

**A COMPARATIVE ASSESSMENT OF THE ACADEMIC PERFORMANCE  
AMONG PUBLIC AND PRIVATE JUNIOR HIGH SCHOOLS IN THE TAMALE  
METROPOLIS OF GHANA**

**BY**

**ALHASSAN, IDDI  
B.A. POPULATION & FAMILY LIFE (HONS)**

A Thesis Submitted to the Department of Planning, Kwame Nkrumah University of Science  
and Technology, in Partial Fulfillment of the Requirement for the Award of  
A Degree of  
Master of Science  
Development Policy and Planning  
College of Art and Built Environment

**JUNE, 2016**

## DECLARATION

I hereby declare that this submission is my own work towards the Master of Science in Development Policy and Planning and to the best of my knowledge, it contains neither material previously published by another person, nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

Alhassan Iddi  
(PG7189712)  
(Student)

.....

Signature

.....

Date

CERTIFIEDBY:

Dr. Kafui A. Ocloo  
(Supervisor)

.....

Signature

.....

Date

CERTIFIEDBY:

Prof. D. K. B. Inkoom  
(Head of Department)

.....

Signature

.....

Date

## **ACKNOWLEDGEMENTS**

First and foremost, I thank the Almighty Allah for His protection and guidance throughout my stay on campus to study this program.

I will equally wish to express my sincerest gratitude to Dr. Kafui Ocloo, my supervi-sor for the advice and assistance she rendered to me throughout this exercise. I am indeed very grateful to her for the criticism and corrections that have resulted to end this study; I equally extend my sincere thanks to the entire staff of the Department of Planning, Kwame Nkrumah University of Science and Technology (KNUST) especially Mr. Owusu, Aponsah and Dr. K.O. Agyemang, the workshop tutors for their care and support.

I cannot forget the assistance offered me by Mr. Achampong, a database officer from Tamale Regional Education office for providing me with the necessary data to facilitate the execution of this project. Besides, I am equally grateful to all heads of public and private schools, especially, teachers who assisted me in data collection together with parents and JHS graduates who participated in this exercise. May the Almighty Allah richly bless you.

Finally, my thanks go to my wonderful mother, Hadjia Abdulai Ramatu, my wife, Alhassan Zayida, my brother, Alhassan Tahiru, as well as all my siblings for their support during the period of this study.

## **ABSTRACT**

The purpose of developing any educational policy is to ensure quality human resource development that will propel the country's development agenda. Education without quality is tantamount to no education at all. For more than two decades now, more than 30% of all the pupils who write BECE annually do not get admission into the senior high, technical and vocational schools as designed in the Ghanaian education system. The failure rate among these children in recent times is however alarming and this requires all hands on deck to support to put an end to this menace.

In this study, an attempt was made to establish the causes of high poor BECE outcomes in the Tamale Metropolis and to establish reasons why private basic schools were doing considerably better in external examination than their public counterparts.

The study adopted descriptive research design and multi-stage sampling technique was used to select the respondents for the study. In all 250 respondents made up of six headteachers, 20 teachers, 112 parents and 112 JHS graduates who completed in 2013 Basic Education Certificate Examination (BECE) took part in the study. Four research instruments were formulated, comprising interview guide for heads of schools, teachers, parents and a questionnaire for the JHS graduates from public and private schools. Data was analyzed using cross tabulation, percentages correlation, and mean scores to draw conclusions.

The results of the study revealed that private schools were performing academically better than their public counterparts in the Tamale Metropolis due to many reasons. These include the fact that the private schools were more resourced, had parents of pupils whose socio-economic status was higher and hence were more involved in their children's education than the public. Teacher motivation was quite low in both public and private selected schools and the high academic achievements of private school students were attributed to strict internal supervision of the school heads/proprietors.

The study recommended that future educational policies and programs should include parental involvement in child education by specifying roles and responsibilities of parents to ensure high cooperation between household and schools operations.

## TABLE OF CONTENTS

DECLARATION.....	ii
ACKNOWLEDGEMENTS .....	iii
ABSTRACT.....	iv
TABLE OF CONTENTS .....	v
LIST OF TABLES .....	x
LIST OF FIGURES .....	xi
LIST OF ACRONYMS AND ABBREVIATIONS .....	xii

### CHAPTER ONE: INTRODUCTION TO BASIC EDUCATION.....1

1.1	Background to the Study .....	1
1.2	The Problem Statement .....	2
1.3	Research Questions .....	4
1.4	Aims and Objectives.....	4
1.4.1	General Objective .....	4
1.4.2	Specific Objectives .....	5
1.5	Scope of the Research: .....	5
1.6	Significance of the Study: .....	5
1.7	Limitation of the study.....	6
1.8	Organization of the Report.....	6

### CHAPTER TWO: QUALITY BASIC EDUCATION IN GHANA: A CONTEXTUAL REVIEW .....

2.1	Introduction .....	7
2.2	Background to Basic Education in Ghana .....	7
2.3	Accelerated Development Plan on Education (ADPE) 1951-1973.....	9
2.4	The New Structure and Content of Education (NSCE) 1974-1986.....	9
2.5	The New Educational Reform Programme of 1987-1994.....	10
2.6	The free Compulsory Universal Basic Education (fCUBE) Policy 1995 -2006	11
2.7	The Educational Reform Programme of 2007-2010 .....	12
2.8	The Performance of Basic Education Sub- Sector .....	13
2.8.1	Promotion of Access to Universal Basic Education in Ghana .....	13
2.8.1.1	<i>The Gross Enrolment Rate (GER) of Basic Education .....</i>	<i>13</i>
2.8.1.2	<i>The Net Enrolment Rate of Basic Schools.....</i>	<i>14</i>

2.8.1.3	<i>Primary Completion Rate in Ghana</i> .....	14
<b>2.9</b>	<b>Eliminating the Gender Gap in Access to Education in Ghana</b> .....	<b>14</b>
<b>2.10</b>	<b>Promotion of Quality Basic Education in Ghana</b> .....	<b>15</b>
2.10.1	National Education Assessment Test (NEAT) .....	15
2.10.2	The BECE Pass Rate .....	15
2.10.3	Pupil Core Textbook Ratio (PCTR) in Basic Schools .....	16
2.10.4	Pupil Teacher Ratio (PTR) in Basic Schools .....	16
2.10.5	Strategies for Improving Quality Basic Education Services in Ghana .....	16
<b>2.11</b>	<b>Factors Influencing the Academic Performance of Pupils in Schools</b> .....	<b>17</b>
2.11.1	The internal Factors that Influence Children Academic Performance .....	18
2.11.1.1	<i>The Role of a Teacher</i> .....	18
2.11.1.2	<i>Medium of Instruction</i> .....	18
2.11.1.3	<i>Class Schedules and Class Sizes</i> .....	19
2.11.1.4	<i>Teaching Resources and Textbooks supply</i> .....	19
2.11.1.5	<i>School Based Assessment (SBA)</i> .....	19
2.11.1.6	<i>Internal Supervision</i> .....	20
2.11.2	External Factors that Influence Children Academic Performance .....	20
2.11.2.1	<i>The influence of parental education on child's outcomes</i> .....	20
2.11.2.2	<i>The influence of family structure and child's school outcomes</i> .....	20
<b>2.12</b>	<b>Teacher Motivation and Students' Academic Performance.</b> .....	<b>20</b>
2.12.1	Equity Theory of Motivation.....	21
2.12.2	Maslow's Need Hierarchy .....	22
2.12.3	Alderfer's Hierarchy of Motivational Needs .....	24
2.12.4	Herzberg's Theory of Motivation.....	25
<b>2.13</b>	<b>School Leadership and Students 'Academic Achievement</b> .....	<b>25</b>
2.13.1	Responsibilities of Effective School Leader. ....	26
2.13.1.1	<i>The Head teacher's Role on Discipline</i> .....	26
2.13.1.2	<i>Flexibility of the School Head.</i> .....	26
2.13.1.3	<i>Head teacher's Input in Schools.</i> .....	27
2.13.1.4	<i>Head teachers Role in Monitoring and Evaluating</i> .....	27
<b>2.14</b>	<b>Conceptualization of Quality in Education</b> .....	<b>28</b>
2.14.1	Effective Teaching Workforce. ....	28
2.14.2	Effective Use of Instructional Time .....	28
2.14.3	Effective Teaching and Class Sizes.....	29

2.14.4	Supportive Learning Environment. ....	30
2.14.5	Availability of Teaching and Learning Materials in Schools.....	30
2.14.6	The Individual Learners Circumstances.....	30
2.14.7	Assessment Systems in Ghanaian Schools.....	31
2.14.8	Computerized School Selection and Placement System (CSSPS).....	32
<b>2.15</b>	<b>Theoretical Framework .....</b>	<b>33</b>
<b>2.16</b>	<b>Definition of key terms: .....</b>	<b>35</b>

### **CHAPTER THREE: THE STUDY AREA AND RESEARCH METHODOLOGY .....37**

<b>3.1</b>	<b>Introduction .....</b>	<b>37</b>
<b>3.2</b>	<b>The Study Area .....</b>	<b>37</b>
<b>3.3</b>	<b>Research Design.....</b>	<b>39</b>
<b>3.4</b>	<b>Target Population.....</b>	<b>40</b>
<b>3.5</b>	<b>Determination of Sample Size. ....</b>	<b>42</b>
<b>3.6</b>	<b>Sample and Sampling Technique.....</b>	<b>42</b>
<b>3.7</b>	<b>Sampling Methods.....</b>	<b>44</b>
<b>3.8</b>	<b>Research Instrumentation .....</b>	<b>45</b>
3.8.1	Validity and Reliability of the Instruments. ....	45
3.8.2	Pre-testing of the Instruments.....	46
3.8.3	Data Collection Techniques. ....	46
<b>3.9</b>	<b>Units of Analysis .....</b>	<b>47</b>
<b>3.10</b>	<b>Variables of Analysis.....</b>	<b>47</b>
<b>3.11</b>	<b>Methods of Data Analysis .....</b>	<b>47</b>
<b>3.12</b>	<b>Field Problems Encountered. ....</b>	<b>48</b>
<b>3.13</b>	<b>Ethical Issues in the Study .....</b>	<b>48</b>

### **CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION OF RESULTS.....50**

<b>4.1</b>	<b>Introduction .....</b>	<b>50</b>
<b>4.2</b>	<b>Academic Performance among Public and Private JHS Graduates. ....</b>	<b>51</b>
4.2.1	Performance of Graduates in Core Subjects in Public and Private Schools .....	53
4.2.2	Placement of JHS Graduates into Second Cycle Schools .....	53
<b>4.3</b>	<b>Causes of Performance Differences among Public and Private Schools.....</b>	<b>55</b>
4.3.1	Class Sizes in Public and Private Schools.....	55
4.3.2	Availability of textbooks in public and private schools. ....	56

4.3.3	Access to Extra Teaching in Public and Private Schools .....	57
4.3.4	Access to School Library in Public and Private Schools .....	58
<b>4.4</b>	<b>Parent/Guardian Involvement in Their Children Education.....</b>	<b>59</b>
4.4.1	The Level of Education of Parents/Guardians. ....	60
4.4.2	Parents / Guardians Daily Parental Care. ....	61
4.4.3	Parent / Guardian Occupation. ....	62
4.4.4	Income Levels among Public and Private School Parents/Guardians.....	63
4.4.5	Number of Children Taken Care of in School by a Parent/ Guardian.....	64
4.4.6	Involvement of Parents in PTA Meetings .....	66
<b>4.5</b>	<b>Quality of Teachers in Public and Private Schools .....</b>	<b>69</b>
4.5.1	Teachers Academic Qualification in Public and Private Schools .....	69
4.5.2	Teaching Subject and Corresponding Experiences of Teachers. ....	71
4.5.3	Availability of Teaching and Learning Materials (TLMs) in Schools.....	71
4.5.4	Number of Exercises Given in Class per Week in Public and Private Schools. ....	72
4.5.5	Queries on Unperformed Tasks.....	73
4.5.6	External Supervision of Teachers in Public and Private Schools .....	74
<b>4.6</b>	<b>Trends of Motivation among public and Private School Teachers.....</b>	<b>75</b>
4.6.1	Satisfaction of Teachers on Pupils Performance. ....	75
4.6.2	Salaries of Teachers in Public and Private Schools .....	76
<b>4.7</b>	<b>Leadership Styles of Heads in Promoting their Schools Academic Performance.....</b>	<b>78</b>
 <b>CHAPTER FIVE: SUMMARY OF KEY FINDINGS, RECOMMENDATIONS AND CONCLUSION .....</b>		
<b>5.1</b>	<b>Introduction .....</b>	<b>84</b>
<b>5.2</b>	<b>Academic Performance Difference among Public and Private Junior High Schools in the Tamale Metropolis.....</b>	<b>84</b>
<b>5.3</b>	<b>The Involvement of Parent/Guardian in Their Children Education.....</b>	<b>85</b>
<b>5.4</b>	<b>The Influence of Motivation among Public and Private School Teachers on Pupils Academic Achievements.....</b>	<b>86</b>
<b>5.5</b>	<b>Leadership Styles of Heads in Promoting Academic Performance in Schools. ....</b>	<b>87</b>
<b>5.6</b>	<b>Policy Recommendations. ....</b>	<b>88</b>
<b>5.7</b>	<b>Conclusion.....</b>	<b>89</b>



<b>REFERENCES.....</b>	<b>91</b>
<b>APPENDICES .....</b>	<b>99</b>
<b>Appendix A: A Questionnaire for public and private JHS Graduates.....</b>	<b>99</b>
<b>Appendix B: An Interview Guide for Parents/Guardians .....</b>	<b>101</b>
<b>Appendix C: An Interview Guide for Teachers Teaching Core Subjects in Private and Public Junior High Schools (JHS) .....</b>	<b>103</b>
<b>Appendix D: Interview Guide for JHS Headteachers/ Proprietors .....</b>	<b>106</b>
<b>Appendix E: Pass Rates of Selected Schools from 2010 to 2013 at BECE .....</b>	<b>1</b>

## LIST OF TABLES

Table	Page
1: Distribution of Graduates and Parents by School Category in 2013 BECE .....	42
2: Proportional Distribution of Candidates by Selected Schools .....	44
3: Distribution of Respondents by School Category.....	44
4: Distribution of JHS graduates by school category.....	51
5: Category of Schools and Aggregate Obtained at 2013 BECE.....	52
6: Mean total Aggregates of Public and Private Schools.....	53
7: Distribution of Grades Obtained in Core Subjects. ....	53
8: Placement into Second Cycle Schools.....	54
9: Access to core textbooks in schools.....	56
10: Access to extra classes after school at JHS.....	57
11: The Linked between Aggregate Score and Extra tuition.....	57
12: Access to School Library at JHS. ....	59
13: Sex of Parents / Guardians in Public and Private Schools.....	60
14: Parent/Guardian Level of Education.....	60
15: Parental Education Level and Child's Aggregate Scores. ....	61
16: Parental care and aggregate obtained at BECE.....	62
17: Parent/Guardian occupation.....	63
18: Correlation of parental income and child's total aggregate in BECE.....	64
19: Number of children taken care of in School by a parent/guardian. ....	65
20: Correlation between total aggregate and number of children of a parent.....	66
21: Parental Participation in PTA Meetings. ....	67
22: Teacher's Sex and school category. ....	69
23: Teaching Subject and Corresponding Experiences.....	71
24: Availability of (TLMs) in Public and Private Schools. ....	72
25: Mean Exercise Given in Class per Week.....	73
26: External supervision on Public and Private Schools.....	74
27: Satisfaction of teachers on pupil's performance in subjects. ....	75
28: Monthly Salaries of Teachers in Public and Private Schools. ....	76
29: Demographic characteristics of head teachers.....	78
30: Leadership Styles of head teachers in public and private schools.....	80
31: Headteacher special motivation for teachers in Schools.....	81
32: Teachers'assessment of their headteachers leadership styles .....	82

## LIST OF FIGURES

Figure	Page
1: The Study Area (Tamale Metropolis) .....	37
2: Number of Pupils in class .....	56
3: Income levels among Public and Private Schools Parents.....	64
4: Blames for Shortcomings at the BECE.....	68
5: Teacher's Academic Qualification .....	70

## **LIST OF ACRONYMS AND ABBREVIATIONS**

<b>B.E.C.E</b>	Basic Education Certificate Examination
<b>CSSPS</b>	Computerized School Selection and Placement System
<b>EFA</b>	Education for All
<b>EMIS</b>	Education Management Information System
<b>fCUBE</b>	free Compulsory Universal Basic Education
<b>G.E.S</b>	Ghana Education Service
<b>GNAT</b>	Ghana National Association of Teachers
<b>GEQAF</b>	General Education Quality Analysis/ Diagnosis Framework
<b>J.H.S</b>	Junior High School
<b>J.S.S</b>	Junior Secondary School
<b>MDGs</b>	Millennium Development Goals
<b>MoE</b>	Ministry of Education
<b>MoESS</b>	Ministry of Education Science and Sports
<b>N.C.E.S</b>	National Center for Education Statistics
<b>NDPC</b>	National Development Planning Commission
<b>N.G.O</b>	Non-Governmental Organization
<b>SHS</b>	Senior High School
<b>SMC</b>	School Management Committee
<b>SPAM</b>	School Performance Appraisal Meetings
<b>SPSS</b>	Statistical Package for the Social Sciences
<b>TAMA</b>	Tamale Metropolitan Assembly
<b>TEWU</b>	Teachers and Education Workers Union
<b>TIMSS</b>	Trends in International Mathematics and Science Study
<b>TLMs</b>	Teaching and Learning Materials
<b>UBE</b>	Universal Basic Education
<b>UIS</b>	UNESCO Institute for Statistics
<b>UNICEF</b>	United Nations Children's Fund
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>WAEC</b>	West African Examination Council

## **CHAPTER ONE**

### **INTRODUCTION TO BASIC EDUCATION**

#### **1.1 Background to the Study**

Access to quality basic education is a fundamental human right for every child. Children all over the world have the right to receive education that prepares them for social integration and economic freedom (Meyer, 2008). Education can also be seen as a right which exposes the individual to social advancement and quality education can build significant analytical and social skills which enable youth to make good choices and pursue responsible life styles (Basic Education Coalition, 2013).

In many Sub Saharan African countries however, the existing public education facilities and expected supply are inadequate to meet the ever increasing children population. While there were general declarations at the Jomtien conference in 1990, Dakar framework for action in 2000 and the Millennium Development Goals (MDGs) in 2000 that basic education should be a priority for public financing, it is gradually recognized that public funding alone is inadequate to meet the growing number of children and the required educational infrastructure to ensure quality education delivery in the region (Kitaeva, 1999).

Many educational policies in Ghana such as: the expansion of schools infrastructure, the removal of schools under trees, the introduction of capitation grant, school feeding program, free exercise books, and free school uniforms were introduced at the basic school level which has led to increase in enrolments (MoE, 2010)

While a number of policy reforms and interventions at the basic school level have improved access to education in Ghana, enhancing the instructional quality and children academic achievement remain critical challenges (Etsey et al. 2009). Quality in education defines how much and how well children learn and the extent to which their abilities are seen in test grades or job market (Ampiah, 2010). Indeed, access to education of poor quality is equivalent to no schooling. There is no reason of providing the opportunity for a child to enroll in school if the quality of the education is so poor that the child will not become well-educated or numerate, or will fail to acquire important life skills (UNICEF, n.d).

The choice of a particular school type by a parent could be influenced by perceived school effectiveness, which is often judged in terms of the number of pupils that pass standardized tests; and there is sufficient evidence from developing countries that suggest that private

schools most at times perform academically better than their public schools counterparts in external examinations (Akaguri, 2011).

The supply of basic education in Ghana is between the public and private schools with each offering the degree of quality to satisfy their consumers. Public education is however currently be devilled with many problems such as inadequate infrastructure, shortage supply of teaching and learning materials, teacher absenteeism, low student discipline, parental negligence and above all poor academic performance in standard examinations. Parents' explanations of their choice of private basic schools over public ones for their wards include better examination performance and access to higher levels of education (Rolleston & Adefeso-Olateju, 2012:6).

Ghana has witnessed a persistent achievement disparity between students in public and private basic schools (Quansah, 2000 cited in Ankomah & Hope, 2011). The private basic schools in Ghana over the years have been performing well with respect to the examination conducted by the West African Examination Council (WAEC) and Performance Monitoring Test (PMT) by the Ghana Education Service (Oduro, 2000). Besides, the research conducted by CDC Consult Ltd in 2008 and 2009 showed that the average pass rate of the low income private schools pupils in Ghana at the BECE were averaged 98% and 96% in 2007 and 2008 respectively compared to national pass rates of 62.17% and 62.16% within the same period (CDC Consult, 2010:35). In addition, the National Education Assessment Test (NEAT) was introduced in 2005 to assess the academic achievement of the lower and upper primary pupils in class three and six. These tests consistently showed higher academic performance of private school pupils compared with public school pupils in English and Mathematics (Djangmah, 2011:7).

## **1.2 The Problem Statement**

Basic Education Certificate Examination (BECE) is the main initial formal examination that primary aged children sit in Ghana. The BECE results are normally used for certification and selection of the pupils at the basic school level, and also to determine how a child should progress in to second cycle schools. The BECE therefore provides an excellent opportunity to assess the performance of the basic school system (Oduro,2000). This form of examination helps to determine the individual's academic ability and further reveals how this skill should be progressed on their next stage of educational career.

Available information from the Ghanaian media and stakeholders in education indicates that for about a decade now almost 50% of all the pupils who write BECE nationwide do not get admission into second cycle institutions due to poor academic performance (Hugo, 2012). The general perception being held by most Ghanaians are that the academic standards and performance in public basic schools where majority of children receive their education have fallen as compared to their private counterparts.

For instance, in the year 2008, the number of candidates who sat for BECE was 338,292 nationwide and the number that obtained the qualified grades for placement into second cycle institutions was 210,282, representing 62.16% of the total number of candidates. The number that sat in 2009 was 395, 649 and those qualified for placement into second cycle schools was 198,642 representing only 50.21% of the graduates. The trend of performance of the candidates at the BECE in percentage terms continued to dwindle nationwide in 2010 at 49.12% and 2011, 46.93% respectively (Okyere-Darko, 2011).

The poor examination results are nationwide phenomenon, but the degree of failures varies among the regions and districts with some district schools scoring as low as 0 percent at the BECE. What the zero percent means is that none of the candidates registered for the examination in a given school got the aggregate that qualifies him/her into any second cycle institution.

Data from Tamale Metropolitan Education Directorate showed that the pupils in the Metropolis over the years have been recording poor BECE results. The overall pass rate of the pupils at the BECE in the Metropolis who qualified for placement into second cycle institutions in 2012 was 40%. In 2013 academic year, a total of 3,881 pupils, comprising 2,290 boys and 1,591 girls were registered for the BECE in the Metropolis. Out of this number, those who had aggregate six were only five, those with aggregate seven to fifteen were 93 and those with aggregate sixteen to 24 were 421. Again, those who obtained an aggregate between 24 and 31 were 745 and those who had aggregate 31 and above were 2,617 (Tamale Regional Education Directorate, 2014). This statistics means that the percentage of the pupils in the Metropolis who obtained the qualified grades for placement into secondary schools in 2013 was only 33%.

The poor performance of the pupils in the Metropolis is both consistent and persistent from year to year and there is no sign of changes to reverse the trend. This gloomy picture has

raised a lot of serious concerns among the stakeholders of education in the Metropolis. While some are putting blame at the door step of teachers and educational management, others are blaming the pupils for lack of seriousness in learning. Some attribute the problem to lack of parental commitment to their children's education but others believe the breakdown of social cohesion in our societies are accounting for these misfortunes.

However, as more public basic schools are performing poorly at the BECE in the Tamale Metropolis, the private basic schools on the other hand, are acclaimed for their outstanding performance in the same examination. This is because the BECE results in 2012 and 2013 academic years in the Metropolis showed that the first five schools whose pupils had 100 percent passes were mainly private schools and the last five schools that recorded 0 percent in the same examinations were public schools. The questions that bother the researcher's mind to undertake this study included: what accounts for the academic performance difference between the public and private basic schools in Ghana? Can one attribute the performance gap between public and private schools to poor leadership strategies by the schools heads? Could it be that the private school teachers are more motivated to teaching than their public counterparts? Again, could it be that parents and children alike in private schools are more serious than their counterparts in public schools? The main thrust of this study is therefore to investigate the possible causes of the academic performance differences among public and private basic schools in the Tamale Metropolis.

### **1.3 Research Questions**

- 1 What academic performance differences exist among private and public basic schools in the Tamale Metropolis at the BECE?
- 2 What is the level of involvement of parents in ensuring the success of their wards education in private and public Junior High schools?
- 3 How do motivation levels of teachers influence learning outcomes in private and public Junior High Schools?
- 4 What leadership styles are used by headteachers in enhancing the academic performance of their pupils in private and public Junior High Schools?

### **1.4 Aims and Objectives**

#### **1.4.1 General Objective**

The primary goal was to make a comprehensive comparative academic performance study between private and public Junior High Schools in the Tamale Metropolis.



### 1.4.2 Specific Objectives

The following specific objectives guided the research:

- To examine the academic performance among public and private Junior High Schools in the Tamale Metropolis at the BECE;
- To assess the level of involvement of parents in supporting their wards education in private and public Junior High Schools;
- To compare how the motivation levels of teachers influence learning outcomes in public and private JHS;
- To compare the leadership styles of promoting the academic performance of pupils in public and private JHS.

## 1.5 Scope of the Research

Geographically, the study was centered in the Tamale Metropolis and contextually, on the nature and characteristics of public and private basic schools with respect to their academic performance at the BECE. More importantly, the study was more focused on Junior High Schools (JHS) students as they transition to Senior High School (SHS) with a time frame from 2010 to 2013.

## 1.6 Significance of the Study

The research was an attempt to increase the existing literature on the academic performance the pupils at the basic education level in Ghana and to explore how public and private schools contribution to quality education delivery can be enhanced. The advantages that are associated with quality academic performance of the pupils in both public and private schools cannot be overlooked, since this is the only way we can get a rigorous set of qualifications of the individuals in place to ensure a competent and confident future workforce. This study will therefore draw the attention of educational stakeholders to pay more attention to the basic education system in the Metropolis. The study will equally help the educational managers and planners to adopt new modern methods of managing the schools for better results. The study will also explore the reasons behind the low performance of pupils in the current Basic Education Certificate Examination (BECE) and to make policy recommendations to help address the situation. It is the hope of the researcher that the findings of this research will serve as a tool to change the poor performance of the candidates at the BECE in the Tamale Metropolis and beyond and also improve the quality of teaching and learning in our basic schools.

### **1.7 Limitation of the study**

The most apparent limitation of this study was the assumption that all children can become successful in external examination when certain basic resources and support systems are made available to them. This assumption is stemmed on the fact that all children are assumed to have equally intelligent quotient (IQ) and it is only unfair handling of the children that result in their inabilities to do well in external examinations. Another limitation of this study was that the researcher could not report what exactly happened in classroom between the teachers and the JHS graduates within the period of discourse but only relied on the information provided by the respondents. Another challenge the researcher was confronted with in the field was a financial constraint to cover all the registered schools who took part in 2013 BECE which was resolved by choosing six schools, three public and three private junior high schools for the study. Despite these challenges, the researcher followed the due process to ensure that the finding of this research reflects the reality on the ground.

### **1.8 Organization of the Report**

The entire study is organized into five chapters. Chapter one presents the introduction to basic education, the problem statement, research questions, research objectives, significance of the study, limitation of the study, and the organization of the report. Chapter two presents the review of related literature that is relevant to the study, while chapter three presents the detail discussion on the methodology used to carry out the research. Chapter four look at the analysis of data and presentation of results, and finally chapter five deals with the interpretation of data and discussion of major findings, recommendations for policy makers and conclusion of the study.

## **CHAPTER TWO**

### **QUALITY BASIC EDUCATION IN GHANA: A CONTEXTUAL REVIEW**

#### **2.1 Introduction**

The review of related literature is an important aspect of any research project as it generates a solid foundation for advancing knowledge, simplifies theory development, closes areas where large volume of research exist, and discover areas where research is needed (Webster and Watson, 2002).

This chapter reviews the literature on factors that influence the academic performance of pupils in schools. It delves into history, performance of basic education sub sector, theories and concepts that underpin the issues of quality education in basic schools; including the learning environment (School); the content (Curriculum); processes (Teaching and learning) and Outcomes (Test Systems, Assessments or Examinations). Other proxy indicators of educational quality like Pupil Core Textbook ratio, Pupil teacher ratio, Daily Attendance Rate of pupils and teachers were equally examined.

#### **2.2 Background to Basic Education in Ghana**

Education is a process that may be explained differently and therefore, may defy a precise definition, but its general sense could be defined as a systematic or organized knowledge designed for learners in formal or informal settings (Akyeampong, 2001).

Basic education is an important step in attempting to enhance the status of many people – women, rural folks, the urban poor, marginalized ethnic minorities and the millions of children who are not attending school but working (UNESCO, 2007). The concept of basic education expands the dimensions of the right to education for lifelong learning (Buckland, 2000). Basic Education according to the Millennium Report of Education for All in 2007 specifies the skills, knowledge, attitudes, values and inspirations that are deemed necessary in order for children to become well-educated (UNESCO, 2007). In terms of access to basic education, the Jomtien declaration in 1990 had moved the definition of basic education beyond the acquisition of basic skills, towards empowering the children to meet their future personal and social needs (Black, 1998). Basic education thus creates the opportunity to provide the right channel for children to continue to higher levels of learning and those who cannot, it gives them the opportunity to acquire work-related skills (Oduro, 2000).

Basic education is quite an elusive concept and most countries have chosen to limit 'basic' as the first step of formal schooling. Basic education in its right sense is described as an action formulated to meet basic learning needs of learners and equally must correspond to the actual needs, interests, and problems of the individuals in the learning process (Black, 1998). It can also be seen as a large pool of knowledge that everyone, irrespective of age are entitle to, at any stage of their lives as a right. Basic education is formally a primary schooling while its associated programmes are meant for children who missed the opportunity for formal schooling and literacy programmes are addressed for adults.

As part of the efforts to achieve the Millennium Development Goals as well as the charter for Education for All (EFA), many developing countries including Ghana introduced Universal Basic Education (UBE) to enhance basic educational access for their citizenry.

The Republic of India with the second largest education system in the world had made a Constitutional Provision to provide free and universal Primary and Middle grade education for all Indians as far back as at 1960 (NCEE, 2005). Besides, Nigeria for example introduced her first universal access to basic education in 1976 but was unsuccessful; however, since 1999 she has been providing un-altered free access of six year primary school and three year junior high school for every Nigerian child of school going age and also ensures the reduction of incidence of drop out from the formal schooling system (Rolleston & Adefeso-Olateju, 2012:11).

In the same vein, the Republic of Rwanda in 2012 won the Commonwealth Education Good Practice Awards for their inventive fast-tracking strategies of the nine 'Year Basic Education Programme'. The structure of basic education in Rwanda is made up of a pre-primary education for children within the ages of three to six years; a full Primary education of a six year duration, and in theory enrolls children of seven to twelve years of age and a '*Tronc commun*', a three year lower secondary cycle which in addition to primary, constitutes Rwanda's nine year basic education system (World Bank, 2011).

The educational review committee of 2002 in Ghana chaired by Professor Jophus –Anamuah Mensah, a former Vice Chancellor of the University of Education Winneba, reviewed the new basic education system in Ghana to comprise two years kindergarten, six years primary, and three years Junior High School (MoESS, 2008).

### **2.3 Accelerated Development Plan on Education (ADPE) 1951-1973**

Education in Ghana has undergone many changes from independence till date through reviews and reforms for the purpose of making it better. The Accelerated Development Plan on Education was launched in 1951 after Gold Coast was granted self- government status by British, with Kwame Nkrumah as the leader of government business. The major aim of the plan was to use education as a vehicle for accelerating the implementation of government development policies and programs (Agyeman, et al., 2000).

The Education Act of 1961(Act87) under the Accelerated Development Plan on Education made basic education free and compulsory and all children of school going age were expected to be enrolled in schools (Akyeampong et al., 2007; Kadingdi, 2004). The introduction of fee-free compulsory basic education in primary and middle schools was closely linked with teacher training and teacher welfare matters as areas for investment to promote quality basic education in the country (Akyeampong, 2009). The (Act 87) also made it possible to allow private schools to supplement the public ones to ensure more educational access for all children of school going age and likewise made it feasible to prosecute any parent who did not send his/her ward to school.

The educational infrastructures in Ghana at this period were well expanded and enrollments into basic schools were quite tremendous (Akyeampong et al., 2007). This education system was however later criticized for lacking quality as the increased in student enrolment could not match the number of teachers and the educational facilities leading to low quality of output (Kadingdi, 2004).

### **2.4 The New Structure and Content of Education (NSCE) 1974-1986**

In the early part of 1972, series of criticisms were leveled against the existing old system of education. Among some of these criticisms included: passing out ill-prepared students; poor quality of teachers; poor curriculum and high rate of unemployment of middle school leavers (Djangmah, 2011).

The New Structure and Content of Education (NSCE) was introduced in the early 1970s by Acheampong's military government through the Dzobo education committee of 1973 to overcome the existing challenges of the education system (Dzobo, 1974). The NSCE system was part of a Five-Year Development Plan for the period 1975/76 to 1979/80 and was intended to replace the four year middle school with a three year Junior Secondary School

(JSS) system (Akyeampong et al., 2007). This reform is often cited as the first major post independence reform in pre tertiary education in this country (Agyeman et al., 2000).

The NSCE reform was piloted in some selected schools across the country and was run alongside the existing old basic education system of six year primary and four year middle school. The purpose of this reduction in years was to introduce a curriculum with high practical oriented content to equip students with practical knowledge to sharpening their skills to enhance the country's man power development (Oduro, 2000).

The structure of the education system in this period was such that children could advance to secondary school level through a three-track system. Those who complete primary school could take the middle school track and enter secondary school after four years or terminate their education. It was equally possible to skip middle school and enter secondary school by sitting for the common entrance examination after completing primary six. The last alternative for accessing secondary education in this period was to sit two years in middle school before writing the common entrance examination to qualify into any secondary school of choice (Kadingdi, 2004).

The education system that existed before the 1987 general reforms were characterized by poor management, limited access for the disadvantaged families and persistently dwindling enrolments (Kate, James & Dzigbodi, 2003). The NSCE could not however be implemented fully due to economic and political instability that engulfed the country in the late 1970s and 80s (Oduro, 2000).

## **2.5 The New Educational Reform Programme of 1987-1994**

Ghanaian economy deteriorated in the 1970s and early 80s resulting in significant reduction in the country's Gross National Product (GNP). The government funding for education during the period reduced drastically from 6.4 percent of Gross Domestic Product (GDP) to 1.4% which nearly collapse the public education system (Akyeampong & Furlong, 2000).

The harsh economic conditions in the country during this period prompted many trained teachers to find relatively better paid jobs either in Ghana or nearby countries. The 1987 educational reforms therefore became indispensable as a result of the near breakdown of the public education system. Reasons adduced for this outcome included: insufficient financing of the education sector programs resulting in low supply of qualified teachers, low teacher

motivation, lack of textbooks, dilapidated school buildings and poor curriculum materials (Akyeampong & Furlong, 2000; Kadingdi, 2004).

The New Educational Reform Program of 1987 completely abolished the middle school system and replaced it with a Junior Secondary School (JSS). This reform was in line with Dzobo Committee's recommendations of 1974 by combining six years primary and three years junior secondary to constitute basic education. The reforms also included comprehensive curriculum reforms to make it possible for the majority of children whose formal education terminated either at Junior Secondary School level or Senior Secondary School for the world of work, and the rest, for further schooling (Akyeampong, 2009).

This reform declared basic education to be compulsory for all Ghanaian children and defined the system as nine years of schooling (six years primary and three years Junior Secondary School). The vision of the reforms was to make basic education more accessible to many Ghanaian children. It's noted at this period that about 43% of the Ghanaian children were estimated to be out of school in 1987 (Kadingdi, 2004). The NERP also made it possible for third year JSS pupils to sit for the annual Basic Education Certificate Examination (BECE) to guarantee their selection into second cycle institutions.

In 1993/94 academic year, the outcome of poor academic achievement of public schools pupils influenced the formation of another education review committee to recommend appropriate measures to improve the education system. In this period, only six percent of the pupils in public basic schools tested nationwide attained a criterion score of 60% and above in English and less than three percent achieved a criterion score of 55% and above in Mathematics (Akyeampong et al., 2007; Kadingdi, 2004).

Though, the 1987 reforms made basic education more accessible to numerous Ghanaian children, many educational performance indicators still show that there is still more to do if the goals of MDGs and EFA were to be realized and sustained (Etsey et al., 2009:5; Akyeampong et al., 2007:10).

## **2.6 The free Compulsory Universal Basic Education (fCUBE) Policy 1995 -2006**

The free Compulsory Universal Basic Education (fCUBE) was launched in September 1995 with the aim of increasing access to quality basic education within ten years of operation. The implementation of the fCUBE policy was in line with the 1992 Constitutional Provision which made it mandatory upon the ruling government to ensure that all children within the

school going age of five to 13 years had access to free, compulsory and universal basic education of ten year duration, spanning from 1996 to 2005 (Nudzor, 2012).

The main objectives of the policy were to expand access to quality of teaching and learning, improve on the school administration, encourage access and participation of major stakeholders as well as decentralizing the entire education management system for efficiency (MoE, 2003 :5). The fCUBE policy aided Ghana to make important strides to allow more children from deprived communities to access the formal basic education system (Nudzor, 2012). The policy equally partly addressed the quality concerns in basic education delivery through the support of many international organizations like United Nations Development Program (UNDP), U K Department for International Development (DfID) and others (Kadingdi, 2004). Under this program, new additional resources were allocated at the basic education level to support quality and administrative concerns which gave rise to minor improvements in quality but not of the dimensions that would make an important difference to educational outcomes at post basic level (Akyeampong, 2001:6). The major challenges that were faced by the fCUBE policy initiatives included: inability to provide adequate logistics; lack of community cooperation and participation in educational issues; low retention rate of girls; inability of parents/guardians to supply the school needs of their children due to poverty; inadequate supply of trained teachers; and inadequate financial support from District Assemblies (Kadingdi, 2004).

## **2.7 The Educational Reform Programme of 2007-2010**

The government of Ghana in 2002 re-introduced key policy initiatives to strengthen and revitalize the fCUBE policy implementation process. Key policy initiatives in this period included the introduction of the ‘capitation grant, the school feeding programme’ and other policies to achieve the desire goals in the basic education sub-sector (Nudzor, 2012). The educational committee that was tasked to undertake this reform made it possible for the Constitutional mandatory of ten years of fCUBE to elapse in 2006 before the new reforms took effect in 2007.

The 2007 reform added additional two years to the basic education to make it eleven years, and thus, comprise two year kindergarten, six years primary and three year junior secondary school respectively. The review also changed the name Junior Secondary School (JSS) to Junior High School (JHS), Senior Secondary School (SSS) to Senior High School (SHS) and extended the duration of secondary school from three years to four years but the status-quo



for other levels of education remained same. The purpose of this initiative was to increase opportunities for all children to have access to early childhood education which is one of the key factors in enhancing children mental development in quality education acquisition. Besides, the capitation grant policy was also designed to reinforce the existing ‘fCUBE’ policy of attracting and retaining children in school (Nudzor, 2012). These arrangements were however reviewed again in 2010 following the change of government in 2009. The 2010 review only reversed the four year secondary education back to three years and other arrangements as put up in 2007 still remained the same.

The trends in educational reviews and reforms in Ghana have shown that the Ministry of education broad policies and strategies over the years has been effective in promoting positive trends in access and reducing the barriers to access for Ghanaian children, however, the quality education improvement programs for both basic and secondary education are yet to show consistent positive trends (Ampiah, 2008).

## **2.8 The Performance of Basic Education Sub- Sector**

The recent national policies and programs under Education Strategic Plan (ESP) 2010-2020 on basic education focused on three objectives areas, which include:

- i The creation of equal opportunity for universal access to basic education;
- ii Elimination of gender disparity in access to basic education; and
- iii Enhancing the quality of education at the basic school level through the improvement in the delivery of education services.

(NDPC, 2012: 139; MoE, 2013:39)

### **2.8.1 Promotion of Access to Universal Basic Education in Ghana**

The government of Ghana in an attempt to expand access to basic education and beyond tracks the progress through gross enrolment, net enrolment and completion rate. The positive trajectory of these indicators shows the country’s achievements towards the attainment of international conventions such as EFA and MDGs respectively.

#### ***2.8.1.1 The Gross Enrolment Rate (GER) of Basic Education***

The General or Gross Enrolment Rate (GER) describes the complete admission of learners into a specified level of education, irrespective of their age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given year (UIS, 2009:9). The enrolment rates in all basic school levels have been increasing

steadily over the years. The GER for pre-school for example recorded a significant increase in 2005/2006 academic year but slowed down from 89.9 percent to 85.70 percent in 2007/08. The enrolment rates in both primary and junior high levels have also been increasing. However, the analysis by grade in the previous and current reports showed that the GER at pre-tertiary decreases at higher levels, pointing to many drop-outs in Ghana (MoE, 2010: 10).

#### *2.8.1.2 The Net Enrolment Rate of Basic Schools*

In the same vein, the Net Enrolment Rate (NER) refers to the number of people admitted into an institution for a given level of education expressed as a percentage of the eligible corresponding population (UIS, 2009:10). The NER at both kindergarten and primary schools increased slightly in 2010/11 academic year. Whiles kindergartens net enrolment increased from 60.1% to 64.2% in 2011/12 academic year, that of the primary level also experienced an increased from 77.9% to 81.7% in the same period. However, NER at the JHS during the period remained unchanged at 66.1% making it difficult for the country to realize her target of 90% in 2015 (NDPC, 2012:142).

#### *2.8.1.3 Primary Completion Rate in Ghana*

The completion rate defines the fraction of students who stay at a given level of education and complete school after enrolment. The primary completion rate therefore shows the magnitude of the education structure to provide primary completion for the hypothetical age group to the last stage of primary school (UIS, 2009:38). The completion rate at the primary schools continued to increase from 2011/12 academic year, but was still below the target of 100% set by 2015. In addition, the completion rate at the JHS level remained static at 67% since 2011/12 academic year (MoE, 2013:142).

### **2.9 Eliminating the Gender Gap in Access to Education in Ghana**

One of the most important measures of Ghana's education strategy is to ensure that both male and female students are able to enjoy the expanded access of basic education. At the basic school level, the ratio of female to their male counterparts continued to grow positively at all the three levels of basic education. In 2012/13 academic year, gender parity in kindergarten had girls outnumbering boys but was almost the same at primary level with a GPI of 0.99. However, more decisive measures need to be done at JHS where the GPI was 0.93 in the same period (MoE, 2013:10).

## **2.10 Promotion of Quality Basic Education in Ghana**

The most important policy initiative at the basic school level is to enhance the quality of teaching and learning to promote pupil/student academic achievements. The indicators used by the Ministry of Education to measure the progress in this realm include: National Education Assessment Test, BECE pass rate, pupil core textbook ratio and pupil per trained teacher ratio respectively (NDPC, 2012:148).

### **2.10.1 National Education Assessment Test (NEAT)**

The National Education Assessment Test (NEAT) is one of the means of measuring quality education at the primary school level nationwide. NEAT is a standardized examination in Ghana with an objective to measure learning outcomes in English and Mathematics at the lower and upper primary levels. The pass rate of the pupils in NEAT scores in these subjects over the years showed that the fraction of pupils showing their skills in Mathematics and English is very low (that is, less than one in five pupils at both P3 and P6). The overall assessment of the quality measures designed to achieve under NEAT are not occurring as expected in most public basic schools in the country. However, the private schools unceasingly out perform their public counterparts in both Mathematics and English in this examination with a vast difference (MoE, 2013:149).

### **2.10.2 The BECE Pass Rate**

This examination is taken at the end of basic education level (that is, JHS 3) to decide whether or not a student advances to secondary school, technical or vocational institute. All candidates in this examination are tested in four core subjects and four to five elective subjects. The CSSPS uses a minimum of six subjects for the selection of all candidates for placement into various second cycle institutions (Ebow & Anokye, 2014). This comprises four core subjects and two best performing subjects of the candidate at the BECE. The Core Subjects are: Mathematics; English Language; Integrated Science; and Social Studies/ Basic Design and Technology. The other two subjects could be any subject well performed by a candidate at the BECE. The national pass rate of BECE from 2002/03 to 2011/12 is shown in appendix E. The analysis of the results over the years indicated that male candidates usually out performed their female counterparts in the core subjects, except in English (NDPC, 2012:149; MoE, 2013:38).

### 2.10.3 Pupil Core Textbook Ratio (PCTR) in Basic Schools

Textbooks are purposively provided in schools to ensure effective teaching and learning. Access to textbooks is one of the several ways of assessing the quality of education at the basic school level. At the JHS level, each individual student is expected to have four core textbooks. The textbook ratio of 1:1 shows a complete access to those books by individual pupils, but more than 1:1 means that the children have access to more than one typical textbook in the classroom. Available data from Education Management Information System in 2013 at the basic schools however showed that this target of 1:1 has not been accomplished at any level of basic education in the country (MoE, 2013:150). The table on textbooks distribution at the basic level of education in Ghana is shown on appendix E.

### 2.10.4 Pupil Teacher Ratio (PTR) in Basic Schools

Pupil Teacher Ratio is the mean number of students per teacher at a specific level of education in a given school year (UIS, 2009). The number of pupils/students being taught by teachers is one of the key indicators of quality in education at a school level. Ghana Education Service (GES) policy is to have a PTR of 40:1 at the primary school and 35:1 at the JSS level respectively (NDPC, 2012:151).

Available data from the Ministry of education in 2012/13 academic year showed that private schools tend to have smaller class sizes and hence lower pupil-to-teacher ratios than public schools, but in terms of access to the proportions of trained teachers, the public JHS had 84% of teachers trained, while in private schools only 18% of their teachers were reported trained (MoE, 2013:49)

### 2.10.5 Strategies for Improving Quality Basic Education Services in Ghana

Important policies and strategies employed from 2012/13 to improve access to quality education focused on: widening the coverage of the school feeding program; fortifying the capitation grant, intensify the provision of free school uniform and exercise books as well as provision and rehabilitation of educational infrastructure (NDPC, 2012:152). Government of Ghana right from 2012 vowed to build and remove all basic schools that are operating under trees; unfortunately, there is no time limit with regard to this political promise.

The next part of the review centers on possible factors that can influence pupils' academic performance in schools.

## **2.11 Factors Influencing the Academic Performance of Pupils in Schools**

According to Encarta English Dictionary (2009) the word ‘performance’ could mean an accomplishment of a task in line with what is required of an individual in a given setting. It could also connote the tendency of the way in which somebody does a job which is judged by an awaiting reward. Thus, entities such as schools need highly qualified teachers to assist their students to perform satisfactorily at the end of their programs of study. Accomplishing a task successfully and performing it at a higher rate can be a source of satisfaction and a feeling of mastery and pride while poor performance, could be a source of dissatisfaction or even sometimes as a personal failure (Sonntag & Michael, 2002). The academic performance (learning achievement) of pupils/students’ in schools remains a top priority for many educators, parents and national governments. Positive academic achievement of students makes the difference in terms of nurturing the children for locally, regionally, nationally and globally levels development (Chaudhry & Shafiq, 2011). The socio- economic development of any country is directly linked with student academic performance in schools. Pupils’ academic performance plays an important role in producing the best quality graduates who will one day become leaders and human capital for the country’s economic and social transformation (Mushtaq & Khan, 2012).

A well laid foundation of pupils in basic schools could support their performance to rise to the highest level of the educational ladder. Higher education confers increase chances for income, influence and prestige on individuals who are fortunate enough to have it. Indeed, in our society today, occupational attainment and the allocation of social position is increasingly dependent on higher education. All these numerous advantages cannot be achieved in Ghana if a child fails to perform creditably in national examinations such as Basic Education Certificate Examination (BECE) and West Africa Senior Secondary Certificate Examination (WASSCE) to ensure admission into tertiary or higher education.

Authors such as Campbell (1990) and Rose (1999) as cited in Sonntag & Frese (2002) agreed that when conceptualizing performance in any organization or entity, one has to differentiate between an action (that is., behavioral) aspect and an outcome aspect of performance. The performance in this context conceptualizes the action to be teaching and learning and academic achievement of pupils in schools as outcomes. According to Mushtaq and Khan (2012: 18) there are two types of broader factors that generally affect the students’ academic performance in schools. These are internal and external school factors.

### 2.11.1 The internal Factors that Influence Children Academic Performance

Among the internal school factors that closely determine pupils academic performance in school includes: teachers' role; students competence in the language of instruction; class schedules; class sizes; availability of textbooks, and the conduct of regular assessment. Other internal factors include: effective internal supervision, the availability of teaching and learning materials and others (Mushtaq & Khan, 2012).

#### 2.11.1.1 *The Role of a Teacher*

The available literature suggests that the main driver of the variation in students' academic performance at school is the quality of teachers. The positive outcome for any school system is essentially the sum of the quality of the instruction that its teachers deliver. The entire task of the school system therefore is to ensure that when a teacher enters the classroom, he/she has the right materials available, along with the knowledge, the competence and the ambition to take one more child up to the standard today than did yesterday (Barber & Monaghan, 2007). The most well-performing school system recognizes that the only way to improve the academic outcomes of students is to improve the quality of instruction. Positive learning occurs when students and teachers interact, and thus, to improve learning implies improving the quality of this interaction – classroom teaching practices. Studies that takes into account all of the available evidence on teachers effectiveness suggest that students placed with high performing teacher will progress three times as fast as those placed with low performing teachers (Barber & Monaghan, 2007).

#### 2.11.1.2 *Medium of Instruction*

One of the most difficult obstacles to improve the quality of instruction among the students to promote their academic performance is the medium instruction. The ability to read and write in a specified language is often considered one of the primary goals of formal education (Buckland, 2000). The medium of instruction in Ghanaian schools is English Language and most at times the lower academic performance among the disadvantaged schools and pupils are mostly associated with their inability to comprehend what is taught in class as well as how to read and write good English (OECD, 2012). Mushtaq and Shabana (2012) in their research on factors affecting pupils' academic performance in schools found that the most important classroom factor which has influence on students' academic performance is their competence in English Language. According to Etsey (1995) teachers using of local language to teach instead of English creates deficiency in the pupils which made them unable to

understand the textbooks they needed to use and this ultimately resulted in their low academic performance in external examinations.

#### *2.11.1.3 Class Schedules and Class Sizes*

The schools authorities need to ensure that all the activities schedule in the school time- table are adhere to by both teachers and pupils. Latecomers are expected to be punished to serve as deferent and the number of pupils per class needs to be kept according to national standard to promote the academic performance of students. Several researches have shown that schools that adhere to the daily schedule activities tend to have positive influence on their students' academic performance (OECD, 2012a).

Besides, the number of pupils per classroom can have an influence on pupils' academic performance in schools. Available evidence has however suggests that except at the early grade, class size reduction does not have much impact on students' academic performance. This is because out of 112 studies which looked at the impact of the reduction in class sizes on students' academic performance, only nine found any positive relationship and the remaining 103 found either no significant relationship or a significant negative relationship (Barber & Mona, 2007).

#### *2.11.1.4 Teaching Resources and Textbooks supply*

According to Mushtaq and Khan (2012) there is a positive relationship between the provisions of effective learning facilities in school and student academic performance. It is widely noted that an effort from students in making a proper utilization of the school facilities provided, enhances the student learning styles and consequently improves his/her academic performance. According to OECD (2012) a school system that lacks infrastructure and textbooks will almost certainly perform at lower levels. Thus, pupils from such schools are not likely to perform creditably in both internal and external examinations.

#### *2.11.1.5 School Based Assessment (SBA)*

One of the most effective strategy to address learning gaps and avoid ill-performance of students in school system is to tackle them during the process of teaching and learning, including: responding appropriately to continuous and comprehensive assessment and providing early, regular and timely support, strengthening students' knowledge and metacognitive skills (OECD, 2012a). Thus, the provision of early support through

comprehensive school based assessment system for students can promote their academic performance and prevent repetition in grades.

#### *2.11.1.6 Internal Supervision*

It is a common knowledge that effective internal supervision of instruction can improve the quality of teaching and learning in the classroom which will ultimately lead to positive academic performance of the pupils. Etsey, Amedahe and Edjah in their study of academic performance among public and private schools in Central Region of Ghana found that the academic performance was better in private schools than public schools because of more effective internal supervision (Etsey, 2005).

#### *2.11.2 External Factors that Influence Children Academic Performance*

It is important to highlight that while school environment can have a strong influence on students' academic performance, other external factors such as: economic status of household, parental educational attainment, family size and other home based factors can equally indirectly influence pupils' outcomes. There is sufficient evidence from the fields of education and psychology that the home based socio- economic status has significant impacts on child's academic performance in school. Several researches pointing to the household factors affecting a child academic performance in school has consistently shown that parental involvement in children's education does make a positive difference to pupils' academic achievement (DCSF, 2008).

##### *2.11.2.1 The influence of parental education on child's outcomes*

Research has shown that parents' educational attainment has a direct, positive influence on students' academic performance or achievement in school (Davis-Keen,2005).

##### *2.11.2.2 The influence of family structure and child's school outcomes*

The development of a child lies at the bosom of his/her immediate family before formal education. The structure of a child's family, size, socio-economic status and educational background play important role in students' academic performance and social integration (Ushie, Emeka, & Owolabi, 2012).

## **2.12 Teacher Motivation and Students' Academic Performance.**

The rationale for reviewing the motivation of teachers and pupils was to help the researcher make informed decisions about how teachers and pupils levels of satisfaction affect their performance outcomes with respect to the annual BECE results. However, to enable the



researcher adequately appreciate the relationship between theory and practice, an overview of the theories of motivation and job satisfaction as well as a review of literature on some perspectives and models of motivation processes have been presented here.

A theory is a set of variables which is related to each other by precise set of rules, with some or all of these variables linked to an operational language (Graham & Weiner, 1992). Among theories of motivation that are claimed to explain human needs with respect to working life are: the Equity theory, Maslow's Need Hierarchy, Alderfer's ERG theory, and Herzberg's two factor theory respectively. These models were chosen because they are grounded in psychological theories that represent aspects of the motivational dimensions of personality. These models tend to postulate that people have drives, potentials, values, and motives that influence personal inspiration and development (Keller, 2006:5).

#### 2.12.1 Equity Theory of Motivation.

The proponent of this theory, Adam (1963) proclaimed that when workers identify disparities in their compensations at work, they will be aroused to remove the discomfort and restore a state of felt equity to the situation by: changing work inputs; changing rewards received; leaving the situation; changing the comparison points; and psychologically distorting the comparisons (MTD Training, 2010).

Teachers like other workers may compare their work load and rewards with those of colleagues in other professions. Teachers will regard pay as a de-motivator if they thought that they are being underpaid either in comparison with other staff in the same business or with reference to regional/national averages (Bagshawe, 2011:36).

People may respond to inequities differently, but generally, the extent of demotivation is comparative to the perceived disparity between inputs and expected outputs. Some people in this regard could reduce effort and application and become inwardly disgruntled, or outwardly difficult, recalcitrant or even disruptive. The implication for this theory on teachers job satisfaction is that if teachers thought they are being underpaid either in reference to their colleagues or other professionals in employer's pay roll, their input may reduce (resulting in poor academic performance in schools) or protest through strikes as witnessed in recent times in Ghana.

### 2.12.2 Maslow's Need Hierarchy

According to Maslow (1943:3) all human needs are arranged in a hierarchical order of importance. The appearance of one need at an individual level usually depends on the earlier satisfaction of another more important need. The underlying assumption of this theory is that if man is not able to satisfy basic needs such as food, shelter, healthcare and so on, he/she cannot seek more advanced needs such as love, friendship and self-actualization.

Abraham Maslow posited in this theory that there are five levels of needs that every individual try's to meet in a life time (MTD Training, 2010). The hierarchy of needs can make it possible to judge how strong the motivation factors could be for a group of people like teachers or an individual like pupil/student. These levels of needs in this regard are: physiological needs, safety needs, belonging needs, ego-status and self-actualization needs.

#### **Level one –the physiological needs.**

At the bottom of the hierarchy of needs in this theory is the „physiological need“ which refers to the needs that help man to function or survive. These are the needs that man cannot live without. Examples of such needs includes: air, food, water, clothing, shelter and sexual activity.

Teachers would be more motivated to work in order to have access to their monthly salary for the purpose of meeting their basic needs such as food, shelter, clothing and others. The teachers however unsuccessful towards achievement of basic needs can seriously impair the realization of higher level needs without which effective teacher performance cannot be achieved (Bennell & Akyeampong, 2007). For instance, teachers who are struggling and unreasonably preoccupied about meeting their domestic livelihood needs are not likely to become strongly motivated to work effectively to achieve the desire educational outcomes.

Ghana National Association of Teachers (GNAT) and Teacher and Education Workers Union (TEWU) in a research in 2009 concerning attrition and retention of teachers in Ghana opined that job satisfaction or dissatisfaction is often cited and rendered important in both teacher attrition and retention. The research conducted by these two bodies in Ghana indicated that nearly three quarters (72%) of the teachers they surveyed said they were either “Dissatisfied” (41%) or “Very Dissatisfied” (31%) with their level of earning. The main reasons for the dissatisfaction are the low level of wages and poor conditions of service in the education sector (GNAT & TEWU, 2009:33).

On the other hand, a student who has difficulties in getting basic needs such as daily food, transport to school, uniform or clothing will have less concentration in classroom and such a child is unlikely to be motivated to learn which will negatively affect his/her test scores. This implies that no effective learning can be made if the learner failed to access basic necessities assumed in this first level of the theory. Perhaps, the extension of School Feeding Programmes (SFP) to all basic schools in the country can support children from less endowed homes to learn better in schools.

### **Level two and three - safety needs and belonging needs**

The safety needs according to this theory refers to the needs that are demanded after the basic needs have been met. Thus, once the physiological needs are met, the individual will further strive to ensure that they are safe. Belonging needs are those that revolve around social interaction and the need to belong.

The inference of safety needs on teachers is that once they achieve their basic needs, they will strive to meet the next level needs such as job security, financial savings, insurance policies, accommodation and protection from unilateral decisions (MTD Training, 2010). The safety of a teacher once guaranteed can motivate him/her to work to achieve the school goal which has quality as a top priority. In the same vein, teachers needs to collaborate with colleagues, headteachers, students, school management committee and the school community to work effectively. These relationships help the stakeholders in schools to work harmoniously to achieve the desire results.

Students like teachers need the love of their parents or guardians, teachers, significant others and peers to help build positive self-esteem that will contribute to their learning at school. A student who does not experience interaction with others may feel being alienated and these can possibly cause low grades at school.

The implication of this for planning is that schools must draw up programs to constantly interact with parents. Through these interactions, adequate data on parents can be obtained to facilitate the formulation of social interventions in schools for the poorer homes in the country.

### **The fourth and fifth needs- ego status and self-actualization.**

The ego-status level need is related to how an individual sees himself/herself and how they believe others see them. For example, if an individual believes he/she is smart, funny, kind,

considerate or any other attribute, they equally tend to believe that other people see them with the same attributes (MTD Training, 2010). Maslow equally described self-actualization level need as the desire to become more and more of one self or what an individual is capable of becoming.

The implication of these needs on teachers is that teachers need recognition and appreciation from their employers and parents. Thus, if hard working teachers are recognized and rewarded, it may motivate other teachers to emulate their example to give off their best in classroom which will contribute positively to learning outcomes. Also a student whose effort is recognize by teachers and parents is more likely to work hard to get better grades in school than a student whose effort is unrecognized.

### 2.12.3 Alderfer's Hierarchy of Motivational Needs

Clayton Alderfer reworked Maslow's Need Hierarchy to realign it more closely with empirical research. Alderfer's theory is popularly called the ERG theory—Existence, Relatedness, and Growth (Perone, 2005). Existence refers to human concern with basic material existence requirements which is what Maslow called physiological and safety needs. These needs are such that human beings cannot survive without them and examples include: food, shelter, health care, clothing and their likes. All behaviour is said to be motivated by unsatisfied needs and if these survival needs are already met by individual(s), any addition of those will not attract further satisfaction or motivation (Armstrong, 2010:21).

Relatedness to Alderfer (1972) refers to the desire man has for maintaining interpersonal relationships; similar to Maslow's man social love need such as friendship, and the external component of his esteem need such as personal affection. In terms of relatedness, teachers need partnership among their heads, parents, pupils, supervisors, School Management Committees (SMCs) and the school community to work effectively.

Growth in view of Alderfer refers to an intrinsic desire for personal development –the intrinsic component of Maslow's esteem need, and self-actualization. This implies that teachers like any other workers when meet the first two priorities (existence and related-ness) will strive to reach the final stage (growth) for self-actualization or reaching their full potentials. The final stage (growth) may be likened to the position of director general of Ghana Education Service (GES) which is the highest post within the ranks of teacher profession in Ghana.

#### 2.12.4 Herzberg's Theory of Motivation.

Herzberg (1959) described how a working environment affects workers emotions through satisfaction or dissatisfaction. The proposal in this theory is that when workers were satisfied at work, they would be motivated to work, and vice versa (MTD Training, 2010:20; Armstrong, 2010:140). This theory is also known as motivation - hygiene theory because it considered the factors that satisfied the employee to be motivators and those factors that were dissatisfying as hygiene factors. Hygiene factors" being present does not avoid job dissatisfaction, but you take them away, you will find that they can de-motivate an employee (MTD Training, 2010). Besides, the availability of motivators in the workplace causes endless state of motivation in employees but their absence did not lead to discontent. Hygiene on the other hand produced an acceptable working environment but did not increase fulfillment – their absence did however cause job dissatisfaction.

Herzberg theory is important and applicable to the teacher motivation in Ghana. For example, it shows how different decisions in a school environment will affect teachers and students satisfaction and dissatisfaction. If the school head focused on motivating teachers and students, he/she will concentrate on factors leading to satisfaction within the school climate. Thus, the failure of the school head to create chances for his/her subordinates growth, advancement, achievement, and recognition will create a team lacking satisfaction and motivation which will lead to poor academic achievement of the school.

It is worth noting from Hertzberg's theory that when people become dependent on rewards such as salaries to perform their duties, there will be significant negative consequences when they perceive their earnings to be low. This fact has led the researcher to propose that rewards such as increase in salaries and allowances must not be used as basis for motivating teachers in Ghana. Instead, working conditions such as housing schemes, means of transportation, free medical care and nonpayment of fees by teachers" children will far motivate teachers than constantly increasing their salaries in currency depreciation economy.

#### **2.13 School Leadership and Students 'Academic Achievement.**

The Encarta English Dictionary of 2009 defines a leader as somebody whom people follow or somebody who guides or directs others. The term leadership therefore describes the ability of a person to guide, direct or influence people. Leadership style thus describes the common emphasis a leader places on performance and expected behavior of the followers at a working

environment (Warrick, 1981). In this context, the duties and functions of headteachers are in line with these definitions. Headteachers are the immediate caretakers of both the material (school facilities) and human resources (teachers and students) of the schools. Leithwood et al. (2004) opined that at the core of most definitions of leadership are two functions: “providing direction” and “exercising influence. Each of these functions can be carried out in different way, and such differences distinguish many models of leadership from one another.

#### 2.13.1 Responsibilities of Effective School Leader.

Cotton (2003) identified some responsibilities and leadership styles of headteachers that contribute to the successful academic achievements of students. Among some of the responsibilities are discipline, flexibility, input and above all monitoring and evaluation.

##### *2.13.1.1 The Head teacher’s Role on Discipline.*

According to Garner (2012:10) the word “discipline” has the same origin as the word “disciple”. Under the task of discipline, the important duty of the headteacher is to protect teachers from undue distractions. Discipline according to Cotton (2003) engrosses keeping good order, systematically enforcing fair, clear and well-understood rules and frequent use of actual punishment. Thus, the specific leadership styles and responsibilities associated with the discipline on the part of the school head are:

- ensuring that the instructional time is not interrupted and
- watching over teachers and pupils to prevent internal and external distractions.

##### *2.13.1.2 Flexibility of the School Head.*

Flexibility describes how the leaders maintain their leadership styles at working environment and are ready to accept different opinion(s). The school head should be a distinguished teacher so as to be able to offer appropriate instructional leadership. Instructional leadership involves encouragement that focus on improving the classroom practices of teachers as the direction for the school. Effective instructional leadership affects the quality of teaching and student learning which is the ultimate of determining their performance in external examination (Leithwood et al. 2004). The performance guide provided by individual school head in terms of flexibility involves encouraging creativity and individual school head initiatives (Stronge, 2013:8). Flexibility to meet individual needs by leaders in modern organizational management is much more important in heterogeneous population such as teachers and pupils.

#### *2.13.1.3 Head teacher's Input in Schools.*

Input simply defined how the school leader involves teachers in the design and implementation of important decisions and policies of the school. It is associated with transformational and instructional leadership. The input dimension is in line with the view that effective leadership is a function of the extent to which the headteacher works toward whole-staff consensus in establishing school priorities and communicate these priorities and goals to students and staff, giving a sense of overall purpose. The specific behaviors and roles associated with this leadership arrangement are:

- providing opportunities for staff to be involved in developing school policies;
- providing opportunities for staff input on all important decisions; and
- using leadership teams among teachers and students in decision making.

#### *2.13.1.4 Head teachers Role in Monitoring and Evaluating.*

Monitoring and evaluation involves the creation of a system that provides effective feedback (Nettles & Herrington, 2007). More specifically, this responsibility of the headteacher defines the extent to which he/she monitors the effectiveness of school practices in terms of their impact on student achievement. School leaders can define the school's educational goals, ensure that instructional practice is directed towards achieving these goals, observe and evaluate teachers, suggest modifications to improve teaching practices, and liaise with the community and parents.

Personal supervision of classes during instructional period by the school head has been shown as one of the effectiveness of the school in most studies where it has been included as a variable (Nettles & Herrington, 2007). Through effective class supervision, the head of the school is able to ascertain the academic competencies of his/her staff for academic achievements. For example subjects reallocation to teachers can only be done if the head of school has a fair idea about the academic competencies of his/her staff. Head of schools are also in a position to provide enticements and motivate teachers to improve the quality of instruction (OECD, 2012a). Thus, the monitoring and evaluation duty of the headteacher is to assess the input and output of the school and make the necessary adjustment to ensure positive educational outcomes.

In summary, Ankomah and Hope (2011) in a research on academic performance between public and private in Ghanaian schools concluded that the variability between public and

private basic school head teachers" exercise of supervisory practices was fundamental to Ghana"s public and private student achievement gap. Casely-Hayford et al. (2013) on a research on quality education through public schools leadership in Northern Ghana found that the majority of the head teachers neither queried nor even checked their teachers" use of instructional time and level of absenteeism.

## **2.14 Conceptualization of Quality in Education**

Several definitions have been put forward on the concept of quality in education, testifying to the difficulty and multidimensional nature of the concept (Buckland, 2000). In Ghana, like elsewhere, it is often hard to define quality in education. It becomes even more difficult when it is conceptualized in terms of a particular aspect of education because all the features connected with educational quality are interrelated (Ankomah et al. 2005:2). While some define quality in education in terms of resource input, others perceive it as positive outcomes such as the attainment of good grades after schooling. However, there are certain factors that are often considered as key to positive educational outcomes as identified by UNESCO education quality framework, popularly known as GEQAF. These include the quality of the teachers, ease of access to educational resources, a supportive learning environment, background of learners and the assessment system to gauge the progress of the learners against the stated educational objective.

### **2.14.1 Effective Teaching Workforce.**

All educational policies rest on the shoulders of well trained teachers. Teachers are the immediate implementers of national education curriculum as they interact with pupils/ students to ensure teaching and learning in the classrooms. What happens in classrooms between teachers and pupils is the most important factor in determining quality in education (UNICEF, 2005:36). An important underlying dimension of classroom processes identified to influence quality education delivery includes the quality of pedagogy, duration of learning, child"s confidence and engagement as well as involvement of children in literacy and numeracy teaching and learning (Sammons et al. 2008). Pedagogical knowledge deals with the teaching process which includes ways of representing and formulating the curriculum content which makes it comprehensible to the learners.

### **2.14.2 Effective Use of Instructional Time**

Regular attendance of teachers and pupils to school ensure continuous learning that leads to the academic excellence of the students. Teachers are expected to teach and evaluate their



lessons through regular class exercises and homework. These exercises are expected to be marked, offer corrections and recorded to maintain the child academic progress through the School Based Assessment (SBA). The SBA proportion mark of 30% is used by WAEC as Continuous Assessment (CA) for determining examination results at the BECE (MoESS, 2008).

To improve learning outcomes in classrooms, adequate educational facilities (water, electricity, teaching aids and so on) must be made available to support the process. Inadequate educational facilities negatively affect learning outcomes. Besides, teachers need to apply their skills in terms of utilizing the formative and summative assessments to monitor children's advancement and ensure they are acquiring good understanding and knowledge that will enhance their academic achievements (OECD, 2012a:12).

In Botswana, (Dunne & Leach 2005, quoted in Akaguri, 2011) reported that an important factor to be used in identifying poor performing schools is low professionalism among teachers in such schools. Problems identified among such school teachers include: leaving school before closing time, drunkenness, absenteeism, lack of preparation of lesson notes, poor conduct of class exercises, lateness to school and above all refusal to teach even when in school.

#### 2.14.3 Effective Teaching and Class Sizes.

The issue of class size and effective teaching are often debated in relation to quality in education. It is often stated that small class sizes are helpful as it allows teachers to pay closer attention to the needs of individual learners and allow for a wider range of teaching methodologies to be applied in classrooms. Most certainly, smaller classes are beneficial for slow learners, especially in the early years of schooling and some evidence have shown that smaller class sizes allows more positive teacher-student relationships (OECD, 2012a:14). Thus, a smaller class sizes allow the teacher to offer class exercises, mark and offer corrections and this could be a vice versa for larger class sizes

It is largely noted that larger class sizes result in lesser academic achievements, especially in the early years of education. Larger classes are difficult for teachers to manage and may often result in the adoption of ineffective methods of teaching, and less guidance receive by students from teachers (UIS, 2011).

#### 2.14.4 Supportive Learning Environment.

Learning environment can either be structured or unstructured. Schools are recognized buildings or structures that are put up for teaching and learning. Supportive learning environments have high level of impact on learners and use learning as the main transformative force to change their behaviors. Providing a friendly reception to the child, in an environment where he/she can feel safe and ready for teaching is essential for the development of each individual pupil and the general students as a whole (UNESCO, 2012:39). All learning environment must take into consideration the locational safety, period of learning and availability of essential facilities to support learning process in the schools. Without adequate facilities within the learning environment, teaching and learning will be adversely affected

#### 2.14.5 Availability of Teaching and Learning Materials in Schools.

The school improvement programme can include the provision of basic infrastructure such as (blackboards, furniture, basic teaching and learning materials, electricity as well as water and toilet facilities). The most important factor in improving quality education delivery is the distribution of basic textbooks to all public and private schools as well as basic equipment, furniture and computers for JHS workshops.

Access to core textbooks is an essential indicator of the quality of education in Ghana. According to the Ministry of Education policy, each student in Junior High School is expected to have four government – designated core textbooks: namely; Mathematics, English Language, Integrated Science and Social Studies. A core textbook ratio of 1:1 means a complete pupils access to these books, but the available data from Ghana Education Management Information System in 2013 indicated that most basic schools in Ghana lacks adequate textbooks for teaching and learning (MoE, 2013).

#### 2.14.6 The Individual Learners Circumstances

The process of acquiring knowledge among children is strongly influence by their home parental care and the kind of attention they are offered in the school environment (UNICEF, 2005). Appraisal of the quality of education at any level must take into consideration the initial individual differences among the learners. These differences may include issues such as: the amount and nature of prior learning, socio-economic background of the learners, amount of daily calories intake as well as their health backgrounds. The quality of children’s survival before beginning formal education critically impacts on the kind of learners they can

be. Many things go into making a quality learner, including health, early childhood experiences and home support. Attending a good pre-school can build a strong foundation for learning and also assist children to be promoted from one level of education to the other without difficulty (UNESCO, 2012:48).

The Programme for International Student Assessment (PISA) in a research in 2009 reported that in 58 out of 65 countries, pupils who had attended at least a year of pre-primary school performed academically better than students who had not, even after accounting for their socio-economic background. Some good numbers of children in private schools in Ghana do have the privilege to attend good school at pre-school and hence exhibit good performance in standard examinations.

Many researches point to the fact that private schools students are normally from affluent homes and hence have more advantages over their public counterparts in terms of care and support from home. This assertion is however debunked that some private schools charges very low fees affordable to parents on poverty-line (Tooley, 2007).

#### 2.14.7 Assessment Systems in Ghanaian Schools

The purpose of an assessment in education is to verify the extent to which the available outcomes cover key competencies that should be measured in a learner at a particular period of time. Assessments broadly measure the strengths and weaknesses of education outcomes through the learners (examples: quality of grades obtained, competencies, positive values, dexterity acquisition, and equity in the acquired knowledge) (UNESCO, 2012). Assessment instruments on any level of education therefore serve at least one or two aims. One objective could be to give each individual in a learning environment an indication of actual accomplishment in his/her learning and the other goal is to identify trends among groups to establish the impact of their learning outcomes.

Assessment systems in Ghana's pre-tertiary education is inclined towards three main types of activities, each of which serves a different purpose and addresses different information needs. These three main types are: classroom assessments, examinations, and large-scale, system level assessments (World Bank, 2013).

Classroom assessment provides real-time information to support ongoing teaching and learning in individual classrooms. Classroom assessments use a variety of formats, including observation, questioning, paper and pencil tests to evaluate student learning on a daily basis.

These forms of assessment constitute the formative assessment which main focus is to ascertain the learner's level of achievement or competence. Classroom assessment often requires that all stakeholders in education get the necessary report to make their input through School Performance Appraisal Meeting (SPAM) for better educational outcomes. Policies and programmes on classroom assessments could serve as basis to provide swift feedback for improving teaching and learning activities in basic schools.

Examinations on the other hand, provide a basis for selecting or certifying learners as they change from one level of the education system to the next (or into the workforce). All eligible students are tested on an annual basis (or more often if the system allows for repeat testing). Examinations normally cover the main subject areas in the curriculum and usually involve essays and multiple-choice questions. The standardized examination assessment constitutes the summative assessment which works towards a pupil's or student achievement at the end of the study- (examples include: quality of grades obtained, literacy and numeracy skills, life and emotional skills, and so on). These types of examinations in Ghana include; Basic Education Certificate Examination (BECE) for certification and selection into second cycle institutions and West Africa Senior Secondary Certificate Examination (WASSCE) for certifying and admission into tertiary institutions.

The large-scale system-level examination makes the necessary arrangement on the general performance of the entire education system at particular grades or age levels. These forms of assessments typically cover a few subjects on a regular basis (such as every 3 to 5 years), are often sample based, and use multiple-choice and short-answer formats (World Bank, 2013). They may be national or international in scope. Example of national assessment in Ghana is National Education Assessment Test (NEAT) and that of the international is Trends in International Mathematics and Science Study (TIMSS) which Ghana has been participating since 2003.

#### 2.14.8 Computerized School Selection and Placement System (CSSPS)

The demand for Senior High School (SHS) education has increased in Ghana, following the successive increasing population over the years. However, there remain inequities in this demand as three-fourths of youth typically either do not have adequate qualifications to enter SHS or cannot afford to move or commute to the schools where they are placed (World Bank, 2014:2). The CSSPS for second cycle schools was introduced in 2005 by government of Ghana to eliminate the disparity in access to post basic education in the country. The system

is purely based on the quality of grades obtained by pupils in the Basic Education Certificate Examination (BECE). However, because of high competition among the candidates for limited number of well-endowed secondary schools in the country, a student must realistically obtain the range of aggregate from six to 20. A candidate in this examination therefore needs to obtain very good grades to gain admission into well-endowed SHS because of the smaller number of places available to the large number of JHS graduates that complete annually (Ahiatrogah, Dela & Bevell, 2013). The CSSPS is normally done after the students submit a list of ranked choices for second cycle schools of their choice; then take the standardized BECE after which they are placed into various secondary schools based on their performance.

Certification and selection of basic school pupil into various second cycle schools is the main objective of the BECE. The basic education system in Ghana however has failed to take into consideration the faith of the greater portion of pupils who are unsuccessful to transition to second cycle schools know and can really do, and hence makes their placement into other areas of further education and apprenticeship difficult (Mereku, c2001).

### **2.15 Theoretical Framework**

A large volume of literature has come into view on educational quality in recent years, examining factors that help improve education and proposing ways to promote better learning outcomes in schools. The theoretical framework underpinning this study is the Theory of Educational Productivity. This theory was introduced by Welbeg in 1981 and identified three major factors that had direct links with the effectiveness of an educational system and its outcomes. These three overlapping issues as factors determining the academic performance of students in schools. Thus, several researches that attempted to explain the successes or failures among students in school do so with the help of these three intervening variables in education. These include: parents (family causal factors), teachers (academic causal factors) and students (personal causal factors) (Diaz, 2005:45).

The Theory of Educational Productivity believed that the personal factors can be well explained in the areas of motivational theories and psychological theories respectively. the most useful psychology theory in explaining personal disposition is self- concept respectively.

Motivation, whether intrinsic or extrinsic direct a person activities towards an aim or goal. Thus, a student well motivated to learn in order to achieve academic excellence in school is more likely to put up extra time and resources in learning than a student who is less motivated. Self-concept on the other hand, is a result from the person's internalization of his/her social image or capacity (Woolfolk, 1998). An academic self-concept therefore refers to the individual student constantly evaluating and judging his/her academic performance abilities in school. Academic self-concept serves as a base for future educational success or failure. It is believed that academic self-concept has a positive relationship with academic achievement based on psychological theories (Hung & Pey-yan, 2007). In several studies, self-concept was found to better envisage a student performance than other factors such as age and gender (Edward, 2005, cited in Diaz, 2005). Studies have shown that self-concept influences academic performance indirectly by means of its influence on intrinsic motivation (Woolfolk, 1998).

The second class of factors that influence the academic performance of students in school is the family factors. The recent condition of measuring the attributes of families to child's academic performance is beyond all doubt that there is an increasing awareness of the importance of parents' role in the progress and educational development of their children. The variables that are often associated with family factors are mostly on the level of parental involvement in child's education which proves to contribute positively to children academic performance in schools (Desforges & Abouchaar, 2003).

According to Diaz (2005) the family background of a student is the most important and most weighty factor in determining the academic performance of the children in school. Among family factors of greatest influence are social class variables, educational background of parents and family structure.

Social class factors are mostly the family values and expectations from the child's outcomes from school. The influence of social class determines family expectations, values and attitudes regarding a child's education. A child's perception of parental support directly affects his/her performance in school (Hung & Peyyan, 2007).

Besides, the influence of parent educational attainment determines the amount and nature of care a child receives from the family, like affective relationship and attitudes towards values expectations. All things being equal, there is a positive relationship with regard to pupils'

perception of their academic performance in school and the perceived expectations of their parents (Diaz, 2005).

There is equally sufficient evidence that positive parental care as a result of the parent attainment of formal education favors the development of well-mannered, stable and integrated personality while unfavorable parenting produces an immature and insecure personalities (Desforges & Abouchaar, 2003).

The final group of factors that influence pupils' academic performance are mostly school variables. The most important noticeable aspect in these variables is the class teacher and the students' colleagues. The characteristic of a teacher is considered a key for the student personal and academic development. The values given from the teacher to the student are usually reciprocal highlighting additional personal relationships. Studies have shown that teacher expectations significantly influence a student's exam score. The teacher's assessment in classroom is influenced by two factors: 1) the student intelligence which guarantees that the higher the intelligence of the child, the better the academic performance which strengthen reciprocal appreciation between the teacher and the student. Secondly, teachers relationship with pupils who perform abysmal in his/her class assessment attributes the poor performance to the pupil and in this case the reciprocal relationship between the teacher and the pupil could be strained (Diaz, 2005)..

Besides, research has shown that a student interaction with peers in the school environment promotes the acquisition of competencies such as temper control and expression of his/her prosocial behavior which could lead to positive attitude of learning.

## **2.16 Definition of key terms:**

The terminologies below have been used in the text to connote the following meanings:

### **Basic schools:**

This is an eleven year basic education system in Ghana, comprising two year kindergarten, six year primary and three year junior secondary school (MoESS, 2008).

**Public schools:**

Government or Public schools are those that obtain all their funding from the state, and are owned by the state. These schools are mainly owned by churches and Islamic authorities, nationalized in Ghana in the 1970s, and which now operate as government schools, but with some vestiges of private management under state regulations (Nsiah-Pepurah, 2004).

**Private schools:**

Private schools are those that are independently managed and privately funded by person(s) or entities rather than the state and they can either be registered or unregistered (CDC Consult, 2010).

**Conclusion**

In recent times, more Ghanaian parents at their individual levels look for better private basic schools for their wards instead of patronizing the fee-free public schools. However, the major differences between private and public schools are the superior English language facility of the private school pupils; greater availability and use of textbooks by pupils; and more access to whole class extra classes (Ampiah, 2008). Thus, these variables can equally be applied to public basic schools to lift up their performances in standard examinations.



## CHAPTER THREE

### THE STUDY AREA AND RESEARCH METHODOLOGY

#### 3.1 Introduction

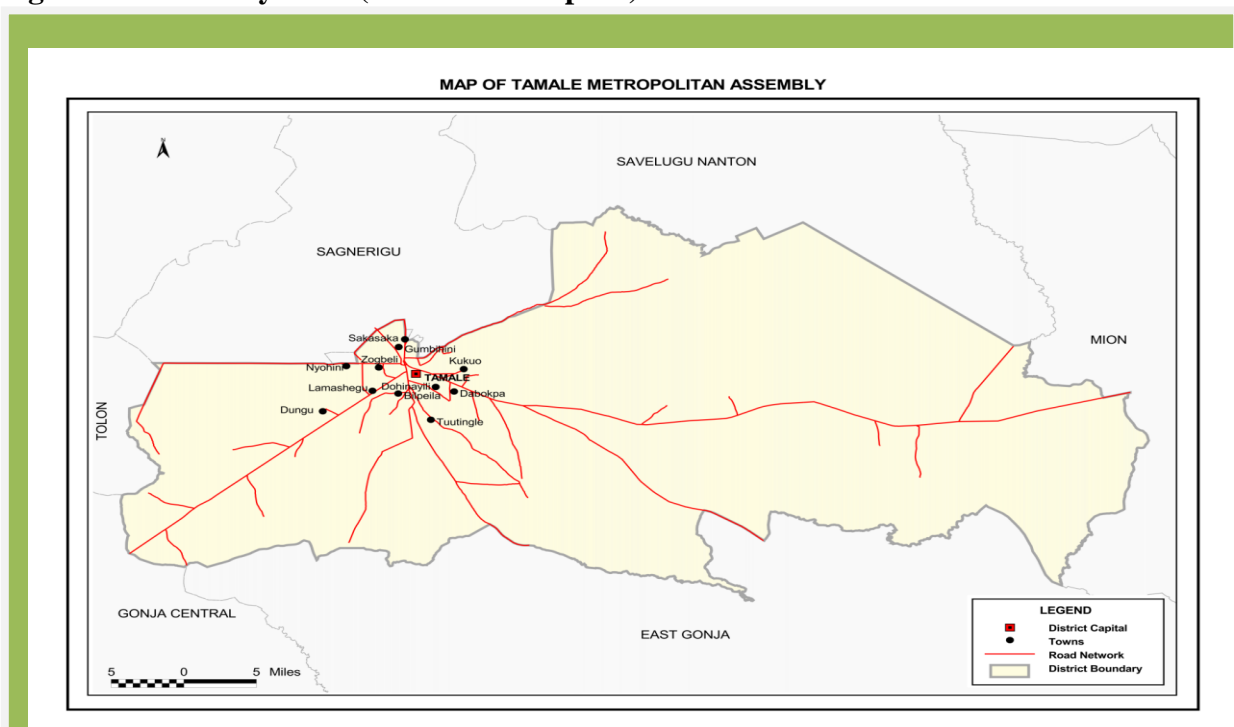
This chapter defined the methods and techniques that were adopted for data collection for this thesis and it includes: background of the study area, research design, sampling procedures, data collection methods, the research ethics and field problems encountered. The issues of reliability, validity and pre-testing of research instruments were also examined to ensure the accuracy of the research outcomes.

#### 3.2 The Study Area

Tamale is the capital of Northern Region of Ghana and the only Metropolis among the twenty six (26) local government areas in the region and two other regions (Upper East and Upper West) in the Northern sector of the country.

The Metropolis is located in the central part of the region and shares boundaries with the newly created Sagnarigu District Assembly to the west and north, Mion District Assembly to the east, East Gonja to the south and Central Gonja to the south-west respectively. In terms of location, Tamale lies between latitude 9°16 and 9° 34 North and longitudes 0° 36 and 0° 57 West (GSS, 2014). The location of the Tamale Metropolis is shown on Figure 1.

**Figure 1: The Study Area (Tamale Metropolis)**



Source: Ghana Statistical Service, 2014.

The estimated population of the inhabitants within Tamale Metropolis in 2010 Population and Housing Census, was 233,252, representing 9.4% of the entire Northern region's population (GSS, 2014). The male population constituted 49.7 % while that of the females represented 50.3 percent. Recent projected population of the Metropolis as at 2015 was estimated at 302,126 inhabitants, based on the annual population growth rate from 2010 Census making it the third largest settlement in Ghana and the fastest growing city in West African sub-region (Tamale profile, 2015). Besides, the proportion of the population residing in urban communities (80.8%) is higher than that living in rural localities (19.1%) of the Metropolis (GSS, 2014).

The people in the Metropolis are mostly peasant farmers and grow crops such as: millet, rice, maize, groundnuts, sorghum and others. Some also involve in petty trading for their livelihood. Majority of the inhabitants in the Tamale Metropolis are Muslims with Christian minority and Traditionalists. The proportion of literate individuals varies among the districts in the region with the lowest rate of twelve percent in Gushegu District to about 43percent in the Tamale Metropolis (Women Voice, 2014). The parents in the Metropolis failure to secure reliable jobs as a result of their low levels of educational attainment make them less able to support the education of their children as expected, resulting in high incidence of illiteracy in the area (NOYED, 2013).

In terms of development facilities, there are many banks and insurance companies within the Central Business District (CDB) as well as the market for various economic activities. The Metropolis can also boast of a teaching hospital for referral cases as well as a standard sports stadium for recreational activities.

The Metropolis has many educational institutions, including the administration and two campuses of the University for Development Studies (UDS), a private technical university, one polytechnic and two teacher training colleges. There is also one nursing training college, a community health nursing college, institute of adult education, Ghana institute of languages, and school of hygiene. There are equally eleven public Senior High Schools (SHS) and eight Private Senior High Schools in the Metropolis, bringing the number of secondary schools to 19.

As a result of the carve out of Sagnarigu district from Tamale Metropolis in 2012, the number of circuits in the Metropolis has been reduced from 22 to 14. In September 2014/2015 academic year, the number of public nursery schools in the Tamale Metropolis was 184 and

that of the private nursery schools was 56, bringing the total number to 240. In the same way, the number of public primary schools during this period was 236 and that of the private primary schools was 38, resulting to 274 primary schools respectively. In the same manner, the number of public and private junior high schools that registered candidates for 2013 BECE were 60 for which private being twelve schools and the remaining 48 being public schools respectively (Tamale Regional Education Directorate, 2014). The children in the Metropolis who are four years or older and are enrolled into schools as at September, 2014 constituted about 81.5 percent in basic schools, 11.6 percent in senior secondary schools, 0.7 percent in vocational/technical schools, and 4.6 percent in tertiary institutions (GSS, 2014:65).

### **3.3 Research Design**

In simple terms, the research design is a plan of the methods and procedures that is used by the researchers to collect and analyze data (Shukla, 2008:29). The researcher in this case adopted the descriptive and case study designs for the study. The purpose of descriptive studies is to observe, describe and document aspects of a situation as it naturally occurs and sometimes serves as a starting point for hypothesis generation or theory development (Polit & Hungler, 1999:195). This design helps the researchers to describe the relationships among the variables of interest, but not to infer cause –effects relationships. The major characteristic of the descriptive research design method is that the researcher has no control over the variables; but can only report what happened or what is happening among the variables of interest.

The descriptive design in this study allowed the researcher to obtain information regarding the current status of academic performance of public and private junior highs schools in the Tamale Metropolis. It also assisted the researcher to ascertain what existed in these two categories of schools with respect to student academic achievements at the BECE, parental involvement in their children's education, head teachers leadership styles, motivation levels among teachers in public and private schools and the availability of teaching resources in the two categories of schools.

Besides, the purpose of a case study is to conduct an in-depth investigation of a single entity or small series of entities. Typically, the entity could be an individual, families, groups, institutions or other social units as a focus of the study (Polit & Hungler, 1999:250). A case study according to Yin (1984) is an empirical enquiry that investigates a contemporary phenomenon within its real life context; when the boundaries between phenomenon and context are not clearly evident and in which multiple sources of evidence are used.

The Case study in this study helped the researcher to gather data from two different entities (public and private schools) individuals to deduce complex issues that influence their academic performance at the BECE and to further strengthen what is already known with respect to the academic performance disparity among public and private junior high schools.

In using the descriptive and case study designs, the researcher equally used the quantitative means of data collection to enhance the understanding of the numerical relationship in the data. In the researcher's view, the quantitative means of collecting data allows meaningful generalization to be made with respect to the numerical relationships which existed in the sample, and which reflected the attributes of the entire population.

A mixed methods design is useful to capture the best of both quantitative and qualitative approaches to both generalize the findings to a population and develop a detailed view of the meaning of a phenomenon or concept been studied (Creswell,2003). Both quantitative and qualitative data were collected for the purposes of exploring and describing the BECE outcomes in public and private JHS in the Tamale Metropolis. The quantitative data describes numerical data while qualitative describes categorical data.

### **3.4 Target Population**

The target population of the study was the 60 Junior High Schools in the Tamale Metropolis who presented candidates for the annual BECE in 2013 academic year. These schools altogether presented 3,881 students for the examination. For the purpose of data collection, mean percentage exam scores in BECE for past four years (2010, 2011, 2012 and 2013) were sum up and divided by four to get the average performances of the schools in order to categorize them into high, average and low performing schools respectively. The scrutiny of the schools performances at the BECE from 2010 to 2013 showed that there were eight schools that consistently recorded a mean score of 80% and above pass rate and were thus regarded as high performing schools. The average performing schools were those that at least recorded mean pass rate of 50% to 40% during the period and their number was 19. Schools that consistently recorded 39% or below pass rate from 2010 to 2013 were regarded as low performing schools and their total number was 33. Again, four of the high performing schools had all the three levels of basic education (Kindergarten, Primary and JHS ) which constitute basic education system in Ghana while six schools from the average performing class also had all the three levels of basic education. In addition, eight schools from low performing category schools also had all the three levels of basic education. Hence, the accessible

population for this study comprised high performing schools that had all the three levels of basic education and the same criteria was also considered for the average and low performing schools respectively.

The selected schools were chosen based on their average examination scores as contained in the data of schools performance in BECE in the Northern Regional Education Directorate. This processes led to the choosing of three public and three private schools in the Tamale Metropolis for the study. According to Arnold (1970:148) in an event of a researcher experiencing multiples of cases with similar variation in a target population, what are required to avoid against bias is to layout the dimensions along which the cases vary and then examine at least one example of each type of case.

In this regard, Abe Halperin JHS (a private school ) and Jisonayil M/A JHS (a public school ) have had a mean percentage above 80% during these periods and were thus rated as high performing schools. The average pass rate schools were Zogbeli M/A JHS (a public school) and Peace & Unity JHS (a private school) with an average score between 40% and 80% respectively. The low pass rate schools were Mahad Tahalia JHS (a public school) and Future Leaders JHS (a private school) with an average pass rate within 10% and 39% during the periods under consideration.

Therefore, the accessible population for this study was the entire heads of public and private selected schools, core subject teachers, parents and the graduates from these schools. The secondary data from the selected schools, including the classroom registers and teachers' attendance books were made available to the researcher after he introduced himself as a sophomore from the Department of Planning, KNUST. The introductory letter from the Head of Department of Planning actually facilitated the attention the researcher received from almost all the selected junior high schools in the Tamale Metropolis for this study. The list of core subject teacher were obtained through the teachers attendance book whiles that of the list of candidates presented by each school was obtained from their class registers. The name of each candidate from each school was matched against a parent/guardian to obtained data from both. The estimated population for the study of these six schools was 664 respondents, comprising six head teachers, 20 core subject teachers, 319 JHS graduates and 319 parents or guardians. Thus, a total of 220 JHS graduates and 220 parents were targeted from public schools whiles 99 JHS graduates and 99 parents/guardians were targeted from the private

schools. The distribution of the number of JHS graduates from each school and the corresponding number of their parents is shown on Table 1.

**Table 1: Distribution of Graduates and Parents by School Category in 2013 BECE**

Public Schools	No. of Graduates	No. of Parents	Total	Private Schools	No. of Graduates	No. of Parents	Total
Jisonayil M/A	40	40	80	Abe Halperin	28	28	56
Zogbeli M/A	134	134	268	Future Leaders	36	36	72
Mahad Tahalia	46	46	92	Peace &Unity	35	35	70
Total	220	220	440		99	99	198

Source: Author's Construct with field data, 2014.

### 3.5 Determination of Sample Size.

Sample size simple refers to the number of subjects to be selected from the population to constitute a sample for a study. The size of sample in qualitative studies should neither be excessively large, nor too small (Kothari, 2004: 56). From tabulated values of sample sizes for different sizes of population, 600 and 700 populations of individuals require a minimum sample size of 234 and 248 for a 95% confidence level and 5% margin of error (Gang, 1999). A sample of 250 respondents was used for this study which was seen as highly representative of the population of 664 research respondents. According to Baker and Edwards (2012:15) it may be advisable to seek out a larger subject pool when groups or sub-populations are discernable within the setting and it is likely that members of these groups have varied perceptions, roles, statuses, problems with, or decisions about the scene.

### 3.6 Sample and Sampling Technique.

In the terminology of research design, the larger group of interest to a researcher is the population and small set of individuals who participate in the study is called the sample (Gravetter & Forzano, 2006: 117). Thus, a sample of six schools were chosen for the study, comprising three public and three private JHS based on their average academic performances at the BECE from 2010 to 2013 . These schools were made up of two high performing schools, one private and the other public. The same criterion was used for the average and low performing schools respectively.

Owing to the fact that there were more JHS graduates in public schools as compared to the private schools selected, the researcher used a proportional quota sampling technique to determine the number of subjects that were recruited for each of the two categories of

schools. Quota sampling is a type of non-probability sampling in which units are selected in to a sample on the basis of pre-specified characteristics, so that the total sample will have the same distribution of characteristics assumed to exist in the population being studied (Babbie, 2010:194). The respondents were therefore put into a set of mutually exclusive clusters for selection to ensure fair representation of the selected schools respondents.

Thus, the sample was sub divided into two groups with similar characteristics, in this case public and private junior high schools. There were 99 private school graduates and 99 parents of this category that were targeted while that of the public constituted 220 graduates and 220 parents for the public schools category. Thus, the targeted population of graduates from both public and private schools and their parents were altogether 638.

In addition, 20 core subject teachers were targeted and all the six school heads were automatically picked for the study. The core subject teachers were targeted because all the candidates at the BECE were expected to pass successful in those subjects. Any student by rule who fails a single core subject will not get placement through the CSSPS to continue his/her education at post basic level. The field data produced all the 20 core subject teachers comprising eleven from public schools and nine from private schools for the study. This is because at Future Leaders JHS, two teachers were responsible for teaching both Mathematics and Integrated Science. Also, a teacher who teaches Mathematics at Mahad Tahilia JHS was same person teaching Integrated Science in that school as at the time of this study. Thus, out of 250 respondents targeted for the sample size, 20 teachers were selected from the schools and all the six head teachers were automatically picked for the study. The remaining 224 sample size respondents were distributed among the public and private JHS graduates and their parents/guardians based on their respective stratum.

The number of JHS graduates sampled from public schools was  $220 / 638 * 224 = 77$  JHS graduates and that of the private schools was  $99 / 638 * 224 = 35$  JHS graduates respectively. The proportional distribution of the candidates presented by selected schools in 2013 BECE is shown on Table 2.

**Table 2: Proportional Distribution of Candidates by Selected Schools**

Name of a School	No.of graduates	Proportion of public graduates	Name of a School	No. of graduates	Proportion of private graduates
Jisonayil M/A	40	$40/220*77=14$	Abe Halperin	28	$28/99*35=10$
Zogbeli M/A	134	$134/220*77=47$	Future Leader	36	$36/99*35=13$
Mahad Tahilia	46	$46/220*77=16$	Peace & Unity	35	$35/99*35=12$
Total	220	77		99	35

Source: Author's Construct with field data, 2014.

Based on the selection procedure that the number of JHS graduates and their parents / guardians number was the same, the proportion of parents / guardians were equally the same in the two categories of schools. The distribution of all the sampled respondents by selected schools in 2013 BECE is shown on Table 3.

**Table 3: Distribution of Respondents by School Category.**

School Type	Headteachers	Teachers	JHS Graduates	Parents	Total
Public JHS	3	11	77	77	168
Private JHS	3	9	35	35	82
Total	6	20	112	112	250

Source: Author's Construct ,2014.

### 3.7 Sampling Methods

Both probability and non- probability sampling methods were used to gather data for this study. Probability sampling is a type of sampling in which all the entire population is known, each individual in the population has a specifiable probability of selection, and sampling is done using a random process based on the probabilities (Gravetter & Forzano, 2006: 512). A non - probability sampling on the other hand, is a method of sampling in which the population is not completely known, individual probabilities cannot be known, and the selection is based on factors such as common sense or ease with an effort to maintain representativeness and avoid bias (Gravetter & Forzano,2006:510).

In this regard, all the core subject teachers and headteachers from the chosen schools were selected based on purposive sampling. Purposive sample is a type of non-probability sample in which the researchers carefully and consciously choose their subjects to be included in their sample so that the sample can be developed for their needs (Alonge 2010:52). The purposive sampling was adopted by the researcher to ensure the participation of only core subject tutors and headteachers from the selected schools.



On the other hand, all the JHS graduates from the chosen schools were selected based on both probability and non-probability techniques. The first method the researcher used was proportional quota sampling to determine the number of graduates to be selected from each school. The sampling frame (class registers) from each school containing the names of the graduates was matched against numbered pieces of papers according to the lists. The researcher then made a thorough mix of the pieces of papers in a black polythene bag and was drawn through a lottery method without replacement in each school visited. Thus, any numbered piece of paper selected had a corresponding name of the student being equally selected. Again, any graduate selected automatically had a parent/ guardian selected accordingly. These processes actually ensure that no graduate or parent from the selected schools was biased against the selection process.

### **3.8 Research Instrumentation**

Four research instruments were designed for this study. They were made up of three interview guides for heads of the selected schools, the core subject teachers from those schools as well as the parents who had their wards passed through the same schools. The only units of the respondents who answered the questionnaire were the public and private schools graduates.

Each interview guide was made up of open and closed ended questions to ascertain the respondents' views with respect to factors that could be responsible for the low performance of the students at the BECE in the Tamale Metropolis and possible reasons why the private schools pupils are out performing their public counterparts in this examination. The questionnaire for the JHS graduates on the other hand, were made up of closed ended questions, with few open questions in order to effectively compare the academic performance among public and private schools graduates.

#### **3.8.1 Validity and Reliability of the Instruments.**

According to Babbie (2005:148) in conventional usage, validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration. In the view of Gravetter & Forzano (2006:68) validity of a measurement procedure is the degree to which the measurement process measures the variable it claims to measure. To ensure the attainment of validity in this work, the researcher developed the research instruments based on the stated objectives of the study. This was done to ensure content validity of the items. The researcher equally ensured that subjects that possess the

characteristics of the research objectives were covered and this reflected the real outcome of the findings.

In the abstract, reliability is a matter of whether a particular technique applied repeatedly to the same objects, yields the same results each time (Babbie, 2005:145). A measurement procedure is therefore said to have reliability if repeated measurements of the same individual under the same conditions produce identical or nearly identical results (Gravetter & Forzano, 2006:72).

To ensure the attainment of reliability in this study, all the instruments were made simple for participants understanding and were pilot-tested to ensure suitability before data collection exercise. The researcher's supervisor who has firm knowledge in the area of the investigation equally vetted and approved the instruments before they were sent into the field for data gathering. Besides, triangulation of methods were used to ensure the accuracy of the data collected from the respondents to guarantee that the views expressed are accurately reported in this study.

### 3.8.2 Pre-testing of the Instruments

Pre- testing seeks to ensure the validity and reliability of the instrument for the study. A pre-test was conducted in the Sagnarigu District which was carved out from Tamale Metropolis in 2012. The district was selected for the pre-test because it had similar educational characteristics as the Tamale Metropolitan education directorate. It is about five minutes' drive from Tamale Metropolis to the Sagnarigu District Assembly. Three schools (Bagabaga JHS „A“ and Bagabaga JHS „B“) which were public and Alhassan Gbanzaba, a private JHS were used for the pre-test. These three schools actually exhibited some similarities with selected schools in terms of academic performance from 2010 to 2013. Twenty -five respondents were used in all. This number was made up of three headteachers, six core subject teachers, eight parents and eight passed students who just left in 2013 from those schools. They were made to complete a prototype of the instrument so that problems which were identified from the answering were dealt with before the final data collection exercise.

### 3.8.3 Data Collection Techniques.

The data collection methods describe how, when and where data is gathered in order to get the sample of respondents to provide answers to the research study. Both primary and secondary data sources were gathered from the respondents in order to facilitate the an-

swering of the research questions. According to Gravetter and Forzano (2006:42) primary source is a firsthand report of observations or research results written by the individual(s) who actually conducted the research and made the observations, while secondary source is a description or summary of another person's work. Both questionnaire and interview guide were used to solicit the views of the research subjects. An interview guide consisting of closed and open ended questions were used to gather primary data from the heads of public and private JHS, Core Subject tutors in both private and public JHS, parents who have their wards passed through the public and private JHS and a questionnaire for the JHS graduates.

A secondary source data for the study included among other records such as staff strength, new paper publications, journals, academic records, attendance rate of pupils and teachers, fees charge over the period, stock of textbooks and dual desks and other materials relevant in answering the research questions. Quality education indicators such as pass rate in BECE, Pupil Teacher Ratio (PTR), Pupil Core Textbooks Ratio (PCTBR), class sizes and other proxy indicators of educational quality were examined and collected to enhance the basis of comparisons between public and private JHS. Some of these data are found in appendix E.

### **3.9 Units of Analysis**

According to Babbie (2005: 98) individual human beings are perhaps the most typical unit of analysis for social research. In this study therefore, the opinion of headteachers/ proprietors, core subject teachers, parents and JHS graduates in both public and private schools were sought to comprehend factors that differentiated the academic achievements among the schools.

### **3.10 Variables of Analysis**

Candidates performance at BECE in this analysis is the dependent variable being explained by independent variables such as the leadership styles of heads of JHS, motivation levels among teachers, parental involvement in children education, availability of teaching and learning materials and the commitment of children in learning to pass their examinations.

### **3.11 Methods of Data Analysis**

Data was analyzed using Microsoft excel and the Predictive Analytics Software (SPSS) by illustrating the relevant information with graphs and charts to make the findings clearer. All quantitative and qualitative data that can be categorized were edited and coded and then fed into the computer using Predictive Analytics Software (SPSS) version 20. In addition, data

that was captured through observation and written statements were put into themes for analysis. The data collected from the questionnaires and interview guides were analyzed by the use of descriptive statistics (cross tabulations, frequencies, mean scores and percentages).

### **3.12 Field Problems Encountered.**

The first major problem the researcher encountered was his failure to take all schools that fell under his categorization due to resource constraints. This was resolved by taken three public and three private schools that exhibited similar variations of schools with respect to their academic performance.

Another problem the researcher met was how to get the JHS graduates and their parents to answer his research questions since these two units were no longer part of the selected schools. This was quickly resolved by employing the selected schools teachers to do the administering of the interview guide for parents and their children questionnaire as well. The chosen teachers were given training on how to solicit the views of these components of the work. The last problem the researcher faced during the data collection exercise was the failure of one of the private selected schools to cooperate fully with him. It took the researcher two weeks before he was given access to interact with that school teachers.

### **3.13 Ethical Issues in the Study**

There were several ethical issues that were followed in carrying out this study. These include:

- ✓ **Anonymity and Confidentiality:** all the participant in the study were assured of the confidential information they were ready to give to the researcher. The confidential issues included the protection of the respondent identity and the information given to the researcher;
- ✓ **No Harm to the Participants:** the researcher in this study throughout did not do anything that could adversely affect any respondent physically, psychologically and emotionally. Questions were basically framed according to the status of the respondents in the study. Thus, no respondent was compel to answer any question that did not relate to him or her;
- ✓ **Voluntary Participation:** no single respondent in this exercise was coerced in any form to take part in the study. All respondents who took part in this study did that voluntarily;

- ✓ **Anonymity and Confidentiality:** the analysis of the data given by the respondents were collectively discussed without linking a particular information to a particular individual or group of individuals and their respective school categories;
- ✓ **Deception:** the researcher in this study did not use any deceptive tactics to lure the respondents to respond to question he desired from them, but instead, the respondents only answered the questions based on their understanding

## **CHAPTER FOUR**

### **DATA ANALYSIS AND PRESENTATION OF RESULTS**

#### **4.1 Introduction**

This chapter presents the analysis of the data gathered from the field. Four sets of research instruments were administered to four different groups of respondents in this study, namely; the core subject teachers, headteachers, parents and JHS graduates from both public and private junior high schools in the Tamale Metropolis. Out of 112 interview guides that were distributed to parents, the number that was retrieved from them for processing was 108 and that of the graduates questionnaires were 109 out of 112 distributed. The entire 20 interview guide for core subject teachers and six headteachers, in the chosen schools were all retrieved for the analysis. The actual number of respondents who answered the research questions were 243 out of 250 respondents targeted, which represented 97.2% of the sampled population.

Analysis of this study was done using cross tabulations, frequencies, percentages, correlations and mean scores. Where possible, data has been depicted in graphical form to illustrate trends to ensure better comprehension of the issues discussed.

Analysis of this survey was done using cross tabulations, frequencies, percentages, correlations and mean scores. Where possible, data has been depicted in graphical form to illustrate trends to ensure better comprehension of the issues discussed.

The main focus of the study was to ascertain issues that account for the poor performance of the JHS candidates at the BECE and to identify factors which differentiate the academic achievements between public and private basic schools in the Tamale Metropolis. The study was done in terms of –headteachers leadership styles, motivation levels among public and private school teachers, parental involvements in their children education and the seriousness of public and private JHS pupils in learning to pass their final examinations. Other issues that were considered include: the availability of teaching and learning materials in the two categories of schools, internal or external supervision, teacher motivation and the use of instructional time on task. The chapter was organized into four main sections, in accordance with the research questions as well as the information sought from respondents based on the study stated objectives. These include:

- ✓ Academic performance among public and private Junior High Schools;
- ✓ Parental involvement in their children education in public and private JHS;

- ✓ Comparison of motivation levels among public and private school teachers; and
- ✓ Leadership styles adopted by public and private school heads in promoting the academic performance of their students

#### 4.2 Academic Performance among Public and Private JHS Graduates.

The total number of the JHS past students of the selected schools who completed BECE in 2013 and participated in this study were 109. This was made up of 39 males, representing 51% and 38 females, representing 49% for the public school category. The private school class was made up of 17 males, representing 53% and 15 females, representing 47% respectively. The average age reported among the graduates was 18 years for public and 16 years for private which means that there were more young graduates in private than in public junior high schools. The distributions of the graduates are shown on Table 4.

**Table 4: Distribution of JHS graduates by school category.**

Selected Schools graduates		Category of School				Total
		Public	% Public	Private	%Private	
Graduates by sex	Male	39	51	17	53	56
	Female	38	49	15	47	53
Total		<b>77</b>	<b>100%</b>	<b>32</b>	<b>100%</b>	<b>109</b>

Source: Author's construct with field data, 2014.

According to Djangmah (2011: 8) the best performance for a student at the BECE is to get aggregate six; that is a grade one in each of the four core subjects in addition to a grade one in two other subjects. Thus, the grading system of the BECE regards lower numbers as the best grades and bigger numbers as poor grades. Grade one is therefore the highest grade and grade nine the lowest in the grading scheme. Therefore, lower aggregates implies better performance and vice versa for higher aggregates. To be selected and placed in a second cycle school, a candidate at the BECE must have good grades from the six subjects. A grade which is higher than six in any one of the core subjects will not help the candidate selection for placement through the Computerized School Selection and Placement System (CSSPS). Thus, all candidates at the BECE who selects a particular school as their first choice are arranged in order of their performance and cut- off point of the school depends on available vacancy for each programme declared by heads of Senior High Schools/Technical Institutions (Ebow & Anokye, 2014). The best performance of a candidate at the BECE is therefore to obtain single number aggregates from six to nine and worse performance is

aggregate 30 or above which normal denies candidates the chance to get well-endowed senior high school for further schooling.

A cursory summary of the data on BECE outcome in 2013 academic year among the selected schools indicated higher performance of private school students over their public counterparts in the Tamale Metropolis. The Table 5 illustrates this assertion further.

**Table 5: Category of Schools and Aggregate Obtained at 2013 BECE.**

BECE Results		Category of School				Total
		Public	%Public	Private	%Private	
Aggregate obtained by schools at BECE	6 to 9	0	0	4	13	4
	10 to 15	2	3	11	34	13
	16 to 20	18	23	10	31	28
	21 to 30	38	49	7	22	45
	Above 30	19	25	0	0	19
Total		<b>77</b>	<b>100%</b>	<b>32</b>	<b>100%</b>	<b>109</b>

Source: Author's Construct with field data, 2014.

Out of 109 graduates from the selected schools, 77 completed from public schools while 32 were from private schools. As seen on Table 4, no public school graduate was able to get a single aggregate number from six to nine. However, four graduates, representing 13% from private schools were able to get single aggregate from six to nine. In addition, eleven candidates, representing 34% from private schools had aggregate from ten to 15 with only two candidates, representing 3% of the public schools recording same results, confirming what Djangmah (2011:6) declaration that public schools under-achieved academically compared to private schools. In addition, no student in private school had aggregate above 30 while 19 graduates from public category, representing 25% had aggregate which constituted those who could not get placement through the CSSPS.

Besides, the mean aggregate score of the graduates from public schools was higher than that of their private counterparts. While the private school graduates total mean aggregate score was 16.52 that of their public counterparts recorded a total mean aggregate score of 25.82. This implies that the number of graduates from private schools had a lower aggregate which is better performance than their public counterparts at the BECE in the Tamale Metropolis. The mean aggregate scores of the graduates from public and private schools is shown on Table 6.



**Table 6: Mean total Aggregates of Public and Private Schools**

Category of School	Frequency	Mean	Std. Deviation
Public	77	25.82	6.351
Private	32	16.52	5.995
Total	109	23.00	7.556

Source: Author's Construct with field data, 2014.

#### 4.2.1 Performance of Graduates in Core Subjects in Public and Private Schools

In Table 7, most of the good grades such as one to five were obtained by the private school graduates, indicating better performances. In addition, the private category graduates outperformed their counterparts in both Mathematics and English Language. The lower grades recorded in core subjects, such as six to eight were obtained in the public school category which could be the reason why some of them could not get placement through CSSPS as reported by The Ghanaian Times on (1st October, 2013). This finding affirms Rolleston and Adefeso-Olateju (2012:6) statement that parents' explanations of their choice of private schools over public ones include better examination performance and learning of English language.

**Table 7: Distribution of Grades Obtained in Core Subjects.**

Grades at BECE Subjects	School Category	Grades Obtained by School Category in the four Core Subjects at the BECE								
		1	2	3	4	5	6	7	8	9
Number of JHS Graduates										
English Language	Public	0	6	15	12	26	12	5	1	0
	Private	5	8	9	4	5	1	0	0	0
Social Studies	Public	1	5	9	16	20	16	7	3	0
	Private	5	9	11	5	1	1	0	0	0
Mathematics	Public	0	0	13	11	24	20	8	1	0
	Private	5	9	9	6	1	2	0	0	0
Integrated Science	Public	0	5	11	17	15	22	5	2	0
	Private	2	9	13	3	3	2	0	0	0

Source: Author's Construct with field data, 2014.

#### 4.2.2 Placement of JHS Graduates into Second Cycle Schools

As seen on Table 7, all students presented by private junior high schools were all enrolled into the second cycle schools because of their high pass rate at the BECE as compared to their public counterparts. The average total aggregate among the private school graduates as earlier on stated was lower than that of their public counterparts which is better performance at the BECE and hence were all placed into second cycle schools. Though 69 students representing 90% of the public school students were enrolled into the senior high schools,

eight students representing 10% of public school graduates could not get placement into the SHS or technical/vocational institutes because of poor academic performance.

**Table 8: Placement into Second Cycle Schools.**

Placement		Category of School				Total
		<b>Public</b>	%Public	<b>Private</b>	%Private	
Did you get placement to SHS?	No	8	10	0	0	8
	Yes	69	90	32	100	101
Total		<b>77</b>	<b>100%</b>	<b>32</b>	<b>100%</b>	<b>109</b>

Source: Author's Construct with field data, 2014.

On the issue with respect to getting a first program of choice and school at the second cycle institutions, 53 students representing 69% of public school graduates reported 'no' while that of the private schools only nine students, representing 28% of them could not get access to their first program of choice. This means that 72% of private school graduates were able to get their first choice schools as well as the program they intended pursuing at the second cycle level. This again confirms the fact that the private school graduates out performed their public counterparts in getting access to progress to the next higher level of education.

The explanation offered by 42 of the graduates from the public schools, representing 55% for their poor show at the BECE included lack of reading materials, parental engagement on household chores, attendance problem and lack of daily support. Meanwhile only two students, representing 6% from private also answered being involved in household chores as well as having attendance problem. These explanations were however dominated among female graduates than their male counterparts. Thus, this finding affirmed Marphatia et al. (2010:7) assertion that parents who put efforts to reduce domestic chores for children at home and, where possible, take on tutors to support their learning tend to achieve high academic standard in schools.

In the same vein, most teachers in public schools revealed that some of their students ceased to attend classes after they registered them for the BECE and hence their poor performance in the examination. Teachers in public schools also alleged that their students are more interested in playing with mobile phones and engaging in pre-marital relationships that destruct their attention in class and lack of time to learn at home. This allegation could be a factor that brought about academic achievement disparity among the public and private school graduates in the Tamale Metropolis. Though, the researcher could not get similar

findings from the literature to justify the outcome, the practice if true could indeed hamper the academic achievement of any child irrespective of his/her school category.

The next part of the analysis looked at the possible causes of academic performance disparity among the public and private schools in the Tamale Metropolis.

### **4.3 Causes of Performance Differences among Public and Private Schools.**

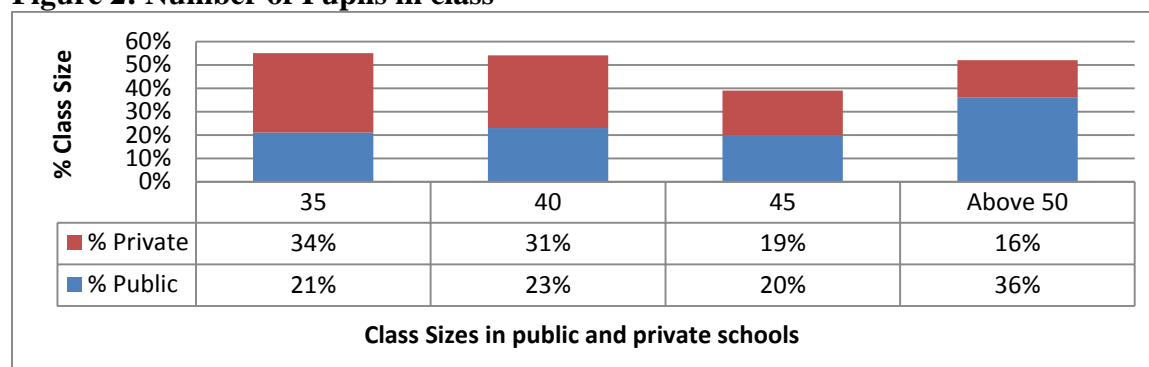
A number of school based issues were drawn to compare the academic performance differences among public and private schools based on certain quality education parameters, such as class size, access to textbook, access to exercise books, class exercise, extra tuition and access to library facilities to ascertain how these factors lead to academic performance disparity between the two schools.

#### **4.3.1 Class Sizes in Public and Private Schools.**

The data collected among the public and private schools indicated high class sizes in both public and private selected schools. A quick glance on Figure 4 shows that 28 past students, representing 36% of the selected schools from public reported having sat in class with class size being above 50 students while five students, representing 16% from private schools reported same. At the same time, both public and private schools graduates reported class size above 35 pupils.

The policy of Ghana Education Service (GES) to ensure positive learning outcomes in basic schools expects Junior High Schools to have a class size of 35 or below but not up to 40. The field data however indicated that only 16 past students from public and eleven graduates from private, representing about 21% and 34% respectively enjoyed this arrangement. The rest of the past students from both public and private sat in classes more than the required class sizes. According to UNESCO Institute for Statistics, large class sizes are difficult for teachers to manage and this could result in the adoption of less effective methods of teaching, and often limit the amount of individual attention and guidance students receive (UIS, 2011).

Figure 2 below however shows that the public schools graduates did experienced high class sizes more than their private counterparts in the Tamale Metropolis. The implication of this outcome for policy planning is that more classrooms are needed to be constructed to decongest the classrooms for effective teaching and learning.

**Figure 2: Number of Pupils in class**

Source: Author's Construct with field data, 2014.

#### 4.3.2 Availability of textbooks in public and private schools.

The (DCSF, 2004 cited in Ampiah, 2008:21) reported that learning outcomes depended significantly on textbook supply. The question on access to core textbooks equally revealed that the private school students had more access to textbooks than their public counterparts as shown in Table 9.

**Table 9: Access to core textbooks in schools.**

Textbooks		Category of School				Total
		Public	%public	Private	%private	
Did you have textbooks in all core subjects?	No	41	53	7	22	48
	Yes	36	47	25	78	61
Total		77	100%	32	100%	109

Source: Author's Construct with field data, 2014.

Table 9 indicates the responses gathered with respect to the question of having access to all the four core textbooks at the JHS. Forty one past students, representing 53% from public schools reported 'no' to have had all core textbooks while the remaining 47% responded positively. On the contrary, 25 graduates from private schools, representing 78% reported to have had access to all the four designated core textbooks with only 22% answering in the negative. Therefore, the academic performance disparity between public and private schools could be attributed to more textbooks in private schools than in public schools in the Tamale Metropolis. This outcome affirms Ampiah (2008: 35) declaration that the major differences between private and public schools academic achievement gap were attributed to the greater availability and use of textbooks in those schools.

Meanwhile, more than 80% of both public and private JHS graduates (that is 66 past students, representing 86% public and 30 past students representing 94% private) admitted to have had exercise books in all the subjects. This analysis indicates that government policy of providing

free exercise books to basic schools is yielding positive results. Only eleven students, representing 14% from public and two students, representing 6% from private reported not to have had all exercise books for their studies at the JHS.

#### 4.3.3 Access to Extra Teaching in Public and Private Schools

The link between private school choice and hopes for better performance on BECE was made by almost every respondent in the study, by means of several kinds of explanations, including the pedagogical strategies employed by private schools, the use of extra classes and a more direct focus on examination preparation (Rolleston & Adefeso-Olateju, 2012:18).

A question of access to extra tuition after normal classes revealed that both public and private JHS graduates had access to extra tuition after normal school hours as shown on Table 10. The degree of responses were however different. While only 55 % from public side had access to extra tuition that of the private reported 77% access to extra tuition. This implies that the private school graduates did have more access to extra tuition than their public counterparts and hence the disparity in achievement at the BECE..

**Table 10: Access to extra classes after school at JHS.**

Extra classes		Category of School				Total
		Public	%Public	Private	%Private	
Did you get extra tuition after school?	No	35	45	7	23	42
	Yes	42	55	25	77	67
Total		77	100	32	100	109

Source: Author's Construct with field data, 2014.

Indeed, the distribution of the range of aggregate obtained at BECE among the selected schools graduates support the claim that extra tuition do matter in terms of examination preparation and aggregate attainment as shown on Table 10.

**Table 11: The Linked between Aggregate Score and Extra tuition**

Extra tuition and aggregates obtained		Aggregate obtained at BECE					Total
		6 to 9	10 to 15	16 to 20	21 to 30	Above 30	
Did you get extra tuition after school?	No	0	2	9	24	9	44
	Yes	4	11	19	21	10	65
Total		4	13	28	45	19	109

Source: Author's Construct with field data, 2014.

From the Table 11 above, graduates who scored aggregate six to twenty which constitutes better performance and responded positively to having had extra classes were 34,

representing 31% of the graduates. Those who responded not to have had extra classes and had also obtained aggregate six to 20 were eleven, representing only 10% of the graduates. Again, those who had aggregate 21 to 30 or above 30 which constituted those who were likely to get placement but not of their first choice schools or program and answered positively to have had extra classes were 31, representing 28% of the graduates. Those who answered in the negative but scored aggregate 21 to 30 or above 30 were 33, representing 30% of the graduates. This analysis could mean that the private schools graduates were able to outperform their public counterparts as a result of high exposure to extra classes they received. Akaguri (2011:17) opined that what account for the academic achievement disparity among public and private schools in Ghana could be due to selectivity in student admission and support strategies such as the provision of extra tuition by private schools. The policy implication for planning with respect to this outcome is that the instructional period of public schools at the JHS could be increased to allow teachers more time to complete their syllables on scheduled.

#### 4.3.4 Access to School Library in Public and Private Schools

In Latin America, a study that included 50,000 students in grades three and four found that children whose schools lacked classroom materials and had inadequate library were significantly more likely to show lower test scores and higher grade repetition than those whose schools were well equipped (Willms, 2000, cited in Buckland, 2000). The outcome of this research actual supports that claim. Table 11 indicates that library facilities are major problems facing basic schools in the Tamale Metropolis. Available data from the field indicated that 82% of past students from public schools did not have access to library while 53% from private reported same. Though library facilities were more common in private schools as compared to the public, the facility in question was simply inadequate and therefore could be the reason for low academic achievements at the BECE in the Tamale Metropolis. Lonsdale (2003) reported that in schools that have good libraries and full-time librarians, students perform far better in reading comprehension and use of reference materials than students in schools with smallest or no library services. The provision of library facilities in schools can instill reading habits among the children which could lead to positive learning outcomes. The policy implication of this outcome for planning is that more educational resources, including libraries should be provided in the Tamale Metropolis to help improve the academic performance of both public and private schools pupils.

**Table 12: Access to School Library at JHS.**

Library		Category of Child's School				Total
		<b>Public</b>	%Public	<b>Private</b>	%Private	
Did your school provide library for your studies?	No	63	82	17	53	80
	Yes	14	18	15	47	29
<b>Total</b>		<b>77</b>	<b>100</b>	<b>32</b>	<b>100</b>	<b>109</b>

Source: Author's Construct with field data, 2014.

In reference to research question one, the above analysis clearly showed that private schools in the Tamale Metropolis are better performing schools in terms of absolute grades they recorded in the core subjects as well as high aggregates they obtained at the Basic Education Certificate Examination (BECE). This finding is not new but supports several researches conducted in Ghana on the academic achievement disparity among the public and private basic schools. These include: Etsey, 2005; Ampiah, 2008; Akaguri, 2011; Djangtmah, 2011; Ankomah & Hope, 2011 and Ahiatrogah, Dela & Bevell, 2013. All found that in most cases, the private basic school pupils academically outperformed their counterparts in public schools in external examinations.

#### **4.4 Parent/Guardian Involvement in Their Children Education.**

There were some factors identified in the literature review as being the home based factors that affect a child academic achievement in school. Among some of the household factors identified to have influence on children academic performance includes: income statuses of the parents, household size, fees and indirect cost of schooling, literacy level of parents and others (Gyan, Mabefam and Baffoe, 2014).

Factors that are used for parental involvement with respect to their children education in this analysis includes: parents level of education, income, daily care of children, occupation, assisting children with homework, family size and parent school relationship. Thus, these factors were analyzed to ascertain how they affected candidates' performance among public and private JHS graduates at the BECE.

A total of 108 parents, consisting of 77 in public category of schools and 31 from private schools took part in the study. They were made up of 48 males, representing 62% from public schools and 29 females, representing 38% from same category. Parents from the private selected schools constituted 58% males and 42% females. Both private and public schools had a Muslim population of parents above 90% with an average age of 47 years for

public and 44 years for private schools parents. The distribution of parents in the survey is shown on Table 13.

**Table 13: Sex of Parents / Guardians in Public and Private Schools.**

Parents / guardians		Category of School				Total
		<b>Public</b>	% Public	<b>Private</b>	% Private	
Parental Sex	Male	48	62	18	58	66
	Female	29	38	13	42	42
Total		77	100	31	100	108

Source: Author's Construct with field data, 2014.

#### 4.4.1 The Level of Education of Parents/Guardians.

Parents' level of education, for example, has a multifaceted impact on children's ability to learn in school. In one study, children whose parents had primary school education or less were more than three times as likely to have low test scores or grade repetition than children whose parents had at least some secondary schooling (Willms, 2000, cited in Buckland, 2000). The outcome of this research actually confirmed that assertion.

As shown in Table 14, forty two public category parents, representing 55% reported never been to school while five of them, representing 6.5% acknowledged to have attended only primary school. This was however contrary to the private category parents who had had higher educational qualifications. There were twelve parents, representing 39% from private category who reported to have attained higher education with only five of them; representing 16% attained secondary education. The distribution on the level of parental education favored the private schools as compared to the public ones.

**Table 14: Parent/Guardian Level of Education.**

Education levels of parents		Category of School				Total
		<b>Public</b>	%Public	<b>Private</b>	%Private	
Level of Education attained by Parent /Guardian	Uneducated	42	55	7	23	49
	Primary	5	6.5	2	6	7
	MSLC/JHS	14	18	5	16	19
	Secondary	11	14	5	16	16
	Higher Education	5	6.5	12	39	17
Total		<b>77</b>	<b>100%</b>	<b>31</b>	<b>100%</b>	<b>108</b>

Source: Author's Construct with field data, 2014.

Besides, more than 80% of private JHS graduates reported to have had homework support from parents than that of the public who reported only 38% support of help from their parents/ guardians. Luke and Mhlauli (2014) in their research concluded that lack of support



for students' homework has a negative impact on students' academic achievement. The Table 14 indicates the parental level of education and the range of their children aggregate scores at the BECE.

**Table 15: Parental Education Level and Child's Aggregate Scores.**

Level of education of parents and aggregates of their wards		Parent Level of Education					Total
		Unedu-cated	Primary	MSLC/JHS	Secondary	Higher Education	
Aggregate obtained at the BECE	6 to 9	0	0	0	2	2	4
	10 to 15	0	0	1	4	8	13
	16 to 20	15	1	3	2	4	25
	21 to 30	25	4	11	4	3	47
	Above 30	9	2	4	4	0	19
Total		<b>49</b>	<b>7</b>	<b>19</b>	<b>16</b>	<b>17</b>	<b>108</b>

Source: Author's Construct with field data, 2014.

From Table 15 above, the number of children who had aggregate six to nine and whose parental level of education was either secondary or higher level were four. Candidates who fell within aggregate ten to 15 were 13 with their parental level of education being eight higher education, four secondary and one MSLC/JHS respectively. Furthermore, those graduates who obtained aggregate 16 to 20 were 25 and their parents' levels of education being four higher education, two secondary, three MSLC/JHS, one primary and 15 uneducated parents. Parents who attained higher education or secondary from Table 16 appeared to have their children getting better aggregates than those who had lower or no education. From this analysis, it's clear that all graduates who had aggregate 30 above had a parental background of lower level education or illiterate parent background which goes to affirmed Panda (1982) declaration that parental illiteracy levels adversely affect children academic achievements. Supporting same claim, Gyan, Mabefam and Baffoe (2014) in a research on academic achievement between children from Northern Ghana and South found that children from educated parents did perform better in BECE than those from illiterate parents.

#### 4.4.2 Parents / Guardians Daily Parental Care.

According to Avvisati, Besbas and Guyon (2010:11) socio-economic status, as measured by occupation/wages or parental level of education, is positively associated with parental involvement in child's education. Thus, the more involve a parent commits to his/her wards education, the better the child achievement in school. A question on what the parents /guardians

used to do daily for their wards at JHS before he/she leaves for school recorded the following options of responses.

**Table 16: Parental care and aggregate obtained at BECE.**

Daily parental care and child's aggregate score at BECE		Parental daily care to a child				Total
		always gave a child money to school	always gave the child food and money to school	always gave money or food when have	child earned his/her income for school	
Aggregate obtained at BECE	6 to 9	1	3	0	0	4
	10 to 15	4	9	0	0	13
	16 to 20	11	14	2	1	28
	21 to 30	24	10	9	2	45
	Above 30	3	1	3	11	18
Total		43	37	14	14	108

Source: Author's Construct with field data, 2014.

From Table 16 above, 43 parents, representing 40% and 37 representing, 34% reported they gave their children either money or food and money to school daily. On the contrary, 14 parents, representing 13% said they used to give money or food when have and the remaining 13% reported that their children earned income for schooling. From Table 16, it appeared that JHS graduates whose parents used to give them money and food daily did perform better than those whose parents used to give them only money. Also, parents who gave their children only money to school daily turned to have their children performing better than those children whose parents were inconsistent with their daily care. This analysis shows that the private category parents did show more commitment to their children education than their public counterparts based on aggregates distribution among the selected public and private schools in the Tamale Metropolis. This finding corroborated Hara and Burke (2003) assertion that strong daily parental care of children improves students' academic performance and attitude toward learning. The implication of this outcome for policy planning is that more sensitization of parents to take active part in their children education could narrow the performance gap between the public and private schools

#### 4.4.3 Parent / Guardian Occupation.

Parents in this survey reported various things they do to earn a living. Some were teachers, soldiers, farmers, traders, tailors, cleaners, nurses, drivers, carpenters and retirees. The researcher categorized them into formal and informal workers respectively. Thus, all parents who were earning monthly salary or weekly wage was classified as formal and those outside

this brackets were labeled as informal workers. Table 17 indicates that 69 parents, representing 90% from public category were found in informal sector and thus did not have regular incomes, while 21 parents; representing 68% from private category were found in formal sector and hence were earning more regular incomes. This outcome means that more private category parents did acquire education that secured them jobs and regular income than their public counterparts which then illustrated that parents in the public category were unable to take care of their children daily needs because of lower earnings.

**Table 17: Parent/Guardian occupation.**

Occupation of parents		Category of Child's School				Total
		<b>Public</b>	%Public	<b>Private</b>	%Private	
Type of work	Formal	8	10	21	68	29
	Informal	69	90	10	32	79
Total		<b>77</b>	<b>100</b>	<b>31</b>	<b>100</b>	<b>108</b>

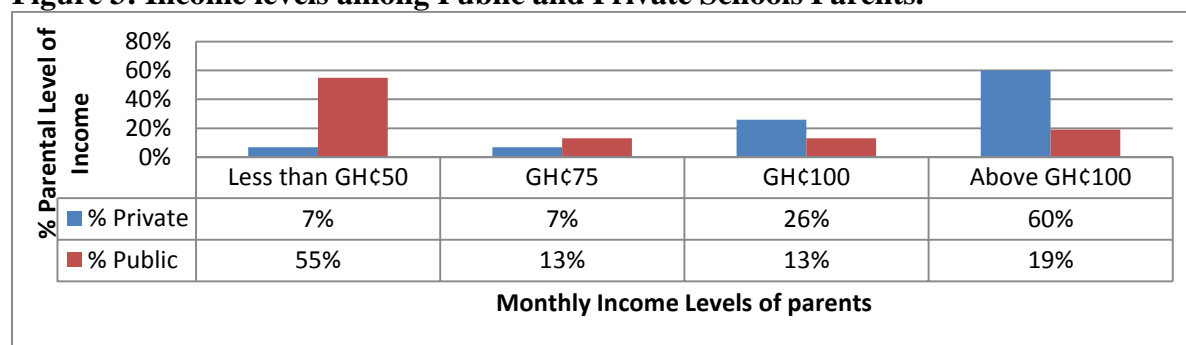
Source: Author's Construct with field data, 2014.

#### 4.4.4 Income Levels among Public and Private School Parents/Guardians

People who earn regular income do have means to plan their lives properly than those who do not. As seen on Table 18, the occupation of a parent determines the income he or she would receive on daily or monthly basis. The more regular an individual income, the better one is able to make a decisive plan about his/her children education. Figure 5 below also indicates that parents in public category reported lower incomes as compared to their private counterparts. Forty two parents, representing 55% from public category reported monthly income below GH¢50 while only two parents, representing 7% from private category reported same. At the same time, 18 parents from private category, representing 60% stated incomes above GH¢100 monthly and only 15 parents, representing 19% from public category said same.

The income distribution level among parents of public and private selected schools is shown on Figure 4 which clearly showed that the private graduate parents had more regular income than their counterparts in the public category schools and therefore more supportive of their wards education. Income of parents by school category and their levels of education is shown on appendix E.

**Figure 3: Income levels among Public and Private Schools Parents.**



Source: Author's Construct with field data, 2014.

An attempt by the researcher to ascertain how parental income related with the child's total aggregate score indicated that there was a weak -0.400 correlation between parental income and child's total aggregate score at the BECE. This means that as the parent income increases, there was a likely decrease in child total aggregate score at the BECE which is positive outcome. The coefficient of determination calculated for parental income levels and total aggregate score was 0.16. A practical explanation of this outcome is that about only 16% variations in the total aggregate score obtained by a child at the BECE was explained by an increase in parental income. The remaining unexplained 84% variations of the total aggregates obtained by pupils could be attributed to other variables affecting children academic performance in school. The correlation between parental income and child's total aggregate score at BECE is shown on Table 18.

**Table 18: Correlation of parental income and child's total aggregate in BECE.**

Correlation between parental income and total aggregate of their wards at the BECE.			Parent Monthly Income	Total Aggregate
Spearman's rho	Parent Monthly Income	Correlation Coefficient	1.000	-.400**
		Sig.(2-tailed)	.	.000
		N	108	108
	Total Aggregate	Correlation Coefficient	-.400**	1.000
		R <sup>2</sup>	0.16	
		Sig.(2-tailed)	.000	.
		N	108	108

Source: Author's Construct with field data, 2014.<sup>1</sup>

#### 4.4.5 Number of Children Taken Care of in School by a Parent/ Guardian.

<sup>1</sup>The Spearman's rho measures the rank-order relationship between two scale or ordinal variables and this works regardless of the distributions of the variables.

Family size structure, income and employment pattern have all been implicated as having bearing on educational achievement and personal adjustment of children (Desforjes & Abouchaar, 2003:14).

**Table 19: Number of children taken care of in School by a parent/guardian.**

Family size	Category of school			
	<b>Public</b>	<b>%Public</b>	<b>Private</b>	<b>%Private</b>
1 to 4	19	25	21	68
5 to 9	46	60	9	29
10 to 14	11	14	1	3
15 to 19	1	1	0	0
<b>Total</b>	<b>77</b>	<b>100%</b>	<b>31</b>	<b>100%</b>

Source: Author's Construct with field data, 2014.

In Table 19, parents/guardians were categorized into four classes, ranging from having a child to 19 children in schools. Family size here simply refers to the number of children or siblings being catered for in school by a parent/guardian. Parents, who reported number of children they cater for in school from one to four, were 19; representing 25% from public category while 21 parents, representing 68% answered same in the private category. At the same time, 46 public category parents, representing 60% reported taking care of five to nine children at school, with only nine parents from private category, representing 29% answering the same. As seen on Table 19, parents or guardians among the public school category had more children to take care of in school than their private counterparts and this could explain why some of them could not provide certain basic necessities such as daily food and transport for their children to school, which perhaps has resulted in their poor performance at the BECE.

Meanwhile, the correlation between number of children taken care of in school by a parent and total aggregate scored by a ward at the BECE was a very weak positive 0.188 as shown on Table 20. This could mean that as the number of children taking care of in school increases, the total aggregate was also increasing and vice versa. The coefficient of determination calculated was 0.035. A practical explanation of this outcome is that about 3.5% variation in total aggregate obtained at the BECE was explained by increase in number of children taken care of in school by a parent/guardian. The remaining 96.5% unexplained variation in total aggregate scores could have been attributed to other factors influencing children academic performance. Though the percentage of the number of children taken care of in school that explains the variation of total aggregate obtained is small, it could mean that

the lesser the number of children taken care of in school by a parent, the better the child's performance at the BECE since higher numbers means poor grades and vice versa for lower numbers. This finding affirmed Ogwen, Kathuri and Obara (2014) research results on family structure and children academic performance that students coming from smaller family sizes had a higher mean test score as compared to students coming from larger family sizes.

**Table 20: Correlation between total aggregate and number of children of a parent.**

Correlation between number of children of parents and total aggregate obtained at the BECE.		Number of Children in School	Total Aggregate
Number of Children of Parents	Pearson Correlation	1	.188
	Sig.(2-tailed)		.051
	N	108	108
	$r^2$	0.035	
Total Aggregate	Pearson Correlation	.188	1
	Sig. (2-tailed)	.051	
	N	108	108

Source: Author's Construct with field data, 2014.<sup>2</sup>

#### 4.4.6 Involvement of Parents in PTA Meetings

Research suggests that partnership in children education is a better approach as it gives educators, families and community members to work together to share information about school matters, guide students, solve problems and celebrate academic successes (Epstein, 2001:4). The relationship between school and home is normally link by Parent Teacher Association (PTA) meetings and parents' individual contacts with the teachers to ascertain how their wards are faring in school.

The Table 21 below shows that 34 parents, representing 44% of public category reported to had attended Parent Teacher Association (PTA) three times a year as opposed 19% for the private category parents. Majority of the private school parents, representing 45% were reported to had attended only one PTA meeting annually. This means that public school parents were more participatory in PTA meetings than their counterparts in the private schools.

The implication of this outcome is that if more sensitization is done among the public school parents on the importance of their role in their children academic achievement in school, it will encourage them to take active part in their children learning.

---

<sup>2</sup>The Pearson  $r_{xy}$  was used here because both total aggregate scores and number of children taken care of by a parent in school were measured in ratio scale

**Table 21: Parental Participation in PTA Meetings.**

Category of child's schools	Frequency of Parent Participation on annual PTA meetings								
	Three times a year	%	Twice a year	%	Once a year	%	Never participated	%	Total
Public	34	44%	17	22%	22	29%	4	5%	77
Private	6	19%	10	32%	14	45%	1	3%	31
<b>Total</b>	<b>40</b>		<b>27</b>		<b>36</b>		<b>5</b>		<b>108</b>

Source: Author's Construct with field data ,2014.

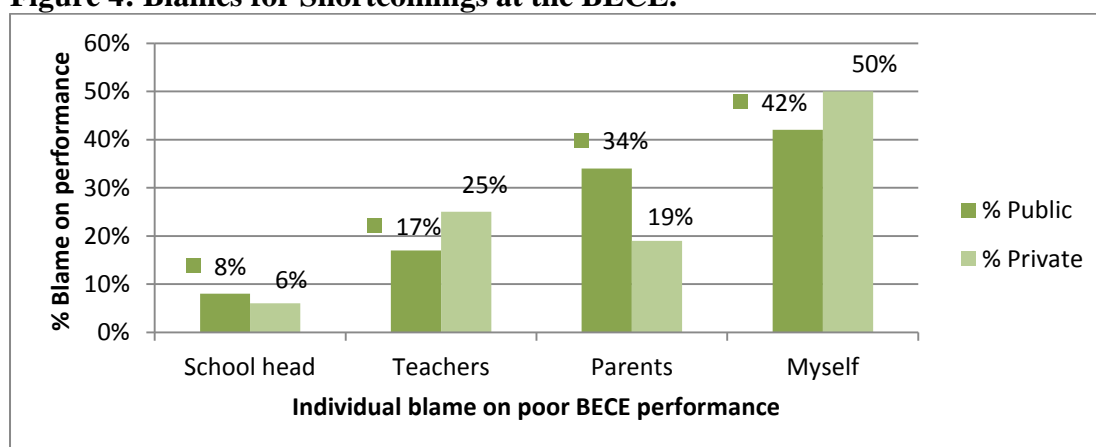
However, in a statement by the researcher to ascertain how parents were monitoring their children performance at school among the teachers showed that majority of private school teachers surveyed either strongly agreed or agreed to the statement that there was a strong involvement of parents in running their school than those reported by the public school teachers. Seven teachers, representing 78% from private category admitted that parents constantly interacted with them to ascertain their children academic performance than that of the public three teachers (27%) who answered same. This finding falls in line with NCES (1997:20) proposition that public school teachers are more likely to believe that lack of parental involvement is a serious problem in their schools than their private counterparts. In the same vein, children from private schools reported more involvement of their parents in homework than reported in public schools. These outcomes could be the basis of differences in aggregate scores between public schools and private ones at the annual BECE in the Tamale Metropolis.

A question among the JHS graduates as to who is responsible for their shortcomings at the BECE in the Tamale Metropolis with the options of: 'school head', 'teachers,' 'parents' and 'self' recorded the following responses shown on Figure 5. Six graduates from public schools, representing 8% attributed their shortcomings to the school head while majority constituting 42 % attributed the problem to themselves. Again, 26 graduates from public category, representing 34 % attributed their shortcomings to parents. However, in the private category, eight students, representing 25% attributed their short comings to teachers while only 13 graduates from public schools, representing 17% attributed their shortcomings to teachers. Again, eight teachers from public, representing 73% accused the children of not paying attention to their books after normal classes while six teachers, representing 67% from private category also answered same. Thus, majority of both public and private

graduates blamed much of the problem on teachers, parents and themselves with heads of schools only sharing fewer of the blames.

The Figure 4 however shows that the public schools graduates saw the cause of their poor performance at BECE to themselves and parents than to that of the teachers and school heads. A research on home base factors on academic achievement is recommended based on this outcome. The implication of this outcome for policy planning is that an establishment of programmes in schools to involve parents to participate more actively on their children education will enhance the formulation of better decisions to help improve teaching and learning in both public and private schools.

**Figure 4: Blames for Shortcomings at the BECE.**



Source: Author's Construct with field data, 2014.

In reference to the research question on what's the level of involvement of parents in ensuring the success of their wards education in private and public Junior High schools? the above analysis clearly showed that parents of pupils in the private schools were more actively involved in their wards education than their public school counterparts in the Tamale Metropolis and hence the disparity in their academic achievements. Several researches support the claim that more involvement of parents in their children education contribute positively to their educational outcomes. Epstein, 2001; Epstein and Salinas, 2004; Fan and Williams, 2010; Avvisati, Besbas and Guyon, 2010, all support the view that strong involvement of parents have a positive effects on children learning outcomes. This finding however contradicts Hara and Burke (1998) findings that some parents do not really involved in their children education, yet their children, seemingly, make it through the system successful.



#### 4.5 Quality of Teachers in Public and Private Schools

This portion of the analysis centered on the academic and professional qualification of teachers, teaching experiences, agreement or disagreement of quality education issues, levels of supervision and classroom management strategies. The socio-demographic characteristics of respondents used for teachers in this study, includes: age, sex, marital status, category of school, highest level of education attained and professional training background. The distribution of teachers in this study is shown on Table 22.

**Table 22: Teacher's Sex and school category.**

Teachers and school categories		Category of Teacher's School				Total
		Public	%Public	Private	%Private	
Teacher's Sex	Male	9	82	6	67	15
	Female	2	18	3	33	5
Total		11	100	9	100	20

Source: Author's Construct with field data, 2014.

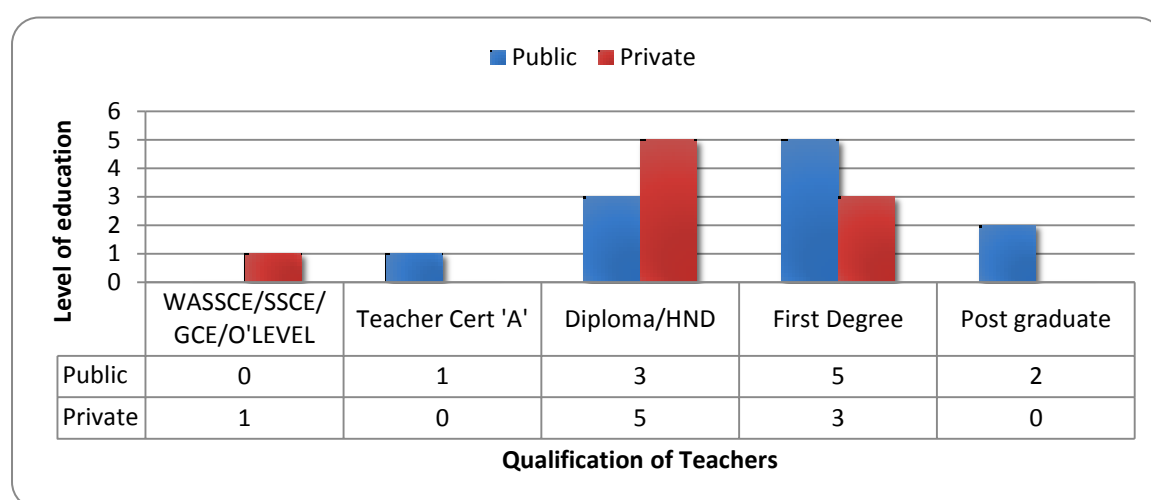
A total of 20 core subjects' teachers from private and public schools took part in this study. They were made up of 15 males and five females respectively. Also, nine male teachers, representing 82% were from public schools while two female teachers, representing 18% were also from public schools. On the part of the private, six male teachers, representing 67% and three female teachers, representing 33% took part in the survey. The mean age of the teachers reported was 39 years for public and 34 years for private category teachers, which means that there was much younger teacher population in private schools than the public schools. Also, 90% of the teachers surveyed were Muslims with one Christian and a Traditionalist. Among the teachers surveyed also indicated that only three from public schools were single while two teachers, from private category reported same. Both public and private school teachers, representing 73% and 67% respectively reported being married with only one conveyed been separated.

##### 4.5.1 Teachers Academic Qualification in Public and Private Schools

High levels of educational attainment serve as the measure of the stock of knowledge and capacity of an individual. The more education a person receives, the more knowledge he or she is perceived to possess. Teachers must have adequate knowledge to be able to impart it to students. Figure 5 shows the distribution of the level of educational attainment among the selected schools core subject teachers.

As seen on Figure 5, teachers in public schools recorded higher educational attainment than their private counterparts. 64% of public schools teachers reported either having a first degree or postgraduate degree with only 33% from private schools teachers reported to attain a first degree. This finding affirmed the US National Center for Education Statistics report that on certain measures, public school teachers appear to be more qualified academically than their private school counterparts (NCES, 1997). The figure 5 further revealed that the high academic attainments were skewed in favor of the public school teachers as compared to their private counterparts in the Tamale Metropolis.

**Figure 5: Teacher's Academic Qualification**



Source: Author's Construct with field data, 2014.

In addition, out of the 20 teachers surveyed, only one teacher from public school reported to be untrained whiles four teachers from private category reported same. The data equally showed that more than 90% of the teachers from public schools surveyed were professionally trained. However in the private category, only 56% of the teachers reported been professionally trained. Thus, if professional qualification were to be a scale of measuring the output of public and private school teachers, one would have expected students from public school to perform better than their private counterparts. This means that public school teachers were again more qualified as teachers than their private counterparts. The development of teachers' academic and professional qualification is critical in building their capacity to improve student learning outcomes. Thus, if the high professional and academic qualification of public school teachers are not reflecting in their students' academic performance, then a review of the criteria used in recruiting teachers need to be reviewed or

perhaps more policies on teacher accountability in public schools can solve the performance gap between public and private schools.

#### 4.5.2 Teaching Subject and Corresponding Experiences of Teachers.

Out of the twenty core subject teachers who were interviewed with respect to the subject(s) they teach and the associated number of years they taught the subject(s). The researcher was of the view that the more consistent a teacher teaches a particular subject, the more he/she will master the themes in the subject for effective delivery in class.

The Table 23 indicates the average years of teaching the core subjects in public and private schools. The time allocation for a period in both public and private schools were virtually the same. That is either 35 minutes for a period or maximum of 70 minutes for double periods.

**Table 23: Teaching Subject and Corresponding Experiences.**

Number of Years Teaching the Subject			
Category of Teacher's School	Mean	N	Std.Deviation
Public	6.73	11	5.815
Private	4.22	9	1.302
Total	<b>5.60</b>	<b>20</b>	<b>4.489</b>

Source: Author's Construct with field data, 2014.

The data revealed that teachers of public schools had 6.73 average years of teaching each core subject while teachers of private schools had 4.22 years teaching the same subject(s). The corresponding standard deviation for public schools was 5.815 and 1.302 for private category teachers respectively. This statistics means that there was much variation of the number of years teaching core subjects in public schools as compared to that of the private schools. Thus the consistency of teachers in teaching a specified core subject in private schools could be the reason for their outstanding performance in those subjects. The implication of this outcome for policy planning is that teachers should be given the subjects they specialized on and allowed to handle such subjects at the basic school level and beyond since the consistency of a teacher teaching a specified subject could lead to pupils' good performance in those subjects as seen among the private schools.

#### 4.5.3 Availability of Teaching and Learning Materials (TLMs) in Schools.

One of the most important enabling inputs to promote teaching and learning in classrooms to promote children academic performance in schools is the provision of teaching and learning materials (Leu & Alison, 2010).

A statement was made by the researcher to ascertain the availability of teaching and learning materials in the two categories of schools which is one of the means of ensuring effective lesson delivery for learners. The Table 28 indicates that five teachers from public schools, representing 45.5% disagreed or 36.4% strongly disagreed to have had learning materials in their teaching subjects. On the contrary, five teachers, representing 55.6% and 11.1% from private schools either strongly agreed or agreed to have had learning materials in their subjects. This implies that the private school teachers did have more teaching and learning materials in their teaching subjects than their public counterparts. Thus, the academic performance differences between public and private schools in the Tamale Metropolis could be attributed to more teaching and learning materials in private schools as compared to their public counterparts. This finding corroborated Gyan, Mabefam and Baffoe (2014) research findings on the performance gap between the students from the North and South that limited teaching and learning materials were cited by respondents as one of the major factor that contributed to the poor performance of students at the BECE from the North as compared to their Sothern counterparts. The response on access to TLMs in class for effective teaching and learning is shown on Table 24.

**Table 24: Availability of (TLMs) in Public and Private Schools.**

Availability of Teaching and Learning Materials		Category of Teacher's School				Total
		<b>Public</b>	%Public	<b>Private</b>	%Private	
Have TL/M in Teaching Subject	Strongly agree	0	0%	1	11.1%	1
	Agree	2	18.1%	5	55.6%	7
	Disagree	5	45.5%	3	33.3%	8
	Strongly disagree	4	36.4%	0	0%	4
Total		<b>11</b>	<b>100%</b>	<b>9</b>	<b>100%</b>	<b>20</b>

Source: Author's Construct with field data, 2014.

#### 4.5.4 Number of Exercises Given in Class per Week in Public and Private Schools.

Teachers in this survey were tasked by the researcher to indicate the number of exercises they were giving to their pupils in a week. The purpose of this was to establish how regularly they teach and evaluate their lessons to ascertain the level of academic achievement of their pupils in both public and private schools. The data processed by the statistical software revealed that the mean numbers of exercises given in public schools was 3.00 per week whiles that of the private was 3.78 with standard deviation of 1.549 for public and 0.441 for private schools. This statistics means that the frequency of given exercises in class in private schools was less erratic than that of the public schools. This could mean that the regularity of exercises given in class were more consistent in private schools than their public counterparts and hence

could be the cause of disparity in their academic performance at the BECE. This finding corroborated Mehmood et al. (2012) declaration that the impact of formative assessment among students showed that students assessed by constant formative assessment had higher scores than students who were not. Supporting the same claim, Kimani, Kara and Njagi (2013) in their study of the relationship between teachers' class activity and students' academic achievement concluded that there is a significant relationship between frequent class exercises and students' academic achievement. The researcher in this instance could not however get the standard exercises that are expected to be delivered by a teacher daily or weekly in both public and private schools. Table 25 indicates the weekly mean number of exercises and standard deviations among the public and private schools in the Tamale Metropolis.

**Table 25: Mean Exercise Given in Class per Week.**

Category of Teacher's School	Mean	N	Std.Deviation
Public	3.00	11	1.549
Private	3.78	9	.441
Total	3.35	20	1.226

Source: Author's Construct with field data, 2014.

Policy implication of this outcome for planning is that headteachers must encourage their teachers to teach and evaluate their students to promote the academic performance of the schools.

#### 4.5.5 Queries on Unperformed Tasks

Six teachers of private category, representing 67% reported that they are queried for failure to turn up on time for a lesson or absent from class and the punishment involved is reduction in salary. On the other hand, the public teachers also answered the same, but do not suffer a decrease in their earnings. Also, the preparation of lesson notes was more common in public schools than in private schools surveyed. Teachers in public schools reported that the headteacher will only insist that a teacher should prepare it and failure will result in queries that do not lead to the reduction in salary. The explanation the researcher received from the teachers revealed that if a teacher fails to prepare a lesson note, the head is supposed to query him/her. If the said teacher does not comply, he/she will then be taken on by the circuit supervisor through the same channel to the director in charge of the district. This means that headteachers supervisory role in public schools is more relax than their private counterparts who can carry out the necessary sanction immediately than it's in the public schools.

Furthermore, all teachers from public schools reported that there was not any punishment for mass failure of students in their subjects while the private teachers reported that a teacher could be sanctioned for poor pupils performance in his/her subject through demotion or sacked. The policy implication of this outcome for planning is that more teacher accountability programmes are needed in public schools to promote positive learning outcomes in those institutions.

#### 4.5.6 External Supervision of Teachers in Public and Private Schools

According to Ghana Education Service (GES) regulation, headteachers are the immediate care takers of their respective schools and who are equally being supervise by individual circuit supervisor under the directive of an assistant director in a district in charge of supervision. The overall supervisor in the district is the district director of education. Thus, these people are supposed to constantly be with teachers for them to perform their teaching job effectively. A question on the number of times an external supervisor(s) visits the schools per term revealed that 18.2% of public schools teachers said twice while the majority of the same category, representing 45.6% said three times in a term. Only two teachers, representing 18.2% reported that the supervisor(s) visited their schools countless times. On the other hand, two teachers from the private schools, representing 22.2% reported to have had twice visits of external supervisor (s) and majority from the same category, representing 66.7% said the supervisor(s) never visited their school in a term. This implies that there was external supervision on both public and private schools, but the degree was quite weak in private schools as seen on Table 26. This outcome could mean that the private schools internal supervision was higher than that of the public schools which validates Akaguri (2011) finding that private schools better internal practices with respect to teacher supervision and accountability to parents is significant in improving their pupil performance in external examinations.

**Table 26: External supervision on Public and Private Schools.**

Number of visits by external supervisor(s) in a term		Category of Teacher's School				Total
		Public	%Public	Private	%Private	
External supervision	Twice	2	18.2	2	22.2	4
	Thrice	5	45.6	1	11.1	6
	Countless times	2	18.2	0	0	2
	Never visited	2	18.2	6	66.7	8
Total		11	100	9	100	20

Source: Author's Construct with field data, 2014.

In summary, the above analysis clearly showed that the private schools internal arrangements in terms of teaching resources and internal supervision were relatively higher than that of their public counterparts and hence could be the cause of disparity in their academic achievements. The policy implication for planning with respect to this outcome is that the.

#### **4.6 Trends of Motivation among public and Private School Teachers.**

According to Maslow (1943) motivation in any form may be classified as intrinsic or extrinsic. Intrinsic motivation is that which gives an individual inner satisfaction (example, praises, recognition, happiness at work and so on). Thus, an intrinsic is a feeling that could be seen only when expressed outwardly by the individual who felt satisfied, while extrinsic motivation is considered to be material gains (example :promotion, salary increment, allowances, awards and others) given to an individual and which could be seen and appreciated by all. Various interrogations were used to assess the level of intrinsic and extrinsic motivation among public and private schools teachers. These included, pupils’ performance in their subject, the monthly salary received, adequacy of the salary, main reason for teaching and the readiness of the teacher to remain or quit the profession. Other issues discussed were what could be done by government and parents to enhance teachers performance in the classroom which is the ultimate factor in determining pupils performance in external examinations.

##### **4.6.1 Satisfaction of Teachers on Pupils Performance.**

A glance on Table 27 shows that more than 90% of the teachers in public selected schools were not satisfied with students’ performance in their subjects at the BECE while 55.6% from private schools answered being satisfied.

**Table 27: Satisfaction of teachers on pupil’s performance in subjects.**

Satisfaction of teachers on BECE outcomes		Category of Teacher's School				Total
		Public	%Public	Private	%Private	
Are you satisfied with pupils’ performance in your subject at BECE?	No	10	91	4	44.4%	14
	Yes	1	9%	5	55.6%	6
Total		11	100	9	100%	20

Source: Author’s Construct with field data, 2014.

A question on what account for the poor performance revealed that most of the English and Mathematics tutors were blaming the primary school for poor foundation of pupils in their respective subjects” whiles that of Science teachers lamented lack of teaching and learning

materials in their subject. Teachers teaching Social Studies complained about the time allocated for the subject in school time table as highly inadequate in both public and private schools. Majority of public school teachers also blamed their children for not being serious but roam on the streets of the Metropolis in the night to the detriment of learning for better future. However, while teachers in private school receive punitive sanction such as been sack or reverse to lower classes for poor examination performance of their students, all teachers in the public schools answered that there was not any punishment for poor performance of students in their subjects at the BECE. What many of them said was that they simple feel bad.

#### 4.6.2 Salaries of Teachers in Public and Private Schools

There were disparities with respect to salaries among teachers in public and private school surveyed. A cursory look on Table 28 showed that the public school teachers were more remunerated than their private counterparts. Majority of public school teachers, numbering eight and represented by 73% received salaries from GH¢700 to GH¢ 800 monthly. On the other hand, the majority of the private school teachers, numbering five and represented by 56% reported the salaried range of GH¢300 to GH¢400. The least paid teacher in the private school category received less than GH¢300 monthly while that of the public least paid teacher reported salary range of GH¢700 to GH¢800. The highest paid teacher in the public school category reported monthly salary above GH¢1000. This outcome corroborated NCES (1997) declaration that on average, public school teachers receive higher salaries and more benefits than their private counterparts.

**Table 28: Monthly Salaries of Teachers in Public and Private Schools.**

Salaries of teachers		Category of Teacher's School				Total
		Public	%Public	Private	%Private	
Categories of monthly salaries	Less than GH¢ 300	0	0	1	11	1
	GH¢ 300-400	0	0	5	56	5
	GH¢ 500-600	0	0	2	22	2
	GH¢ 700-800	8	73	0	0	8
	GH¢ 900-1000	2	18	1	11	3
	Above GH¢ 1000	1	9	0	0	1
Total		11	100	9	100	20

Source: Author's Construct with field data, 2014.

A question with respect to salary satisfaction revealed that all the teachers, both public and private alike, said they were either strongly dissatisfied or dissatisfied with their current salaries, affirming Ghana National Association of Teachers (GNAT) and Trade and Education Workers Union (TEWU) research finding that the main reasons for the teachers



dissatisfaction are the low level of wages and poor conditions of service in the education sector (GNAT & TEWU, 2009:33). Supporting the same investigation, Burchell and Dickson-Koudjoe (2014) in a research in Ghana among professional teachers from a national representative sample concluded that teachers were dissatisfied with their salaries which in turned affect their overall job satisfaction. The basis of these dissatisfactions according to the teachers was based on the high increase of commodity prices as well as increase in utility prices. Many equally stated that they were living in misery as their salaries could not take them through the month confirming Bennell and Akyeampong findings among teachers that their total pay does not cover basic household survival needs, let alone enable teachers to enjoy a reasonable standard of living (Bennell & Akyeampong, 2007).

Furthermore, the majority of public and private school teachers reported that they do not get extra income apart from their monthly salary. Out of nine teachers from the private category, only four teachers, representing 44.4% admitted to be getting extra income apart from their monthly salaries while majority constituting 55.6% from the same category said they were not earning extra income apart from the monthly salaries. On the other hand, all teachers from the public category reported not earning extra income apart from monthly salaries. This finding also affirms Torrente et al. (2012) research findings in Democratic Republic of Congo (DRC) that only few teachers admitted having additional income to their teaching salaries.

In another instance, teachers were asked by the researcher to indicate their main reason for teaching to ascertain the motivation they attached to it as their profession. In this response, the majority of both public and private schools teachers, representing five and four said they enjoy teaching and only two teachers from public and four teachers from private schools mentioned salary as the basis for teaching. In addition, four teachers from public and a teacher from private mentioned children welfare as the basis of their commitment to teaching with none answering for respect. But a question on whether when other job opportunities are available they will still go in for teaching job revealed that five teachers, representing 56% from private schools said „no“ while six teachers from public category, representing 55% also answered the same. This means that only 44% from private and 45% from public school teachers were ready to remain in teaching even if there were other job opportunities.

The researcher further interrogated the teachers to ascertain how they feel with respect to future prospects of the teaching job by making a statement that „future teachers are likely to enjoy more than the current ones'. In this regard, nine teachers from public, representing 82%

either strongly disagreed or disagreed with the assertion. In the same sense, six teachers, representing 67% of private category also strongly disagreed or disagreed to the statement.

In conclusion, the private school teachers were relatively more motivated intrinsically than their public counterparts based on satisfaction of their children performance at the BECE and availability of teaching and learning materials in their teaching subjects and hence the better performance of their students at the BECE. The extrinsic motivation such as monthly salary was highly unsatisfactory in both public and private schools.

#### **4.7 Leadership Styles of Heads in Promoting their Schools Academic Performance.**

At the basic school level, headteachers are expected to perform a number of supervisory responsibilities to promote the academic performance of their schools. These practices among others include: the provision of learning materials, regular visit to classrooms during instruction period, vetting of weekly lesson notes, checking pupils note books and exercise books, as well as motivating teachers and auxiliary workers in the school to give off their best for pupils academic achievements (Ankomah & Hope, 2011).

Three headteachers from public and three from private schools took part in this study. They were made up of five males and one female. Two headteachers in the public category of schools were males and the remaining one been female. All three headteachers from private schools were males. Five out of six school heads reported being professionally trained with only one been untrained teacher. The average age reported among school heads was 45 years for public and 53 years for private schools. This implies that there were elderly headteachers in privately owned schools than in public schools. The reason being that two of the heads in private schools surveyed, had retired from active service. Also, four out of six heads were Muslims while the remaining two were Christians. The distribution of headteachers in the survey is shown on Table 29

**Table 29: Demographic characteristics of head teachers.**

Headteachers/Proprietors		Sex of School Head		Total
		Male	Female	
School Category	Public	2	1	3
	Private	3	0	3
<b>Total</b>		<b>5</b>	<b>1</b>	<b>6</b>

Source: Author's Construct with field data, 2014.

Besides, the academic qualification among the heads revealed that only one headteacher from private category held teacher cert „A“ while two heads from the same category reported holding a Diploma and Higher National Diploma (HND) respectively. However, two heads

from public schools reported holding their first degree and the remaining one with masters" degree respectively. On the whole, the headteachers from public category were more educated than their private counterparts. This outcome also corroborated US National Center for Education Statistics assertion that public school teachers on certain measures normally have extra academic qualifications than their private counterparts (NCES, 1997).

The average years of involvement in the teaching profession was 18 years for public and 24 for private school heads. This confirms the fact that there were more experience head teachers from private schools than in public schools. However, none of these heads admitted being specially trained to head the school which confirms UNICEF (2009) declaration that few head teachers and administrators in developing countries have had any formal training in the leadership functions of their schools.

A question on what constitute quality education received different answers from all the six heads but some common themes did appear in their answers. Two heads from private and one head from public view quality education as education that is received from qualified and dedicated teachers. In addition, one head from public and one head from private equally said quality education is to ensure that children learn what is expected to be learned at school while the remaining headteacher from public category defined quality education as education that matches national standards with discipline as a hallmark. This finding validates Ampiah (2008) statement that quality education in Ghana is mostly measured in terms of resource inputs and outcomes.

A question on what specific leadership styles the headteachers have adopted to achieve better academic performance in their respective schools attracted the following themes of comments shown on Table 29. One headteacher from public school and two headteachers from private schools reported that they ensured strong internal supervision in their schools. Besides, one headteacher from public school and one headteacher from private category of schools reported that they ensured discipline among teachers and pupils while the remaining headteacher from private category of schools said he ensured the strong involvement of all the stakeholders to attain good outcomes in his school. The highest performing school at the BECE among the selected schools head said he always ensures that teachers finish their syllables on time and guide students on how to answer questions. A lesson drawn from this comment was that, this headteacher closely monitor his teachers" activities in class to ensure the completion of the syllables. This outcome therefore validates Ankomah and Hope (2011) assertion that where

effective school internal based supervision exists, there is the likelihood that teacher competences levels are enhance which could lead to improvement in student academic achievements.

**Table 30: Leadership Styles of head teachers in public and private schools**

Leadership and quality education delivery		School Category		Total
		Public	Private	
What special leadership style do you use to achieve good academic performance in your school?	Strong involvement of stakeholders in the school	0	1	1
	Strong internal supervision	1	2	3
	Discipline at school level	1	1	2
Total		2	4	6

Source: Author's Construct with field data,2014.

A question on whether headteachers as part of their leadership styles in their schools give special motivation to teachers apart from monthly salary to give off their best in classrooms revealed that two headteachers from public schools said 'no' with only one answering positively. On the contrary, all three heads from private category responded 'yes' to the question. An additional question on what kind of motivation they were giving to their teachers revealed that two heads from private category stated that their schools give scholarships to hard working teachers" wards and annual welfare fund for teachers. The last head from private category said "we give rent allowance to teachers who are with us for the past five years". On the other hand, the only headteacher who admitted given special motivation in the public category said, she gives teachers some bonuses for marking and filling students' report cards. Table 30 is the responses with respect to headteacher leadership style in motivating public and private school teachers.

The analysis on special motivation for teachers in public and private selected schools indicates that headteachers in private schools were more poised in motivating their teachers than their public counterparts. This outcome affirms Burchell and Dickson- Koudjoe (2014) findings in Ghana that there is always a strong level of commitment of organizations leaders to employee's motivation in the private sector than in the state owned entities. Table 31 is the responses with respect to head teacher leadership style in motivating public and private school teachers.

**Table 31: Headteacher special motivation for teachers in Schools.**

Motivation of teachers		School Category		Total
		Public	Private	
Do you give any special Motivation for your Teachers?	No	2	0	2
	Yes	1	3	4
Total		3	3	6

Source: Author's Construct with field data.

The responses on the question of headteachers satisfaction of facilities in their schools also attracted different answers from both public and private JHS heads surveyed. Only one headteacher from public said he did not have problem for classrooms but the remaining two did. All private headteachers complained about inadequate classrooms, furniture as well as laboratory equipment and computers. Two headteachers from public complained about insufficient water supply and urinal pit on school compound as well as inadequate furniture for both teachers and pupils in their respective schools. Two headteachers from public put it this way “We have not received furniture from Metro education office for more than three years now.” One can deduce from these comments that inadequate educational infrastructure could be a factor militating against pupils performance at the BECE in Tamale Metropolis. The policy implication for this outcome is that more educational infrastructure should be provided in various schools in the Metropolis to help improve children academic achievements.

However, five out of six headteachers surveyed acknowledged high cooperation with their teachers with only one reporting hardly cooperation between him and the teachers. More so, all three headteachers from public mentioned lateness to school as their major problem with teachers whiles two headteachers mentioned not filling report cards early and last one mentioned closing before time as problem they have with teachers. Also, two headteachers from public schools bemoaned lack of parents’ readiness to contribute to the up keep of PTA dues which help them to undertake minor projects such as repair of broken furniture and equipment in the school. On the supervision of classes during instructional period, all the heads reported carrying out the task daily as their main responsibility.

The question on the headteachers internal supervision at the school level among the teachers revealed that five teachers, representing 46% from public schools believed their headteachers were able to constantly mobilize teaching and learning materials for effective teaching as well as visited their classrooms during instructional period to observe teaching and learning whiles five teachers, representing 56% answered the same in the private category of schools.

In the same vein, six teachers, representing 54% from public schools said their headteachers check the pupils' notebooks and exercise books as well as teachers' lesson notes regularly while four teachers, representing 44% from private category of schools answered the same. Based on these responses, it can be deduced that the headteachers in both category of schools were carrying out their daily supervisory role in almost the same manner and therefore not much differences were established to ascertain why their schools differ in terms of pass rates at the BECE as shown on Table 32. This result corroborated Ankomah and Hope (2011) finding that even though the internal supervisory practices of headteachers differ in public and private schools, the degree of variations are not large enough to conclude that there is significant differences in head teachers' performance in the two categories of schools. This result corroborated Ankomah and Hope (2011) finding that even though the internal supervisory practices of head teachers differ in public and private schools, the degree of variations are not large enough to conclude that there is significant differences in headteachers' performance in the two categories of schools

**Table 32: Teachers' assessment of their headteachers leadership styles**

Appraisal of head teachers by teachers on schools supervision		Category of Teacher's School				Total
		Public	%Public	Private	%Private	
School Supervision	Provide enough teaching and learning materials for learning	2	18%	3	34%	5
	Visits class room during the period of teaching and learning	3	28%	2	22%	5
	Check pupils note and exercise books	4	36%	2	22%	6
	Checks teachers weekly lesson notes	2	18%	2	22%	4
Total		11	100%	9	100%	20

Source: Author's Construct with field data, 2014

A response to the question on satisfaction of school performance at the BECE revealed that two head teachers, from public category were not satisfied with their school performance at the BECE while one head reported being satisfied. In the same vein, two head teachers in the private category reported being satisfied while one from the same category reported to be unsatisfied about the school performance at the BECE. Thus, majority of head teachers in public surveyed schools were not satisfied with their schools performance in the Tamale Metropolis just like their teachers.

A response on what account for the low academic performance of pupils in the Metropolis over the years received different reactions from all the six headteachers. Two headteachers from public category blamed the poor performance on parental negligence while the

remaining one blamed the system for lack of accountability on the part of parents, teachers and government. On the contrary, all three heads from private category gave different testimonies with respect to pupils' poor performance at the BECE. One headteacher from private category attributed the pupils' poor performance in the Tamale Metropolis to be caused by nothing but poverty. Another private school headteacher attributed the high failure rate to indiscipline on the part of students and teachers in public schools and the last one from this same category blamed the mass failure on inadequate supervision from metropolitan education directorate

On the question of the heads recommendation to ameliorate poor BECE outcomes in the Tamale Metropolis attracted different solutions. Those from public category put up the following solutions:

- "Parents should support their wards and encourage them to stay at home in the night and learn;"
- "Ghana Education Service should liaise with the Metropolitan chief executive to pass a bye law to stop children from loitering in the night and attend to their books instead;" and
- "Government should build more classrooms to reduce the class sizes that hinder classroom management in schools."

The same suggested means to solving poor BECE outcomes from private heads category of schools put up the following solutions:

- "All stakeholders in education, including parents, teachers, pupils and government must all play their roles effectively;"
- "Mass promotion of students at the basic school level from one class to another should be discontinued;"
- "GES should intensify supervision in schools and should also motivate teachers to give off their best in classrooms."

In conclusion, the leadership styles of headteachers in public schools were slightly different from those of the private ones. While those in private schools enjoyed some high level of autonomy in their respective schools that of their public counterparts did not have that opportunity and therefore had limited powers to deal with recalcitrant teachers and pupils in their schools.

## **CHAPTER FIVE**

### **SUMMARY OF KEY FINDINGS, RECOMMENDATIONS AND CONCLUSION**

#### **5.1 Introduction**

This concluding chapter contains the summary of key findings of the study with respect to the earlier research questions, conclusions of issues raised in data analysis in chapter four and policy recommendations for improving quality education delivery in basic schools.

The primary objective of the study was to identify the factors that brought about poor academic performance of public as compared to private basic schools in the Tamale Metropolis. The study concentrated on factors such as parental involvement in their children education, headteachers leadership style, motivation levels among public and private school teachers, students' attitudes to learning and the availability of teaching and learning resources in these schools. Other issues considered were internal and external supervision to ascertain how these schools were monitored to ensure the attainment of good results.

#### **5.2 Academic Performance Difference among Public and Private Junior High Schools in the Tamale Metropolis.**

The overall analysis of both total aggregates made and individual grades obtained in core subjects by JHS graduates indicated high academic achievements among private schools graduates as compared to their public schools counterparts. While the private school graduates total mean aggregate score was 16.52 that of their public counterparts recorded a total mean aggregate score of 25.82. Thus, the private schools out performed the public schools in 2013 BECE in the Tamale Metropolis based on total aggregate they obtained as well as the absolute grades they made in the four core subjects. The pass rate in private schools gave their students opportunities to get their first choice schools and programs to enhance better future opportunities than their public counterparts.

There were school and home based factors that led to the differences in academic achievement among the public and private junior high schools in the Tamale Metropolis. Among the school based factors were high class sizes in public schools as compared to the private ones. Literature has shown that small class sizes at the lower level of education allowed teachers to give pupils more individual attention and ease the teacher's work burden of giving and marking of class exercises to promote the attainment of quality education. The private schools exhibited high consistency of exercises in class as compared to inconsistency exercises in their public counterparts. The inconsistent exercises in public schools could be



attributed to less internal supervision in those schools as compared to their private counterparts. The private schools graduates according to the data analysis equally enjoyed more access to early childhood education, libraries and extra classes than their public counterparts, and hence their better performance at the BECE. Furthermore, the private schools graduates also reported to have had 78% of the four designated core textbooks for JHS as compared to 47% reported by the public schools graduates. The high level of owning textbooks in private schools gave them upper hand in attaining quality education as compared to their public counterparts.

In addition, home based factors such as household low incomes, illiteracy of parents and inadequate parental care negatively affected public school graduates at the BECE which is in line with NCES (1997) opinion that students' personal problems that interfere with learning are more of a problem in public schools than in private schools. For example, in terms of income, 60% of private schools parents reported earning more than GH¢100 monthly as compared to only 19% public schools parents who answered the same. More so, while the public schools parents reported 55% illiteracy rate that of their private counterparts reported only 23% illiteracy rate. This implies that the private schools parents stood the better chance of helping their children in home work and offer their children school needs than their public counterparts in the Tamale Metropolis. This is in line with the assertion that students from lower socio-economic background are always at a higher risk of poor academic performance than those from high socioeconomic backgrounds (OECD, 2012b:104)

The policy implication for planning with respect to this outcome for policy makers is that more educational resources such as adequate classrooms, textbooks, teaching and learning materials, and library facilities should be made available to public schools and school feeding program should be extended to all basic schools to ensure equal opportunities of learning outcomes. If this is done, it will give a true meaning to the provision of free compulsory universal basic education in Ghana as this will help bridge the gap between the rich and the poor children with respect to access to quality education.

### **5.3 The Involvement of Parent/Guardian in Their Children Education.**

Factors identified in the data analysis as being the parental factors that affect a child academic achievement in school includes: parental level of education, income, daily care of children, occupation, assisting children with homework and parent school relationship.

The analysis of the data indicated that the private school parents were more involved in their children education than their public counterparts in the Tamale Metropolis. Parents in private schools were more educated, found in formal sector, had high incomes to support their children school needs and assist their children in home work than reported in the public schools. The private category parents also interacted with teachers more frequently to ascertain their wards performance at school than their public counterparts; but the reverse rather occurred in the attendance of Parents Teacher Association meetings, where the public category parents participated more than their private counterparts.

Besides, parents in public schools were found to be taking care of more children in school than their private counterparts and thus pushed the former into more difficulties in taking care of their children in school than the later. In addition, the data analysis indicated that there was a very weak positive correlation between number of children taken care of in school by a parent and the total aggregate score at the BECE, which means that the higher the number of children taken care of in school by a parent, the lower the academic achievement of the children and vice versa. Thus, the higher aggregate obtained by public schools could be attributed to parents having more children to take care of in those schools. Also, there was a weak negative correlation between parental level of income and child's total aggregate score at the BECE, which implies that higher incomes could influence lower aggregates which is better performance at the BECE. Thus, in response to the parental involvement in their children education in public and private schools, it appears in this analysis that the private category parents were more involved in their children education than their public counterparts. Policies and programmes on family planning are needed to sensitize parents in the Tamale Metropolis to limit their child births to minimize a burden of parental care.

#### **5.4 The Influence of Motivation among Public and Private School Teachers on Pupils Academic Achievements.**

The data showed that teachers in the public schools category were better qualified academically and professionally than their private counterparts, but were highly unsatisfied with their students' performance at the BECE. Whiles 91% of public school teachers were unsatisfied with their students' performance at the BECE that of the private recorded 56% satisfaction of their children performance in the same examination. In addition, the private school teachers reported having greater access to teaching and learning materials in their teaching subjects than reported by public school teachers. Whilst only 18% of public category

teachers either strongly agreed or agreed to have had learning materials in their teaching subjects that of the private category teachers reported 67% access to teaching and learning materials in their teaching subjects. This outcome meant that intrinsically, private category teachers were more satisfied than their public counterparts and hence could be a major factor that leads to their students' academic achievements at the BECE.

In terms of salary, the public school teachers reported higher remuneration than their private counterparts. The least paid teacher in public schools reported salary range of GH¢700 to GH¢800 while the least paid teacher in private schools reported salary below GH¢300, but both categories reported being unsatisfied with their current salaries because of high cost of living. Thus, there was low motivation of teachers in both public and private schools, even though; teachers in private school were relatively better motivated intrinsically than their public counterparts.

The setback in this study is that the researcher could not establish any statistically relationship or enough themes to link teacher motivation and the students' academic achievement at the BECE in both public and private schools. However, Schieb and Karabenick (2011) concluded that teachers' motivation and engagement in professional development influences their classroom instruction which ultimately determine their students' academic achievements. The policy implication for planning in this analysis for policy makers is that the working environment of teachers should be made conducive by paying them commensurate salaries and providing the necessary facilities in schools to ensure effective teaching and learning.

### **5.5 Leadership Styles of Heads in Promoting Academic Performance in Schools.**

This research outcomes could not clearly established the specific leadership styles between public and private basic school heads supervisory practices as a direct causal factor in student achievement disparity among the schools. However, the analysis revealed that 56% of teachers in private schools admitted their headteacher provided them teaching aids and monitor their classroom activities as compared to 46% of teachers from public schools who admitted same. This could mean that the internal arrangement for teaching and learning in private schools were relatively better organized than their public counterparts and hence could be the cause of their academic achievement disparities. In addition, headteachers in private schools showed more commitment to motivating their teachers than that of the public

school heads which could be the basis of their high academic achievements in the Tamale Metropolis.

## **5.6 Policy Recommendations.**

The following policy recommendations have been suggested to improve quality education delivery in both public and private basic schools in the Tamale Metropolis and beyond.

### **a) Government**

Future educational policies and programs should include parental involvement in child education by specifying roles and responsibilities to ensure high cooperation between household and schools operations. In this process, parents will become clients of the education system and partners in the management of education at the basic school level. However, in current stands, more educational campaigns are needed to sensitize parents in the Tamale Metropolis to take active part in their children education.

#### **a) Government**

- Government should as a matter of urgency provide schools with the needed teaching and learning resources, in order to facilitate the teaching and learning process. Inadequate teaching and learning materials are major hindrances to the academic successes of the public school children. For example, facilities such as adequate classrooms, libraries, laboratory equipment, textbooks, computers, places of convenience and teaching aids go a long way to improve children learning at school and hence help them to become victorious in external examinations.
- Policy focus should be placed on measures to increase the instructional time, especially at the Junior High School level to meet the official requirement of good quality standards and ensure high supervision of teachers to that effect.
- Junior High School curriculum should be revised by introducing more practical oriented courses and the number of subjects must be reduced to ensure effective and efficient learning outcomes.
- Review of Teacher Remuneration and Conditions of Service: Incentive packages such as housing scheme, provision of free medical care, transport and free education for teachers' wards must be more emphasized in motivating teachers than the

constant increase of salaries which is not appreciated by many of them due to constant depreciation of the national currency.

b) District Assemblies

- A formal standard examination board should be instituted by Metropolitan Municipal and District Assemblies (MMDAs) in their respective localities to conduct examinations to enhance pupils' transition from primary to the JHS. Through this examination boards, all districts in the country can monitor the progress they made with respect to their basic educational outcomes which will be reflected at the national level.

Ghana Education Service

- Intensive supervision from the metropolitan directorate and circuit supervisors is needed to complement the headteachers supervisory role which will lead to more accountability among teachers in public and private schools.
- Mass promotion of students from one grade to the other as a policy by Ghana Education Service (GES) should be abolished and pupils should only be promoted by merit.

d) Headteachers/Proprietors

- Headteachers must ensure that teachers give adequate exercises to pupils after every lesson delivered. Practice „they say“ makes man perfect. Through this process children will learn how to answer questions which will go a long way to improve their academic achievements.

## 5.7 Conclusion

The low performance of public schools pupils as against their private counterparts with respect to the annual BECE in the Tamale Metropolis is seen clearly in this study. The differences in academic achievements among public and private schools were due to myriad of issues. The home based factors included low socio economic status of parents in public schools as against their private counterparts. The school based factors that favored private schools as opposed public ones included among other things such as high class exercises, low class sizes, high access to extra classes and textbooks as well as access to early childhood education

The findings of this research on motivation was that even though there were not much differences in the motivation patterns of teachers in both public and private schools, teachers in private school were relatively better motivated because, most of them were satisfied with the availability of teaching and learning materials in their respective schools and their students' performance at the BECE. The headteachers in private schools exercise strict supervision internally, and in most cases showed more commitment in motivating their teachers and these could be the genesis that brought out their dominance in academic performance over their public counterparts.

## REFERENCES

- Agyeman, D. K., Baku, J. J., Gbadamosi, R., Addabor, E., Adoo-Adeku, K., Cudjoe, M., et al. (2000). *Review of Education Sector Analysis in Ghana 1987- 1998*. Paris: Working Group on Education Sector Analysis.
- Ahiatrogah, Paul, D., & Bevell, B. (2013). *Determinants of Equity in Access to Senior High School Education in the Ghanaian Education System*. Accra: Journal of Education and Social Research.
- Akaguri, L. (2011). Quality Low- Fee Private Schools for the Rural Poor: Perceptions or Reality? Evidence from Southern Ghana. *Consortium for Research on Educational Access, Transition and Equity*.
- Akyeampong, K. (2001). *Educational Expansion and Access in Ghana: A Review of 50 Years of Challenge and Progress*. University of Sussex, United Kingdom.
- Akyeampong, K. (2009). Public-private partnership in the provision of basic education in Ghana: challenges and choices. *A Journal of Comparative and International Education*, Volume 39, Issue No. 2,.
- Akyeampong, K., & Furlong, D. (2000). *Muster-Multisite Teacher Education, Research Project in Ghana: a Baseline Study of the Teacher Education System*. Accra: DFID.
- Akyeampong, K., Djangmah, J., Oduro, A., Seidu, A., & Hunt, F. (2007). *Access to Basic Education in Ghana: The Evidence and the Issues Country Analytic Report*. Brighton: Consortium for Educational Access, Transitions and Equity (CREATE).
- Almendarez, L. (2011). Human Capital Theory: Implications for Educational Development. University of West Indies: Belize Country Conference Pre- Prints.
- Alonge, M. F. (2010). *Essentials of Research Methods and Designs for Educators*. Ikeja, Lagos: Bolabay Production.
- Ampiah, J. G. (2008). An Investigation of Provision of Quality Basic Education in Ghana: a Case Study of Selected Schools in the Central Region. *Journal of International Cooperation in Education, Volume 11*, , p.19-37.
- Ampiah, J. G. (2010). Quality Basic Education in Ghana: Prescription, Praxis and Problems. *Experience Sharing Seminar, 17-19 January, 2010*. Accra: University of Cape Coast.
- Ankomah, Y. A., & Hope, W. (2011). A Comparison of Public and Private Basic School Heads. *Journal of the African Educational Research Network, Volume 11*.
- Ankomah, Y. A., Koomson, J. A., Rosemary, A. B., & George, K. T. (2005). A Review on the Concept of Quality in Education: Perspectives from Ghana. *EdQua Group, Volume 1*. (University of Cape Coast).

- Annie, M., & Jennifer, S. (2014). The Relationship Between Income and Children's Outcomes: A Synthesis of Canadian Evidence. *Canadian Research Data Center Network (CRDCN) Synthesis Series*.
- Armstrong, M. (2010). *Armstrong's Handbook of Rewards Management Practices: Improving performance through rewards*. India: Replika Press Ltd.
- Arnold, D. O. (1970). Dimensional Sampling: An Approach for Studying a Small Number of Cases. California: University of California.
- Avvisati, F., Besbas, B., & Guyon, N. (2010). Parents Involvements in School: A Literature Review. Paris, France.
- Babbie, E. (2005). *The Basics of Social Research*. Canada: Thompson Learning Academic Resource Centre.
- Babbie, E. (2010). *The Practice of Social Research*. New York: Cengage Learning Customer & Sales Support.
- Bagshawe, A. (2011). *How to Improve Motivation: How to get Everyone in Your Business Motivated*. Retrieved June 12th, 2013, from <http://bookboon.com>
- Baker, S. E., & Edward, R. (2012). How many qualitative interviews is enough? discussion of expert voices and early career reflections on sampling and cases in qualitative research papers. National Centre for Research Methods.
- Barber, M., & Mona, M. (2007). *How the world's best - performing school systems come out top*. London: McKinsey & company.
- Basic Education Coalition. (2013). *Teach a Child Transform a Nation*. Retrieved January 12, 2014, from <http://www.BasicEd.org>
- Bennell, P., & Akyeampong, K. (2007). Teacher Motivation in Sub Sahara Africa and South Asia. Irving Street,, U.S.A.
- Braun, H., Anil, K., Eric, B., & Micheal, K. (2006). Improving Education Through Assessment, Inovation and Evaluation. Irving Street, U.S.A.
- Buckland, P. (2000). Defining Quality in Education. Florence: UNICEF International Working Group on Education.
- Burchell, B., & Dickson Koudjoe, T. A. (2014). Employee Motivation and Work Ethic in the State and Private sector in Ghana: A Survey of Teaching and Banking Professions. *Online Journal of African Affairs*.
- Casely-Hayford, L., Campbell, S., Seidu, A., & Adams, R. (2013). *The Quality and Inclusivity of Basic Education across Ghana's three Northern Regions: A look at*



- learning effectiveness and efficiency in post 2015*. Accra: UKFIET International Conference on Education and Development – Education & Development Post 2015.
- CDC Consult Limited. (2010). *Final Ghana Country Report: Market Research Project on Low Income Private Schools*. Cantonments – Accra: International Finance Corporation (IFC).
- Cotton, K. (2003). *Principals and Students Achievement: What the Research says*. Alexandria: : Association for Supervision and Curriculum Development.
- Creswell, J. W. (2003). *Qualitative, Quantitative and Mixed Methods Approaches*. London: Sage Publications.
- Darwish, T. K. (2013). *Strategic HRM and Performance Theory and Practice*. Newcastle: Cambridge Scholars Publishing.
- Davis-Kean, P. E. (2005). The Influence of Parent Education and Family Income on Child Achievement: The Indirect Role of Parental Expectations and the Home Environment. *Journal of Family Psychology*.
- DCSF. (2008). *The Impact of Parental Involvement on Children's Education*. London: DCSF publications.
- Desforges, C., & Abouchar, A. (2003). *The Impact of Parental Involvement, Parental Support and Family Education on Pupil Achievement and Adjustment: A Literature Review*. Nottingham: Queen's printer.
- Diaz, A. L. (2005). Personal, Family and Academic Factors Affecting Low Achievement in Secondary School. *Electronic Journal of Research in Educational Psychology and Psychopedagogy*.
- Djangmah, J. S. (2011). Inequitable Access to Basic Education in Ghana: The Way Forward for Free Compulsory Universal Basic Education (FCUBE). *Consortium for Research on Educational Access, Transitions and Equity*.
- Dzobo, N. K. (1974). *The Report of the Education Review Committee - The New Structure and Content of Education for Ghana*. Accra: Ministry of Education.
- Ebow, A. B., & Anokye, K. A. (2014). Computerised School Selection & Placement System (CSSPS): My Role, Your Role. Accra: Ghana Ministry of Education.
- Farooq, M. S., Chaudhry, A. H., Shafiq, M., & Berhamu, G. (2011). Factors Affecting Students Quality of Academic Performance: A Case Study of Secondary Level. *Journal of Quality and Technology Management*.

- Farooq<sup>1</sup>, M., Chaudhry<sup>1</sup>, A., Shafiq, M., & Berhanu<sup>2</sup>, G. (2011). Factors Affecting Students' Quality of Academic Performance: A Case of A Secondary School Level. *Journal of Quality and Technology Management*.
- Garner, E. (2012). *Effective Discipline: How to Manage Discipline at Work*. Retrieved February 17, 2014, from <http://www.bookboon.com>
- Ghana National Association of Teachers & Teacher Education Workers Union. (2009). *Teacher Attrition in Ghana: Results of a Questionnaire Survey*. Accra: GNAT & TEWU.
- Ghana Statistical Service. (2012). *The 2010 Population and Housing Census, Summary Report of Final Results*. Accra: Ghana Statistical Service.
- Graham, S., & Weiner, B. (1992). *Theories and Principles of Motivation*. Los Angeles: National Science Foundation, University of California.
- Gravetter, F., & Forzano, L. B. (2006). *Research Methods for Behavioral Sciences*. New York: Vicky knight.
- Gyan, C., Mabefam, M. G., & Michael Baffoe, M. (2014). Push Out or Drop Out? Taking a Critical Look at the Poor Performance and Drop-Out of Students of the JSS/JHS Programme in Ghana . *Academic Journal of Interdisciplinary Studies*, p.409-419.
- Hara, S. R., & Burke, D. J. (1988). Parent Involvement: The Key To Improved Student Achievement. *School Community Journal*, p.210.
- Hugo, V. (2012). *Reversing the decline in academic performance at the BECE Level in Volta Region: The Role of the Stakeholders*. Accra: Ghana News Agency.
- Hung, Y.-C., & Lion, P.-Y. (2013). *Examining the relationship between student academic achievement and self-concept in the I/E, BFLPE, and combined models -Evidence from East Asian countries' data in TIMSS 2007*. Zhongli City: Graduate Institute of Learning and Instruction.
- Kadingdi, S. (2004). *Policy initiative for change and innovation in basic education programs in Ghana*. Cape Coast: University of Cape Coast.
- Kate, A.-A., James, A. O., & Dzighodi, A. B. (2003). *Quality of Basic Education in Ghana: An Annotated Bibliography from 1992-2002*. Accra: ERNWACA-Ghana.
- Keller, J. M. (2006). Revise and Extended Version of Encyclopedia. In J. M. Keller, *What is Motivational Design?*
- Kimani<sup>1</sup>, G. N., Kara, A. M., & Njagi, L. W. (2013). Teacher Factors Influencing Students' Academic Achievement in Secondary Schools in Nyandarua County ,Kenya. *International Journal of Education and Research*.

- Kitaev, I. (1999). Private Education in Sub-Saharan Africa: A Re-Examination of Theories and Concepts related to its Development and Finance. *International Institute for Educational Planning*.(UNESCO).
- Kothari, C. A. (2004). *Research Methodology Methods and Techniques*. New Delhi: New Age International (P) Ltd Publishers.
- Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2004). *Successful School Leadership: What is it and how it influences pupil learning*. National College for School Leadership (NCSL), University of Nottingham.
- Lonsdale, M. (2003). *Impact of School Libraries on Student Achievement: A Review of the Research*. Australia: Australian Council for Educational Research.
- Luke, M., & Mhlauli, M. B. (2014). An Investigation on Students Academic Performance for Junior Secondary Schools in Botswana. *European Journal of Educational Research*, p.122., p.122.
- Marphatial, A. A., Edge, K., Legalt, E., & Archer, A. (2010). *Politics of participation: Parental support for children and school governance in Burundi, Malawi, Senegal and Uganda*. Bujumbura: Improving Learning Outcomes in Primary Schools (ILOPS) Projects.
- Maslow, A. H. (1943). *A Theory of Human Motivation*. Retrieved May 12, 2014, from <http://www.Abika.com>
- McNeil, B., Neil, R., & Julia, R. (2012). *A framework of outcomes for young children*. New York: The Young Foundation.
- Mehmood, T., Hussain, T., Khalid, M., & Azam, R. (2012). Impact of Formative Assessment on Academic Achievement of Secondary School. *International Journal of Business and Social Science*, p.101-103.
- Mereku, K. (c2001). *The BECE Grading System Committee Report: Implications for Minimum Qualification for Basic Education Certificate*. Winneba: Department of Mathematics Education.
- Meyer, D. (2008). What Constitutes Quality Education. *IFUW online discussion on quality education*.
- Micheal, B., & Mona, M. (2007). *How the World Best Performing Schools Systems Come Out on Top*. Mckingsey & Company.
- Ministry of Education. (2010). *Appraisall of the government of Ghana education sector plan, 2010-2020*. Accra: Ghana Ministry of Education.

- Ministry of Education. (2010). *Education Sector Medium Term Development Plan, 2010-2013*. Accra: Ghana Ministry of Education.
- Ministry of Education. (2013). *Education Sector Performance Report*. Accra: Ghana Ministry of Education.
- Ministry of Education Science and Sports. (2008). *Preliminary Education Sector Performance Report*. Accra: Ghana Ministry of Education.
- MTD Traning. (2013). *Coaching and Mentoring*. Retrieved April 14, 2013, from <http://www.bookboom.com>
- Mushtaq, I., & Khan, S. N. (2012). Factors Affecting Students Academic Performance. *Global Journal of Management and Business Research*.
- National Center for Education Statistics. (1997). Findings from the Conditions of Education, 1997; Public and Private Schools: How do they differ. Washington D.C: Department of Education Office.
- National Development PLanning Commission. (2012). *Implementation of the Ghana Shared Growth and Development Agenda 2010-2013 Annual Progress Report*. Accra: NDPC.
- Nettles, S. M., & Herringtong, C. (2007). Revising the Importance of the Direct Effects of School Leadership on Students Achievement: The Implication for School Improvement Policy. 82.
- NOYED. (2013). *A Situational Report on Youth in the Tamale Metropolis: towards the youth development*. Tamale: NOYED-Ghana.
- Nsia-Pepurah, Y. (2006). *Social Dimensions of Development*. Kwame Nkrumah University of Science and Technology. Kumasi: Faculty of Planning and Land Enonomy.
- Nudzor, H. P. (2012). Exploring the policy implementation paradox: using the Free Compulsory Universal Basic Education (fCUBE) policy in Ghana as an exemplar. *International Journal of Qualitative Studies in Education*.
- Oduro, A. D. (2000). *Basic Education in the post reform period*. Accra: Center for Policy Analysis (CEPA).
- OECD. (2012a). *Equity and Quality in Education Supporting Disadvantaged Students and Schools*. OECD Publishing.
- OECD. (2012b). *Preparng teachers and developing school leaders for the 21st century: Lessons around the world*. OECD Publishing.
- Ogwen, P. O., Nephath, J. K., & Obara, J. (2014). Influence of Family Characteristics on Academic Performance of Students in Rachuonyo North Sub County, Kenya. *International Journal of Education and Research*.

- Okyere-Darko, G. (2011). *Poor Performance of BECE Candidates under President Mills*. Accra: The Ghanaian Stateman.
- Panda, M. D. (1982). *The relationship of the parental lifestyle to intellectual achievement responsibility, adjustment and cognitive performance among under-privileged children*. Uktal University.
- Perone, J. S. (2005). *Assessing Hierarchy of Needs in levels of service*. South Florida: National Centre for Urban Transportation Research.
- Polit, D. F., & Bernadette, P. H. (1999). *Nursing Research Principles and Methods*. Washignton: Lippincott Williams & Wilkins.
- Republic of Ghana. (2003). *National Action Plan Education for All: Ghana 2003-2015*. Accra: Ministry of Education.
- Rolleston, C., & Adefeso-Olateju, M. (2012). De Facto Privatization of Basic Education in Africa: A Market Response to Government Failure? Comparative Study of the Cases of Ghana and Nigeria. Accra.
- Sabine, S., & Michael, F. (2002). *Performance Concepts and Performance Theory*. London: John Wiley & Sons, Ltd.
- Sammons, P., Kathy, S., Edward, M., Iram, S., Brenda, T. & Softka, B.(2008). *The Influence of School and Teaching Quality on Children's Progress in Primary School*. London: Department for Children, Schools and Families.
- Schieb, L. J. & Karabenick, S. A. (2011). Teacher Motivation and Professional Development:A Guide to Resources. *Math and Science Partnership – Motivation Assessment Program*, p.8.
- Shukla, P. (2008). *Essentials of Marketing Research*. Shukla & Ventus publishing Aps.
- Stronge, L. (2013). *NESA Fall Leadership Conference: School Leader Evaluation*. Stronge&Associates Educational Consultng, NLLC.
- The Ghanaian Times. (2013, October 1st). SHS Placement Out: 182,000 Can't get Schools.. They Failed in Core Subjects. *The Ghanaian Times*, p. 17.
- Tooley, J. (2007). *Private Schools for the Poor, Implication for Commonwealth Ministers of Education*. London: Commonwealth Education Partnership.
- Torrente, C., John, L. A., Dirk, W., Taveeshi, G., & Brian, J. (2012). *Opportunity for Equitable Access to Quality Basic Education (OPEQ)*. New York: USAID.
- UNESCO Institute for Statistics. (2009). *Education Indicators Technical Guidelines*. Washington D.C: UNESCO Institute for Statistics.

- UNESCO Institute for Statistics. (2011). *School and teaching resources in Sub Saharan Africa, Analysis of the 2011 UIS Regional Data Collection on Education*. UNESCO Institute for Statistics.
- UNESCO. (2007). *Operational Definition of Basic Education Framework*. UNESCO.
- UNESCO. (2012). *General Education Quality Analysis/ Diagnosis Framework (GEQAF)*. UNESCO.
- UNESCO. (2012). *Youth and Skills, Putting education to work*. Education for All Global Monitoring Report.
- UNICEF. (2009). *Child Friendly Schools: Schools and Community*. New York: UNICEF Division of Communication.
- UNICEF. (n.d). *Improving quality education for children through reform of teaching and learning materials*. Retrieved April 23, 2014
- Warrick, D. D. (1981). *Leadership Styles and Their Consequences*. University of Colorado, College of Business Administration. Colorado: Colorado Springs.
- Webster, J., & Watson, R. T. (2002). *Analysing the past to prepare for the future: Writing a literature review*. Retrieved May 7th, 2014, from <http://www.misq.org/misreview/announce.html>
- Woolfolk, A. E. (1998). *Reading in Educational Psychology*. (2, Ed.) Needham Height, Gould Street, USA: Allyn & Bacon.
- World Bank. (2011). *Rwanda Education Country Status Report Toward Quality Enhancement and Achievement of Universal Nine Year Basic Education*. Washington D C: Rwanda Ministry of Education.
- World Bank. (2013). *Ghana Students Assessment: System Approach for Better Education Results*. Accra: SABER Country Report.
- World Bank. (2014). *International Development Association Project Appraisal Document on Secondary Education Improvement Project*. Accra: Ministry of Education.
- Yin, R. K. (1984). *Case Study Research Design: Design and Methods*. London: Sage Publications.

## APPENDICES

### Appendix A: A Questionnaire for public and private JHS Graduates

This questionnaire is design to solicit your views with respect to the BECE outcomes of basic education in the Tamale Metropolis. The views shared are only to support academic research and your confidentiality is completely guaranteed.

Socio demographic data

Tick the following boxes and fill in where applicable.

Age: [     ] Sex: Male [     ] / Female [     ]

Name of your JHS: -----

Category of your JHS: Public [     ] / Private [     ]

Parent/Guardian's level of education:

None [     ] Primary [     ] JHS [     ] Secondary [     ] Higher Education [     ]:

Father/ Guardian Occupation: .....

Please provide accurate answers to the following questions as applied to you as an individual.

Your answers should be as clear as possible.

Did you attend kindergarten? Yes [     ] / No [     ]

Did your JHS provide a library for your studies? Yes [     ] / No [     ]

How will you rate your Mathematical abilities at the primary school?

Excellent [     ] Very Good [     ] Good [     ] Average [     ] Poor [     ]

Were you able to read fluently before going to JHS? Yes [     ] / No [     ]

How many pupils were in your class at the JHS? Choose one among the following:

35 [     ] 40 [     ] 45 [     ] 50above [     ]

Were you able to have your own English and Mathematics textbooks at primary six? Yes [     ]

/No [     ]

How frequent were you in class in JHS?

One day out of five [     ] Three days out of five [     ] All Five days [     ]

How often were you given class exercise and home work by your JHS teachers?

Everyday [     ] Every week [     ] Every month [     ] Rarely given [     ]

Were you able to have your own textbooks in all the four core subjects? That's English, Mathematics, Integrated Science and Social Studies? Yes [     ] / No [     ]

Did you get extra tuition after school at the JHS three? Yes [     ] / No [     ]

Who was taking care of your schooling at the JHS?

Father Only [ ] Mother Only [ ] Both Father and Mother [ ] Guardian [ ] Other [ ] please specify.....

How will you describe the care offered you by your parent/guardian at the JHS? Excellent [ ] Very good [ ] Good [ ] Average [ ]

What are some of the extra activities that your parent/guardian used to involve you after school in JHS? .....

What was your major challenge of learning at the JHS? .....

What range of aggregate did you make at the Basic Education Certificate Examination? Choose one among the following:

Aggregate 6 to 9 [ ] Aggregate 10 to 15 [ ] Aggregate 16 to 20 [ ]  
21 to 30 [ ] 30 above [ ]

Indicate the grades you obtained in the following Core subjects at your BECE:

- a. English Language [ ]
- b. Social Studies [ ]
- c. Mathematics [ ]
- d. Integrated Science [ ]

What was your total aggregate at the BECE? [ ]

. Have you gotten placement to SHS? Yes [ ] / No [ ]

Did you get your first choice of programme? Yes [ ] / No [ ]

Who is responsible for your shortcomings at the BECE among the following?

My school head [ ] My Teachers [ ] My Parents [ ] Myself [ ]

**Thank You for Your Attention.**



## Appendix B: An Interview Guide for Parents/Guardians

This schedule is design to solicit your views with respect to the BECE outcomes of basic education in the Tamale Metropolis. The views shared are only to support academic research and your confidentiality is completely guaranteed.

Socio demographic data.

Tick the following boxes and fill in where applicable.

Age: [     ] Sex: Male [     ] / Female [     ]

Name of Your Child JHS: .....

Category of Child's JHS: Public [     ] / Private [     ]

Religious affiliation:

Christian [     ] Moslem [     ] Traditional [     ] Other [     ], please state.....

Level of education: None [     ] Primary [     ] MSLC/JHS [     ] Secondary [     ] Higher Education [     ]

Level of Monthly Income: Less than GH¢ 50 [     ] GH¢75[     ] GH¢100[     ] above GH¢100 [     ]

**Kindly provide answers to the following questions as accurately as possible.**

1. How many children do you have? [     ]
2. Are your children all in school? Yes [     ] / No [     ]
3. How many children do you have in the following levels in the educational system?

Kindergarten [     ] Primary [     ] JHS [     ] Secondary [     ] Tertiary [     ]

Choose one among the following responses:

I always gave my ward money to school [     ]

I gave my ward food and money to school [     ]

I gave my ward money only if I have for school [     ]

My ward earns his/her own income [     ]

4. Teachers in my ward's JHS constantly invited parents to deliberate on the children academic performance?

I strongly agree [     ] I agree [     ] I disagree [     ] I strongly disagree [     ]

5. I was not able to provide all the needs for my child at the JHS? .....

I strongly agree [     ] I agree [     ] I disagree [     ] I strongly disagree [     ]

6. The Parent Teacher Association (PTA) of my ward JHS was **not** effective?

I strongly agree [     ] I agree [     ] I disagree [     ] I strongly disagree [     ]

7. How often did you participate in Parent Teacher Association (PTA) meetings?

Three times a year [     ]

Twice a year [     ]

Once every year [    ]

Never Participated [    ]

8. What activities did you assign to your ward after school at the JHS?

.....

9. Were you able to put up any measure for your child to learn at home after school?

Yes [    ] / No [    ]

10. If your answer to question ten(10) is ‘ yes’, indicate some of the measures you put in place to enhance your child’s academic achievement:

.....

11. Were you helping your child or getting somebody to help him/her do his/her home-work? Yes [    ] / No [    ]

12. Did you have any interaction with the teachers in respect to knowing how your ward was faring in school? Yes[    ] / No[    ]

13. Were you able to provide all the core textbooks for your ward? That is        English, Mathematics, Integrated Science and Social Studies, Yes [    ] / No[    ]

14. If you are to blame a single person(s) for poor BECE outcomes, who will that be and why? .....

15. Are you satisfied with the aggregate your child had at the Basic Education Certificate Examination (BECE)? Yes[    ] / No [    ]

16. If your answer to question 16 is ‘no’, what do you think went wrong?

.....

17. What in your opinion will help future candidates to get good results in the Basic Education Certificate Examination (BECE)?

.....

18. What will you do differently if your child were to seat again for the BECE?

.....

**Thank you for your attention.**

## **Appendix C: An Interview Guide for Teachers Teaching Core Subjects in Private and Public Junior High Schools (JHS)**

This design is meant to solicit your views with respect to the BECE outcomes in the Tamale Metropolis. The views shared are only to support academic research and your confidentiality is completely guaranteed.

Socio demographic data:

Tick the following boxes and fill in where applicable.

Age:[    ] Sex: Male [    ] / Female [    ]

Name of Your JHS: .....

Category of your JHS: Public [    ] / Private [    ]

Marital status: single [    ] married [    ] divorced [    ] separated [    ]

Level of Education:

WASSE/SSSE/GCE O'level [    ] Teacher Cert 'A' [    ] Diploma/HND [    ]

First Degree [    ] Postgraduate [    ]

Religious affiliation:

Christian [    ] Moslem [    ] Traditional [    ] Other [    ] please specify .....

-----

Please answer the following questions as accurately as possible:

1. Are you a trained or untrained teacher? Trained [    ] / Untrained [    ].
2. How many years have you been teaching? [    ]
3. What subject(s) have you been teaching in the school? -----
4. Choose among the following categories of responses? I have all the teaching and learning materials in my subject. I strongly agree [    ] I agree [    ]  
I disagree [    ] I strongly disagree [    ]
5. How many years have you been teaching your current subject? [    ]
6. How many minutes are allocated to a period in your lesson? [    ]
7. How many periods do you teach in a week? [    ]
8. How many exercises do you give your pupils in a week? [    ]
9. There is a full cooperation between parents and the teachers in running the school. I strongly agree [    ] I agree [    ] I disagree [    ] I strongly disagree [    ]
10. Are you satisfied with the current level of pupils' performance in your subject? Yes [    ] / No [    ]
11. If answer to question 10 above is 'no', what in your opinion accounts for the low academic performance of pupils in your subject?

.....  
12. Which of these terms best describe your head teacher?

Very approachable [ ] Approachable [ ] Unapproachable [ ] Very unapproachable [ ]

13. Use the table below to appraise your headteacher supervisory practices in terms of the indicators in the table. Choose the most appropriate by ticking once:

The head provides teaching and learning materials for learning	
Visits classroom during the period of teaching and learning	
check pupils note and exercise books	
checks teachers weekly lesson notes regularly	

14. The circuit supervisor(s) is too regular to this school .....

I strongly agree [ ] I agree [ ] I disagree [ ] I strongly disagree [ ]

15. The supervisory role of the head of this school is very satisfactory.....

I strongly agree [ ] I agree [ ] I disagree [ ] I strongly disagree [ ]

16. Your school is enjoying cordial relationship with the school community .....

17. I strongly agree [ ] I agree [ ] I disagree [ ] I strongly disagree [ ]

18. How will you describe the School Management Committee (SMC) of your school?

19. Very active [ ] Active [ ] Inactive [ ] Very inactive [ ]

20. If you are to put a blame for the low performance of pupils in BECE in Ta-  
male, whom will you blame first and why? .....

21. How much is your monthly salary? Choose among the following categories:

22. Less than GH¢ 300[ ] GH¢300-400 [ ] GH¢ 500-600[ ] GH¢700-800[ ] GH¢900-  
1000[ ] GH¢1000 above [ ]

23. Are you satisfied with your current level of earning? Yes [ ] / No [ ], if 'no'  
why?.....

24. Do you get extra income apart from your monthly salary? Yes[ ] / No [ ]

25. What in your opinion should government/parents do, apart from increase in salary, to  
help you put up your best in the classroom?

.....  
26. Which of the following is your main reason for teaching? For salary [ ] Pupils  
welfare [ ] For respect [ ] Enjoys teaching [ ] Other .....

27. Most of my students' parents approached the school to ascertain how their wards are faring in class.....
28. I strongly agree [    ] I agree [    ] I disagree [    ] I strongly disagree [    ]
29. What measures are you taking to reverse the poor performance if any in the subsequent Basic Education Certificate Examination in your subject? .....
30. Futures teachers are likely to enjoy more than the current ones.....
31. I strongly agree [    ] I agree [    ] I disagree [    ] I strongly disagree [    ]
32. If you were to be given a chance to choose another profession, would you choose teaching? Yes [    ] / No [    ]. If 'no' why? .....
33. What are some of the challenges you are facing as a teacher in both your professional life and as an individual?  
.....

Thank You for Your Attention

## Appendix D: Interview Guide for JHS Headteachers/ Proprietors

This schedule is design to solicit your views with respect to the BECE outcomes in the Tamale Metropolis. The views shared are only to support academic research and your confidentiality is completely guaranteed.

Socio demographic data

Tick he following boxes and fill in where applicable.

Age: [      ] Sex: Male [   ] / Female [   ]

Marital status:

Married [   ]    Single [   ]    Divorced [   ]    Separated [   ]

Name of Your JHS: .....

Category of your JHS: Public [   ] / Private [   ]

Level of Education:

WASSE/SSSE [   ] Teacher Cert ‘A’ [   ] Diploma/HND [   ]

First Degree [   ]    Postgraduate [   ]

Religious affiliation:

Christian [   ]    Moslem [   ]    Traditional [   ]    Other [   ] please specify.....

-----

Please answer the following questions as accurately as possible:

1. How long have you been in the teaching profession? [      ]
2. Are you a trained or untrained teacher? Trained [   ] / Untrained [   ]
3. How many years have you headed your current school? [      ]
4. Were you given special training before assuming your headship role?  
Yes [   ] / No [   ]
5. What in your opinion constitute quality education?  
.....
6. What specific leadership styles are you putting in place to ensure quality education attainment in your school? .....
7. Do you give your staff any extra motivation apart from their monthly salary?  
Yes [   ] / No [   ]
8. If your answer to question above is ‘Yes’, what kind of motivation do you give your teachers?.....

9. Indicate the number of teachers in your school in the following categories, Number of staff [     ] Trained teachers [     ] Untrained teachers [     ] Male teachers [     ] Female teachers [     ]
10. Are you satisfied with the current level of educational facilities in your school? Yes [     ] / No [     ]
11. List the facilities you want in your school that are currently not available to enhance teaching and learning activities:  
.....
12. My teachers are very competent in teaching their subjects.....  
I strongly agree [     ] I agree [     ] I disagree [     ] I strongly disagree [     ]
13. The major problem I have with my teachers is .....  
Absenteeism [     ] Lateness [     ] Closing before time [     ] Lazy to teach [     ] other [     ] please specify .....
14. Parents support me a lot in running the school .....  
I strongly agree [     ] I agree [     ] I disagree [     ] I strongly disagree [     ]
15. What was the pass rates of students in your school over the past four years at the BECE: 2010[     ] 2011 [     ] 2012[     ] 2013[     ]
16. Are you satisfied with the current level of your school performance at the BECE? Yes [     ] / No [     ]
17. If your answer to question above is 'no', what in your opinion account for the low level of academic performance at the BECE?  
.....
18. What challenges are you facing in running your school?  
.....
19. What leadership style do you use to enhance children academic performance in your school?.....
20. What were the fees charged for the past four years in your school?  
2010 GH¢ [     ] 2011 GH¢ [     ] 2012GH¢ [     ] 2013GH [     ]
21. Indicate the following records in your school over the past five years:  
  
Attendance rate of pupils: 2010[     ] 2011[     ] 2012[     ] 2013[     ]  
Attendance rate of teachers: 2010[     ] 2011[     ] 2012[     ] 2013[     ]  
Enrolment rate: 2010[     ] 2011[     ] 2012[     ] 2013[     ]  
Dropout rate: 2010[     ] 2011[     ] 2012[     ] 2013[     ]

Number of pupils in your school [     ]     Male [     ]     Female [     ]  
Stock of English textbooks [     ] Mathematics [     ] Social Studies [     ] Integrated  
Science [     ]

22. What are some the achievements you have acquired in managing your school?

.....

23. How frequent do you supervise your teachers activities in class per week?

.....

24. What are some of the shortcomings you have experienced as the head of the school  
over the years?

.....

25. What are your recommendations in solving the high rate of failures in the BECE  
conducted annually in the Tamale Metropolis?

.....

**Thank You for Your Support**



### Appendix E: Pass Rates of Selected Schools from 2010 to 2013 at BECE

NAME OF SCHOOL	Type of School	Pass Rate at BECE (%)				Mean score%
		2010	2011	2012	2013	
ABE HALPERIN	Private	100%	100%	100%	100%	100
JISONAYILI M/A	Public	83.5% %	95.6%	100%	84.4%	91
FUTURE LEADERS	Private	54%	47%	100%	97%	75
ZOGBELI M/A 'A'	Public	49%	47.5%	33% %	49% %	45
PEACE & UNITY	Private	32%	34%	43%	46%	39
MAHAD TAHALIAISL	Public	10%	12.5%	2%	14%	10

Author's Construct with field data, 2014.

#### Selected Schools Enrolment for 2013/14 Academic Year

NAME OF SCHOOL			Total	Dropout rate		Fees charged
	Boys	Girls		Boys	Girls	
ABE HALPERIN	102	97	199	-	-	GH GH¢320
JISONAYILI M/A	100	86	186	2%	2%	GH¢15
FUTURE LEADERS	45	38	83			GH¢120
ZOGBELI M/A 'A'	176	153	329	2%	4%	-
PEACE & UNITY	49	41	90	-	-	GH¢100
MAHAD TAHALIAISL	98	87	185	3%	2%	GH¢5
TOTAL						

Author's Construct with field data, 2014.

#### National BECE Pass Rate from 2002/2003 to 2012/13 Academic Years

Year of BECE	Percentage Passed	Percentage Failed
2002/03	61.00	39.00
2003/04	61.18	38.82
2004/05	61.59	38.41
2005/06	61.91	38.09
2006/07	61.28	38.72
2007/08	62.17	37.83
2008/09	62.42	37.58
2009/10	50.21	49.79
2010/11`	49.12	50.88
2011/12**	46.93	53.07
2012/13**	99.80	0.20

Source: Education Sector Performance Report, 2010

N.B those marked \*\* are captured from the literature

### Pupils Core Textbook Ratio in Public and Private Schools

Name of School	Total Enrolment	Category of School	Subject	Number of Core textbooks				Total	Pupil Core Textbook Ratio
								<b>268</b>	4:1.3
ABE HALPERIN	<b>199</b>	Private	Eng	24	32	25		81	
			Math	20	31	25		76	
			Int, Sc.	18	28	32		78	
			Soc. St	12	13	8		33	
								<b>204</b>	4:1.1
JISONAYILI M/A	<b>186</b>	Public	Eng	20	17	16		53	
			Math	14	16	22		52	
			Int, Sc.	14	18	24		56	
			Soc. St	20	12	11		43	
								<b>196</b>	4:2.4
	<b>83</b>	Private	Eng	14	21	15		50	
FUTURE LEADERS			Math	15	22	16		53	
			Int, Sc.	13	20	17		50	
			Soc. St	13	16	14		43	
								<b>200</b>	4:0.6
		Public	Eng	23	25	18		66	
ZOGBELI M/A 'A'	<b>329</b>		Math	18	23	14		55	
			Int, Sc.	12	20	11		43	
			Soc. St	12	12	12		36	
								<b>152</b>	4:1.7
PEACE & UNITY	<b>90</b>	Private	Eng	15	17	22		54	
			Math	15	15	20		50	
			Int, Sc.	12	7	14		33	
			Soc. St	5	5	5		15	
								<b>145</b>	4:0.8
MAHAD TAHALIAISL	185	Public	Eng	14	14	12		40	
			Math	13	13	15		41	
			Int, Sc.	12	15	8		35	
			Soc. St	8	8	13		29	

Author's Construct with field data, 2014.

\*\* Eng – English language, Math – Mathematics, Int. Sc- Integrated Science, Soc. St. –Social Studies

### Levels of education of parents/guardians and their monthly incomes

Parent Monthly Income			Parent Level of Education					Total
			Uneducated	Primary	MSLC/ JHS	Secondary	Higher Education	
Less than GH¢50	Category of School	Public	25	3	8	5	1	42
		Private				2		2
	Total		<b>25</b>	<b>3</b>	<b>8</b>	<b>7</b>	<b>1</b>	<b>44</b>
GH¢75	Category of School	Public	9	1				10
		Private			1	1		2
	Total		<b>9</b>	<b>1</b>	<b>1</b>	<b>1</b>		<b>12</b>
GH¢100	Category of School	Public	6		3	1		10
		Private	4		3	1		8
	Total		<b>10</b>		<b>6</b>	<b>2</b>		<b>18</b>
Above GH¢100	Category of School	Public	9		1	2	3	15
		Private	1	1	2	2	12	18
	Total		<b>10</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>15</b>	<b>33</b>
Total	Category of School	Public	47	3	12	11	4	77
		Private	5	1	6	9	12	31
	Total		<b>52</b>	<b>4</b>	<b>18</b>	<b>20</b>	<b>16</b>	<b>107</b>

Author's Construct with field data, 2014.

### Public Basic Schools Core Textbook per pupils, 2009/10 to 2011/12

Level of education	Target (2015)	Baseline (2008/09)	Indicator Status in 2009/10	Indicator Status in 2010/11	Indicator Status in 2011/12	Progress towards target
Kindergarten	3:1	0.1:1	0.2:1	0.35:1	0.3:1	Slow progress
Primary	3:1	1.6:1	1.6:1	1:1	0.9:1	Slow progress
JHS	3:1	2.1:1	1.5:1	0.9:1	1.1	Slow progress

Source: MoE/EMIS, Education Sector Performance Report: NDPC, 2012.

### Stanine Grading System

Year	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
xxxx	4	7	12	17	20	17	12	7	4
xxxx	4	7	12	17	20	17	12	7	4
xxxx	4	7	12	17	20	17	12	7	4

Source: (Akyeampong et al. 2000 cited in Mereku, c2001)