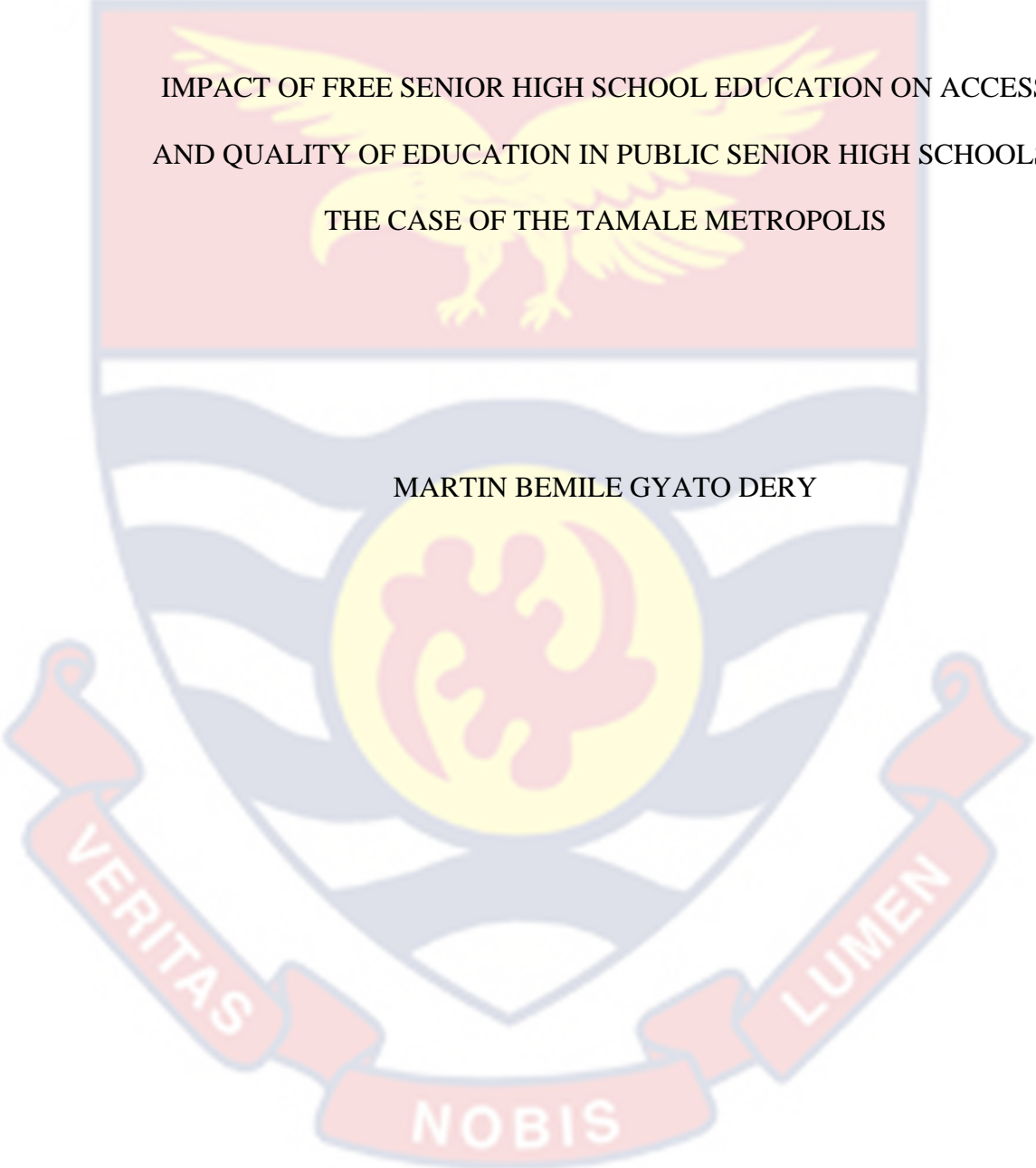


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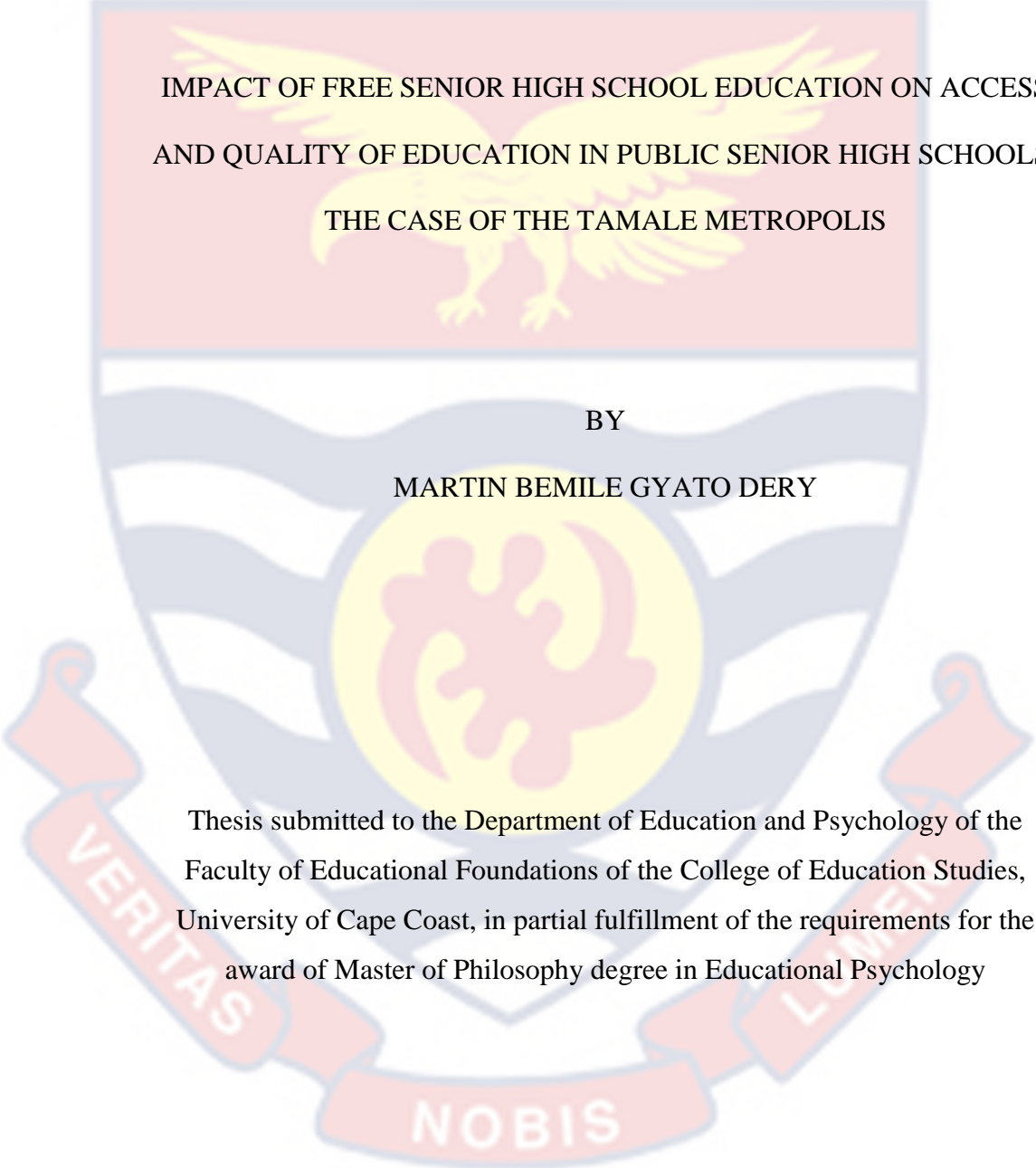


IMPACT OF FREE SENIOR HIGH SCHOOL EDUCATION ON ACCESS
AND QUALITY OF EDUCATION IN PUBLIC SENIOR HIGH SCHOOLS:
THE CASE OF THE TAMALE METROPOLIS

MARTIN BEMILE GYATO DERY

2022

UNIVERSITY OF CAPE COAST



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THE CASE OF THE TAMALE METROPOLIS

BY

MARTIN BEMILE GYATO DERY

This thesis submitted to the Department of Education and Psychology of the Faculty of Educational Foundations of the College of Education Studies, University of Cape Coast, in partial fulfillment of the requirements for the award of Master of Philosophy degree in Educational Psychology

AUGUST 2022

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: Date:

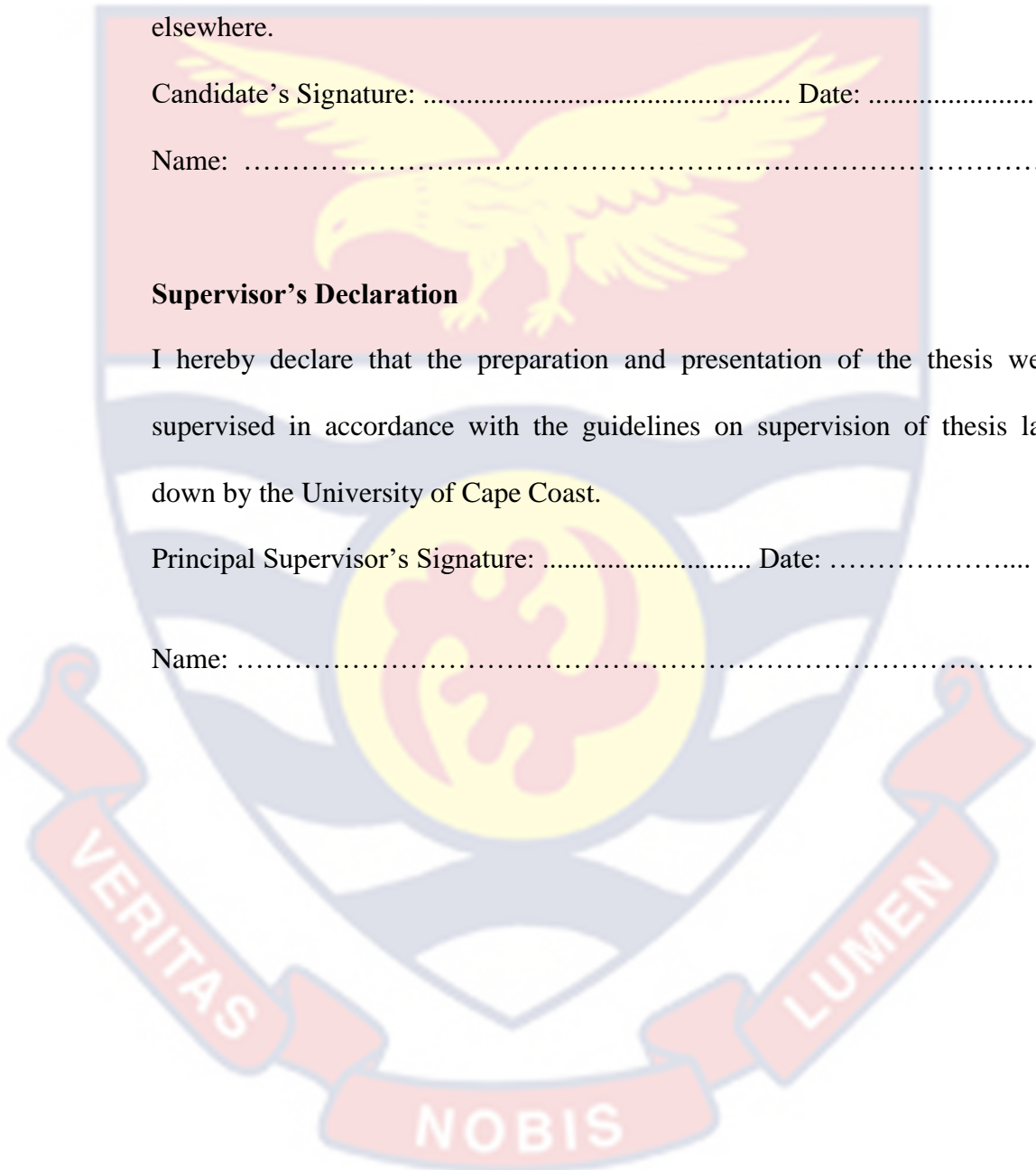
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Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature: Date:

Name:



ABSTRACT

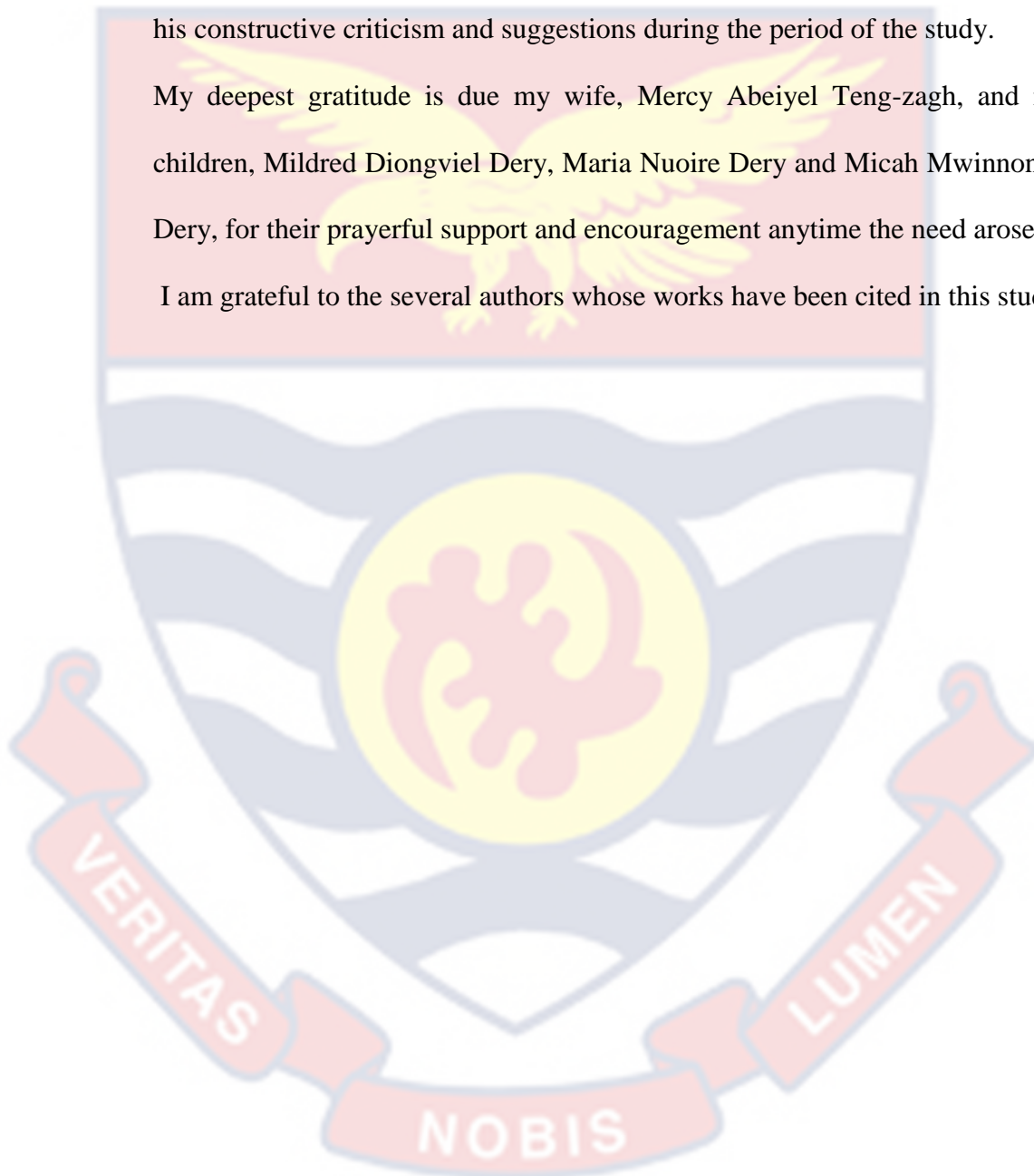
The purpose of this study was to determine the impact of Free Senior High School Education on access and quality of education in the Tamale Metropolis. The target population of the study was all the Public Senior High Schools in the Tamale Metropolis. Simple random sampling was used to select four schools and the proportionate allocation method was used to select 375 students and 151 teachers based on their respective strata from the schools. The four head teachers were purposively selected. Data was collected using questionnaires for students and teachers, and interview schedule for heads. Descriptive statistics was used to analyse the quantitative data. The statistics used include frequency counts and percentages. The qualitative data was analysed by organising them into similar themes. The study established that there has been a marginal increase in the number of students accessing senior high education since the Free Senior High School Policy was introduced in the 2017/2018 academic year. The study also established that sanitary facilities are inadequate; the classes available are few, leading to overcrowded classes. Besides, textbooks are very few for all the subjects making students unable to complete assignments in time. The school libraries are too small to accommodate all the students and overcrowding contributes to noise and poor class control. The study recommends that the government should allocate resources including funding and qualified teachers to schools to ensure that Free Senior High School Education runs smoothly without compromising quality of education. Heads of schools should enroll students based on resources and teachers available to avoid overcrowding schools and overworking teachers. Guidance and Counselling offices should be provided in schools by the Ghana Education Service, supervision should be vigorously undertaken, there should be regular in-service training programmes for teachers and educational administrators to make them effective and efficient on their jobs.

ACKNOWLEDGEMENTS

My special appreciation goes to God the Almighty for granting me with His knowledge, wisdom and strength through the period of the study. I am particularly indebted to my supervisor, Professor Emmanuel Kofi Gyimah for his constructive criticism and suggestions during the period of the study.

My deepest gratitude is due my wife, Mercy Abeiyel Teng-zagh, and my children, Mildred Diongviel Dery, Maria Nuoire Dery and Micah Mwinngoti Dery, for their prayerful support and encouragement anytime the need arose.

I am grateful to the several authors whose works have been cited in this study.



DEDICATION

To my wife, Mercy Abeiyel Teng-zagh and my lovely children, Mildred Dery,
Maria Dery and Micah Dery.



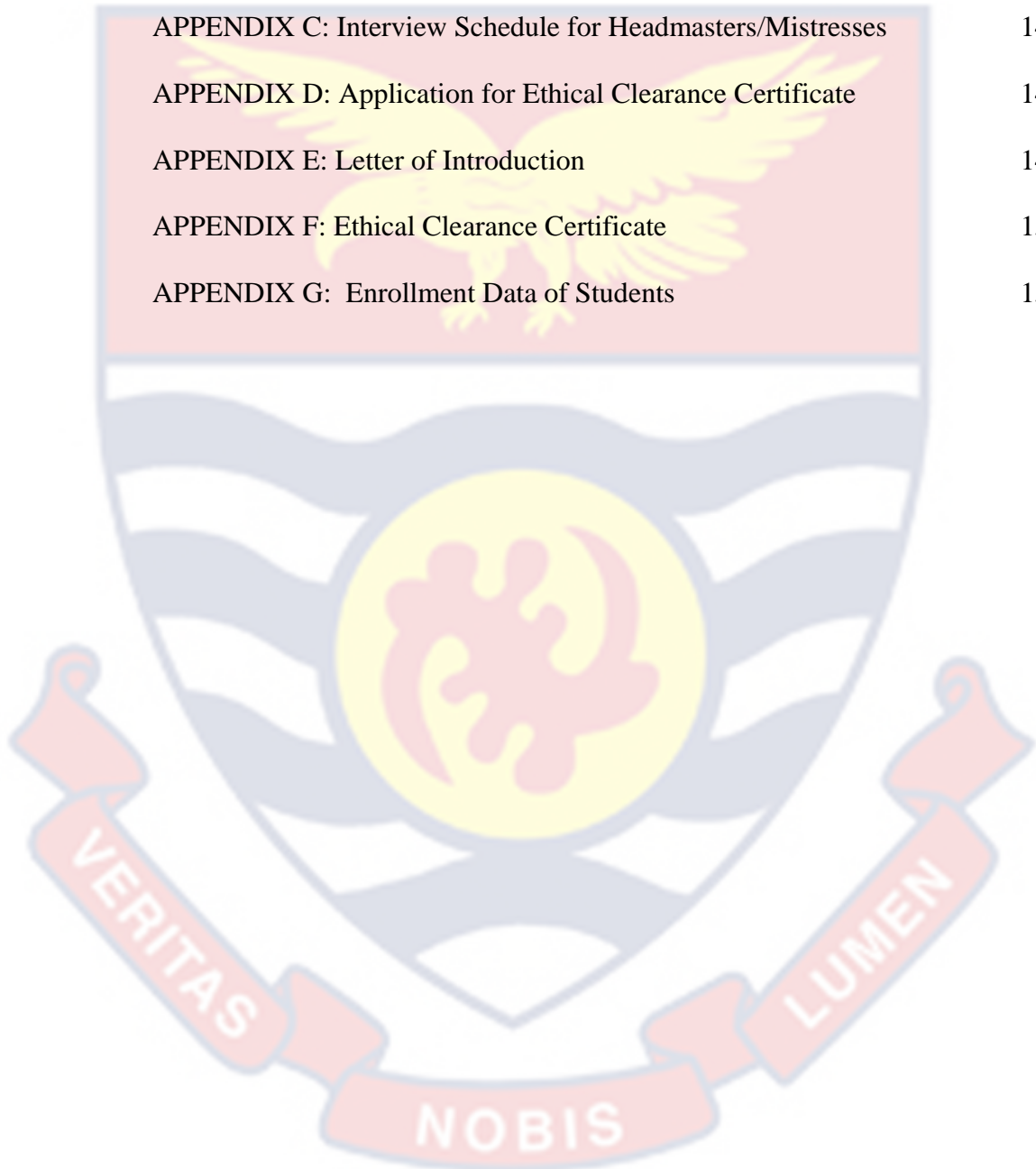
TABLE OF CONTENTS

Contents	Page
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
TABLE OF CONTENTS	vi
LIST OF TABLES	x
LIST OF FIGURES	xi
ACRONYMS	xii
CHAPTER ONE: INTRODUCTION	
Background to the Study	1
Statement of the Problem	9
Purpose of the study	10
Research Questions	11
Significance of the study	11
Delimitation	12
Limitations	12
Definition of Terms	12
Organization of the Study	13
CHAPTER TWO: LITERATURE REVIEW	
Introduction	15
Concept of Quality Education	15
Planning for Quality Education	18
Inputs and Outputs for Quality Education	21

Equity as a Component of Quality Education	22
Theoretical Framework	24
Relevance of the Choice Theory to quality attainment in school	25
Strengths of the Choice Theory	27
Weaknesses of the Choice Theory	27
Conceptual Framework	29
Empirical Studies	32
Quality Education	32
School Environment	34
School Teaching and Learning Facilities	37
(i) Classrooms	37
(ii) Lighting	38
(iii) Cleanliness	38
(iv) Teaching and Learning Materials	38
(v) Sanitation Facilities	40
Teachers' Role in Provision of Quality Education	43
Monitoring and Improving Quality Education	45
Parents/ Guardians and Community Members/ Leaders' Involvement and Support in School	47
Communication in School	50
Leadership Style in School	52
CHAPTER THREE: RESEARCH METHODS	
Introduction	55
Research Design	55
Study Area	56

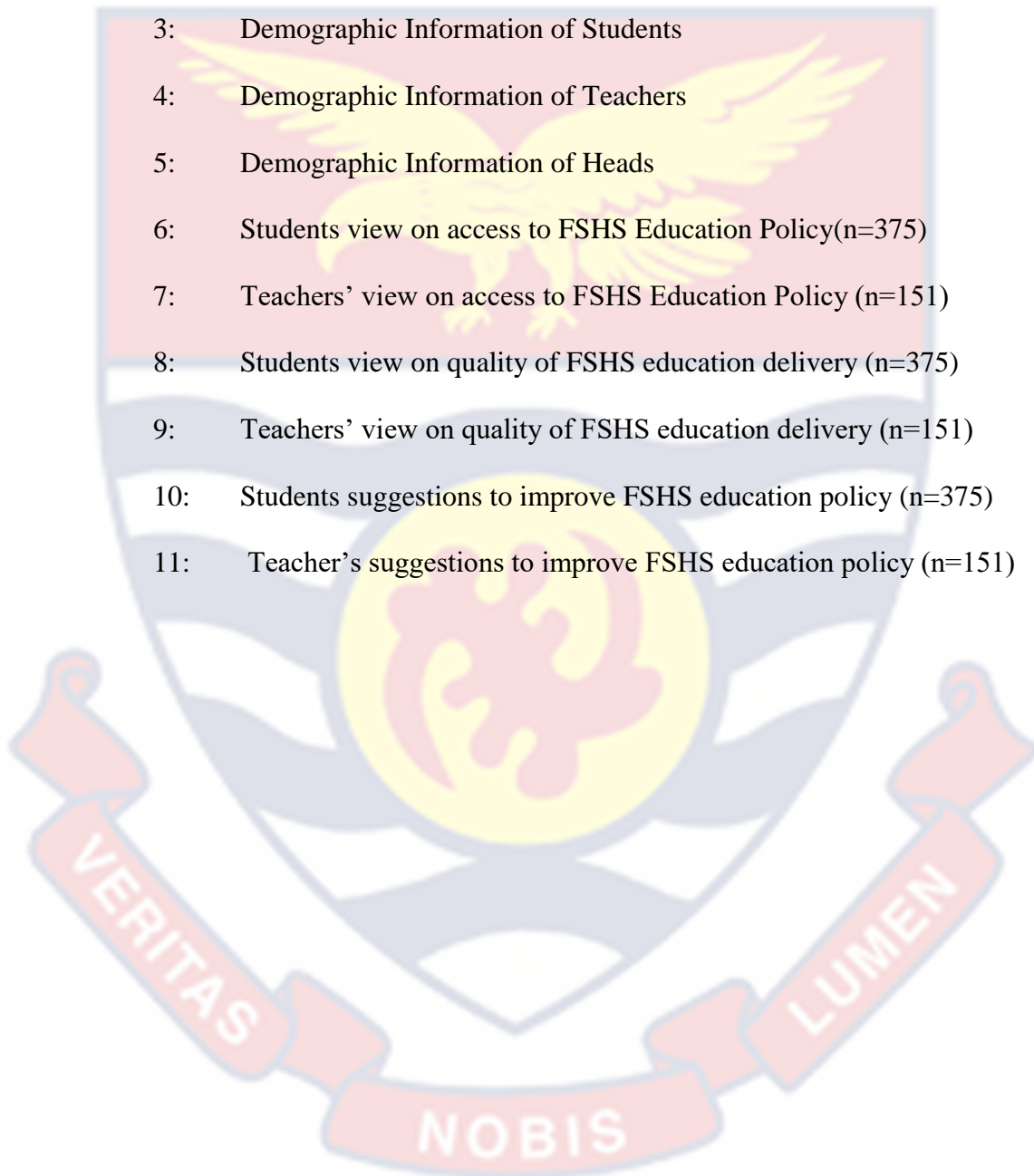
Demographic Features	56
Population	57
Sampling Procedures	58
Research Instruments	61
Questionnaire	62
Questionnaire for Students	62
Questionnaire for Teachers	63
Interview	63
Interview guide for headmasters/mistresses	64
Validity and Reliability of Instrument	65
Ethical Considerations	66
Data Collection Procedures	67
Data Processing and Analysis Procedures	68
CHAPTER FOUR: RESULTS AND DISCUSSION	
Introduction	69
Response Rate	69
Socio-Demographic Characteristics of the Respondents	69
Answers to Research Questions	73
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	
Introduction	102
Summary	102
Conclusions	105
Recommendations	106
Suggestions for Further Research	108

REFERENCES	109
APPENDICES	129
APPENDIX A: Questionnaire for Students	129
APPENDIX B: Questionnaire for Teachers	137
APPENDIX C: Interview Schedule for Headmasters/Mistresses	145
APPENDIX D: Application for Ethical Clearance Certificate	148
APPENDIX E: Letter of Introduction	149
APPENDIX F: Ethical Clearance Certificate	150
APPENDIX G: Enrollment Data of Students	151



LIST OF TABLES

Table	Page
1: Sample size distribution for students	61
2: Sample size distribution for teachers	61
3: Demographic Information of Students	70
4: Demographic Information of Teachers	71
5: Demographic Information of Heads	72
6: Students view on access to FSHS Education Policy(n=375)	73
7: Teachers' view on access to FSHS Education Policy (n=151)	74
8: Students view on quality of FSHS education delivery (n=375)	75
9: Teachers' view on quality of FSHS education delivery (n=151)	77
10: Students suggestions to improve FSHS education policy (n=375)	90
11: Teacher's suggestions to improve FSHS education policy (n=151)	92



LIST OF FIGURES

Figure	Page
1: Framework	29
2: Map of the Tamale Metropolis	57
3: Framework on How Free Senior High School Affects Access and Quality of Education	106



ACRONYMS

1. ADEA: Association for the Development of Education in Africa
2. CASE: Comprehensive Assessment of School Environment
3. COE: College of Education
4. CSSPS: Computerized School Selection and Placement System
5. EFA: Education for All
6. ESPR: Education Sector Performance Report
7. FSHSE: Free Senior High School Education
8. GES: Ghana Education Service
9. GER: Gross Enrolment Rate
10. GNA: Ghana News Agency
11. GoG: Government of Ghana
12. GPI: Gender Parity Index
13. HIV: Human Immunodeficiency Virus
14. JHS: Junior High School
15. MLA: Monitoring Learning Achievement
16. MOE: Ministry of Senior Education
17. NER: Net Enrolment Rate
18. OECD: Organization for Economic Co-operation and Development
19. PCRs: Pupil- Classroom Ratio
20. PROBE: Public Report on Basic Education
21. SCR: Student Classroom Ratio
22. SDG: Sustainable Development Goal
23. SHS: Senior High School
24. SRC: Students Representative Council

25. SRIMPR: Statistics, Research, Information, Management and Public Relations

26. SSA: Sub-Saharan Africa

27. SSAT: Specialist School Academies Trust

28. SSSCE: Senior High School Certificate Examination

29. TMEO: Tamale Metropolitan Education Office

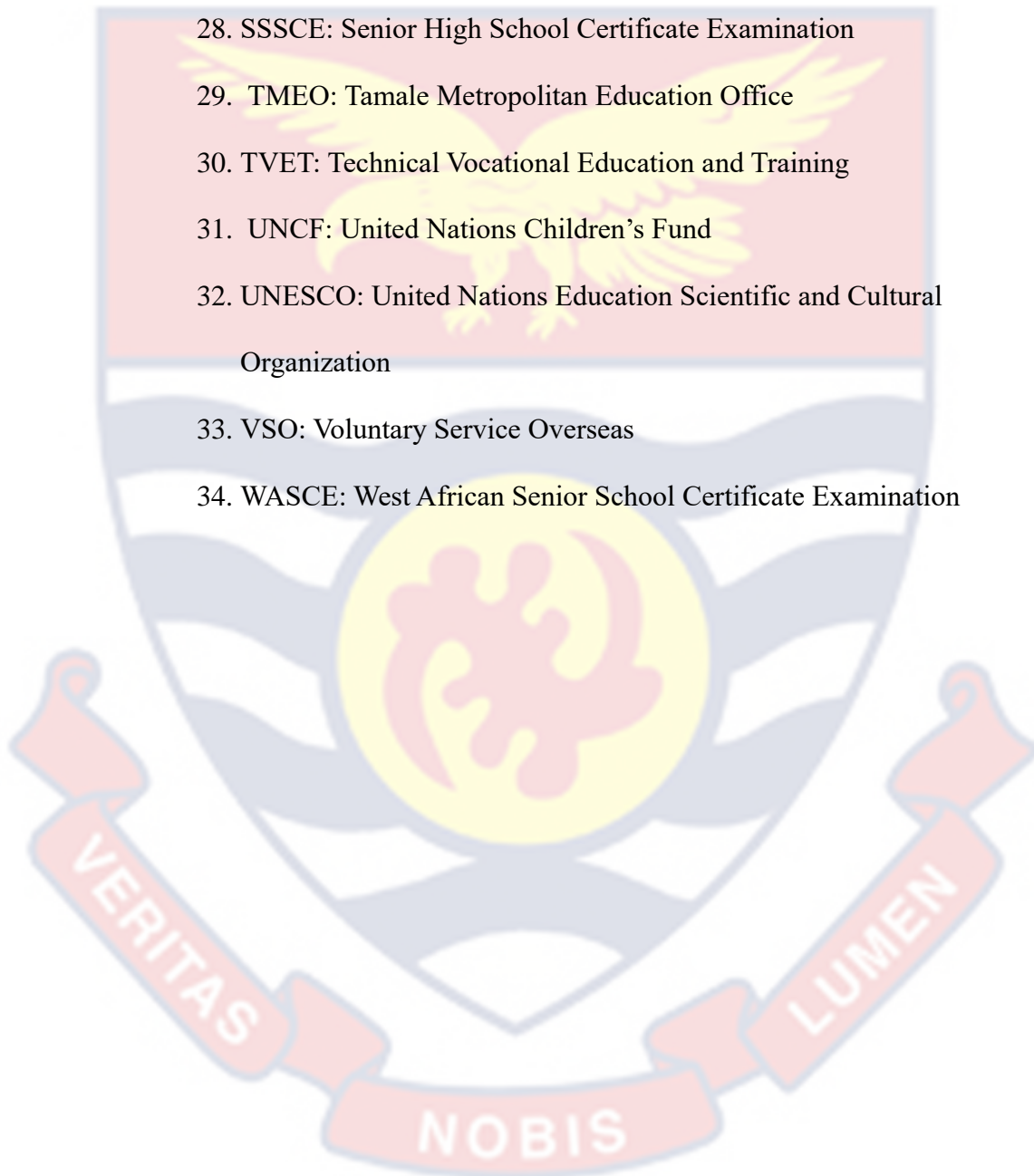
30. TVET: Technical Vocational Education and Training

31. UNCF: United Nations Children's Fund

32. UNESCO: United Nations Education Scientific and Cultural Organization

33. VSO: Voluntary Service Overseas

34. WASCE: West African Senior School Certificate Examination



CHAPTER ONE

INTRODUCTION

Background to the Study

Education forms the basis upon which economic, social and political development of any nation is founded. Investment in education can help to foster economic growth, enhance productivity, contribute to national and social development, and reduce social inequality (World Bank, 1998). UNESCO (2005) argues that the level of a country's education is one of the key indicators of its level of development. Globally, education is recognized as a basic human right. The Human Rights Charter treats education as one of the human rights. Bishop (1989) indicates that in 1948 the Universal Declaration of Human Rights laid down (Article 26) that everyone has the right to education and that education shall be free, at least in the elementary and fundamental stages. Education for all has been discussed in international fora, for example, United Nations Education Scientific and Cultural Organization (UNESCO) World Conference at Jomtien, Thailand in 1990 and its follow-up in Dakar, Senegal in 2000. Consequently, governments around the world have invested huge amounts of their expenditure on education. However, if governments can achieve their educational targets, much will depend on accessibility and quality.

The World Bank (2008) notes that between 1999 and 2005 primary school intake increased by almost 40%; adding that even though survival rates have remained stable so far, this still implies a very large increase in the number of primary school graduates that are seeking a place in Senior High School. With increasing completion rates the number of primary school

leavers could even triple by 2020 in many countries in SSA (Ledoux & Mingat, quoted in Verspoor, 2008b). This creates an enormous challenge for Senior High Education Policy which needs to be designed not only to respond to inevitable rapid increase in demand for access, but also to provide the quality of instruction necessary to ensure the supply of personnel with higher levels of education and training demanded by a growing and modernizing economy. This study looks at the impact of Free Senior High Education on access and quality of education in the Tamale Metropolis of Ghana.

Access to education is one of the problems of education around the globe. The Education for All (EFA) movement led by UNESCO which aimed at meeting the learning needs of all children, youth and adults by 2015 was not met. Although this was not achieved, it tells us that efforts are being made all over the world to improve access to education. Therefore, the two components of accessibility which are affordability and infrastructure should always be the starting point.

From the contributions of various governments over the years in Ghana, the number of Senior High Schools increased from 720 (2010/11 academic year) to 872 (2015/16 academic year) (ESPR, 2016). The current government has also committed to continue on-going Senior High School (SHS) projects, upgraded 42 SHS into Model schools and constructed new public schools where necessary. All these are measures aimed at increasing access in the area of infrastructure. In terms of affordability, the government has absorbed all fees for SHS students in the country under the Free SHS Education Policy. Pertaining to Access at the SHS level, substantial progress has been made by successive governments of Ghana with the GER reaching

50% in 2016/17, up from 37% in 2011/12; however, this varies substantially by region. The NER, at 26.5% in 2016/17, is much lower than the GER and the substantial difference is indicative of a large number of students in SHS who are not of the appropriate age. Over-age enrolment is primarily due to the relatively high repeater rates throughout the school system but the repeater rates in the latter two grades of SHS are particularly high (up to 15%). Many of the students repeating have not been able to complete the year due to seasonal work, family responsibilities, or lack of money to pay fees (prior to the Free SHS Programme). While they may not have completed the year and failed, technically they are still counted as repeaters for resource purposes (ESPR, 2018).

The transition rate between Junior High School (JHS) and Senior High School (SHS) reached 68% in 2016/17, and is expected to continue improving with the introduction of the Free SHS Policy in 2017. Gender parity has nearly been achieved and reached 0.96 in 2016/17, but there are substantial inequities to access across wealth quintiles. Students from the poorest 20% of households, the most deprived districts, and/or from rural areas are about five to six times less likely to access SHS. A contributing factor to pupils' inability to access SHS is the shortage of schools and classrooms. In 2015/16 the national SCR for Public SHS stood at 46:1, with substantial regional differences. Northern and Upper East Regions had PCRs of over 50:1 and in total the shortage of classrooms in 2016 was 2,894, 16% of the total SHS classroom stock (ESPR, 2018). This condition therefore, begs for deliberate acceleration in infrastructural development in our educational institutions. Textbook–student ratio has declined substantially since 2011/12, reaching 0.5

in 2016/17 for Mathematics, and textbook production is often delayed. There is also a need for investment in infrastructure to address increasing SCRs which reached 48 in 2016/17, despite the much lower student-teacher ratio of 20 in 2014/15 (ESPR, 2018).

In terms of learning outcomes, results from the West African Senior High Certificate Examination (WASSCE) have been poor for both core and elective science and mathematics subjects, particularly in 2015. These results diverge substantially across regions, with the three Northern Regions performing the most poorly. (ESPR, 2018).

In the 2015/2016 academic year, enrolment and staffing in the seven Public SHSs in the Tamale Metropolis stood at 3826. Out of this, 2245 were boys and 1,581 girls. Three hundred and thirty-eight were professional teachers, while 83 were non-professional teachers giving a total number of teachers at 421 (Tamale Metropolitan Education Office, 2015). Again, in the 2016/2017 academic year, for the seven SHSs in the Tamale Metropolis, total enrolment was 3,878 (2,113 boys and 1,765 girls). Total number of teachers stood at 437 (347 professional and 90 non-professional), Tamale Metropolitan Education Office (2016). Furthermore, total enrolment for the 2017/2018 academic year for Public SHSs in the Metropolis stood at 3,965, 2,153 being boys and 1,812 being girls, Tamale Metropolitan Education Office (2017). Enrolment for 2018/2019 academic year in the Metropolis was 5,476, number of boys stood at 2,841 and 2,635 being girls, Tamale Metropolitan Education Office (2018). This marginal increase in the enrolment figures could be as a result of the Free Senior High Education Policy which absorbed fees in all forms thus, eliminating the hitherto barrier (affordability). It can also be

deduced from the data that, enrolment for boys dropped by some margin (that is, 2016 academic year) but that of the girls increased marginally). A situation which could possibly be due to the several campaigns for female education especially in Northern Ghana. However, what are the possible consequences that can arise from the marginal general increased in students' enrolment on quality of educational out come in the Tamale Metropolis?

Quality education is crucial in every educational system. In Ghana, quality education is of utmost interest to the government, Ministry of Education (MOE), Ghana Education Service (GES) and Cooperate bodies. It involves putting the right mechanisms in place such as providing quality inputs and delivery in the educational process to help achieve excellent outcomes in education. The Ghanaian system of education is centred on providing a holistic and quality approach to education by creating well-balanced individuals with the requisite knowledge, skills, values and aptitudes for the purpose of self-realisation and for the socio-economic development and political transformation of the country. To achieve this, the individual being educated should be developed intellectually, psychologically, spiritually, emotionally, physically and intuitively in order to positively contribute towards national development and adapt to technological changes and other innovations. The Ghana government, as part of her vision towards education, aims at providing quality education for all by way of providing adequate resources and facilities to achieve her goal at all levels of education. It is thus, very relevant to create an environment that will help promote and sustain quality delivery in the Ghanaian educational system. Teaching and learning should as a result take place in an environment that is healthy, safe and sound

and gender sensitive with adequate resources and facilities. Quality education delivery further involves the process through which trained and motivated teachers use child-centred approaches in well-managed classrooms and schools in addition to skillful assessment, effective use of time, right attitude towards learning, effective supervision, and good discipline not forgetting other factors such as the effective use of information and communication technology as a tool for learning. The United Nations Children's Fund (2000) criteria for quality education include:

1. Learners who are healthy, well-nourished and ready to participate and learn, and supported in learning by their families and communities;
2. Environments that are healthy, safe, protective and gender-sensitive, and provide adequate resources and facilities;
3. Content that is reflected in relevant curricula and materials for the acquisition of basic skills, especially in the areas of literacy, numeracy and skills for life, and knowledge in such areas as gender, health, nutrition, HIV/AIDS prevention and peace.
4. Processes through which trained teachers use child-centred teaching approaches in well-managed classrooms and schools and skillful assessment to facilitate learning and reduce disparities.
5. Outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society (Partey, 2017)

This implies that, achieving access to quality education is not just a matter of introducing Free Senior High School (SHS), it is a complex system embedded in a political, cultural and economic context. Therefore, more needs

to be done if truly our focus is to achieve access to quality education. In Ghana, the Ministry of Education (MoE) and Ghana Education Service (GES) have certain variables known as quality inputs which they use to measure quality education. Some of them are; student-teacher ratio, student-trained teacher ratio, student-textbook/material ratio, student-classroom ratio, student-desk ratio among others. These inputs are supposed to be relatively reasonable to achieve quality education. For example, the GES norm is that, student to teacher ratio at the SHS level is 25. Thus, each 25 students should be handled by a teacher. The national average is around 1:35/40 (Partey, 2017). Also, student to classroom ratio hovers around 46, thus, on the average, 46 students are assigned to one classroom (Partey, 2017). The implication of this is that, by removing the barrier of affordability, the end result will be an increased in student-teacher ratio, student-classroom ratio among others. This has called for urgent concerns to examine the implications of Free Senior High Education on access and educational quality in the Tamale Metropolis.

The Government of Ghana (GoG), through the 1992 Constitution, recognizes its responsibility to ensure that every Ghanaian child of school age has a right to education to the level and extent possible within the resources of the nation. The present education in Ghana runs through Basic School Education up to Tertiary Education. The Basic Education System covers a period of nine (9) years consisting of six (6) years Primary School Education and three (3) years Junior High School Education. This is followed by three (3) years of Senior High School Education or Technical and Vocational Education. From this level, one may then enter a Tertiary Educational Institution to pursue further studies from three (3) to four (4)

years as may be specified in the various programmes. Tertiary Education in Ghana consists of Universities and Colleges, as well as Technical Universities, Institutes and Post-Senior High Institutions offering Academic programmes/courses leading to the award of diplomas and degrees ((Adu-Agyem & Osei-Poku, 2012).

Senior High School Education in Ghana is an extremely important one. It is the next level of education offered to students after pursuing programmes at the Junior High School (Basic level). Senior High School provides a comprehensive education for students with the principal objective of strengthening the knowledge and skills acquired during the Basic Education level, as well as preparing students for further education and training in tertiary institutions. Senior High School Education also introduces students to a variety of relevant occupational skills necessary for human and national development. It also aims at helping students appreciate the environment and the need to sustain it, and inculcate a sense of discipline and selflessness in students. Additionally, it helps develop an interest for life-long learning in students. It is at the Senior High School level that some form of specialization takes place and it is from there that specialized training colleges and other institutions tend to admit students. The curriculum at this level is thus diversified to cater for the different aptitudes, abilities, interests and skills of students.

The Senior High School System has had its ups and downs since the implementation of the 1987 Education Reform Programme and was running for a 3-year duration. It has attracted the most criticism as to whether it should be 3 years or 4-years duration. (Adu-Agyem & Osei-Poku, 2012).

Statement of the Problem

The Government of Ghana started implementing the progressively Free Senior High School Education (FSHS) Policy in direct response to fulfilling the requirement of Article 25(1) (b) of the 1992 National Constitution. This began by absorbing the expenses of day-students in Public SHSs. The sponsorship included the absorption of examination, entertainment, library, Students Representative Council (SRC), sports, culture, science and mathematics quiz, Information Communication Technology (ICT) and co-curricular fees for 320,488 day-students in Public SHSs. This was expanded to include 120,000 boarding students by 2015/16 academic year. These interventions have led to increase in enrolments from 393,995 in 2007/08 to 787,861 in 2015/16. Despite the increased in enrolment, high proportion of candidates who qualified and were placed could not enroll into Senior High Schools, 25.7% of qualified applicants were placed in SHSs in 2013, but they could not enroll. This increased to 29.3% in 2014, but later reduced to 26.5% in 2016 (MOE, 2018). The inability of candidates to enroll after placement appears to border mainly on challenges relating to access and equity which could partly be due to inability of parents to meet the cost associated with the placement.

In September, 2017, the government decided to depart from the “progressively free” approach to a holistic approach involving all students who qualified and were placed in Senior High Schools countrywide. This intervention is to provide universal access to Ghana’s young adults (MOE, 2018).

Some stakeholders notwithstanding, have raised critical questions about the policy implementation and have even called for a total review of the policy. Prominent among these questions in the Metropolis is whether factors including inadequate numbers of professional teachers, inadequate material resources including infrastructure, inadequate inflows, increased in student-teacher ratio, student-classroom ratio among others could impact on quality attainment. These perceived challenges, however may not be founded on any systematic studies or supported by data. Therefore, this study seeks to fill this gap in literature within the Tamale Metropolis of Ghana.

Purpose of the study

The purpose of the study was to investigate the contextual factors that could influence accessibility and access on quality of education after the implementation of Free Senior High Education in Ghana, with specific focus on selected Public Senior High Schools in the Tamale Metropolis.

The specific objectives of the study were to:

- i. Establish how the introduction of Free Senior High Education Policy affected access in the Tamale Metropolis;
- ii. Establish how the introduction of Free Senior High Education Policy has affected the quality of education delivery in the Tamale Metropolis;
- iii. Investigate the perceived challenges facing the successful implementation of the Free Senior High Education Policy in the Tamale Metropolis;

- iv. Find out the measures that can be taken to improve the successful implementation of the Free Senior High Education Policy in the Tamale Metropolis.

Research Questions

The study was guided by the following four questions:

- i. How has the introduction of Free Senior High Education Policy affected access to education in the Tamale Metropolis?
- ii. How has the introduction of Free Senior High Education Policy affected quality of education delivery in the Tamale Metropolis?
- iii. What are the perceived challenges affecting the successful implementation of the Free Senior High Education Policy in the Tamale Metropolis?
- iv. What measures can be taken to improve the successful implementation of the Free Senior High Education Policy in the Tamale Metropolis?

Significance of the study

The study may be helpful for both school policy makers and parents. It may help the school administrators to design and implement policies to improve students' achievement and the quality of education by changing the attitude of students towards learning, facilitating students learning and improving teaching procedures. The outcome of the study is therefore expected to assist all stakeholders in the Metropolis, particularly those at the Senior High School level, to fashion out appropriate strategies that would enhance the academic achievement of students.

The study will help teachers, counsellors and psychologists to take into account students' differences and developmental needs and help them make meaningful adjustment in decisions affecting teaching and learning. At the community level, the Metropolis would benefit from improved quality of education and successful students and citizens.

The study also adds to the body of knowledge in the study area. Parents can use the outcomes of the study to solve their wards' problems, especially, financial problems and to look after them more effectively. The study equally creates awareness among students about their rights and responsibilities to help them achieve quality education. Lastly, the findings, suggestions and recommendations from this study will serve as a platform for further studies.

Delimitation

The study was confined to the Tamale Metropolis in the Northern Region of Ghana. It targeted only Public Senior High Schools who were beneficiaries of the Free SHS Policy. Attention was given to only the impact of the Free Senior High School Education Programme on access and educational quality in the Tamale Metropolis.

Limitations

This study covered only Public SHS in the Tamale Metropolis; hence, it would be difficult to generalize the findings to the population as a whole especially the privately owned ones.

Definition of Terms

Impact: The action of one object coming forcibly into contact with another or have a strong effect on someone or something

Education: The process of facilitating learning or the acquisition of knowledge, skills, values, morals, beliefs, and habits

Access: The right to use, communicates, or approaches something or someone

Quality: The standard of something as measured against other things of a similar kind; the degree of excellence of something

Head teacher: Is a teacher who is in charge of a school

Provision: The action of providing or supplying something for use

School: An educational institution designed to provide learning spaces and learning environments for the teaching of students under the direction of teachers

Student: A person who is studying at a school, college, or university

Teacher: A person who helps students to acquire knowledge, competence or virtue

Organization of the Study

This study is organized into five chapters. The first chapter dealt with the general introduction of the study, background to the problem, statement of the problem, purpose of the study, research questions, and significance of the study, delimitation and limitations of the study, definition of terms and organization of the study. Chapter Two of the study deals with the review of related literature. It presents the theoretical framework, conceptual framework and empirical review. Chapter Three presents the methodology employed in the study including: the research design, population, sampling procedure, research instrument, validity and reliability of instrument, data collection procedure and data processing and analysis procedure. Chapter four of the study deals with the presentation and analysis of results as well as the

discussion of the findings of the study. Chapter five concludes with a summary of the study, presents conclusions based on the findings, and makes recommendations.



CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter contains the review of literature on the following topics: concept of quality education, planning for quality education, equity as a component of quality education and inputs and outputs for quality education. The detailed account of the review of related literature pertaining to variables under study, namely theoretical framework (Choice theory) and a conceptual review on access and educational quality are presented in this chapter. The study also reviewed literature on empirical Studies on access and the provision of quality education.

Concept of Quality Education

According to Cheng (1997), quality can be defined as exceptional, perfection, fitness for purpose, value for money or transformation. On the other hand, the term quality in management literature has different meanings. It has been variously defined as conformance to specifications, conformance to requirement, defect avoidance and meeting customer expectations. Quality, like beauty, is subjective; it is a matter of personal judgment. All these different definitions seem to have no consensus at all; however, they are correlated. In general, quality education is a rather controversial and vague term.

Furthermore, Cheng (1997), contends that quality implies a scale and often denotes standards. An object can be of good or poor quality, or it can meet, or fail to meet, a standard. As a matter of fact, the controversy that arises in defining the quality of education is not really quality itself as such but the

perspective and interest that has been put in education. In other words, education has many aspects which can be taken as the focus of attention since education has many purposes and components. In the end, quality becomes a subjective and personal judgment. As such quality remains elusive and subjective (Cheng, 1997).

In spite of the controversy over the definition of quality, Doherty (2008) defines quality as something that organizations do; a methodology for judging the degree to which the macro aims, objectives and outcomes of organizations have been achieved. In other words, it is a managerial tool, which can make an effective contribution to improving performance at the institutional, subject or departmental level within an institution.

According to UNESCO (1990), quality of education includes liberty, numeracy and life skills which are inculcated through teachers, content, methodologies, curriculum, examination systems, policies, management and administration. With these definitions, education is expected to make a contribution to a sustainable human development, quality of life at individual, family, societal and global levels. UNESCO (2004) stresses that education is a human right. Thus, participation in a high quality of education is an important end in itself. The practice of human rights in education and education as a right facilitates the fulfillment of other rights.

The primary concern in the quality of education is learning; the teacher is critical. In addition to the inputs, the processes, environment and outputs that surround and foster learning are important as well. They positively affect the quality of education at two levels: the level of the learner in his or her learning environment and the level of the education system that creates and

supports the learning experiences. UNESCO (2004) uses a framework for understanding quality of education by identifying five dimensions where different variables contribute to quality of education. These include:

- i) Learners' characteristics that affect quality. These are aptitude, school readiness, and perseverance.
- ii) Context, which also significantly affects quality. This refers to socio-economic and cultural conditions, public resources for education, parental support, and time available for schooling and homework.
- iii) Inputs are critical in quality monitoring and improvement. They refer to all types of resources (i.e. personnel, facilities, space, equipment and supplies, information) that support the implementation of a programme.
- iv) Teaching and learning approaches which refer to learning time, teaching methods, assessment, feedback, incentives, and class size.
- v) Outcomes which signal overall quality. These entail literacy, numeracy, life skills, creative and emotional skills, values, and social benefits.

Therefore, improving all aspects of quality education means ensuring excellence for all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills. The Dakar Framework for Action commits nations to the provision of primary education of a good quality. The Forum emphasises that improving all aspects of education quality means that everyone can achieve better learning outcomes, especially in literacy, numeracy and essential life skills. However, this would have an effect on quality only when quality educational planning is done both at ministerial and school levels.

Planning for Quality Education

Educational planning is a description or determination of events, conditions or needs of some future actions in time, for example forecasting the number and types of students and expansion of facilities needed for them.

According to Mbiti (2007), educational planning is problem prevention, that is, it minimizes the magnitude of an educational problem likely to be encountered at some point in time.

It is extremely difficult nowadays to discuss education at any level in isolation from change, quality and innovations. This is especially true in this era of globalization when we need to ensure that the educational system is structured and made relevant to the needs and aspirations of the society. New and relevant ideas and approaches must be injected into the educational system. Planning is the way to inject these approaches.

Dror (1973) defines planning as a process of preparing a set of decisions for action in the future, directed at achieving goals by preferable means. Salami (2003) sees it as the process of obtaining and analyzing statistics and systematically using them to make projections of future development in particular estimates of human, physical and financial resources needed to achieve the proposed development. From these definitions, planning can be understood as future oriented; it has a focus or goal which is development and it has a process which is continuous. As a process, planning is no longer an isolated series of activities but a complex set of procedures. A major concern of planners is the comprehension of all elements and considerations necessary for achieving a responsible program that contributes to successful outcomes for both planners and learners. Salami (2009), on the

other hand, emphasizes that educational planning is the application of rational and systematic analysis to the process of education development with the aim of making education more effective and efficient in responding to the needs and goals of students and society. By implication, if any development for quality education is to take place and be sustained within the educational system, it must be planned for. A review literature of developing countries by Obanya (2004) regards educational reforms in quality education as a rethinking of the role of education in nation building. This is essentially a re-examination of the national goals and provision of answers to the problem posed by quality education worldwide and especially in developing countries. Adepoju (1998) says the most common reasons or needs for introducing reform and innovation or a change programme in educational quality, particularly in educational structure, curriculum and teaching, are precipitated by the following factors.

- i. II. Future expectations: Change may be desired if there is an indication about future trends or expectations of the system. To cope with such future demands, educational reformation may be desirable.
- ii. III. Achievement-inclined: This would always allow positive change to take place wherever there is need for it. In other words, an educational administrator would always like new programs that will improve teaching-learning situations to be introduced in the school.
- iii. Creativity: An educational quality may be precipitated by desire of the members of staff to be more creative by introducing new ideas

which may lead to the realization of the school objectives and their own individual goals (Adepoju, 1998).

Therefore, for growth and development to be realized, quality planning and innovations are pre-requisites. Quality education is a prerequisite for educational improvement as well as development and planned change is likely to be more effective than unplanned change. Griffiths (1975) asserts that when organizations are viewed over a long period of time, their outstanding characteristic appears to be stability rather than change.

However, when one considers the rate at which reforms in quality education and innovations take place in educational systems today, the conclusion is that the rate is not in tandem with that of the society as a whole. For education to be more relevant and to ensure compliance with societal needs, it must be planned for, especially in the areas of structure, curriculum and methods.

Management of quality education and innovation: educational planning for quality should be managed to ensure self-reliance, which has a very profound meaning. Self-reliance implies that education must be of such a quality that it would train students in intellectual self-reliance and make them independent thinkers. If this is to become the chief aim of learning, the whole process of learning would be transformed. Adepoju (1998) emphasizes that self-reliance means freedom from dependence on others or any external support. A man who has true learning is truly free and independent. The first and least part of this self-sufficiency is that the person must be educated and skilled in a craft. A second and very important part of this is ability to acquire new knowledge for oneself; and the third is that a man should be able to rule

himself, to control his senses and his thoughts; otherwise, he will suffer the slavery of the body.

In the process of planning for quality education, a district should have detailed information about the major indicators and the issues under different areas, preferably in a tabular form. While quantitative data like enrolment, retention, physical facilities can be obtained from school records, qualitative information may be obtained through assessment of different aspects of quality for which data is not available in schools, such as learner achievement tests. In other words, the interventions or activities aimed at achieving quality education in senior high schools can be visualized on the basis of information and be prioritized accordingly. The plan should address the nature of activities, and strategies within a given time frame.

Inputs and Outputs for Quality Education

Input is what is put in a system for it to function or work while output refers to the final product of a system. In an education system, it refers to personnel who possess relevant, desirable knowledge, skills and attitudes and who are guided in their actions by certain norms and values. Education as a system has an input such as students, teachers, managers, administrators, other support staff, supervisors, inspectors, teaching and learning resources and finances. All these and many others make up system inputs and outputs.

In a school, inputs play a significant role in contributing to quality education, especially in terms of performance or outcomes. Leu and Price-Rom (2005), citing Fuller (1986) and Muskin (1999), observe that one way of looking at quality prevalence in both the research literature and reports of

program implementation concerns the relationship between different inputs and a measure of student performance or outputs.

In enabling inputs, the success of teaching and learning is likely to be strongly influenced by the resources made available to support the process and the direct ways in which these resources are managed. At the end of formal learning, therefore, the outcomes of education should be assessed in the context of its agreed objectives. They are most easily expressed in terms of academic achievement and whatever the case, the outcomes which are determined by inputs should be objectively quality outcomes.

Equity as a Component of Quality Education

Equity in education means personal or social circumstances such as gender, ethnic origin or family background. Education systems should help the vast majority of students to have the opportunity to attain high levels of skills, regardless of their own personal and socio-economic circumstances. The issue of equity, therefore, is an issue of human rights as stipulated in the UN Declaration in regard to lack of access and achievement of disadvantaged groups (e.g., girls and those economically deprived). For example, students from low socio-economic backgrounds are twice as likely to have low performance, that is, personal or social circumstances are obstacles to achieving their educational potential. Lack of inclusion and fairness fuels schools, of which dropout is the most visible manifestation with 20% of young adults on average dropping out before finalising upper senior high education (UNICEF, 2000).

In regard to equity and failure, says UNICEF, the economic and social costs of school failure and dropout are high, whereas successful senior high

education completion gives Individuals better employment and healthier lifestyle prospects resulting in greater contribution to public budgets and investment. In other words, more educated people contribute to more democratic societies and sustainable economies and are less dependent on public aid, less vulnerable to economic downturns. Societies with skilled individuals are best prepared to respond to current and future potential crises. Therefore, investing in early, primary and senior high education for all and in particular for children from disadvantaged background is both fair and economically efficient (UNESCO, 2004).

OECD (2001) asserts that education has become a central element of growth strategies. Thus, to be effective in the long run, improvements in education need to enable all students to have access to quality education early, to stay in the system until at least the end of upper senior high education in order to obtain the skills and knowledge they will need for effective social and labour market integration. OECD stresses that one of the most efficient educational strategies for governments is to invest early and all the way up to upper senior high. Governments can prevent school failure and reduce dropout using two parallel approaches: eliminating system level practices that hinder equity and targeting low performing disadvantaged schools. But education policies need to be aligned to other government policies such as welfare, to mention but one, to ensure student success.

In summary, OECD emphasises that equity can never be achieved unless obstacles to improving equity are dealt with. For example, grade repetition is costly and ineffective in raising educational outcomes. Alternative strategies to reduce this practice and raise education include prevention of

repetition by addressing learning gaps during the school year, automatic promotion or limiting repetition to subject or modules failed with targeted support. Managing school choice to avoid increased inequity is another alternative. In other words, choice programme can be designed and managed to balance choice while limiting its negative impact on equity. Also, student selection to upper senior high education ought to be avoided. Other strategies include availing funding to students and for school needs, designing equivalent upper senior high education to ensure completion, formulate policies to improve quality and design ways to make upper senior high education more relevant for students.

Theoretical Framework

Theoretical framework is the structure that can hold or support a theory of a research study. It introduces and describes the theory that explains why the research problem under study exists (Abend, 2008). There are several theories that explain enrollment and quality of educational outcomes, yet in this study, the choice theory (CT) is reviewed.

Theory is formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge within the limits of critical bounding assumptions (Abend, 2008). This study is grounded in Choice Theory which was developed by psychiatrist Glasser (1998). The theory states that, we are motivated by a never-ending quest to satisfy five basic needs woven into our genes: to love and belong, to be powerful, to be free, to have fun and to survive. Choice Theory explains why and to a great extent how people behave and that all behaviour is purposeful and a person

chooses behaviours that will assist him or her to meet the above-mentioned needs.

Choice theory has been used extensively in both therapy and counselling as well as in school. In therapy, people are helped to come out of bad past experiences. For example, the focus of the practitioner of Reality Therapy is to learn about the past but to move as quickly as possible to empowering the client to satisfy his or her needs and wants in the present and in the future. It is very much a therapy of hope, based on the conviction that we are products of the past but we do not have to go on being its victims.

In counselling, Choice Theory encourages people to make choices or decisions to satisfy their abused needs regardless of how painful it is to make a decision. In a school situation, Choice Theory (CT) tries to explain student behaviour; why they behave indifferently or are de-motivated in learning.

Relevance of the Choice Theory to quality attainment in school

Practicing Choice Theory helps people choose responsible actions and thoughts that lead them to feel better and positively impact their physiology, especially when applied in the classroom where it has a significant impact on how instructions are delivered.

Teacher as a Manager: Glasser (1999) contends that teachers need to manage both quality teaching and students' learning effectively if they hope to achieve successful performance of their students. The role of the teacher or head teacher is to help students see that working hard and doing what the teacher asks is worth the effort and will add quality to their lives. This is achieved by developing positive relationships with students and providing active, relevant learning experience where students can demonstrate success.

He goes on to say, an effective teacher or head teacher creates shared quality world pictures with students where they are motivated to learn what the teacher wants to teach.

The Need-Satisfying Classroom: creating lessons, teachers who practice Choice Theory ensures that students can satisfy their needs by doing what the teacher asks them to do. As a result, learning increases and disruption diminishes when students know that they are able to connect and feel a sense of competence and power, have some freedom, and enjoy themselves in a safe, secure environment (Sullo, 2007).

Coercion is minimised: Rather than trying to make students behave by using rewards and punishments, teachers build positive relationships with their students, managing them without coercion. Coercion never inspires quality.

Focus on quality: Teachers expect mastery of concepts and encourage students to re-take tests and continue to work on assignments until they have demonstrated competence or quality. The emphasis is on deep learning demonstrated through the ability to apply what has been learned.

Self-evaluation: Self-evaluation is a cornerstone of Choice Theory. Given helpful information (rubrics, models, exemplars among others) students take on greater ownership of their learning by evaluating their own performance routinely. Encouraging students in self-evaluation promotes responsibility and helps students pursue goals and become skilled decision-makers because they are more actively involved in their education as they feel empowered (Sullo, 2007).

Strengths of the Choice Theory

In the school setting, Choice Theory is a learner-centred theory; a student is motivated to choose, not coerced. It is a simple and easy theory to apply. For example, what is asked of a learner, he or she will do no matter how hard the work is because a learner is not coerced or compelled. Besides, in teaching and learning situations, the teacher helps the student to envision a quality existence in school and chooses activities that lead to achieve it. Choice Theory emphasises effective methods of managing students without coercion even in hard work to achieve better results. In other words, teachers can teach more of what they enjoy and students can learn more of what interests them. When this occurs, there is no need for coercion (Glasser, 1990).

The theory emphasises cooperative work between teacher and student unlike boss-management. Lead-management empowers both teacher and student and as they are empowered, they work hard. Furthermore, persuasion and problem solving are central to the philosophy of Choice Theory method of lead-management. The manager or teacher spends a lot of time figuring out how to run the system so that workers will see that it is to their benefit to do quality work (Glasser, 1990).

Weaknesses of the Choice Theory

Conflict between a teacher's responsibility and student's behaviour: In school, the teacher or school is responsible for creating an environment that meets the needs of the students. But sometimes, students choose their own behaviour based on their own needs. This may lead to a clash between teacher's choice based on his or her responsibility and student's behaviour. In other words, a teacher may think of going to great lengths to promote a

positive environment that suits students, but the students may not choose appropriate behaviour (Bourbon, 1994).

Misuse of freedom by students: Glasser (1990) states that when a student misbehaves, it is the teacher who is responsible for failing to meet the needs of the student regardless of the student's own choice and "total behavior." Therefore, Bourbon (1994) argues that a paradox exists between the idea that a student chooses his or her own behaviour but does not use behaviour to control his or her own perceptions. For example, in a room with an air conditioner and thermostat, a student walks in and changes the setting if it is too hot or too cold, until the room feels just right. But what is the reaction of the rest of students who have different perceptions of what is just right in the room? Rather, to create a classroom that meets the needs of every individual student simultaneously, there must be a moderate perception or respect towards students who have different perceptions of the same physical conditions.

Failure to make correct behaviour choice: Another weakness of Glaser's approach is raised by Weinstein (2000). He says that people are not always aware of all the choices in behaviour that they can make. They would not always select the option that they believe would maximize the benefits forthcoming to them.

In spite of the weaknesses of the Choice Theory, its strengths far outweigh its weaknesses. On the basis of these strengths therefore, the researcher grounded the current study on the Choice Theory.

Conceptual Framework

A conceptual framework represents the researcher’s synthesis of literature on how to explain a phenomenon. It maps out the actions required in the course of the study given his previous knowledge of other researchers’ point of view and his observations on the subject of research. It is arranged in a logical structure to aid provide a picture or visual display of how ideas in a study relate to one another (Grant & Osanloo, 2014).

Independent Variables

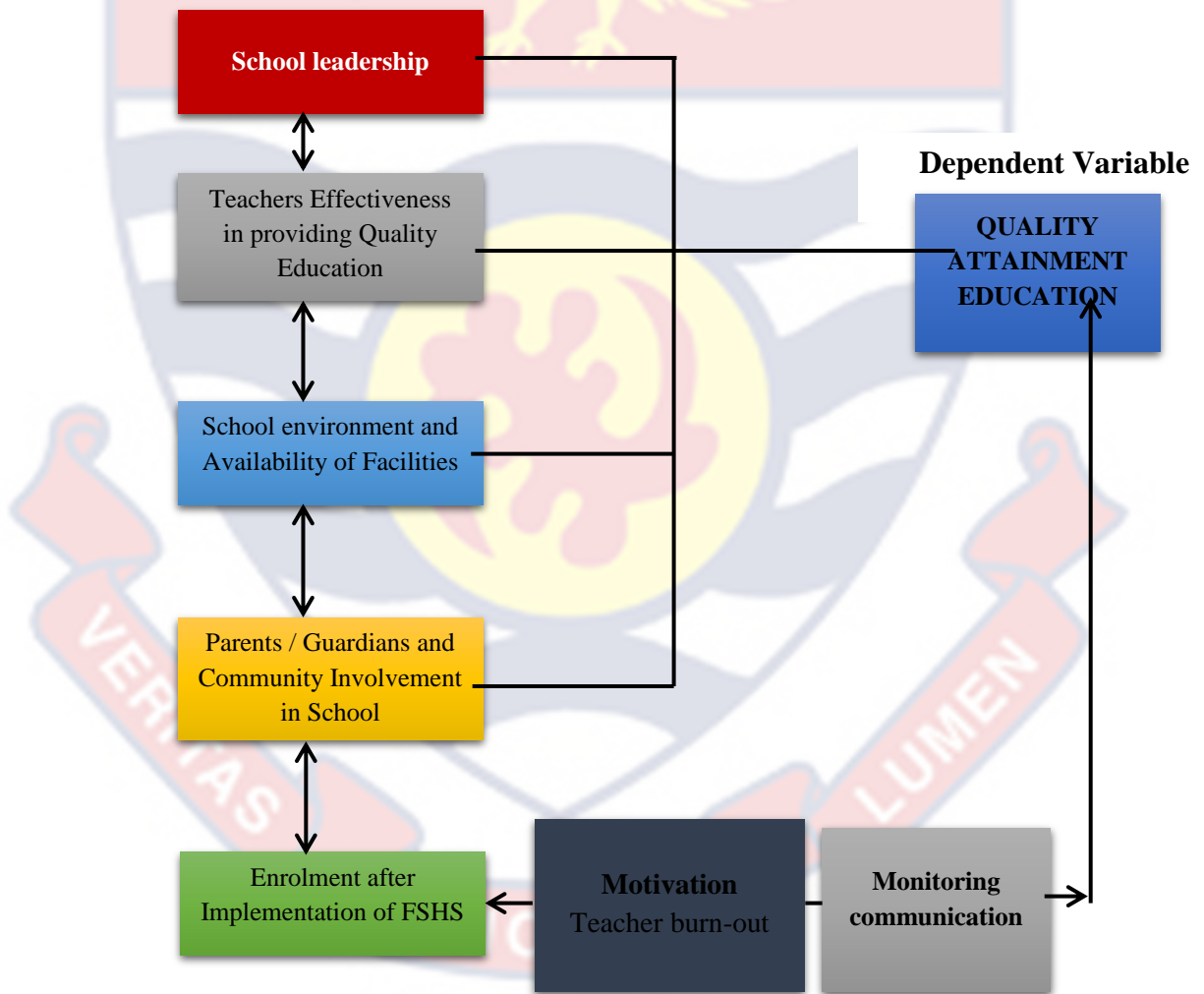


Figure 1: Framework

As shown in Figure 1, the implementation of Free Senior High Education in Ghana could possibly lead to problems related to availability of physical facilities, students' enrolment, availability of qualified teachers and teacher effectiveness, leadership style and parents/guardians and community involvement in the achievement of quality education. These factors, which are the independent variables of the study, could affect the quality of education, which is the dependent variable.

The leadership role played by head-teachers in school ensures the provision of quality education. Effective leadership ensures that educational policies and programs are implemented accordingly and on time. Similarly, the head teacher encourages teachers, students and support staff in their profession and provides technical direction to them to do the right things and on time. He or she plays a supportive and directive role in leadership. Leadership promotes a favourable school climate and culture that emphasises high expectations and academic performance.

Teachers' qualifications and professional development play a significant role in the provision of quality education, especially in terms of inputs for the learners which is portrayed in their performance and later on in life after school. Professional qualifications of the teachers give them confidence, competency and ensure skillful delivery of lessons. Teaching and learning resources significantly support provision of quality education. They complement and improve learning as they make teaching and learning handy and practical.

School environment and availability of facilities and resources are a fundamental aspect in education. Textbooks, teaching and learning materials

and a conducive school environment contribute to better learning, both in psychological and physical terms. Psychologically, if students feel comfortable in school, with adequate security and a friendly environment, they enjoy learning; this leads to better academic performance and achievement. As a matter of fact, a quiet, suitable and comfortable environment plays a significant role in learning and results in better educational outcomes. Good classrooms with adequate and appropriate lighting, and enough tables or chairs, facilitate learning. Without teaching and learning materials teacher effectiveness is undermined. Parents/guardians and community leaders are significant in the life of students, both directly and indirectly. Directly, they influence students by their care and providing moral discipline at home; they also encourage students to work hard and smart. Indirectly, they support the school by attending school functions such as meetings and school visits which may boost students' academic morale.

Parents are the first educators of children; they cannot delegate this responsibility to others. It is their moral duty to participate in the education of their children. Parents have a long-term responsibility to their children. It is, therefore, in the interests of children that their parents get engaged in what is likely to shape their future life. Parental participation is likely to increase students' success in learning, especially through active support in the provision of school inputs as well as moral formation and other values. All these lead to better performance of students.

There is increased influx in student enrolment brought about by the Free Senior High School Education. With increased number of students without the correspondent increase in resources, the teachers may be

overwhelmed and be unable to transfer knowledge to every student at expected level. However, with more enhanced motivational package from the government and other development partners, the teachers will be motivated to achieve the level of knowledge transfer and thus an effective educational output.

Through monitoring, school administrators and Ministry of Education officers are able to determine whether or not the resources employed are sufficient and are being used well, whether the school's capacity is sufficient and appropriate, and whether the activities are done according to plan. Similarly, effective communication by the head teacher can help to build and foster a safe learning environment where students and teachers can thrive, prosper and learn.

Empirical Studies

The empirical studies for this study were based on the following subheadings: quality education, school environment, teachers' role in quality education, school teaching and learning facilities, monitoring and improving quality education, leadership style, communication in school and parent/guardians/community leaders' involvement in quality education.

Quality Education

Quality education is a volatile terminology that changes over time; it is impossible to define for it has no fixed definition. Leu and Price-Rom (2005) remarked that despite the prominence of "quality" as the motivating factor for educational planning and success, "quality" is used in a detached way, leaving the vision of quality in education embedded within country policies and interests. As a result, quality education is understood within institutional

systems. In other words, education systems vary from country to country and emphasis could vary as well.

However, unlike industrial definitions where quality is defined in terms of product, defect free, exceptional and value for money, Coombs (1985) defines quality in education as pertaining to relevance of what is taught and learned in the classrooms and how well what is taught contextually fits the present and future needs of the particular learners in question, given their particular circumstances and prospects. He goes on to say that quality has to be accompanied by significant changes in the educational system itself, in the nature of its inputs (students, teachers, facilities, equipment, and supplies), its objectives, curriculum and educational technologies, and its socioeconomic, cultural and political environment of a particular country.

Preferably, quality education should indeed address what is learned and how it is learned; that is, the learner should learn the right things and learns them well. That is, in fact, the reason why there is a concern and emphasis on quality education everywhere, even in countries where all children are enrolled in basic education. A study by the World Bank in India found that students in grade 5 had often only learned half of what they were supposed to have learned in grade 4. In the state of Mahdy Pradesh 70% of the students in grade 4 and 60% of the students in grade 5, in what was referred to as "privileged urban areas", had not achieved the level prescribed in the curriculum for grade 2 in Hindi and Math. Owing to the context described above, the World Bank study concludes that the content of the curriculum was mainly transmitted through textbooks and it was too theoretical and of little relevance in the reality in which the students lived.

In addition to the World Bank study, other studies, for example Muskin (1999), equate quality education with internal and external efficiency of the system. They say that educational efficiency for quality education (both internal and external quality) requires the provision of inputs and outputs. Internal efficiency means student rates of completion, dropout, and repetition while external efficiency refers to outcomes of education or the productivity of school leavers after school for example, wages and an individual's or a community's level of schooling.

However, the researcher observes that this approach does not give an explanation of what makes quality successful in terms of completion and lower student dropouts. Similarly, the study does not say anything about enabling inputs such as learning materials, physical infrastructure, human resources (especially teachers, headmasters, supervision, class size and school governance) as critical pathways through which inputs are used to bring outputs (quality of education).

In conclusion, whatever the vision of quality education is, quality in education should really focus on cognitive and social-creative development of the learner. And it should be much more than ensuring that excellence is achieved by all in literacy, numeracy and life skills which are measurable. Consideration should be put on various processes of learning at the school, especially the teachers' classroom teaching methodologies and levels of community involvement.

School Environment

School environment refers to the social, academic and emotional contexts of a school, the "personality" of the learning context and how it is

perceived by students, staff and community. This climate is influenced by a broad range of factors, from disciplinary policies to instructional quality, to student and teacher morale. In other words, learning can occur anywhere, but the positive learning outcomes generally sought by educational systems happen in quality learning environments. A specific and particular school environment includes everything within the school from leadership to classroom practices, to student-teacher relationships and support staff's feelings of connectedness to this environment.

A study by Berry (2002) found that there is clear link between environmental quality of schools and educational performance. He goes on to say, quality of the school environment shapes attitudes of students, teachers and staff. For example, attitudes and behaviour which affect teaching and learning as well as performance are shaped by good and conducive learning school environment.

Vandiver (2011) also found that students in classrooms with large windows, natural lighting, and well-designed skylights performed 19 to 26% better than their peers in classrooms without these features. The opposite is that environmental conditions in schools, which included faulty heating systems, inadequate ventilation, and poor lighting, affected health and learning as well as the morale of students and staff.

Many authors, among them Broome (2003), Hughes (2005) and Lyons (2001) indicated that student achievement also depended on the physical school facility such as the age of the school, its design, and other conditions applicable to teaching and learning. Lyons (2001) emphasises that educators must realize that there are many elements that influence the condition of the

school facility and these could range from educational leadership to community involvement. He further says that none of the elements operate in isolation but they work together for the good of all. Therefore, educators need to be informed about the conditions of their school facilities as well as appreciate differences that facilities could make in helping to educate their children.

Deficiencies in the school environment undermine the quality of teaching and learning and this contributes to health and safety problems for staff and students. Filardo (2008) in his findings on school facilities says, building design was associated with teacher motivation and student achievement and thus, school facilities that provide safe, secure, comfortable, accessible, well-ventilated, well-lit, aesthetically pleasing settings are seen as integral components of the school's academic conditions favourable for learning. The quality of infrastructure and learning environments, therefore, has a very strong influence on the academic standard which is an index of quality assurance in the school.

A research by Earthman (2002) in California revealed that comfortable classroom temperature and smaller classes enhance teachers' effectiveness and provide opportunities for students to receive more individual attention, ask more questions, participate more fully in discussions, reduce discipline problems and perform better than students in schools with substandard buildings by several percentage points. In summary, the general outlook shows that comfortable learning facilities will not only boost the morale of teachers and students but will also ensure the realization of the set educational objectives in Senior High Schools in as far quality is concerned.

School Teaching and Learning Facilities

The comfort of students and teachers is indicated as the most important aspect of any school environment. If students are comfortable, then learning becomes much easier. Students' and teachers' comfort is a combination of several and different factors such as adequate usable space for extra-curricular activities, cleanliness, clean water, noise control, lighting, and sanitation. The alarming increase in the number of students with asthma is one problem that may, in part, be a factor of poor physical conditions in schools.

(i) Classrooms

They must be designed with effective communication and interaction in mind. Students should be able to easily see and hear the instructor and other students. Berry's research (2002) on classroom noise levels found that noise levels in classroom should not exceed 68db or about 68-69 db noise levels. In other words, beyond the required measures, students will have difficulty in understanding what is being said and are distracted by noise from the next classrooms. Therefore, for a better physical learning environment, the above-mentioned physical conditions should be followed.

Berry argues further that the classroom is the most important area of a school because it is where students and teachers spend most of their time and where learning process takes place. He identified conditions help make the classroom a better place in which to learn. He emphasises that classes should be designed with enough space to accommodate students so that the number of students does not exceed forty-five. A lower density of students per classroom will increase teacher-student interaction and communication. Thus, classrooms

must be designed with effective communication and interaction in mind. Students should easily see and hear the instructor and other students.

(ii) Lighting

In classrooms, lights must focus on the front of the classroom and over the student's desks. Similarly, glare from hard surfaces is distracting and should be avoided wherever possible. Berry's study found that effective lighting of schools has been related to high performance test scores time and again. The study concludes that classes should be designed to accommodate students so that the number of students does not exceed twenty.

(iii) Cleanliness

The cleanliness of schools is also an important aspect of school environments. Clean schools not only lower the threat of the spread of illness, but also convey a caring message to the students and teachers. Students feel better going to clean classes and sitting on clean desks and surroundings. Sanitation in schools is important because young children face unique health hazards, especially respiratory infections, asthma attacks, skin disease, and diarrheal outbreaks (Berry, 2002).

(iv) Teaching and Learning Materials

Right (2008) defines teaching and learning materials as resources which teachers use to deliver instruction. They assist in and support students' learning and increase their success. He emphasises that teaching materials come in many shapes and sizes, but they all have in common the ability to support student learning. Therefore, teachers who take the time to provide instructional materials and options that take into account the different ways students receive and express knowledge, are more likely to see their students

succeed. Teaching and learning materials consist of textbooks, gloves, models, visual aids (such as charts, overhead projector transparencies, CDs), flashcards and games.

Taylor, Scotter, and Coulson (2007) argue that teachers at all levels utilize a variety of instructional materials such as textbooks, presentations and hand-outs to enhance the quality of their lessons. As a result, the quality of those materials directly impacts the quality of teaching. Thus, knowing how to find the best instructional materials is a valuable skill for a teacher to have. Jennifer (2010) also affirms that teachers normally use chalk and chalkboard as visual aids to accompany lessons. Nevertheless, a student's learning environment can positively or negatively impact his or her ability to learn. However, the availability of visual aids, books, supplies, games and technology support can improve the learning environment by facilitating the learning and teaching process. So, experience shows that unavailability of such materials can make learning and teaching impossible in some circumstances.

Passive learning through lectures and even textbook reading may not provide a lasting understanding or interest in any field of study. As a matter of fact, the use of instructional materials in class can help students connect to the object of study, and student participation may increase. A study by University of Nairobi's Department of Education Administration found that teaching and learning resources create motivation in learning by supporting the learning process since learners enjoy learning when teaching and learning materials are used, resulting in student achievement. Furthermore, a study in Ethiopia found out that having textbooks both at school and at home boosted students' oral

reading fluency, especially in early education by 9.6 words per a minute and 8.3 respectively. Teaching and learning materials play a significant role in enhancing teachers' lesson preparation and class delivery.

However, the provision of textbooks and other teaching and learning materials in developing countries continues to be inadequate and supplemental reading materials are even harder to find although it is a requirement and recommended that teachers must have access to teaching materials for classroom instruction and students as well must have access to learning materials for reading and practice (Ogata, 2012).

In addition, the Department for International Development, DFID (2002) asserts that textbooks and other class-educational materials have great support in poorest countries, where they can counter-balance the problems of poorly trained teachers and the lack of basic facilities in schools. DFID adds that research evidence confirms that the two most consistent characteristics in improving students' academic performance are the availability of (a) textbooks and supplementary learning-teaching materials and (b) well trained, prepared, supervised and motivated teachers. DFID concludes that textbook provision is the most cost-effective input in learning that affects students' academic performance so positively.

(v) Sanitation Facilities

Indian's Ministry of Urban Development (2009) defines sanitation as a safe management of human excreta, including its safe confinement, treatment, and disposal and associated hygiene related practices. The document goes on to say that sanitation is at the core of human dignity and human progress. Access to sanitary toilets not only ensures dignity of the individual users but

also positively impacts health, well-being and productivity, reduces drop-out rates and encourages regular attendance in schools.

The provision of safe water and sanitation facilities in a school is a first step towards a healthy physical learning environment which benefits both learning and health. In schools, hygiene education aims to promote those practices that help prevent water and sanitation-related diseases as well as promoting healthy behaviour in the future generation of adults (Burgers, 2004).

In spite of the importance of sanitation, Snel (2003) says, unfortunately, the hygiene expectation of school health and hygiene education programs have not always been fulfilled. He notes that in many countries, schools are not safe for children due to neglect of the operation and maintenance of facilities. In addition, schools too often suffer from:

- i) Non-existent or insufficient water supply, sanitation and hand-washing facilities.
- ii) Toilets or latrines that are not adapted to the needs of children, particularly girls.
- iii) Broken, dirty and unsafe water supply, sanitation and hand washing facilities.
- iv) Unhealthy and dirty classrooms and school compounds.
- v) Children with poor hand washing habits and practices.

Stressing on the hazards of hygienic related diseases, Adams, Bartram, Chartier, and Sims (2009) assert that 88% of diarrheal disease is caused by unsafe supply, and inadequate sanitation and hygiene. They emphasize that

many schools serve communities that have a high prevalence of diseases related to inadequate water supply, sanitation and hygiene.

The World Health Organisation (2004) agrees that due to sanitation related illnesses or diseases, children's ability to learn may be affected in several ways. Firstly, helminths infections can impair children's physical development and reduce their cognitive development, through pain and discomfort. Secondly, poor environmental conditions in classrooms can also make both teaching and learning very difficult. Thirdly, the effect of disease in teachers impairs performance and increases absenteeism. It also has a direct impact on learning and teachers' work is made harder by the learning difficulties faced by schoolchildren.

The sanitation and hygiene problems described above are not different from the situation that obtains in the research area. Most schools in South Sudan use pit latrines; water supply is a huge challenge facing school administrators. Furthermore, there are no hand washing facilities around the latrines, neither is there disinfection for bad odour and flies' control.

Adams et al. (2009) argue that effective and clean learning environments support students' academic performance, increase enrolment, especially for girls; lack of private sanitary facilities for girls can discourage parents from sending girls to school. Availability of sanitary facilities reduces incidence of disease and worm infection. If the school sanitation and hygiene facilities are absent or are badly maintained and used, schools become health hazards. Similarly, environmental cleanliness matters a lot in a school set up. In other words, the presence and proper use of facilities prevent pollution of the environment and limit health hazards related to sicknesses. Children have a

right to healthy and pleasant facilities in school. Clean and healthy environments, clean water and proper sanitation contribute to a happy and better liked school environment.

Teachers' Role in Provision of Quality Education

What goes on in the classroom, and the impact of the teacher and teaching, has been identified in numerous studies as a crucial variable in improving learning outcomes. The way teachers teach is of critical concern in any educational institution that intends to design a reform to improve quality education. A study by Academy for Educational Development (ADEA, 2004) asserts that the school is the important functional locus of efforts for improving quality; it is a critical factor within the school to facilitate student's learning. The teacher and those in leadership positions have to shape a collaborative, motivated, and effective teaching and learning school community. The ADEA study emphasizes that teachers' professional attitudes, energy and motivation, in combination with teaching skills, are critical to ensure quality learning.

These teaching skills include many interacting factors: knowledge of the young learner, appropriate and varied methodologies and subject matter knowledge, understanding of the curriculum and its purposes, general professionalism, ability to communicate, enthusiasm for learning, sensitivity to others, general character, discipline, ability to work with others, dedication, and relationships within the school and community. All these related to each other to foster quality education. Therefore, advances in education, especially in quality, depend largely on the qualifications and ability of the teacher generally on human, pedagogic and technical qualities.

In addition to professional development, the teachers' status has also been singled out as a factor. A study carried out in Ghana by Fredriksson, Fumador and Nyoagbe (1999, p. 46) say 'there is limited evidence of any improvement in the status of teachers and their overall conditions of service.'

Teachers' working conditions affect their ability to provide quality education. Many aspects of school life and educational policy go into teachers' perceptions of their employment.

In a practical sense, teachers' remuneration matters so much so that in many countries, teacher salaries have declined in recent years, and teachers are not always paid on time. In Bangladesh, Nepal and Uganda, for example, the teachers of 27%, 35% and 60% of all students, respectively, were paid a month or later (Postlethwaite, 1998). Low and late remuneration may lead teachers to take on another job, which hurts student learning.

Williams (2000) contends that in 12 Latin American countries it was found that children in schools where many teachers work in other jobs in addition to teaching were 1.2 times more likely to have lower test scores and/or higher-grade repetition. Craig, Kraft, and du Plessis (1998) emphasize that effective teachers are highly committed and care about their students; however, they need supportive working conditions to maintain these positive attitudes.

The findings conclude that in order to improve the status of teachers in general, education authorities and governments must ensure that teachers have a salary comparable with other professions requiring the same level of qualifications and responsibility and that it is possible for teachers to live with dignity on the salary from their work, and not to be forced to take on a second

or third job. Teachers hold a key position in all kinds of education. No measures will improve education if teachers are not thought of. Carron and Châu (1996); OECD (1994) and VSO (2002) add that, it is important for teachers to be motivated.

Monitoring and Improving Quality Education

Calvani (2001) defines monitoring as a planning and management tool which provides the school management with regular and continuous feedback that can be used to make decisions and manage the educational activities more successfully and plan for better activities in the future. He emphasises that, monitoring is a crucial part of management that can be carried out to observe the progress of the educational program implementation and to ensure that input process is proceeding as planned and external factors are well controlled. Moreover, monitoring is also a tool to identify problems, which may occur during program implementation so that corrective measures can be taken before the program is adversely affected.

Through monitoring, school administrators and Ministry of Education officers are able to determine whether or not the resources employed are sufficient and are being used well, whether the school's capacity is sufficient and appropriate, and whether the activities are done according to plan (Calvani, 2001). All this is done in order to enhance or bring improvement in schools in terms of teaching and learning, performance and overall activities. Therefore, both teachers and school leadership headed by the head teacher play important roles in monitoring and supervising School activities, especially teaching and learning to complete the effort of effective quality improvement policy in the school.

Discussing efforts to improve quality education, Samoff (2005) says it requires reaching beyond inputs to address the process of learning. This process has no standard model for three principal reasons:

- i) Regardless of its focus (cognitive development, mastery of specified skills, or the development of desired values and behaviors), learning is at its core an interactive, face-to-face process. Learning objectives are less likely to be met where systems move away from that core.
- ii) At its roots, learning objectives and learning practices are locally contingent. This means that whether the context is supportive or unsupportive, ultimately quality education is specified and achieved at a small scale.
- iii) Except in the most authoritarian settings, learning objectives are negotiated according to modalities that are multiple and vary across countries and over time within countries. What is regarded as high-quality education is therefore continually re-defined and re-specified. From this perspective, it is arguable that what best, good or poor changes are periodically and that there are not and cannot be universal best practices.

For all these reasons, strategies to improve quality education must be appropriate for each setting. This has important implications, especially for (international) agencies that provide funding and technical assistance to education in developing countries, including Africa.

Samoff takes up the analytical challenge of exploring how and why deeply engaged, competent, and perceptive funding and technical assistance agency staff pursue strategies intended to be helpful but instead limit and

undermine education innovation and reform in Africa. In his view, developing effective support to quality improvement in education in Africa is hampered by two major obstacles: divergent and changing working norms of the funding agencies, and the structure of the aid relationship.

Parents/ Guardians and Community Members/ Leaders' Involvement and Support in School

According to a study by Khaliotis (2010), parents have become more involved in their children's education. There is a shift away from seeing a child's education as mainly or wholly the responsibility of schools to seeing it as the joint responsibility of schools and parents.

A 2007 survey of parental involvement in children's education found that 51% of parents felt very involved in their children's school life, compared to 29% just six years previously. Desforges and Abouchaar (2003 cited by Khaliotis, 2010) have observed that parental involvement in the child's education means involvement in a range of activities such as participation in school activities, helping the child with homework and parent-child discussion. The authors conclude that parental involvement in form of at home interest and support is a major force in shaping pupils' educational outcomes.

Similarly, the Specialist School Academies Trust (SSAT) distinguishes between parental involvement, where schools involve parents in school-related activities, and parental engagement, where parents and teachers work together to improve learning (Harris & Goodall, 2008). In fact, by supporting their child's learning in the home, parents can make the maximum difference to children's academic achievement. In addition, although parents' involvement in the child's education is now encouraged worldwide, it is also significant to

note that not all parents are active. Desforges and Abouchaar (2003) point out that, parents who are more involved and active tend to be from a higher social class, have higher maternal education qualifications, live in two-parent households, have lower material deprivation, have good maternal psychological health, have younger children and have children who take a very active role in mediating between parents and schools. Most of these parents are women, who have children with a special educational needs statement.

Furthermore, the study points out that participation in school activities and helping with homework decreases over time, perhaps because of important decisions that the young person has to make at the age of 14 and 16. However, in spite of parents' low degree of participation at certain moments, the parent's role is indispensable in the child's education. Otherwise, educational support varies as well as needs; whatever the age, a young person is always in need of education support from his or her parents or guardian (Desforges & Abouchaar, 2003).

Harris and Goodall (2008) observed that across the world, there is a growing recognition of the importance of engaging parents, families and communities in raising the educational aspirations and attainment of young people. In other words, there is a wealth of evidence which shows that parental engagement in schooling positively influences pupil achievement and attainment. In many countries and across different school systems, the issue of engaging parents in schooling is a shared aspiration and goal. For example, in England, parental engagement has become a government guideline for

improving the provision of education for children and young people have been introduced to the idea in the form of children's plan.

The children's plan reinforces the need to involve parents in education in order to secure greater wellbeing of young people, and also to secure higher achievement. At the core of the children's plan is the firm belief that parental engagement makes a significant difference to educational outcomes and those parents and careers have a key role to play in raising educational standards. In summary, the authors say, the more engaged parents are in the education of their children the more likely their children are to achieve academic success (Harris & Goodall, 2008).

The relationship between the school and the community is important to the all-round growth and development of both pupils and adults. So, lack of parental involvement, especially as an overseer of government activities, leads to enormous corruption. This was most often found to be because parents and communities feel as though they lack any kind of power in regard to their child's education. UNESCO (2003) found that in Uganda only 50% of parents believe that they have the power to influence decisions regarding the education of their child. Meanwhile in Morocco, just 20% of parents believed they held any sort of power.

Giving parents and community members a strong voice in school management can strengthen the school's accountability to the community, increase teacher and student attendance, improve efficiency of resource use, mobilize increased community support for schools and improve students' learning. In addition, children whose parents paid regular visits to check on

their progress and attended school functions do better academically than those whose parents never showed any interest in their children (UNESCO, 2003).

Communication in School

On average, leaders in schools are engaged in one form or another of communication for about 70 percent of their working moments. Covey (1990 cited by Osterman, 1993) says that in a school, a leader should first seek to understand, then to be understood. Covey and many others believe that to interact effectively with any group for example, teachers, students, community members, even family members, a school administrator needs first to understand where the person is coming from.

Osterman adds that the greatest need of a human being is psychological survival, to be understood, to be affirmed, to be validated and to be appreciated. Once that vital need is met, the school administrator can then focus on influencing or problem solving. The inverse is also true. School administrators who focus on communicating their own “rightness” become isolated and ineffectual. Another supportive argument related to communication is the teaching-learning communication process. Teaching - learning is in essence a communicative process. Since communication is primarily done through language, the language of instruction can be an enabling or disabling factor in the process, depending on how familiar both the teacher and the learner are with it (Osterman, 1993).

Brock-Utne (2007) provides examples showing that African students are able to express themselves well and creatively if they are allowed to use a familiar African language, not to mention some teachers who may also face the same language problems. Brock-Utne says learners encounter difficulties

when forced to learn and demonstrate learning in a foreign language, one that they hardly understand and never use outside of school. She says that when a foreign language (in this case, English in Tanzania and South Africa) is used, there is a much larger spread of test performance between students.

What this means is that the vast majority of students fail while a small group swims through the system. This is one of the explanatory factors of the pyramidal shape of enrolments described in the tests with many students at the bottom and a few at the top. Brock-Utne pushes the point further by positing that the use of a foreign language as language of instruction (LOI) contributes to increased poverty of knowledge instead of alleviating it.

Therefore, communication plays a significant role in quality education for administrators in terms of skillful communication and teachers as coordinators of teaching and learning. Learners, as explained above, face the challenge of understanding English or any foreign language since most of the African countries use English or French (apart from Kiswahili and Luganda in Uganda) as mediums of instructions. The concept of communication is dynamic and it has been used and defined differently by various scholars. They have studied communication as it relates to people in various social organizations.

The term communication derives its origin from the Latin word “communicare” which means to make common. Communication is the answer to the general need of creating common understanding among people in an organisation. Communication oriented towards the receiver has a greater probability of success than communication entirely structured from the source’s perspective. In other words, the message must be understandable to

both source and receiver, otherwise fidelity will be low. In education, both administration and teachers usually fail to analyse teaching from the communication channel point of view; this breeds misinterpretation and misunderstanding and causes poor academic performance.

In short, there is need for clear communication channels and use of suitable communication styles by the head teachers, staff, support staff and students. Where there are no established channels and strategies of communication which respect freedom to express one's opinion, especially by students and staff, leads to mistrust between the opinionates and administrator. Students may resort to disruptive or defiant behaviour and poor commitment to personal academic life.

Leadership Style in School

Leadership in educational organisation is the wheel that spins education forward for quality education in all aspects of school administration, teachers' development and students' performance, and parents and community participation. A study in England by Jacobson (2011) found that school and leadership effects are shown to influence changes in academic outcomes via their effects on teachers and teaching quality. Good leadership promotes a favourable school climate and culture that emphasises high expectations and academic outcomes.

The present study highlights, in particular, the importance of a model of leadership practice that promotes an orderly and favourable behavioural climate, positive learner motivation and a learning culture that predicts positive changes in pupil behaviour and attendance as intermediate outcomes that themselves promote improvement in attainment. Instead of laying more

emphasis on the process of education in general in terms of quality education, the focus now shifts to improvements as to whether pupil outcomes can be enhanced through leadership. In other words, although teacher quality has the greatest influence on student motivation and achievement, leadership influence over teachers plays a significant role in their motivation. Moreover, Fullan (2001) contends that the quality of leadership matters in determining the motivation of teachers and the quality of their teaching, which subsequently effects student performance.

In a school set up, what are really expected of school leadership or leader's outputs or outcomes? Traditionally, leadership was viewed as individualistic and non-systemic perspectives that reinforced a focus on short-term activities and a sort of charismatic hero. Contemporary view on the other hand, sees leadership in education as a systemic force that empowers, transforms collective learning and is community oriented. Gronn (2004) and Spillance (2007) intimate that school leadership no longer refers only to officially designated positions; instead it has become a collective construct that can be distributed among teachers and support staff for purposes of cultivating favourable working relationships and networks.

The researcher concurs that creating a broader perspective on leadership where everybody is virtually responsible makes not only delegation of responsibilities easier but also supervision a bit simpler and less demanding for teachers and support staff. In other words, creating such an environment supports innovation. Silns and Mulford (2002) argue that if schools are to become better at improving student learning they must nurture opportunities for teachers to innovate, develop and learn. In other words, student outcomes

are more likely to improve when leadership is distributed throughout the school and its community; when teachers are empowered their self-esteem and importance are uplifted (Crowther, 2000).

However, this seems not to be the case in practice. A study by Southworth (2003) confirms that the urgent often takes priority over the important, which is why so many principals often feel they spend too much time on administration, budget, and other school problems and not enough working with teachers on instructional issues. He goes on to say, the principals often regret not having the time to be the “instructional leaders” they believe they are supposed to be. The study concludes by saying that, in order to address constraints imposed by time, successful leaders should focus on building the capacity of their teachers through the use of staff development, to create more favourable conditions where teachers can engage in collective explorations of their diverse experiences and approaches to teaching and learning.

The researcher is aware of constraints that block capacity building in a school. The school leader has to create an avenue of trust, competency (in herself or himself) a collaborative spirit, attitude and team work. By cultivating a school culture where collaboration is fostered, the skills and expertise of every staff will bring change and commitment. It will engender high-quality performance of every staff and student. Such leadership opens school doors and opportunities for parents to come in, talk to teachers, use school facilities and see the school as a resource for both their children and themselves. Hargreaves (1995) describes such “cultural relationship” with the parent community as founded on principles of openness and collaboration.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter discusses the methodology used for the research. It presents the research design, study population, sampling procedure, data collection instruments, data collection procedure and data processing and analysis.

Research Design

Manheim (1977), argues that research design not only anticipates and specifies the seemingly countless decisions connected with carrying out data collection, processing and analysis but it presents a logical basis for these decisions.

The study employed the mixed method (consisting of qualitative and quantitative types), with the convergent parallel design typology; the quantitative and qualitative strands of the research are performed independently and their results are brought together in the overall interpretation, Creswell and Clark's (2011). The quantitative approach method was adopted for this study using a descriptive survey design. Mugenda and Mugenda (2003) give the purpose of descriptive research as determining and reporting the way things are and involved the use of questionnaire. Whiles the qualitative approach was used to gather data using interview guide. The researcher thus, used this design and approach to find out the experience, views and knowledge of students, teachers, and head teachers on the provision of quality education in Public Senior High Schools in the Tamale Metropolis.

Study Area

Tamale is among the 26 districts found in Northern Region. It is situated in the central part of the Region and shares boundaries with the Sagnarigu District to the North-West, Mion District to the East, East Gonja to the South and Central Gonja to the South West. Tamale is strategically located in the Northern Region and by this strategic location, the Metropolis has a market potential for local goods from the agricultural and commercial sectors from the other districts in the region and the southern part of Ghana (Ghana Statistical Service, 2014). Geographically, the Metropolitan area falls within longitudes $0^{\circ} 36$ and $0^{\circ} 57$ west and latitude $9^{\circ}16$ and $9^{\circ} 34$ north.

Demographic Features

According to the Population and Housing Census (PHC, 2010) cited in Ghana Statistical Service (2014), the population of Tamale Metropolis stands at 223, 252. The number of females is 112,143 (50.2%) and the number of males is 111,109 (49.7%). Due to its central location, Tamale serves as a hub for all administrative and commercial activities in the Northern Region, doubling as the political, economic and financial capital of the Northern Region. Hence, the Metropolis could be a growth pole for the three (currently five) Regions of the North attracting both population (skilled, semi and unskilled) and economic development in the area.

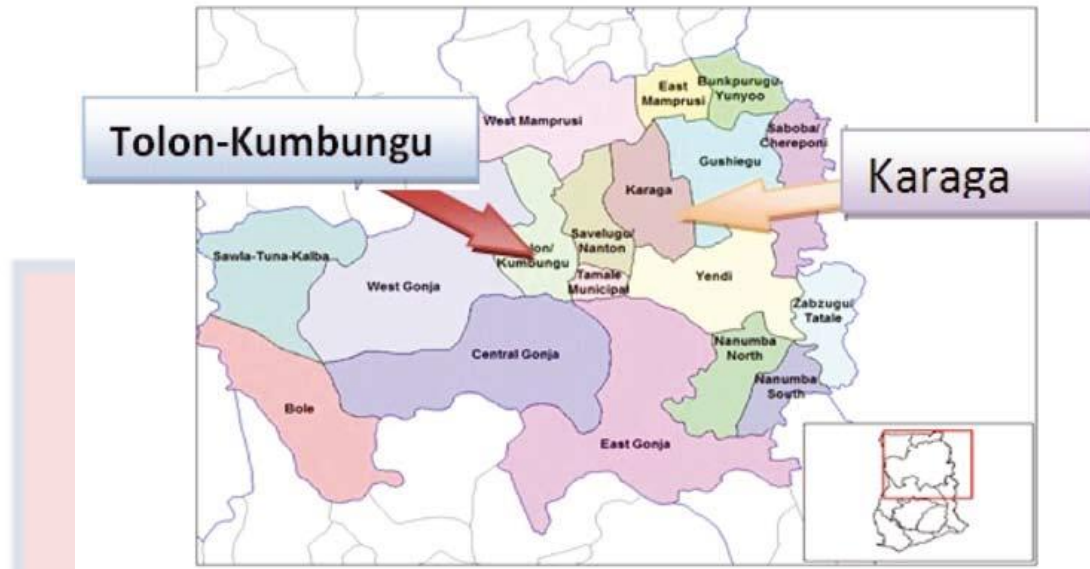


Figure 2: Map of the Tamale Metropolis
Source: Ghana Statistical Service, GIS (2014)

Population

According to Mugenda and Mugenda (2003), target population is the members of a real or hypothetical set of people, events or objects the researcher wishes to generalize the results of the research. The target population for this study comprised all Senior High School students, teachers, and head masters in the seven Public Senior High Schools in the Tamale Metropolis.

Available records at the time of the study from the Ghana Education Service (GES) showed that there were 15 Senior High Schools in the Tamale Metropolis (TMEO, 2019). Of this number, seven were public and eight private. The private schools were (Adventist SHS, City SHS, Ibn Abass SHS, A-Saadi SHS, Fatih College Tamale, Al-Salam Excellent Academy SHS, Zion SHS, and Ghana Libya Islamic SHS Tamale. Of the seven schools, two were single sex (St Charles SHS and Tamale Girls SHS), the other five were mixed schools (they included Business SHS, Ghana SHS, Anbariya SHS and Vitting

Sec/Technical School). The accessible population however, comprised four selected Public Senior High Schools, students, teachers and head teachers from the Tamale Metropolis namely: Business SHS, Ghana SHS, Anbariya SHS and Vitting Sec/Technical School.

The research targeted a population of 9916 comprising students (9634), teachers (278) and head masters (4) from the four selected schools. This population was chosen for the study because the four schools were public schools. Again, the schools were selected for ease of accessibility and proximity in terms of transportation and data collection. Also, the necessary character traits of the behaviour and attitude and all the components of a complete community could easily be found in these school settings.

Sampling Procedures

It is impracticable to collect data on the whole population considering the size, as well as time available to the researcher, hence the need to select a sample that will represent the whole population. The sample frame for the study was students, teachers and head masters in the four selected SHS of the Tamale Metropolis. The sample size for the study was 375 for students, 151 teachers and 4 head masters (see Tables 1 and 2)

The sample size for students and teachers from the four selected schools was determined by using Krejcie and Morgan's (1970) sample size table. The four Senior High Schools (Business SHS, Ghana SHS, Anbariya SHS and Vitting SHS) were randomly selected from the seven Public Senior High Schools in the Metropolis. According to Mertens (2005), simple random sampling ensures that each member of the population has an equal and independent chance of being selected.

The researcher categorised the students into SHS1, SHS2, and SHS3 by using the stratified random sampling technique. The reason for choosing students from year one to year three in each selected school was because all were beneficiaries of the free education and were capable of reading and understanding the questionnaire. A proportional allocation was used to determine and allocate the total number of students from the population to each school. The proportional allocation method was used because the distribution of students in the schools was not even, and thus the method ensured students selected from each school reflected the total number of students in the population of each school (See Table 1). The student respondents from each school were selected using simple random sampling techniques, specifically the lottery method. The researcher made use of the school register in order to get the total number of students from each class. From the school register, the male and female names were segregated and coded, and each code was matched with a particular gender. The names were then written on pieces of paper and the papers were folded and put into a container. This was done separately for each school. The folded paper slips were mixed thoroughly and a number of slips were picked at random. Picking was done by students until the required number for students from each school was obtained. In all, a sample of 375 students was selected for the study. This technique was used in order to give students equal chances of being selected and to help avoid biases in the selection of the respondents. The same technique was employed in all the schools to select the students based on programmes, thus general science and general arts students were used.

Stratified sampling technique was also used to select teachers to participate in the study. The researcher thus, selected teachers according to year group or level. Also, the researcher stratified the teachers into gender and randomly selected them from each level. In other words, 50% were picked from each gender to get a representative sample. However, if either gender was less, the opportunity was given to the side with the greater number. The proportional allocation method was also used because the distribution of teachers in the schools was not even, and thus the method ensured teachers selected from each school reflected the total number of teachers in the population of each school (See Table 2)

The head masters or mistresses in the 4 schools were purposively selected since in a school there was only one head master. As heads or leaders in the schools and with their rich experiences, the head-teachers provided valuable information on access and quality of educational outcomes in the Tamale Metropolitan area.

Table 1: Sample size distribution for students

Name of School	School Population					
	SHS 1		SHS2		SHS3	
	N	S	N	S	N	S
AMBARIYA SHS	890	40	695	27	635	24
BUSINESS SHS	1230	47	788	30	686	26
GHANA SHS	1265	48	802	31	774	30
VITTING SHS	911	35	491	19	467	18
TOTAL	4296	170	2776	107	2562	98

Source: Author's Construct, 2020

Table 2: Sample size distribution for teachers

No.	NAME OF SCHOOL	TEACHER POPULATION (N)	SAMPLE (S)
1	ANBARIYA SHS	50	27
2	BUSINESS SHS	88	48
3	GHANA SHS	76	41
4	VITTING SHS	64	35
	TOTAL	278	151

Source: Author's Construct, 2020

Research Instruments

In this study, questionnaire and interview guide (self-made to meet the objectives of the study), were used to collect data from the sample population. The researcher administered questionnaires to students and teachers and

interview guide for head teachers in the 4 schools in the Tamale Metropolis. The questionnaires comprised different sections ranging from section A to section D while that of the interview schedule ranged from sections A and B. Equally, the number of questions in the questionnaires and that of the interview schedule for the different categories varied. Generally, section A collected the background information of head masters, students and teachers. The other three sections collected information related to the general objectives of the study after the successful implementation of FSHS Policy in the Tamale Metropolis.

Questionnaire

According to Matiru (1993), a questionnaire is a collection of written questions which are usually answered in order to obtain information from the participants. The purpose for using questionnaires was to enable participants to answer freely as they filled the questionnaire forms. This instrument was necessary for this study as the students and teachers had time to provide well thought out information. The importance of questionnaires in the study was also to facilitate collection of large amounts of data which was more dependable and reliable as they were able to provide information or answers to the four research questions. The researcher administered structured questionnaires to 375 students and 151 teachers.

Questionnaire for Students

The questionnaire for students was structured around closed-ended scale-items and open-ended questions in four sections. Section A solicited information on demographic characteristics of the respondents, regarding gender and age and comprised questions 1 to 2. Section B sought information

on quality of education delivery such as enrolment stretching resources, irregular reporting of students due to lack of space, and others. This section comprised one question (that is, question 3 with 17 sub questions). Section C focused on challenges affecting FSHS Policy and had one question (that is, 4). Section D asked for proposals to improve FSHS Policy and comprised one question (that is, 5 with 7 sub questions).

Questionnaire for Teachers

The questionnaire for teachers had closed and open-ended semi structured questions in four sections. Section A was about demographic information of the respondents, such as gender, age, years of teaching, professional status and qualification. In all, there were a total of five questions. Section B looked at information on quality of education delivery and comprised one question (that is, 6). Section C was on challenges affecting FSHS Policy and was discussed around one question (7). Section D intended to solicit suggestions towards improving quality of FSHS Education Policy and was made of one question with 7 sub-questions (that is, 8). Question 9 requested for any other suggestions to improve FSHS Policy delivery in the Tamale Metropolis.

Interview

An interview is typically a face-to-face conversation between a researcher and a participant involving a transfer of information to the interviewer (Creswell, 2012). Interviews are primarily done in qualitative research and occur when researchers ask one or more participants general, open-ended questions and record their answers. Often audiotapes are utilized to allow for more consistent transcription (Creswell, 2012). Interviews have

the following strengths: they provide useful information when participants cannot be directly observed. The interviewer has better control over the types of information that they receive. They can pick their own questions. If worded effectively, questions will encourage unbiased and truthful answers.

However, the following weaknesses are associated with the use of interviewee. It may provide biased information or be unreliable if only one interviewer is interpreting the information. The best research requires many different points of views. The interview answers may be deceptive because the interviewee tries to respond in a way that will please the interviewer. Equipment may be a problem. Equipment may be costly and require a high level of technical competence to use. It can be time-consuming and inexperienced interviewers may not be able to keep the questions properly focused.

Interview guide for headmasters/mistresses

The interview guide for head masters had 14 close and open-ended structured questions in sections A and B. Section A was about demographic information of the respondents, such as gender, age, academic qualification, experience in leadership and headship. This section was discussed around four questions (1 to 4). Section B comprised open-ended items with 10 questions. These questions targeted enrolment, positive and negative effects on enrolment trends. It also sought suggestions on how to improve the provision of quality education.

Pilot-Testing of Instrument

The pilot-test of the instruments was conducted to assess any need for revisions of the questions. The pilot-test of the research instruments was

carried out in two selected SHS (Presbyterian SHS and Tamale Girls SHS) in the Tamale Metropolis, which were not to be included in the final sample.

The pilot-test involved administration of the questionnaires to 151 teachers and 375 students while the interview guide was administered to 2 head masters. The participants of the pilot-test were asked to complete the questionnaires and also responded verbally to interview guide. They were also requested to provide comments or suggestions for revising any ambiguous items. Again, the purpose of the pilot study was to enable the researcher to improve the reliability and validity of the instruments, and to familiarize with questionnaire/interview administration. The final instruments for the study (Appendices A, B & C) were produced after subsequent revisions in the wording of a few items.

Validity and Reliability of Instrument

Validity according to the American Educational Research Association, American Psychological Association and National Council on Measurement in Education (1999) “refers to the degree to which evidence and theory support the interpretations of test scores entailed by the proposed uses of test” (p. 9).

Validity refers to the appropriateness or soundness of your interpretations and uses of students’ assessment results. Assessment of content and construct validity was achieved by the use of non-statistical approaches including peer and/or expert review. The pilot testing was done in two schools and it helped in achieving validity as it resulted in correcting and appropriately adjusting areas of weakness in relation to the topic under study. The supervisor of the thesis was also involved in scrutinizing the questionnaire to ensure both face and content validity.

Reliability is defined as a measure of how consistent the results from the test are. It is a measure of the degree to which a research instrument yields consistent results or data after repeated trials (Mugenda & Mugenda, 2003). A reliable instrument is one that produces consistent results when used more than once in the process of data collection. The reliability of the instruments was determined using Cronbach's alpha analysis. The reliability of the instruments was determined using Cronbach's alpha analysis. Cronbach's coefficient alpha values of 0.825 and 0.857 were obtained for students and teachers' questionnaires. A value of 0.714 was also obtained for the headmasters' demographic information. Cronbach's alpha as an estimate of reliability was adequate at 0.825, 0.857 and 0.714. Such reliability values, according to researchers (Cohen et al., 2007; Fraenkel & Wallen, 2008), were fair indications of a good internal consistency, and the researcher thus concluded that the instruments were adequately reliable.

Ethical Considerations

Ethical clearance at the time of compiling the final work was yet to be received from the Institutional Review Board of the University of Cape Coast (See Appendix D), evidence of the application letter requesting for the ethical clearance certificate. In the absence of the clearance certificate, a letter of introduction was obtained from the University of Cape Coast Graduate Studies Unit (See Appendix E). The ethical clearance was however, obtained later (See Appendix F) The purpose of the study, the need for individual participation, anonymity as well as confidentiality of respondents' responses were spelt out. Informed consent was sought from participants by explaining the purpose of the study to them. Anonymity of respondents was highly

considered in the study. This gave the participants the opportunity to have their identity concealed. Neither names nor any identifiable information from respondents were taken. Again, opportunity was provided for participants to withdraw where they were no longer interested in the study.

On the issue of confidentiality, effort was made to maintain confidentiality of the responses of the participants. Participants were told that their responses would be kept confidential and that no one known to them would have access to the information provided.

Data Collection Procedures

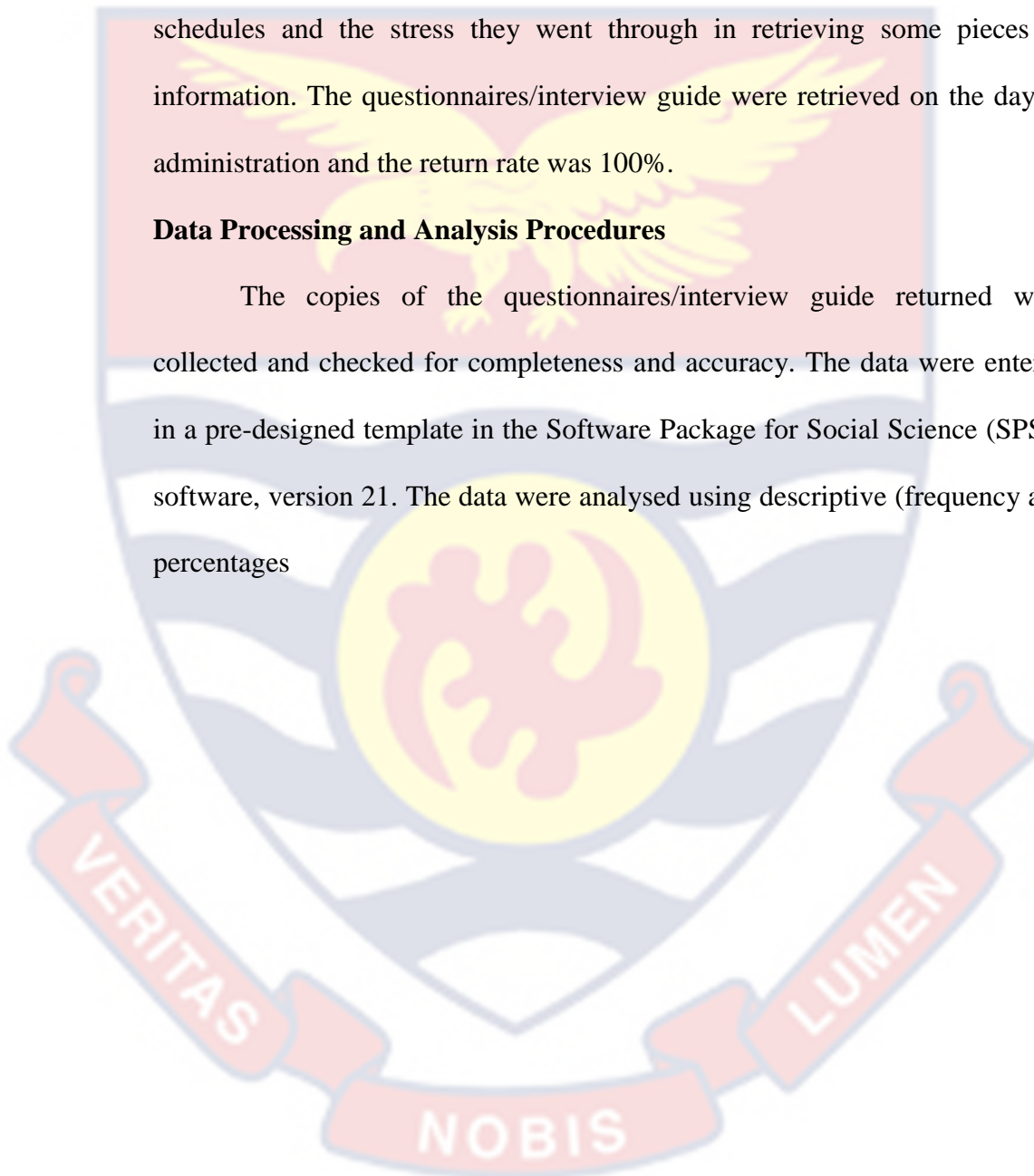
Since the study involved human beings, the ethical principle was followed during data collection. The data were collected in two weeks, from 1st to 15th June, 2021. Before the study was conducted, a research proposal of the study was approved by the Department of Educational Foundations of the University of Cape Coast. The researcher presented copies of an introductory letter from the Department of Education and Psychology to seek permission from the selected institutions to undertake the study. With the introductory letter permission was sought from the various heads of the schools to conduct the study in their schools. The purpose of the introductory letter was to solicit for cooperation and also to create a rapport between the researcher and the respondents who served as key participants of the study.

The researcher obtained consent from the school head teachers before administering the questionnaires to the teachers and the students as well as the interview guide to the heads. In doing so, a consent statement was read out to each participant for acceptance before the instruments were administered. Additionally, the instruments were packed into envelopes to prevent any

losses. The researcher self-administered the instruments to the students, teachers and headmasters. For the students it took about 15-20 minutes in filling the questionnaires. It took about 1 hour for the teachers to complete the questionnaires and about 2 hours for the headmasters due to their busy schedules and the stress they went through in retrieving some pieces of information. The questionnaires/interview guide were retrieved on the day of administration and the return rate was 100%.

Data Processing and Analysis Procedures

The copies of the questionnaires/interview guide returned were collected and checked for completeness and accuracy. The data were entered in a pre-designed template in the Software Package for Social Science (SPSS) software, version 21. The data were analysed using descriptive (frequency and percentages



CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter deals with the presentation, interpretation and discussion of the results based on the research questions. The findings, such as descriptive statistics, were summarized using frequency and percentages. Qualitative data obtained from the interviews was presented in narrative and direct quotations. The background data of the respondents is given first, followed by the discussion of each of the four research questions.

Response Rate

The researcher had three categories of respondents and the response rate is summarized in tables 3, 4 and 5 below. From the tables, it was established that 375 questionnaires issued to students were returned. Also 151 questionnaires issued to teachers were returned duly filled, and 4 interview guides for the head teachers were carried out. The response rates were 100% for students, teachers and headmasters.

Socio-Demographic Characteristics of the Respondents

Demographic information of the respondents in this study was collected to show the characteristics of those who took part in the study. A thorough description of participants allows readers and researchers to determine to whom research findings generalize and allows for comparisons to be made across replications of studies. It also provides information needed for research syntheses and secondary data analyses (Beins, 2009). Non the less, the background data of respondents formed no part of the main analysis. The purpose for the inclusion of background data of respondents was to have idea about the general information of respondents but not for main analysis. The

information collected was based on gender of the respondents, age range, years of experience of the head teachers and teachers, level of qualification of the teachers, parents and head masters, number of children per parent and parent occupation as well as teacher professional qualification. The data obtained from the respondents was analyzed and presented as shown below in Tables 3, 4 and 5.

Table 3: Demographic Information of Students

Variable	Characteristic	Frequency (n)=375	Percentage (%)
Gender	Male	192	51.2
	Female	183	48.8
Age range	12-15	9	2.4
	16-19	287	76.5
	20-23	78	20.8
	24 and above	1	.3
With whom do you live	Both parents	219	58.4
	Mother	76	20.3
	Father	44	11.7
	Other	36	9.6
Number of children parents have	1-2	22	5.9
	3-4	102	27.2
	5 and above	251	67.1
Educational level of parents	Tertiary	70	18.7
	Second cycle	62	16.5
	Basic education	67	17.9
	Never attended	176	46.9
Occupation of parents	Government work	53	14.1
	Private business	91	24.3
	Farming	201	53.6
	Unemployed	30	8.0

Source: Field data, May 2021

From the results of the study, it was established that a majority 51.2% of the students were male while 48.8% were female. For age, the majority of the students 76.5% were aged between 16 and 19 years, 20.8% were aged between 20 and 23 years, while 2.4% were between 12 and 15 years.

However, 0.3% were over 24 years of age. The finding thus showed that, majority of the students were within the appropriate school going age.

With whom do you live, it was found out that a majority 58.4% of the students lived with both parents, 20.3% lived with their mothers, while 11.7% lived with their fathers. Similarly, 9.6% were found to live with their guardians.

On number of children per parent, the study showed that a majority 67.1% of the students came from homes with children 5 and above, 27.2% came from homes siblings ranging between 3 and 4 while 5.9% came from homes with siblings between 1 and 2.

On parents' occupational status, the study revealed that majority 53.6% were into farming, 24.3% were managing their own businesses, 14.1% were employed by government, while 8.0% were reported unemployed. The findings appear to suggest that majority of the parents were peasant farmers.

Table 4: Demographic Information of Teachers

Variable	Characteristic	Frequency (n)=151	Percentage (%)
Gender	Male	68	45.0
	Female	83	55.0
Age range	20-29	14	9.3
	30-39	57	37.7
	40-49	61	40.4
	50 or more	19	12.6
	Level of education	Diploma	2
Years of teaching experience	Bachelors	97	64.2
	Masters	52	34.4
	<5	27	17.9
Years of teaching experience in current school	5-10	29	19.2
	>10	95	62.9
	<5	66	43.7
Trained or untrained teacher	5-10	46	30.5
	>10	39	25.9
	Trained	137	90.7
		14	9.3

Source: Field data, May 2021

The study as shown in table 4 further indicated that 55.0% of the teachers were females while 45.0% were males. For age the study established that, a majority 40.4% of the teachers aged between 40 and 49 years, 37.7% were aged between 30 and 39 years, 9.3% also aged between 20 and 29 years with others 12.6% being 50 years and above. These findings showed a majority of the teachers were in their youthful age and had a lot of potential to offer and energy to work.

From the study, it was established that the majority of the teachers 64.2% were holders of bachelor's degree, 34.4% were holders of master's degree; only 1.3% were holders of diploma.

On years of teaching experience, it was found that majority 62.9% of teachers had 10 and more years, 19.2% had between 5 and 10 years, while 17.9% had 5 and below years of experience. Similarly, 90.7% of the teachers were professionally trained while 9.3% of them were non-professional.

It's indicative from the findings that a greater number of the teachers were well experienced and this could positively impact on students learning.

Table 5: Demographic Information of Heads

Variable	Characteristic	Frequency (n)=4	Percentage (%)
Gender	Male	2	50.0
	Female	2	50.0
Age range	40-49	1	25.0
	50 or more	3	75.0
Level of education	Masters	4	100
Number of years in headship	<5	2	50.0
	5-10	2	50.0
Number of years in current position	<5	2	50.0
	5-10	2	50.0

Source: Field data, May 2021

From the results of the study in table 5, it was established that 50% of the heads were males while 50% were females. For age, the majority 75.0% were aged between 50 and more years while 25.0% were aged between 40 and 49 years. This showed that most of the heads were 50 years and above in their career and service.

On level of education, it was realized from the study that all the 4 (100%) heads had their master's degree. Similarly, on number of years in headship and number of years in current position, it was established that 50% of the heads had served 5 years and below while 50% had served in leadership between 5 and 10 years.

Answers to Research Questions

Research Question One: How has access in terms of enrollment been attained after the implementation of FSHS Education Policy in the Tamale Metropolis? The main objective of this research question was to explore the views of teachers and students on access after the implementation of FSHS Policy. On a four-point, Likert-type scale (1 = strongly agree, 2 = agree, 3 = disagree, and 4 = strongly disagree), both teachers and students were asked to indicate their levels of agreement or disagreement with statements posed by the researcher on the FSHS Policy. The results were discussed using percentages and frequency. Their views are presented in tables 6 and 7 below:

Table 6: Students view on access to FSHS Education Policy (n=375)

Access to education delivery	SA N (%)	A N (%)	D N (%)	SD N (%)
Students who before did not get an opportunity to enroll in school now have been enrolled.	151 (40.3)	160 (42.7)	41 (10.9)	23 (6.1)

Table 7: Teachers' view on access to FSHS Education Policy (n=151)

Access to education delivery	SA N (%)	A N (%)	D N (%)	SD N (%)
Students who did not get the opportunity to enroll in school now have been enrolled.	66 (43.7)	61 (40.4)	22 (14.6)	2 (1.3)

Students who before did not get an opportunity to enroll in school now have been enrolled, it was established from tables 6 and 7 that a majority 42.7% of the students strongly agreed, 40.3% agreed, 41.9% disagreed while 6.1% strongly disagreed. Similarly, a majority 47.0% of teachers strongly agreed, 39.1% agreed, 19.9% disagreed while 4.0% strongly disagreed.

These findings appear to indicate the marginal increased in students' enrollment since 2017. For example, in November 2017, enrollment of students stood at 358,205 representing 83.9%, an improvement of 75% from that of 2016 (GNA, 2017). These findings could also suggest why the Ministry of Education through its implementation agency (Ghana Education Service) introduced the double track system as a temporary measure to contain the huge numbers of students transitioning from JHS to SHS.

Research Question Two: The main objective of this research question was to assess how quality of education delivery has been achieved after the implementation of FSHS Education Policy in the Tamale Metropolis? On a four-point, Likert-type scale (1 = strongly agree, 2 = agree, 3 = disagree, and 4 = strongly disagree), both teachers and students were asked to indicate their levels of agreement or disagreement with statements posed by the researcher on the FSHS Policy.

The results were discussed using percentages and frequency. Their views are presented in tables 8 and 9 below:

Table 8: Students view on quality of FSHS education delivery (n=375)

Quality of education attainment	SA N (%)	A N (%)	D N (%)	SD N (%)
Due to FSHS, sanitary facilities are inadequate.	218 (58.1)	88 (23.5)	38 (10.1)	31 (8.3)
The classes available are few, leading to overcrowded classes.	207 (55.2)	108 (28.8)	45 (12.0)	15 (4.0)
Text books are very few for all the subjects making students unable to complete assignments in time.	139 (37.1)	125 (33.3)	74 (19.7)	37 (9.9)
The school library is too small to accommodate all the students.	228 (80.8)	101 (26.9)	33 (8.8)	13 (3.5)
Overcrowding contributes to noise and poor class control.	234 (62.4)	108 (28.8)	22 (5.9)	11 (2.9)
There is irregular reporting of students since others come in the middle of the semester.	175 (46.7)	151 (40.3)	30 (8.0)	19 (5.1)
The school has been forced to ask students to report to school with desks since those available cannot cater for them.	56 (14.9)	97 (25.9)	97 (25.9)	125 (33.3)
Teachers are unable to mark exercises given.	102 (27.2)	132 (35.2)	84 (22.4)	57 (15.2)
Teachers are unable to offer individual attention.	159 (42.4)	133 (35.5)	57 (15.2)	26 (6.9)
Ability to prepare and use enough teaching and learning materials can help improve learning.	248 (66.1)	101 (26.9)	14 (3.7)	12 (3.2)
Teacher commitment to work is an important element that can help improve learning.	234 (62.4)	109 (29.1)	21 (5.6)	11 (2.9)

Teacher-student classroom relationship can help improve learning.	164 (43.7)	166 (44.3)	30 (8.0)	15 (4.0)
Teacher regularity in school is an important element that can help improve learning.	222 (59.2)	133 (35.5)	12 (5.2)	8 (2.1)
Opportunities for continues teacher academic and professional development can help improve learning.	184 (49.1)	170 (45.3)	8 (2.1)	13 (3.5)
Students' regular absenteeism in school can negatively impact learning.	218 (58.1)	102 (27.2)	25 (6.7)	30 (8.0)
Students' regularity in school can help improve learning.	259 (69.1)	99 (26.4)	10 (2.7)	7 (1.9)
The government has not allocated enough funds towards FSHS.	177 (47.2)	139 (37.1)	43 (11.5)	16 (4.3)
The government did not consider funding on-going projects before the implementation of FSHS.	180 (48.0)	137 (36.5)	40 (10.7)	18 (4.8)
FSHS funds are in most cases disbursed late, thus the school is unable to procure teaching-learning resources in time.	153 (40.8)	169 (45.1)	44 (11.7)	9 (2.4)
In the face of increased prices in fuel and food, the government has not adjusted the FSHS funds.	111 (29.6)	179 (47.8)	59 (15.7)	26 (6.9)
Parents/guardians do not contribute towards FSHS at all.	80 (21.3)	79 (21.1)	104 (27.7)	112 (29.9)
Parents/guardians attend meetings and contribute towards development in the school in terms of infrastructure.	140 (37.3)	110 (29.4)	71 (18.9)	54 (14.4)

Source: Field data, May 2021

Table 9: Teachers' view on quality of FSHS education delivery (n=151)

Quality of education attainment	SA N (%)	A N (%)	D N (%)	SD N (%)
Due to FSHS, sanitary facilities are inadequate.	66 (43.7)	55 (36.4)	21 (13.9)	9 (6.0)
The classes available are few, leading to overcrowded classes.	100 (66.2)	45 (25.8)	5 (3.3)	1 (.7)
Text books are very few for all the subjects making students unable to complete assignments in time.	50 (33.1)	56 (37.1)	35 (23.2)	10 (6.6)
The school library is too small to accommodate all the students.	73 (48.3)	47 (31.1)	26 (17.2)	5 (3.3)
Overcrowding contributes to noise and poor class control.	78 (51.7)	50 (33.1)	15 (19.9)	8 (5.3)
There is irregular reporting of students since others come in the middle of the semester.	78 (51.7)	49 (32.5)	17 (11.3)	7 (4.6)
The school has been forced to ask students to report to school with desks since those available cannot cater for them.	13 (8.6)	20 (13.2)	55 (36.4)	62 (41.1)
Teachers are able to mark exercises given.	33 (21.9)	56 (37.1)	43 (28.5)	19 (12.5)
Teachers are able to offer individual attention.	71 (47.0)	59 (39.1)	15 (19.9)	6 (4.0)
Ability to prepare and use enough teaching and learning materials can help improve learning.	96 (63.6)	50 (33.1)	2 (1.3)	3 (2.0)
Teacher commitment to work is an important element that can help improve learning.	95 (62.9)	51 (33.8)	3 (2.0)	2 (1.3)
Teacher student classroom relationship can help improve learning.	76 (50.3)	70 (46.4)	4 (2.6)	1 (.7)

Teacher regularity in school is an important element that can help improve learning.	87 (57.6)	60 (39.7)	4 (2.6)	-
Parents/guardians attend meetings and contribute towards development in the school in terms of infrastructure.	13 (8.6)	20 (13.2)	55 (36.4)	62 (41.1)
Opportunities for continues teacher academic and professional development can help improve learning.	98 (64.9)	37 (24.5)	4 (2.6)	12 (7.9)
Students' regular absenteeism in school can negatively impact on learning.	113 (74.8)	32 (21.2)	4 (2.6)	2 (1.3)
Students' regularity in school can help improve learning.	99 (65.6)	51 (33.8)	1 (.7)	0 (0)
The government has not allocated enough funds towards FSHS.	64 (42.4)	66 (43.7)	14 (9.3)	7 (4.6)
The government did not consider funding on-going projects before the implementation of FSHS.	84 (55.6)	44 (29.2)	21 (13.9)	2 (1.3)
FSHS funds are in most cases disbursed late, thus the school is unable to procure teaching-learning resources in time.	84 (55.6)	56 (37.1)	8 (5.3)	3 (2.0)
In the face of increased prices in fuel and food, the government has not adjusted the FSHS funds.	64 (42.4)	64 (42.4)	20 (13.2)	3 (2)
Parents /guardians do not contribute towards FSHS at all.	48 (31.8)	38 (25.2)	48 (31.8)	17 (11.3)
Parents/guardians attend meeting and contribute towards development in the school in terms of infrastructure.	16 (10.6)	38 (25.2)	45 (29.8)	52 (34.4)

Source: Field data, May 2021

The study indicates that, the majority 58.1% of the students strongly agreed that due to FSHS, sanitary facilities are inadequate, 23.5% agreed, 10.1% disagreed while 4.0% strongly disagreed. On the other hand, a majority 43.7% of teachers strongly agreed with the statement, 36.4% agreed, 13.9% disagreed and 6.0% strongly disagreed.

In addition, the study found that the majority 37.1% of students strongly agreed that text books are very few for all the subjects making students unable to complete assignments in time, 33.3% agreed, 19.7% disagreed while 9.9% strongly disagreed. In a similar vein, the majority 37.1% of the teachers agreed with the statement, 33.1% strongly agreed, 23.2% disagreed while 6.6% strongly disagreed.

The study equally revealed that majority 80.8% of the students strongly agreed that the school library is too small to accommodate all the students, 26.9% agreed that the school library is too small, 8.8% disagreed that the school library is too small, while 3.5% strongly disagreed with the statement. Similarly, majority 48.3% of teachers strongly agreed that the school library is too small, 31.1% agreed with the statement, 17.2% disagreed, while 3.3% strongly disagreed that the school library is too small.

It was also established from tables 8 and 9 that 62.4% of the students strongly agreed that overcrowding contributes to noise and poor class control, 28.8% agreed with the statement, 5.9% disagreed with the statement, while 2.9% strongly disagreed that overcrowding contributes to noise. On their part, 51.7% of teachers strongly agreed that overcrowding contributes to noise and poor class control, 33.1% agreed with the statement, 19.9% disagreed with the

statement, while 5.3% strongly disagreed that overcrowding leads to noise and poor class control.

Furthermore, the study revealed that majority 46.7% of the students strongly agreed that there is irregular reporting of students since others come in the middle of the semester as a result of FSHS, 40.3% agreed with the statement, 8.0% disagreed, while 5.1% strongly disagreed. Equally a majority of teachers 51.7% strongly agreed with the statement, 32.5% agreed, 11.3% disagreed, as the same time 4.6% of them strongly disagreed with the statement that there is irregular reporting of students.

In addition, it can be deduced from tables 8 and 9 that a majority of students 25.9% and teachers 41.1% disagreed that the school has been forced to ask students to report to school with desks since those available cannot cater for them. These findings however, sharply contradict the earlier findings that sought to suggest inadequacy of infrastructure in the various Senior High Schools especially after the introduction of the Free SHS Education Policy. These results were in line with the findings of Broome (2003), Hughes (2005) and Lyons (2001) that students' achievement also depended on the physical school facility such as the age of the school, its design, and other conditions applicable to teaching and learning.

The study also established that, majority 55.2% of students strongly agreed that the classes available are few, leading to overcrowded classes and compromised learning, 28.8% agreed, 12.0% disagreed while 4.0% strongly disagreed. The majority 66.2% of teachers strongly agreed with the statement, 25.8% agreed, 3.3% disagreed and about 0.7% strongly disagreed. These findings were in line with a number of empirical studies done in developing

countries concerning school facilities (Latin America), which included 50,000 students in grades three and four found that children whose schools lacked classroom materials and had an inadequate library returned significantly lower test scores and higher grade repetition than those whose schools were well equipped (Williams, 2000).

In addition, DFID (2002) states that research evidence confirms that the two most consistent characteristics in improving students' academic performance are the availability of (a) textbooks and supplementary learning-teaching materials and (b) well trained, prepared, supervised and motivated teachers. DFID concludes that textbook provision is the most cost-effective input in learning that affects students' academic performance so positively.

Furthermore, Filardo (2008) in his findings on school facilities says, building design was associated with teacher motivation and student achievement and thus, school facilities that provide safe, secure, comfortable, accessible, well-ventilated, well-lit, aesthetically pleasing settings are seen as integral components of the school's academic conditions favourable for learning.

Also, according to (OECD, "Class Size and Ratio of Students to Teaching Staff" Education at a Glance, 2006), the classes with smaller number of students are often perceived to allow teachers to focus more on the individual needs of students and to reduce the amount of class time, teachers spend on other things such as discipline or disruption among students. Again, class size has to do with quality of class as well as students' own performance.

Not all, these results were in line with the findings of Kwesiga (2002), who concluded that the number of facilities a school offers usually determines

the quality of the school, which in turn, affects the achievement and accomplishment of its students as positive school environment affects students' academic achievement.

As seen in tables 8 and 9 with regards to the statement, “teachers are unable to mark exercises given”, it was found that both students 35.2% and teachers 37.1% agreed with the notion. This result appears to infer that both teachers and students indicated that high enrollment of students makes it practically challenging for teachers to score exercises and other assessment tools in time, this may negatively affect quality academic attainment. Concerning the statement, “The teachers are unable to offer individual attention”, it was noted that teachers 42.2% and students 47.0% strongly agreed with the statement. This result may seem to suggest that teachers could be challenged in the classroom meeting the various needs of the students in relation to a particularly lesson. This could therefore, negatively impact on students' academic achievement.

From tables 8 and 9, it was realized that teachers 63.6% and students 66.1% strongly agreed with the statement that the teachers' ability to prepare and use enough teaching and learning materials can help improve learning. This result may also suggest that, teacher pedagogical skills and experience could be a significant factor that determined and influenced students' academic achievement.

On the statement “teacher commitment to work is an important element that can help improve learning”, a majority of students 62.4% and teachers 62.9% strongly agreed with the notion. Again, a majority 44.3% of students agreed, while 50.3% of teachers strongly agreed with the statement

that teacher student classroom relationship is an important factor that can lead to improvement in learning. It seems implicit from the findings that both teachers and students agreed that teacher effectiveness and classroom management practices is an important factor which could result in quality attainment.

From tables 8 and 9, a majority 59.2% of students and 57.6% teachers strongly agreed with the statement that teacher regularity in school is an important factor for quality attainment, while at the same time, students 58.1% and teachers 64.9% strongly agreed with the notion that students' regular absenteeism in school can negatively impact learning. Again, students 69.1% and teachers 74.8% strongly agreed with the statement that students' regularity in school can help improve performance. It could be deduced from the results that students and teachers accepted teacher student/ teacher regularity in school are important in terms of both children's access to education and the nature of that access.

These results were in agreement with the findings of Bruno (2012), who argues that because of the workload on teachers, insufficient time is given to classroom instruction. Too often teachers are working without support from their aides and other administrative personnel. As a result, much of the work imposed on a teacher draws from the time designed for reading, writing and instruction. In other words, a teacher will not have enough time to read widely and compile a good lesson and delivery of class notes. He or she has limited time in preparing the lesson and has no time to ensure that a slow learner student has understood the lesson. With such conditions Bruno notes that

teachers cannot perform at their highest level, and they will certainly have higher levels of stress and burnout which will result in job dissatisfaction.

In another study, Fobih, Akyeampong and Koomson (1999) arrived unannounced in some 60 schools and found that about 85 per cent of teachers go to school late. They found that lateness ranged from five minutes up to one and a half hours. This meant teaching time was lost, teachers taught fewer school subjects (i.e. taught mainly English and Mathematics out of 10 subjects), and the shortening of the school day for students. Lateness and absenteeism were also found to affect the completion of syllabi. When the syllabus is not completed, pupils find it difficult to understand content that is to be taught in the next class which foundation in most cases is based on the previous class (Etsey, 2005; Etsey et al., 2005).

The assertion above was supported by Pryor and Ampiah (2003), who viewed that most children do not follow school work because they do not possess the understanding from previous work that is prerequisite for the syllabus of the higher grades of Primary School and Junior High School.

Both absenteeism and lateness, as Bennell and Akyeampong (2007) point out, are symptomatic of education systems that are unable to manage teachers effectively, have weak teacher management structures, and are unable to provide incentives to motivate teachers to improve their attitudes to work. By implication, student-teacher relationships which revolve around negative emotion affect the amount of involvement experienced between students and teachers. Again, a conflicting student-teacher relationship may even function as an additional stressor on students in the school environment, further hindering their adaptation and development. In other words, when the student-

teacher relationship is conflicting and tense, students are unable to rely on teachers as a source of support in the learning environment. In addition, a conflicting student-teacher relationship may foster angry and anxious emotions in students, causing them to become disengaged and alienated from the school environment. The study findings were also corroborated by Perry (2009) that when student-teacher relationships are characterized by conflict or negative feelings, the associated results will be academic failure, behavioral difficulties and decreased connection with the school environment. To avert negative relationships in schools, teachers must create physical environments that are conducive to learning in order to avoid student absenteeism. Experience shows that lack of academic relationships or simply poor relationships between teachers and students create an avenue of class absenteeism and avoidance of some teachers, a feeling of intimidation which leads to high anxiety in students and lack of feeling of belonging and acceptance.

Similarly, it was established from the study that teacher planning and preparation is a key part of effective teaching and although it can be difficult to do and requires tones of effort to accomplish it at first, it enables a teacher to save much time in the coming years, since the lesson plans can be employed over and over again, especially through updating. Darling-Hammond (2000) contends that lesson plans allow a teacher to manage his or her time, effort and resources efficiently. It provides the teacher with many ways to keep the teaching process from being monotonous and redundant; a lesson plan is the best way to keep the interests of students throughout. In other words, variations in activities are easily whipped out which will benefit students.

The study equally revealed that teacher academic and professional development was an important element for quality delivery. These findings were supported by Darling-Hammond (2000) who indicated that the effects of well-prepared, that is, trained or qualified teachers on student achievement were stronger than the influence of student background factors, such as minority status, poverty, and language background.

On the statement the government has not allocated enough funds towards FSHS, students 47.2% and teachers 65.6% strongly agreed with the notion. Again, students 48.0% and teachers 43.7% agreed with the statement that the government did not consider funding on-going projects before the implementation of FSHS. In a similar vein, 45.1% and 55.6% of students and teachers respectively supported the view that FSHS funds are in most cases disbursed late, thus the school is unable to procure teaching-learning resources in time. Also, students 47.8% and teachers 55.6% backed the statement that in the face of increased prices in fuel and food, the government has not adjusted the FSHS funds.

These findings appear to show that despite the fact that the funds were inadequate and were not released on time, the FSHS funds were also not regular, which may imply that the head masters could not rely on the funds and may have to look for alternative means of raising funds for the schools.

The head masters on their part, reported that these variables could negatively affect quality of education delivery by:

- “Inadequate infrastructure leading to overcrowding in classrooms and dormitories, and

- Delay in the supply of food stuff and texts books to schools”. The findings corroborated that of Verspoor (2008), who pointed out that constrained by limited public resources and in the absence of significant policy reforms, SSA countries have responded to the increased demand for Senior High Education places by spreading the same resources over larger number of students. Consequently, essential inputs often are in short supply resulting in increasing class sizes, shortage of textbooks, instructional materials and supplies, poorly stocked.

Parents/guardians do not contribute towards FSHS at all, a majority 29.9% of students strongly disagreed, while on the contrary, a majority 42.4% of teachers strongly agreed with the statement. Finally, 37.3% of students strongly agreed that parents/guardians attend meetings and contribute towards development in the school in terms of infrastructure, while at the same time 31.8%, 31.8% of teachers and students respectively strongly agreed and disagreed with the notion. It could be inferred from these findings that the contribution of parents/guardians/community leaders/members towards education delivery could not be taken lightly.

Several researches were in line with the above findings: Olatoye and Agbatogun (2009) found that parental involvement has a strong positive effect on student achievement. Further research shows parental involvement in children’s learning not only leads to higher academic achievement, but greater cognitive competence, greater problem-solving skills, greater school enjoyment, better school attendance and fewer behavioural problems at school (Melhinsh *et al.*, 2001 reported in Ademola & Olajumoke, 2009).

Additionally, Tremblay, Ross and Berthelot (2001) found a significant association between students with parents involved at school and their academic performance.

Also, parental interest in schooling has been found to contribute significantly to the academic achievement of pupils. For instance, Odinko and Adeyemo (1999) found that parental interest in schooling together with socio-psychological factors were good predictors of students' learning outcomes in English language. Ghanney (2007) examined the effects home environment has on the child's achievement in Primary Schools in Winneba Township. He found that positive parental attitude towards education; great parental support and interest combine to enhance children's progress in education rather than the level of parent's educational attainment.

Research Question Three: What are the perceived challenges affecting the FSHS Education Policy in the Tamale Metropolis? The main objective of this research question was to assess the views of teachers, students and headmasters the perceived challenges affecting the FSHS Policy after its implementation. The results were organized into narratives and themes and discussed as shown below:

- “Less involvement of stakeholders in decision making;
- Inadequate teaching and learning resources;
- Teachers not adequately motivated;
- Inadequate infrastructure leading to overcrowding in classrooms and dormitories;
- Inadequate funds to run the school;

- Inconsistencies of the SHS time table as well as overburdening of teachers;
- Enrolling students from JHS with poor grades due to FSHS;
- Lack of teachers for some specific subjects; and

- Delay in the supply of food stuff to schools and delay in the supply of exercise books/textbooks to schools”. According to Lezotte (2001), family and community involvement is a general term used to describe a myriad of activities, projects, and programs that bring parents, businesses, and other stakeholders together to support student learning and schools. Families and other adults can be involved in the education of young people through a variety of activities that demonstrate the importance of education and show support and encouragement of students learning.

Research Question Four: What are the policy measures needed for the improvement of quality of Free Senior High Education in the Tamale Metropolis? To meet this objective, students and teachers were required to state their level of agreement or disagreement on a four-point Likert scale type ranging from “to no extent to a very high extent”. The results were discussed using percentages and frequency in tables 10 and 11 below:

Table 10: Students suggestions to improve FSHS education policy (n=375)

Statement	To No Extent N (%)	To Some Extent N (%)	To a High Extent N (%)	To a Very High Extent N (%)
More teachers are needed due to FSHS.	14 (3.7)	45 (12.0)	98 (26.1)	218 (58.1)
Motivate teachers by increasing salary and other incentives.	18 (4.8)	70 (18.7)	104 (27.7)	183 (48.8)
Provide adequate and quality teaching and learning resources.	10 (2.7)	18 (4.8)	78 (20.8)	269 (71.7)
Put more security measures to ensure secured learning environment.	11 (2.9)	47 (12.5)	117 (31.2)	200 (53.3)
Provide adequate physical facilities (e.g. good building, spacious classrooms, etc.).	9 (2.4)	13 (3.5)	86 (22.9)	267 (71.2)
Creating an enjoyable and interesting school environment.	11 (2.9)	45 (12.0)	122 (32.5)	197 (52.5)
More involvement of all school stakeholders in decision.	14 (3.7)	77 (20.5)	141 (37.6)	142 (38.2)
Students should be involved in decisions about things that affect them in school.	9(2.4)	22 (4.8)	95 (25.3)	249 (66.4)
Teachers should have subject specific knowledge.	4 (1.1)	18 (4.8)	95 (25.3)	258 (68.8)
Teachers should demonstrate a great sense of commitment.	19 (5.1)	30 (8.0)	138 (36.8)	188 (50.1)

Encourage school-parent-community relationships.	16 (4.3)	61 (16.3)	133 (46.1)	125 (33.3)
There should be effective monitoring and supervision by authorities.	8 (2.1)	24 (6.4)	102 (27.2)	241 (64.3)
There should be effective guidance and counselling in schools.	15 (4.0)	19 (5.1)	111 (29.6)	230 (61.3)
Authorities should put in place effective school discipline policies.	13 (3.5)	44 (11.7)	145 (38.7)	173 (46.1)
There should be effective school leadership.	9 (2.4)	34 (9.1)	164 (43.7)	168 (44.8)
Authorities should promote effective communication in the school.	10 (2.7)	33 (8.8)	147 (39.2)	185 (49.3)

Source: Field data, May 2021



Table 11: Teacher's suggestions to improve FSHS education policy (n=151)

Statement	To No Extent N (%)	To Some Extent N (%)	To a High Extent N (%)	To a Very High Extent N (%)
More teachers are needed due to FSHS.	1 (.7)	52 (34.4)	53 (35.1)	45 (29.8)
Motivate teachers by increasing salary and other incentives.	1 (.7)	4 (2.6)	59 (39.1)	87 (57.6)
Provide adequate and quality teaching and learning resources.	1 (.7)	8 (5.3)	44 (29.1)	98 (64.9)
Put more security measures to ensure secured learning environment.	5 (3.3)	38 (25.2)	56 (37.1)	52 (34.4)
Provide adequate physical facilities (e.g. good building, spacious classrooms, etc.).	1 (.7)	9 (6.0)	40 (26.5)	101 (66.9)
Creating an enjoyable and interesting school environment.	0 (0)	17 (11.3)	66 (43.7)	68 (45.0)
More involvement of school stakeholders in decision.	1 (.7)	24 (15.9)	43 (28.5)	83 (55.0)
Students should be involved in decisions about things that affect them in school.	2 (1.3)	42 (27.8)	54 (35.8)	53 (35.1)
Teachers should have subject specific Knowledge.	0 (0)	11 (7.3)	52 (34.4)	88 (58.3)
Encourage school-parent-community relationships.	1 (.7)	19 (12.6)	68 (45.0)	63 (44.7)
Teachers should demonstrate a great sense of commitment.	0 (0)	6 (4.0)	57 (37.7)	88 (58.3)
There should be effective monitoring and supervision by authorities.	0 (0)	13 (8.6)	55 (36.4)	83 (55.0)
There should be effective	0 (0)	16 (10.6)	42 (27.8)	93 (61.6)

guidance and counselling
in schools.

Authorities should put in place effective school discipline policies.	0 (0)	1 (.7)	44 (29.1)	106 (70.2)
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There should be effective school leadership.	0 (0)	7 (4.6)	52 (34.4)	92 (60.9)
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Authorities should promote effective communication in the school.	0 (0)	8 (5.3)	67 (44.4)	76 (50.3)
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Source: Field data, May 2021.

From tables 10 and 11, students 58.1% and teachers 35.1% to a very high extent and to a high extent agreed with the statement that more teachers are needed. This finding was supported by all the heads and some teachers' when they were contacted. They reported the following: "Large numbers burden management and teachers/staff, management has been difficult, teachers are overburdened in areas that teachers are still lacked, in my school (one of the heads) adequacy of teachers was an issue but it has been improving with time".

On the statement motivate teachers by increasing salary and other incentives, a majority 48.8% of students and a majority 57.6% of teachers to a very high extent agreed with the notion. It could be inferred from the finding that a highly motivated person may put in the maximum effort in his or her job. This was supported by Ofoegbu (2004), who linked poor academic achievement of students to poor teachers' achievement in terms of accomplishing the teaching task, negative attitudes to work and poor teaching habits which have been attributed to poor motivation. Corroborating this position, Lockheed and Verspoor (2001) asserted that lack of motivation and professional commitment on the part of teachers leads to poor attendance and

unprofessional attitudes towards pupils which in turn may affect the achievement of students academically.

A study carried out in the United States by Ingersol (2003) on teacher motivation showed that in the United States, about 50% of teachers left the profession within their first five years of teaching. The reasons for dissatisfaction included (a) inadequate administrative support, (b) poor salary, and (c) poor opportunity for professional advancement. Eller (2000) contended that raising teachers' salary in the state of Texas was a significant step in boosting teacher retention. Therefore, lack of motivation in a teacher's job signals an iceberg in terms of how committed a teacher is to his or her job, especially in helping slow learners to come up. When a teacher cannot meet his or her daily basic needs, he/she is forced to look for other ways to fill the gap. For example, they may seek a part time job in other schools, which means the teacher will only fill the school timetable but show little commitment, poor lesson preparation or low-class input. All these work to the disadvantage of the learners.

Furthermore, students 71.7% and teachers 64.9% agreed that to a very high extent provision of adequate and quality teaching and learning resources could lead to improvement in quality attainment as far as the FSHS education policy is concerned. Similarly, a majority of students 53.3% and teachers 37.1% agreed that to a high extent putting more security measures to ensure secured learning environment was necessary. Moreover, students 52.5% and teachers 45.0% agreed that to a very high extent creating an enjoyable and interesting school environment could positively impact quality attainment. It

could be deduced from the findings that quality attainment may well be met if these elements are taken into consideration.

Taylor, Scotter, and Coulson (2007) argue that teachers at all levels utilize a variety of instructional materials such as textbooks, presentations and hand-outs to enhance the quality of their lessons. As a result, the quality of those materials directly impact the quality of teaching. Thus, knowing how to find the best instructional materials is a valuable skill for a teacher to have.

Jennifer (2010) also affirms that teachers normally use chalk and chalkboard as visual aids to accompany lessons. Nevertheless, a student's learning environment can positively or negatively impact his or her ability to learn. However, the availability of visual aids, books, supplies, games and technology support can improve the learning environment by facilitating the learning and teaching process. So, experience shows that unavailability of such materials can make learning and teaching impossible in some circumstances.

Caine and Caine (1991) have observed that the learning environment should be safe, challenging, comfortable, social, and enriched for students. Again, according to the American Federation of Teachers, AFT (2008) unhealthy and unsafe school conditions make it difficult for students to concentrate, for teachers to teach, and for staff to do their jobs. In addition, the empirical study by Cohen (2006) says that the school environment affects more than just academic performance; it influences students' emotions and health behaviours as well. Cohen adds that a positive school environment enhances motivation, increases educational aspirations and improves attendance and retention. On the other hand, an unhealthy school environment

in which rules are unclear or arbitrary, bullying is accepted if not condoned, and teacher attitudes are indifferent, hostile or unnecessarily punitive is likely to cause high absenteeism, misbehaviour and interpersonal aggression. Gonder and Hynes (1994) add that a favourable school environment reduces dropout.

From tables 10 and 11, the statement more involvement of school stakeholders, students 38.2% and teachers 55.0% agreed with the notion. While at the same time, a majority of students 66.4% and teachers 35.8% agreed that students should be involved in decisions about things that affect them in school. In addition, students 46.1% and teachers 45.0% agreed with the statement encourage school-parent-community relationships. These findings appear to support a growing concern that parents and the community are important in schools, especially as they contribute to education through their participation in educational activities.

A study by the Organization for Economic Cooperation and Development, OECD (2001) shows that learning is no longer restricted to what goes on within the school walls. It is now universally accepted that schools must relate well to their surrounding communities if they are to be effective. The school's role needs to be related directly to the changes that are taking place around it. OECD emphasises that the decentralization of power to the school itself increases the pressure for new forms of governance and partnership, including shared decision-making with teachers, parents and members of the community.

Head teachers and other agencies now need to become coalition builders as much as managers; the internal aspects of schools are no longer as precise as they once were. OECD adds that, the schools' functions are being

redefined as they become multi-service establishments, incorporating child care and pre-school as well as formal schooling and recreational services. In fact, these added functions have become even more important as the social capital generated by families, neighbourhoods, communities and other networks tend to shrink in many countries (OECD, 2001).

The relationships between the school and the community are important to the growth and development of students. The school as a social institution acts as an instrument of society for teaching and learning of students. A Transparency International report (2011) gathered from 8,500 educators and parents in Ghana, Madagascar, Morocco, Niger, Senegal, Sierra Leone and Uganda, found that lack of parents' involvement, especially as an overseer of government activities, leads to enormous corruption.

Again, on the statement that teachers should have subject specific knowledge, a majority of students 68.8% and teachers 58.3% agreed that to a very high extent this view is relevant. Also, a majority of students 50.1% and teachers 58.3% agreed to a very high extent that teachers should demonstrate a great sense of commitment. These findings meant they could cause a difference in students' academic attainment.

Rice (2003) a teacher with higher qualification in a given subject is most likely to ask higher level cognitively based questions; thus, helping the students to learn and perform better. The findings again supported the research findings of Darling-Hammond (2000), Abuseji (2007) and Greenwald, Hedges and Laine (1996) who found that teacher quality characteristics such as certification status and degree in subject to be taught are very significant and positively correlated with subject outcomes in science and mathematics.

Furthermore, Firestone and Pannel (1993) maintained that commitment to teaching is an effective route to the development of teaching practice. Commitment to teaching gives teachers the responsibility to explore constantly new ways of teaching to develop learning experiences of students. Teachers with commitment have the potential to provide students innovative instructional strategies that can lead to better achievement. Moreover, committed teachers through encouraging students to involve in school activities can create zealous learners. Teacher commitment is essential to high quality teaching and it includes commitment to the school, students, career continuance, professional knowledge base and teaching profession (Crosswell & Elliott, 2004).

From tables 10 and 11, a majority of students 64.3% and teachers 55.0% agreed that to a very high extent there should be effective monitoring and supervision by authorities. Similarly, a majority of students 61.3% and that of teachers 61.6% agreed that to a very high extent there should be effective guidance and counselling programmes in schools. Not all, a majority of students 46.1% and teachers 70.2% strongly supported that to a very high extent authorities should put in place effective school discipline policies. Also, a majority of students 44.8% and teachers 60.9% concurred that to a very high extent there should be effective school leadership. Lastly but not the least, a majority of students 49.3% and teachers 50.3% to a very high extent agreed with the statement that authorities should promote effective communication in schools. These findings may suggest that quality attainment is strongly correlated with the statements above.

The findings were consistent with Etsey, Amedahe and Edjah (2004) in a study of 60 schools from peri-urban (29 schools) and rural (31 schools) areas in Ghana found that academic performance was better in private schools than public schools because of more effective supervision of work. According to Etsey (2005) if circuit supervisors are more regular in schools, this would put the teachers on the alert to be more regular and early in school. This would forestall teacher absenteeism and improve teaching in the schools. If teachers are present always following regular visits of circuit supervisors, pupils would be challenged to change their attitudes toward school.

In addition, Calvani (2001) defines monitoring as a planning and management tool which provides the school management with regular and continuous feedback that can be used to make decisions and manage the educational activities more successfully and plan for better activities in the future. He emphasises that, monitoring is a crucial part of management that can be carried out to observe the progress of the educational program implementation and to ensure that input process is proceeding as planned and external factors are well controlled. Moreover, monitoring is also a tool to identify problems, which may occur during programme implementation so that corrective measures can be taken before the programme is adversely affected.

The findings also concurred with Mitchell (1995), educational counselling focuses on maximizing a student's scholastic achievement and educational opportunities. It is meant for all categories of students; brilliant or weak. The brilliant is urged to do more in his/her academic work, while the weak is also supported to learn better through remedial classes, the use of workable time table among other learning strategies. On the contrary, Okobia,

and Okorodudu, (2004) on the concept of guidance and counselling in Benin City in Nigeria revealed that there was no statistically significant difference between students who had undergone counseling treatment and those had not. They however added that even though there were no statistically significant differences, there existed some marginal difference in the mean scores of the two groups.

The finding is also supported by Gitome et al. (2013) where there is good discipline, there is improved academic performance. In other words, discipline is vital for students' academic performance, and it is necessary for effective school management and accomplishment of its goals.

The findings equally corroborated with a study in England by Jacobson (2011) that school and leadership effects are shown to influence changes in academic outcomes via their effects on teachers and teaching quality. Good leadership promotes a favourable school climate and culture that emphasises high expectations and academic outcomes. Moreover, Fullan (2001) contends that the quality of leadership matters in determining the motivation of teachers and the quality of their teaching, which subsequently effects student performance. Silns and Mulford (2002) further argue that if schools are to become better at improving student learning they must nurture opportunities for teachers to innovate, develop and learn. In other words, student outcomes are more likely to improve when leadership is distributed throughout the school and its community; when teachers are empowered their self-esteem and importance are uplifted (Crowther, 2000).

The findings are also supported by Covey (1990) cited by Osterman (1993) that in a school, a leader should first seek to understand, then to be

understood. Covey and many others believe that to interact effectively with any group for example, teachers, students, community members, even family members, a school administrator needs first to understand where the person is coming from.

Osterman adds that the greatest need of a human being is psychological survival, to be understood, to be affirmed, to be validated and to be appreciated. Once that vital need is met, the school administrator can then focus on influencing or problem solving. The inverse is also true. School administrators who focus on communicating their own “rightness” become isolated and ineffectual. Another supportive argument related to communication is the teaching-learning communication process. Teaching - learning is in essence a communicative process. Since communication is primarily done through language, the language of instruction can be an enabling or disabling factor in the process, depending on how familiar both the teacher and the learner are with it (Osterman, 1993). Brock-Utne (2007) provides examples showing that African students are able to express themselves well and creatively if they are allowed to use a familiar African language, not to mention some teachers who may also face the same language problems.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The preceding chapter presented the results and discussions on the impact of Free Senior High Education on access and quality of education delivery in the Tamale Metropolis. This chapter highlights the findings of the study, conclusions and implications of the study findings. It also provides recommendations on what needs to be done to improve the quality of education delivery since the introduction of Free Senior High Education Policy.

Summary

The purpose of the study was to find out how the implementation of Free Senior High Education in Ghana, with specific focus in the Tamale Metropolis has impacted on access and quality of education delivery. The participants comprised 4 heads, 151 teachers and 375 students from 4 Senior High Schools in the Tamale Metropolis. The following is a summary of the main study findings.

The study established that there has been a marginal increased in the number of students accessing Senior High Education since the FSHS Policy was introduced in the 2017/2018 academic year. This is in line with the statement “students who before did not get an opportunity to enroll in school now have been enrolled”. This finding is corroborated by enrollment data from the Tamale Metropolitan Education Office.

The study also found that, sanitary facilities are inadequate, the classes available are few, leading to overcrowded classes. Besides, textbooks are very

few for all the subjects making students unable to complete assignments in time. The school library is too small to accommodate all the students and overcrowding contributes to noise and poor class control. There is irregular reporting of students since others come in the middle of the semester.

Teachers are unable to mark exercises given and offer individual attention to students who are unable to perform well academically. Teachers do not have the time to prepare and use enough teaching and learning materials to facilitate teaching and learning.

Teacher commitment to work, their relationship with their students as well as their regularity, to school and punctuality to class and continuous professional development to class are important elements if they are to help their students to do well. However, continuous teacher academic and students' regular absenteeism in school can negatively impact learning. It was further observed that the government has not allocated enough funds towards FSHS. FSHS funds are in most cases disbursed late and in the face of increased prices in fuel and food, the schools face challenges.

However, the respondents disagreed that the schools have been forced to ask students to report to school with desks since those available cannot cater for them. This suggests that, even though facilities may be stretched, the government is leaving no stone unturned to ensuring that all classrooms are adequately furnished. In addition, it was found that the majority of students and teachers reported that parents/guardians should be allowed to contribute to the day to day running of schools.

As part of the challenges affecting the FSHS Education Policy delivery, majority of the teachers and the four heads indicated that there is late and inadequate supply of food and other related items and that the double-

track system is being a great setback. Additionally, the whole sale promotion of students from one grade to another is not helpful to some students and the quality of educational materials being delivered to schools is a challenge. It was also brought to the fore that the supply of textbooks and the school infrastructure are inadequate for the teeming numbers of students. Issues of abuse of the opportunity (FSHS) by some non-serious students and the non-involvement of parents/guardians in the running of schools since the introduction of the FSHS Policy in 2017 was a bother. Finally, there has been high students-teacher classroom ratio since 2017.

On suggestions to improve the FSHS Education Policy in the Tamale Metropolis, the study established that the majority of the respondents that is teachers, students and the four heads agreed to a very high extent that more teachers are needed due to FSHS. They indicated that the teachers need to be motivated through the increment of their salaries and other incentives. More important, there is the need to provide adequate and quality teaching and learning resources. They also indicated that government should make provision for more security measures to ensure secured learning environment and provide adequate physical facilities. There is also the need to create congenial school environment and involve all school stakeholders in decision making. Again, they pointed out that students should be involved in decisions about things that affect them in school.

Besides, teachers should have subject specific knowledge and demonstrate a great sense of commitment, while steps are taken to encourage school-parent-community relationship. There should be effective monitoring and supervision by authorities. There should be effective guidance and counselling programmes in schools. Authorities should put in place effective school discipline policies. There should be effective school leadership and Authorities should promote effective communication in school. On their part, three of the heads when interviewed recommended that cut off points should be introduced to ensure that only serious students will get the opportunity to be enrolled. In their view, this could encourage students at the basic level to sit up to enable them get good grades. They also recommended for government to recruit more management/administrative staff since those already in the field are few and consequently over burden as a result of the large numbers of students.

Conclusions

Based on the findings of this study, it can be concluded that there has been increased in access and quality in terms of enrolment of students and has therefore given opportunity for those who could not have had the chance to be enrolled. It was established that effective communication and leadership style employed by the heads was good and can lead to the provision of quality education.

The study also found that school environment, effective monitoring and supervision, effective guidance and counselling and teacher commitment to work could positively impact quality delivery of education. It was again found that lack of laboratories, libraries, playing fields and clean water supply

were hindrance to education in the Tamale Metropolis. From the findings, however, there was little involvement of parents/guardians and community members/ leaders in major decisions making and also in the running of the schools.

Therefore, based on the findings of the study, the framework is as appears in Figure 3.

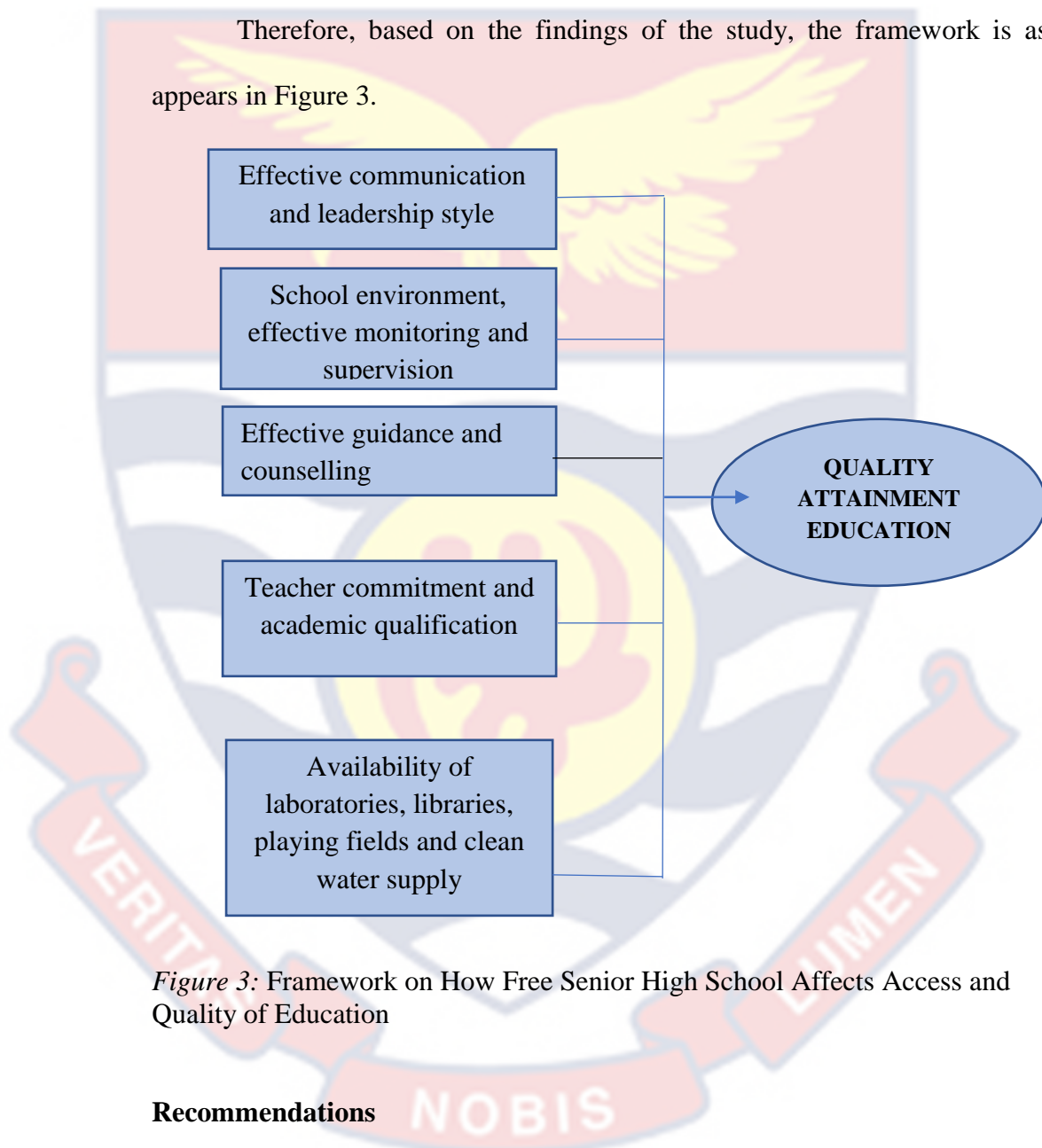


Figure 3: Framework on How Free Senior High School Affects Access and Quality of Education

Recommendations

The government should allocate enough funds and resources to schools to ensure that free senior high education runs smoothly without compromising quality of education. The government should continue to build new schools and also renovate existing ones, and employ more teachers to handle all the

students qualifying for senior high education. The government should consider the reintroduction of parents'/teachers' association (PTA) in schools, especially so when their contributions towards schools' development cannot be overlooked.

Monitoring in schools should be strengthened by authorities and supervisors should be more regular in schools. Regular visits to schools would motivate teachers to be more regular and early school. When students realize that supervisors are regular in visiting schools and teachers are also present always, they would be challenged to change their attitude towards school.

Furthermore, the metropolis should work out incentive packages to increase teachers' motivation to teach in the sub-metro. The teacher must also be interested in what he/she teaches and in the students. If the teacher is not interested in the work itself, he/she can never motivate the students to learn.

In addition, the Tamale Metropolitan Assembly (TMA) has access to common fund from the government for development. It is recommended that part of the fund be allocated to the purchase of text books and other logistics for the schools to complement what the government already has provided.

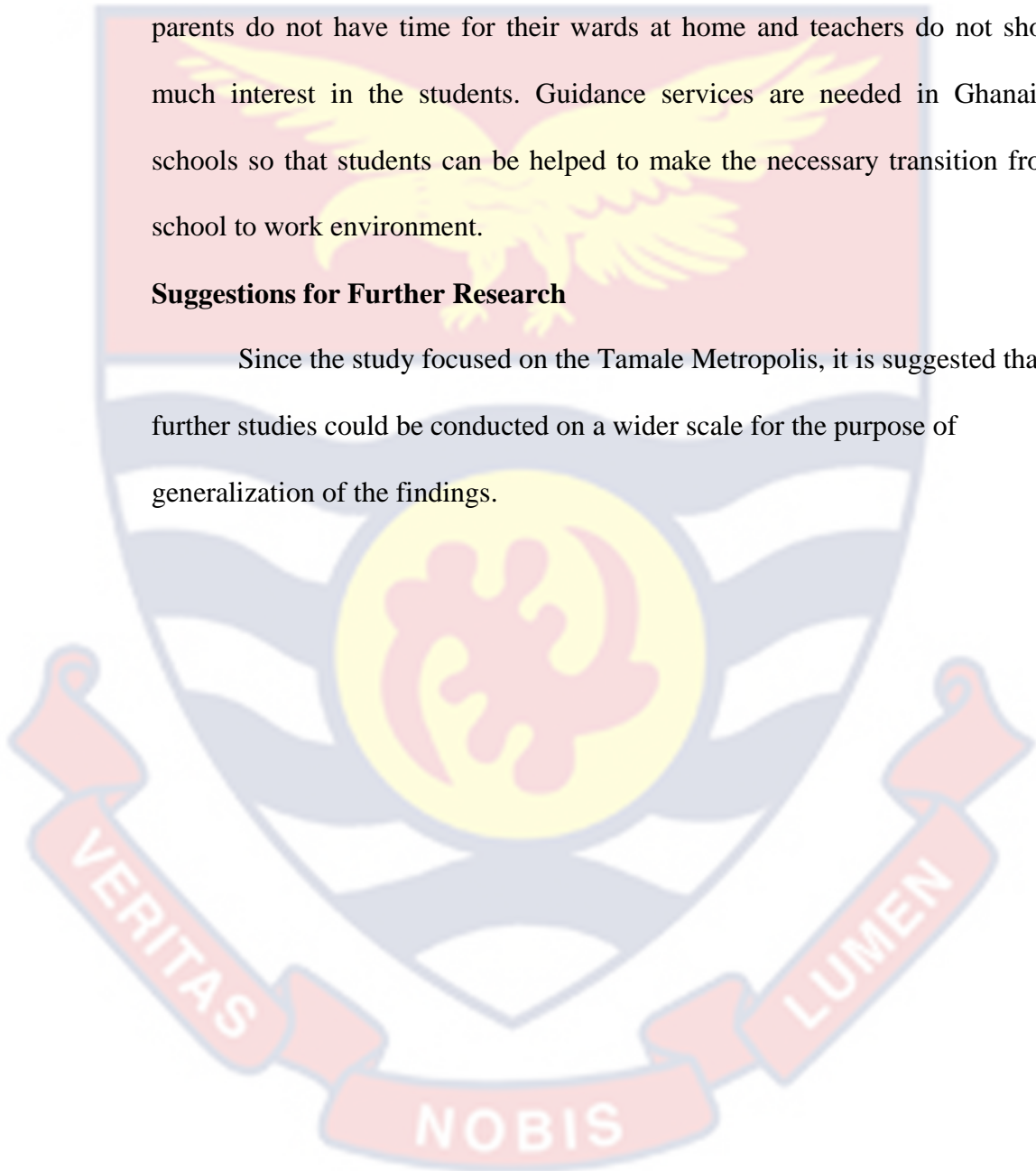
It was also suggested that the major challenges which the stakeholders in education faced were inadequate resources, high number of students in classes, late disbursement of funds to schools, poor and inadequate infrastructure, double-track system and indiscipline in schools. Finally, it was suggested that to improve the provision of quality education, the government should employ more teachers and motivate the practicing ones by paying them well. It should also provide adequate teaching and learning resources, ensure a conducive environment in schools, involve all the stakeholders in decision

making, strengthen monitoring and supervision, promote effective guidance and counselling and provide adequate physical facilities in the schools.

Finally, effective guidance and counselling should be encouraged in schools to meet the needs of students. Students need someone to talk to since parents do not have time for their wards at home and teachers do not show much interest in the students. Guidance services are needed in Ghanaian schools so that students can be helped to make the necessary transition from school to work environment.

Suggestions for Further Research

Since the study focused on the Tamale Metropolis, it is suggested that further studies could be conducted on a wider scale for the purpose of generalization of the findings.



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APPENDICES

APPENDIX A: QUESTIONNAIRE FOR STUDENTS

UNIVERSITY OF CAPE COAST
COLLEGE OF DISTANCE EDUCATION
UNIT OF EDUCATION PROGRAMMES
QUESTIONNAIRE FOR STUDENTS

Dear Sir/Madam,

I am a student of the University of Cape Coast Ghana pursuing a Master of Philosophy Degree in Educational Psychology. As a part of the academic requirements, I am conducting research on: **Impact of Free Senior High Education on Access and Quality Education in Public SHS: A Case in the Tamale Metropolis**. You are kindly asked to share your knowledge and experiences as far as this study is concerned.

Your answers or responses will be used for research purposes only and your identity would be kept confidential. Please, read and answer the questions by putting a tick (✓) within the provided brackets and writing where required.

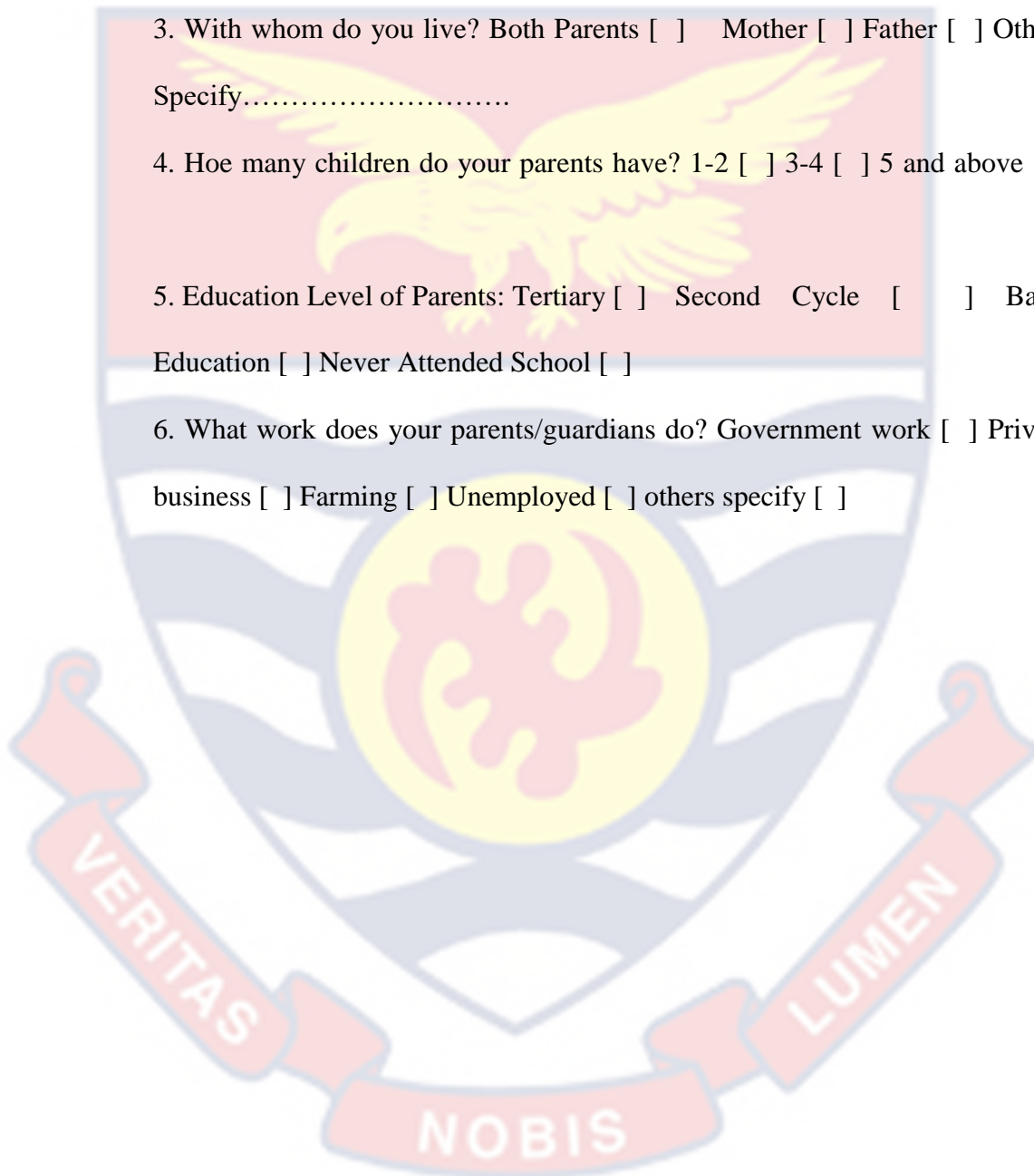
Thank you for your co-operation.

Yours faithfully,

Martin Dery

SECTION A: DEMOGRAPHIC INFORMATION

1. Gender: Male [] Female []
2. Age range: 12-15 years [] 16-19 years [] 20-23 years [] 24 and above []
3. With whom do you live? Both Parents [] Mother [] Father [] Others Specify.....
4. Hoe many children do your parents have? 1-2 [] 3-4 [] 5 and above []
5. Education Level of Parents: Tertiary [] Second Cycle [] Basic Education [] Never Attended School []
6. What work does your parents/guardians do? Government work [] Private business [] Farming [] Unemployed [] others specify []



**SECTION B: QUALITY OF EDUCATION DELIVERY AFTER
IMPLEMENTATION OF FSHS POLICY IN THE TAMALE
METROPOLIS**

1. You are kindly requested to state your degree of agreement or disagreement in relation to each of the given items on a 4-point scale.

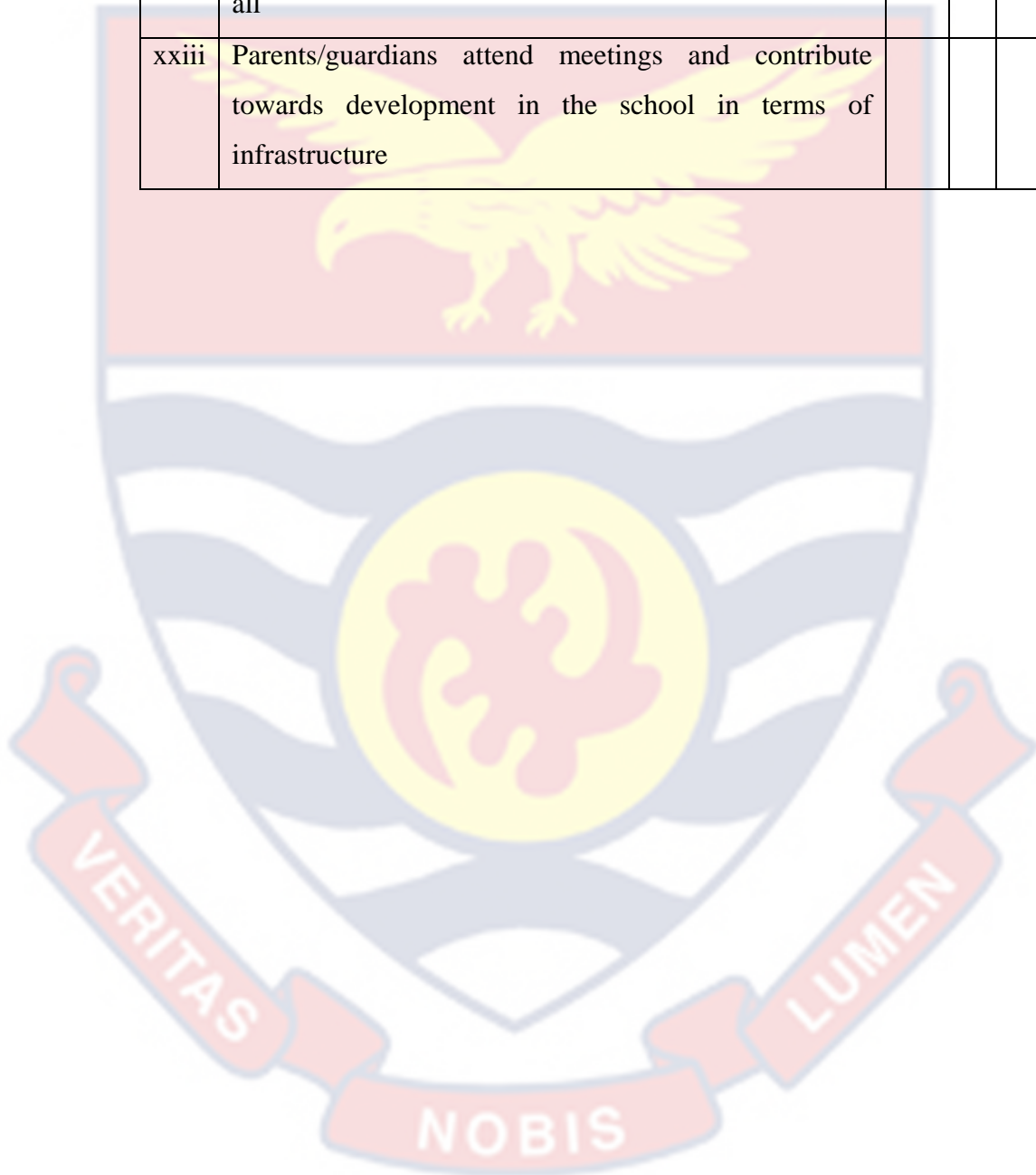
Insert a tick (✓) in the most appropriate column. Use the key below when responding.

SA=Strongly Agree, A= Agree, D= Disagree, SD= Strongly Disagree

S/N	Quality of education attainment	SA	A	D	SD
i	Students who before did not get an opportunity to enroll in school now have been enrolled, stretching the resources for those more suited for senior high school				
ii	Due to FSHS, sanitary facilities are inadequate. This makes students take longer breaks which may lead to syllabus incompleteness				
iii.	The classes available are few, leading to overcrowded classes and compromised learning				
iv.	Text books are very few for all the subjects making students unable to complete assignments in time				
v.	The school library is too small to accommodate all the students, thus standards of learning have gone down				
vi.	Overcrowding contributes to noise and poor class control				
vii.	There is irregular reporting of students since others come in the middle of the semester as a result of FSHS, thus their learning is compromised				

viii	The school has been forced to ask students to report to school with desks since those available cannot cater for them, thus compromising their learning				
ix.	Teachers are unable to mark exercises given				
x.	Teachers are unable to offer individual attention				
xi.	Ability to prepare and use enough teaching and learning materials can help improve learning outcomes				
xii.	Teacher commitment to work is an important element that can help improve learning outcomes				
xiii.	Teacher-student classroom relationship can help improve learning outcomes				
xiv.	Teacher regularity in school is an important element that can help improve learning outcomes				
xv.	Opportunities for continues teacher academic and professional development can help improve learning outcomes				
xvi.	Students' regular absenteeism in school can negatively impact learning outcomes				
xvii	Students' regularity in school can help improve learning outcomes				
xviii	The government has not allocated enough funds towards FSHS, thus compromising the quality of education				
xix	The government did not consider funding on-going projects before the implementation of FSHS				
xx	SHS funds are in most cases disbursed late, thus the school is unable to procure teaching-learning resources in time				

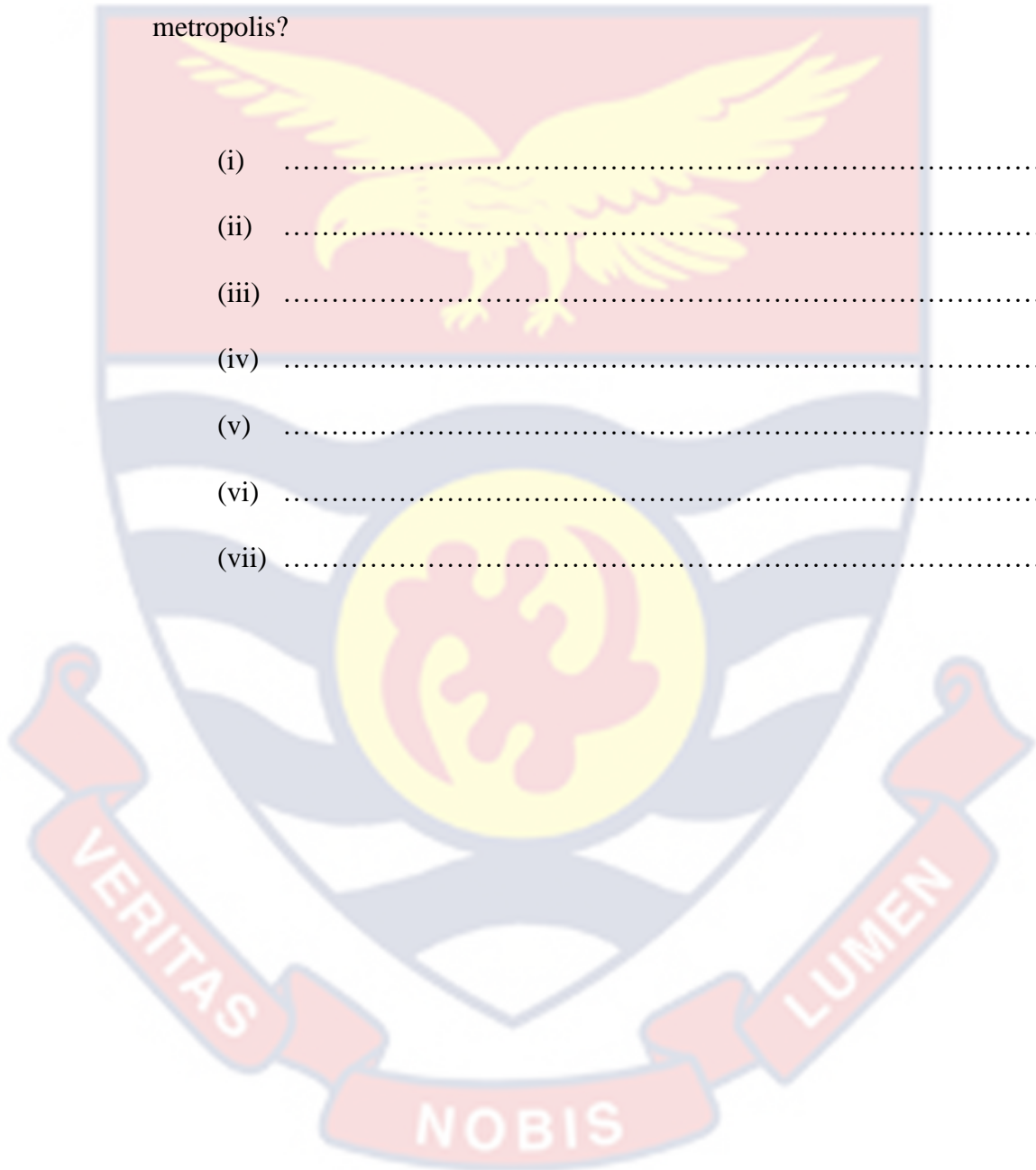
xxi	In the face of increased prices in fuel and food, the government has not adjusted the FSHS funds, thus education quality is compromised				
xxii	Parents/guardians do not contribute towards FSHS at all				
xxiii	Parents/guardians attend meetings and contribute towards development in the school in terms of infrastructure				



**SECTION C: CHALLENGES AFFECTING THE SUCCESSFUL
IMPLEMENTATION OF THE FSHS**

8. In your view, what do you consider to be the challenges affecting the successful implementation of the FSHS education policy in the Tamale metropolis?

- (i)
- (ii)
- (iii)
- (iv)
- (v)
- (vi)
- (vii)



**SECTION D: SUGGESTIONS TO IMPROVE THE SUCCESSFUL
IMPLEMENTATION OF FSHS EDUCATION POLICY IN THE
TAMALE METROPOLIS**

9. Thinking about provision of quality education in your school, to what extent do you agree with the following statements as the most effective ways and suggestions that could be taken to improve provision of quality education? For each statement, please tick [\checkmark] in the appropriate box.

S/N.	Statement	To No Extent	To Some Extent	To a High Extent	To a Very High Extent
i	More teachers are needed due to FSHS				
ii	Motivate teachers by increasing salary and other incentives.				
iii	Provide adequate and quality teaching and learning resources.				
iv	Put more security measures to ensure secured learning environment.				
v	Provide adequate physical facilities (e.g., good building, spacious classrooms, etc.)				
vi	Creating an enjoyable and interesting school environment				
vii	More involvement of all school stakeholders in decision making				

viii	Students should be involved in decisions about things that affect them in school				
ix	Teachers should have subject specific knowledge and know their craft				
x	Encourage school-parent-community relationships				
xi	Teachers should demonstrate a great sense of commitment				
xii	There should be effective monitoring and supervision by authorities				
xiii	There should be effective guidance and counselling programmes in schools				
xiv	Authorities should put in place effective school discipline policies				
xv	There should be effective school leadership				
xvi	Authorities should promote effective communication in the school				

Thank you for the information

APPENDIX B: QUESTIONNAIRE FOR TEACHERS**QUESTIONNAIRE FOR TEACHERS**

Dear Sir/Madam,

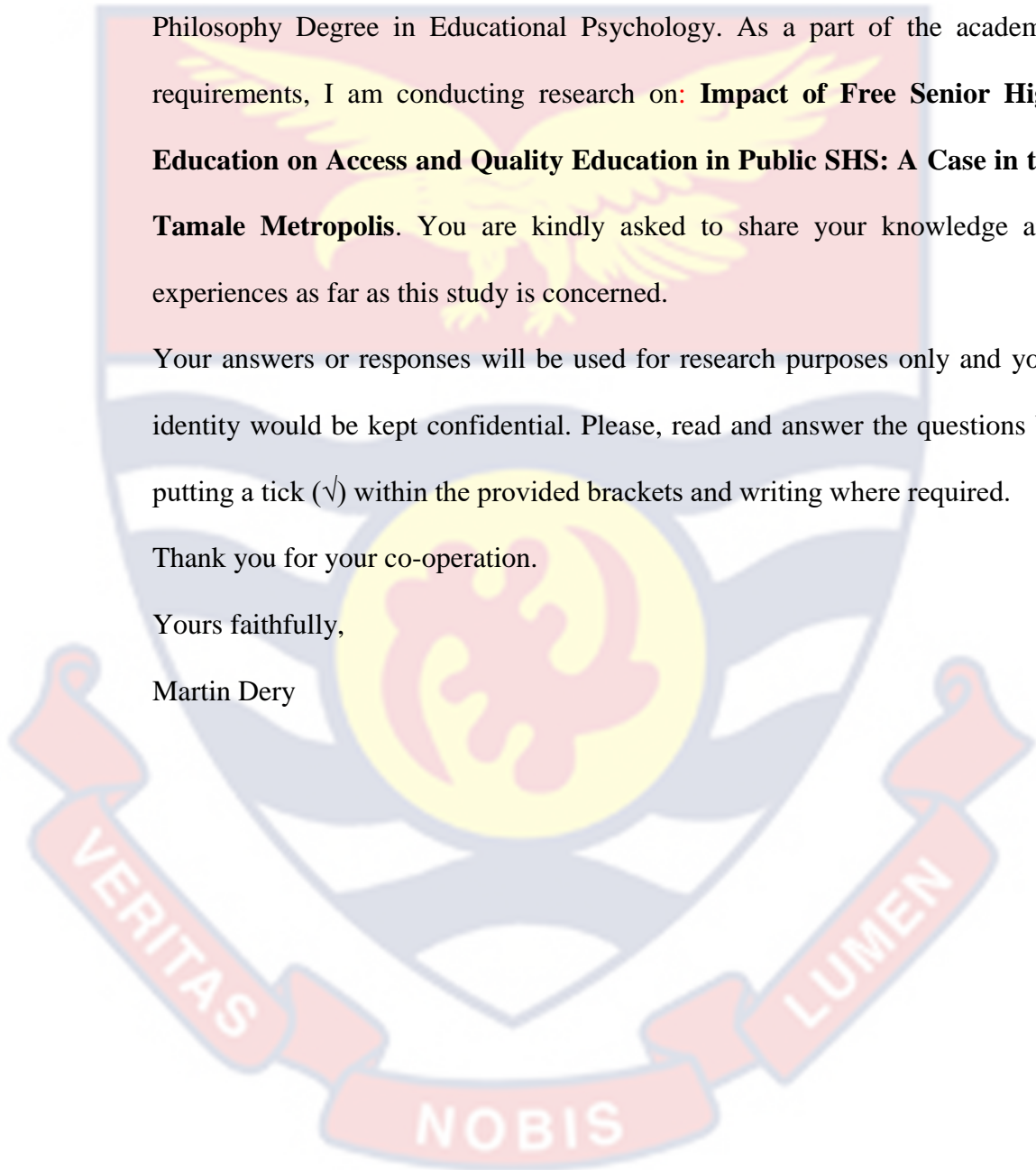
I am a student of the University of Cape Coast Ghana pursuing a Master of Philosophy Degree in Educational Psychology. As a part of the academic requirements, I am conducting research on: **Impact of Free Senior High Education on Access and Quality Education in Public SHS: A Case in the Tamale Metropolis**. You are kindly asked to share your knowledge and experiences as far as this study is concerned.

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Thank you for your co-operation.

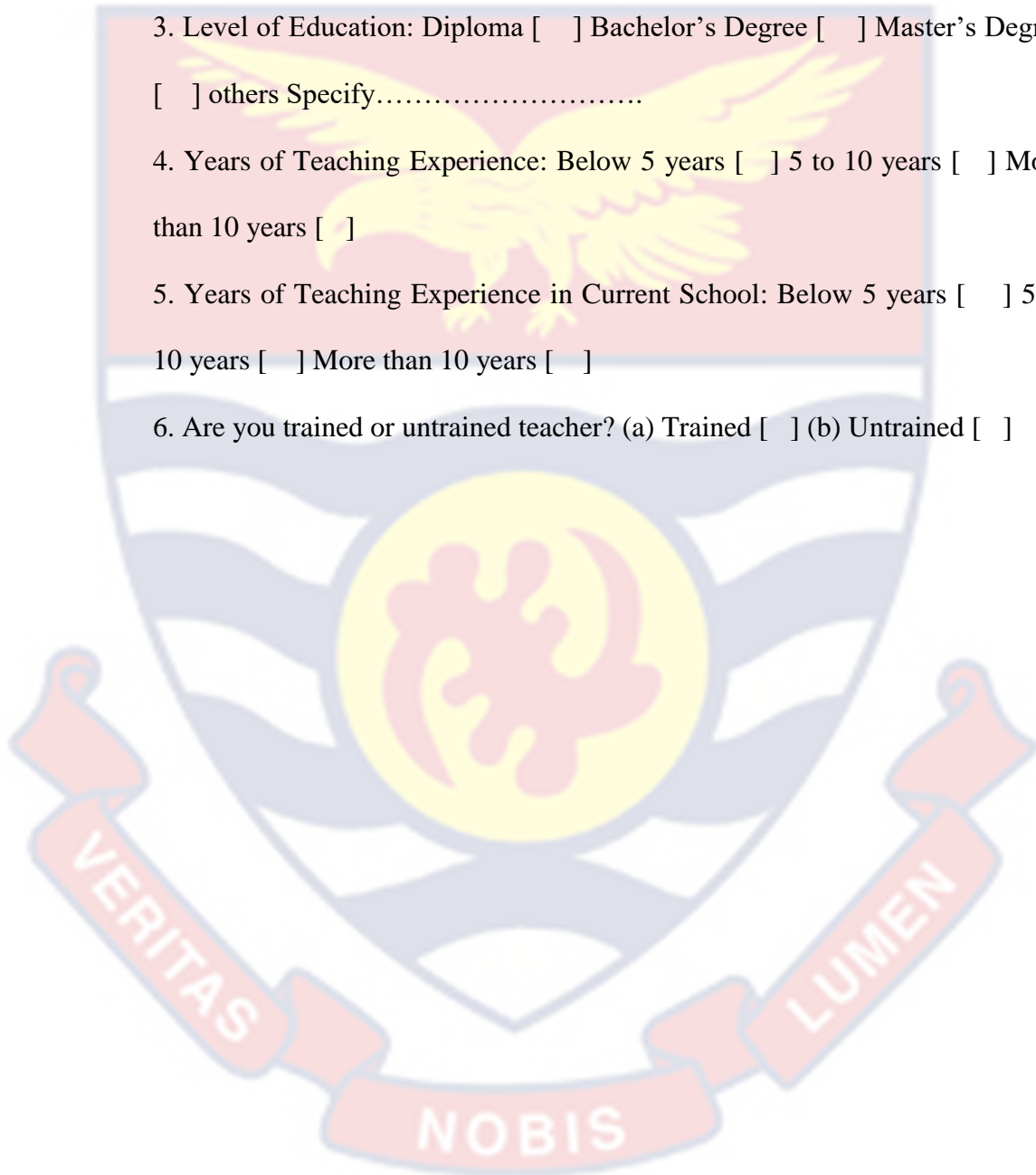
Yours faithfully,

Martin Dery



SECTION A: DEMOGRAPHIC INFORMATION

1. Gender: Male [] Female []
2. Age range (in years): Between 20-29 [] Between 30-39 [] Between 40-49 [] 50 or more []
3. Level of Education: Diploma [] Bachelor's Degree [] Master's Degree [] others Specify.....
4. Years of Teaching Experience: Below 5 years [] 5 to 10 years [] More than 10 years []
5. Years of Teaching Experience in Current School: Below 5 years [] 5 to 10 years [] More than 10 years []
6. Are you trained or untrained teacher? (a) Trained [] (b) Untrained []



**SECTION B: QUALITY OF EDUCATION DELIVERY AFTER
IMPLEMENTATION OF FSHS POLICY IN THE TAMALE
METROPOLIS**

2. You are kindly requested to state your degree of agreement or disagreement in relation to each of the given items on a 4-point scale.

Insert a tick (✓) in the most appropriate column. Use the key below when responding.

SA=Strongly Agree, A= Agree, D= Disagree, SD= Strongly Disagree

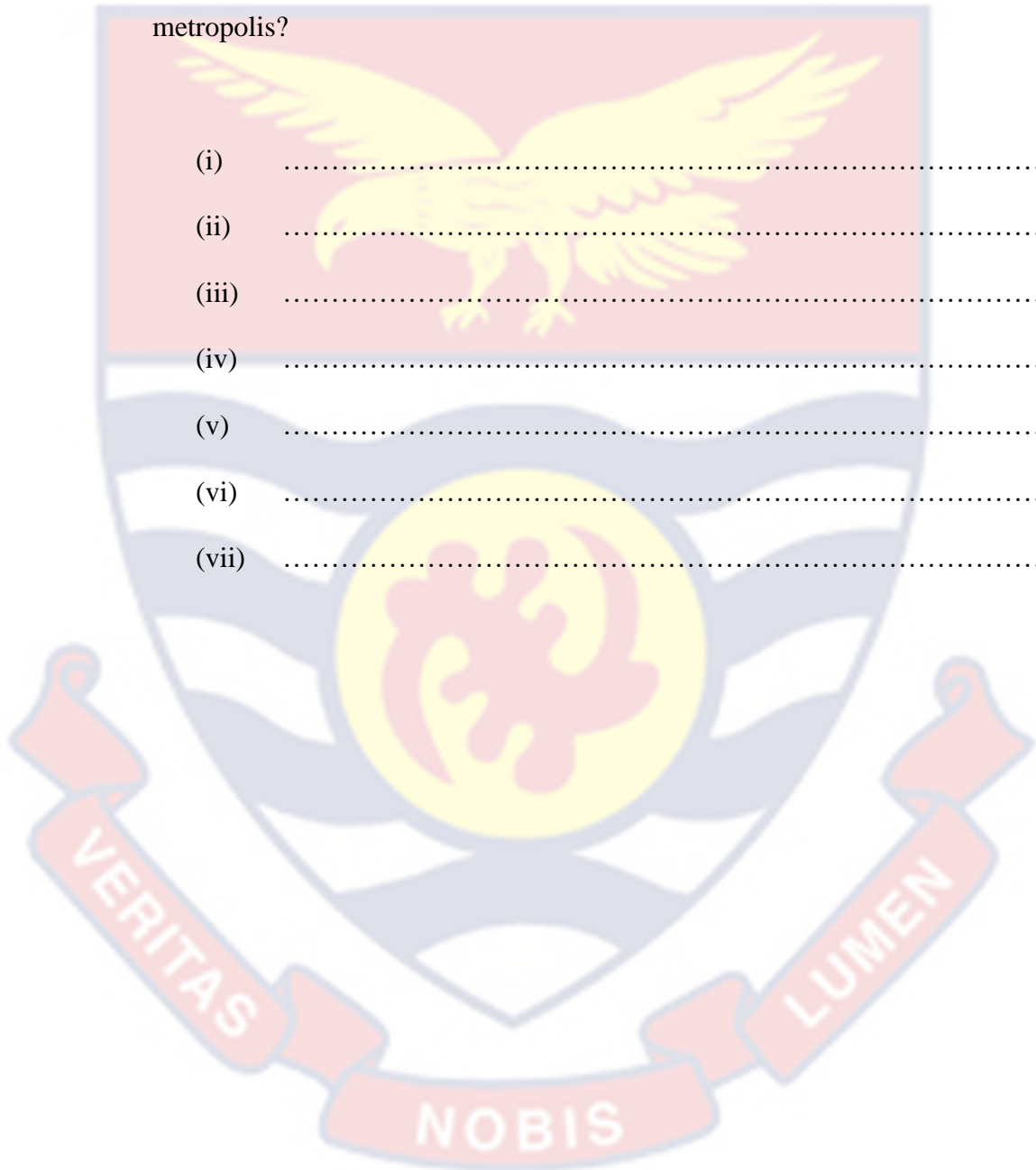
S/N	Quality of education attainment	SA	A	D	SD
i	Students who before did not get an opportunity to enroll in school now have been enrolled, stretching the resources for those more suited for senior high school				
ii	Due to FSHS, sanitary facilities are inadequate. This makes students take longer breaks which may lead to syllabus incompleteness				
iii.	The classes available are few, leading to overcrowded classes and compromised learning				
iv.	Text books are very few for all the subjects making students unable to complete assignments in time				
v.	The school library is too small to accommodate all the students, thus standards of learning have gone down				
vi.	Overcrowding contributes to noise and poor class control				
vii.	There is irregular reporting of students since others come in the middle of the semester as a result of FSHS, thus their learning is compromised				
viii	The school has been forced to ask students to report to school with desks since those available cannot cater for them, thus compromising their learning				
ix.	Teachers are unable to mark exercises given				
x.	Teachers are unable to offer individual attention				

xi.	Ability to prepare and use enough teaching and learning materials can help improve learning outcomes				
xii.	Teacher commitment to work is an important element that can help improve learning outcomes				
xiii.	Teacher-student classroom relationship can help improve learning outcomes				
xiv.	Teacher regularity in school is an important element that can help improve learning outcomes				
xv.	Opportunities for continues teacher academic and professional development can help improve learning outcomes				
xvi.	Students' regular absenteeism in school can negatively impact learning outcomes				
xvii.	Students' regularity in school can help improve learning outcomes				
xviii.	The government has not allocated enough funds towards FSHS, thus compromising the quality of education				
xix.	The government did not consider funding on-going projects before the implementation of FSHS				
xx.	SHS funds are in most cases disbursed late, thus the school is unable to procure teaching-learning resources in time				
xxi.	In the face of increased prices in fuel and food, the government has not adjusted the FSHS funds, thus education quality is compromised				
xxii.	Parents/guardians do not contribute towards FSHS at all				
xxiii.	Parents/guardians attend meetings and contribute towards development in the school in terms of infrastructure				

**SECTION C: CHALLENGES AFFECTING THE SUCCESSFUL
IMPLEMENTATION OF THE FSHS**

8. In your view, what do you consider to be the challenges affecting the successful implementation of the FSHS education policy in the Tamale metropolis?

- (i)
- (ii)
- (iii)
- (iv)
- (v)
- (vi)
- (vii)



**SECTION D: SUGGESTIONS TO IMPROVE THE SUCCESSFUL
IMPLEMENTATION OF FSHS EDUCATION POLICY IN THE
TAMALE METROPOLIS**

9. Thinking about provision of quality education in your school, to what extent do you agree with the following statements as the most effective ways and suggestions that could be taken to improve provision of quality education? For each statement, please tick [\checkmark] in the appropriate box.

S/N.	Statement	To No Extent	To Some Extent	To a High Extent	To a Very High Extent
i	More teachers are needed due to FSHS				
ii	Motivate teachers by increasing salary and other incentives.				
iii	Provide adequate and quality teaching and learning resources.				
iv	Put more security measures to ensure secured learning environment.				
v	Provide adequate physical facilities (e.g., good building, spacious classrooms, etc.)				
vi	Creating an enjoyable and interesting school environment				
vii	More involvement of all school stakeholders in decision making				

viii	Students should be involved in decisions about things that affect them in school				
ix	Teachers should have subject specific knowledge and know their craft				
x	Encourage school-parent-community relationships				
xi	Teachers should demonstrate a great sense of commitment				
xii	There should be effective monitoring and supervision by authorities				
xiii	There should be effective guidance and counselling programmes in schools				
xiv	Authorities should put in place effective school discipline policies				
xv	There should be effective school leadership				
xvi	Authorities should promote effective communication in the school				

10. What other suggestion (s) can you think of?

.....
.....
.....
.....

Thank you for the information



**APPENDIX C: INTERVIEW SCHEDULE FOR
HEADMASTERS/MISTRESSES
UNIVERSITY OF CAPE COAST
COLLEGE OF DISTANCE EDUCATION
UNIT OF EDUCATION PROGRAMMES**

INTERVIEW SCHEDULE FOR HEADMASTERS/MISTRESSES

Dear Sir/Madam,

I am a student of the University of Cape Coast Ghana pursuing a Master of Philosophy Degree in Educational Psychology. As a part of the academic requirements, I am conducting research on: **Impact of Free Senior High Education on Access and Quality Education in Public SHS: A Case in the Tamale Metropolis**. You are kindly asked to share your knowledge and experiences as far as this study is concerned.

Your answers or responses will be used for research purposes only and your identity would be kept confidential. Please, read and answer the questions by putting a tick (✓) within the provided brackets and writing where required.

Thank you for your co-operation.

Yours faithfully,

Martin Dery

SECTION A: DEMOGRAPHIC INFORMATION

1. Gender [] Male [] Female
2. Age range: 40-49 [] 50 or more []
3. What is your academic qualifications?
4. How long have you been in headship?
5. How long have you been in headship in current school?

**SECTION B: ASPECTS ON QUALITY OF EDUCATION DELIVERY
AFTER THE IMPLEMENTATION OF FSHS IN THE TAMALE
METROPOLIS**

6. What has been the impact of the introduction of FSHS on enrolment in senior high schools in the Tamale metropolis?
7. What are the positive effects of the enrolment trend in the metropolis?
8. What are the negative effects of the enrolment trend in the metropolis?
9. What are your views on the adequacy of teachers in the metropolis as compared to the period before FSHS?
10. What impact has the staffing levels had on the quality of education in the metropolis?
11. What are your views on the adequacy of teaching/learning resources (e.g. textbooks) in public senior high schools in the metropolis?
12. How has the implementation of FSHS affected adequacy of teaching/learning resources?
13. How has the adequacy of teaching/learning resources impacted on the quality of education in the metropolis?

14. What are your views on the adequacy of the funds allocated to senior high schools by the government for free senior high education adequate per student?

15. What suggestions would you make for improvement of education in the metropolis in the era of free senior high education?

Thank you for the information.



APPENDIX D: APPLICATION FOR ETHICAL CLEARANCE

CERTIFICATE

Business Senior High School

Post Office Box 261

Tamale N/R

10th December, 2020.

The Head,
Institutional Review Board,
University of Cape Coast

Dear Sir/Madam,

REQUEST FOR ETHICAL CLEARANCE CERTIFICATE (REG. NO. ED/EPS/18/0019)

I wish to apply to request for the above subject from your reputable office.

I am Martin B. G Dery a final year student of the University of Cape Coast, College of Distance Education-Tamale pursuing a **master of philosophy degree (Educational Psychology)**. I am working on the **topic “Impact of Free Secondary Education on Access and Quality Education in Public Senior High Schools in the Tamale Metropolis.”** I would therefore, be very glad if you could assist me secure an Ethical Clearance Certificate to enable me administer my research instruments.

Counting on your usual co-operation and attention.

Thank you.

Yours faithfully,



Martin B. Dery

(0243618838)

APPENDIX E: LETTER OF INTRODUCTION



**UNIVERSITY OF CAPE COAST
COLLEGE OF DISTANCE EDUCATION
GRADUATE STUDIES UNIT**



Tel. No: 03320-91217

Email: code.postgraduate@ucc.edu.gh

University of Cape Coast
Cape Coast

Our Ref: CoDE/G.7/IL/Vol.1/

26th November, 2020

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

A LETTER OF INTRODUCTION – MARTIN B. G. DERY

The bearer Mr. Martin B. G. Dery is a student of the College of Distance Education, University of Cape Coast with student registration number EP/EPS/18/0019. He is pursuing a Master of Philosophy in Administrations in Higher Education. He is working on his thesis on the topic “**Impact of Free Secondary Education on Access and Quality Education in Public Senior High Schools in the Tamale Metropolis**”.

We would be grateful if you could help him with the necessary assistance, please.

Thank you.

Yours faithfully,

Dr. Felix Kumudzro.
(Co-ordinator)

cc: Provost, CoDE.
College Registrar, CoDE.

NOBIS

APPENDIX F: ETHICAL CLEARANCE CERTIFICATE

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
ETHICAL REVIEW BOARD

UNIVERSITY POST OFFICE
CAPE COAST, GHANA



Our Ref: CES-ERB/UCC-EDU/06/22-59
Your Ref:

Date: 8th July, 2022

Dear Sir/Madam,

ETHICAL REQUIREMENTS CLEARANCE FOR RESEARCH STUDY

Chairman, CES-ERB
Prof. J. A. Omotosho
jomotosho@ucc.edu.gh
0243784739

Vice-Chairman, CES-ERB
Prof. K. Edjah
kedjah@ucc.edu.gh
0244742357

Secretary, CES-ERB
Prof. Linda Dzama Forde
lforde@ucc.edu.gh
0244786630

The bearer, Montin B. G. Dery, Reg. No. ED/ERB/18/0019, his
M.Phil. / ~~Ph.D.~~ student in the Department of Education and
Psychology..... in the College of Education Studies,
University of Cape Coast, Cape Coast, Ghana. He / ~~She~~ wishes to
undertake a research study on the topic:

Impact of free secondary school education on
access and quality of education in public
senior high schools: The case of the Tamale
Metropolis

The Ethical Review Board (ERB) of the College of Education Studies (CES) has assessed his/~~her~~ proposal and confirm that the proposal satisfies the College's ethical requirements for the conduct of the study.

In view of the above, the researcher has been cleared and given approval to commence his/~~her~~ study. The ERB would be grateful if you would give him/~~her~~ the necessary assistance to facilitate the conduct of the said research.

Thank you.

Yours faithfully,

Prof. Linda Dzama Forde
(Secretary, CES-ERB)

APPENDIX G: ENROLLMENT DATA OF STUDENTS

Sn	Institution	Status	Census_Year	S1_Enr_Boy	S1_Enr_Girl	S2_Enr_Boy	S2_Enr_Girl	S3_Enr_Boy	S3_Enr_Girls
1	BUSINESS SENIOR HIGH SCHOOL, TAMALE	Public	2017-2018	497	317	455	259	475	269
2	GHANA SENIOR HIGH SCHOOL, TAMALE	Public	2017-2018	535	286	552	291	522	300
3	PRESBYTERIAN SENIOR HIGH SCHOOL, TAMALE	Public	2017-2018	280	232	263	156	134	98
4	ST. CHARLES SENIOR HIGH SCHOOL, TAMALE	Public	2017-2018	156		213		291	
5	TAMALE GIRLS SENIOR HIGH SCHOOL	Public	2017-2018		431		428		379
6	VITTING SEC/TECHNICAL SCHOOL, TAMALE	Public	2017-2018	389	144	369	145	367	126
7	ADVENTIST SENIOR HIGH SCHOOL	Private	2017-2018	33	62	62	103	85	141
8	CITY SENIOR HIGH, TAMALE	Private	2017-2018	20	38	29	34	43	45
9	IBN ABASS SENIOR HIGH SCHOOL	Private	2017-2018	17	12	18	28	27	31
10	STANDARD PROMOTION SENIOR HIGH	Private	2017-2018			5	9	3	13
11	ANBARIYA S.H.S, TAMALE	Public	2017-2018	336	402	300	374	288	277
12	AL-SAAFI SENIOR HIGH SCHOOL	Private	2017-2018	30	45	86	79	88	74
13	FATIH COLLEGE, TAMALE	Private	2017-2018	13		15		14	
14	AL-SALAM EXCELLENT ACADEMY SENIOR HIGH SCHOOL, TAMALE	Private	2017-2018	98	90	97	90	163	156
15	ZION SENIOR HIGH SCHOOL, TAMALE	Private	2017-2018	3	5	14	7	10	9
16	SUCCESS COLLEGE, TAMALE	Private	2017-2018	32	25	38	32	38	50
17	GHANA LIBYA ISLAMIC SENIOR HIGH SCHOOL, TAMALE	Private	2017-2018	8	4	26	24	26	36

Sn	Institution	Status	Census_Year	S1_Enr_Boys	S1_Enr_Girls	S2_Enr_Boys	S2_Enr_Girls	S3_Enr_Boys	S3_Enr_Girls
1	BUSINESS SENIOR HIGH SCHOOL, TAMALE	Public	2018-2019	727	503	484	304	444	242
2	GHANA SENIOR HIGH SCHOOL, TAMALE	Public	2018-2019	626	639	529	273	512	262
3	PRESBYTERIAN SENIOR HIGH SCHOOL, TAMALE	Public	2018-2019	288	231	275	262	210	161
4	ST. CHARLES SENIOR HIGH SCHOOL, TAMALE	Public	2018-2019	161		156		203	
5	TAMALE GIRLS SENIOR HIGH SCHOOL	Public	2018-2019		500		434		411
6	VITTING SEC/TECHNICAL SCHOOL, TAMALE	Public	2018-2019	626	285	360	131	329	138
7	ADVENTIST SENIOR HIGH SCHOOL	Private	2018-2019	31	35	45	56	53	82
8	CITY SENIOR HIGH, TAMALE	Private	2018-2019	6	14	15	20	21	30
9	IBN ABBASS SENIOR HIGH SCHOOL	Private	2018-2019	11	5	15	15	18	27
10	ANBARIYA S.H.S, TAMALE	Public	2018-2019	413	477	310	385	294	341
11	AL-SAAFI SENIOR HIGH SCHOOL	Private	2018-2019	8	18	25	67	40	92
12	FATIH COLLEGE, TAMALE	Private	2018-2019	22		13		17	
13	ALSALAM EXCELLENT ACADEMY SENIOR HIGH SCHOOL, TAMALE	Private	2018-2019	26	35	103	97	120	129
14	ZION SENIOR HIGH SCHOOL, TAMALE	Private	2018-2019	5	5	11	12	20	19
15	GHANA LIBYA ISLAMIC SENIOR HIGH SCHOOL, TAMALE	Private	2018-2019	22	24	32	26	83	74