

UNIVERSITY OF EDUCATION, WINNEBA

**SECONDARY EDUCATION IMPROVEMENT PROJECT ON
EDUCATIONAL OUTCOMES: THE CASE OF THREE SENIOR HIGH
SCHOOLS IN BRONG AHAFO**



**A THESIS IN THE DEPARTMENT OF EDUCATIONAL ADMINISTRATION
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REQUIREMENT FOR THE AWARD OF MASTER OF PHILOSOPHY IN
EDUCATIONAL ADMINISTRATION AND MANAGEMENT DEGREE**

SEPTEMBER, 2018

DECLARATION

Student's Declaration

I, SAMUEL AGYEI AGYARE, declare that this thesis, with the exception of quotations and references contained in published works which have all been identified and acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

Student's Signature:..... **Date:**

Supervisor's declaration

I hereby declare that the preparation and presentation of the thesis was supervised in accordance with the guidelines on supervision of thesis laid down by the School of Graduate Studies, University of Education, Winneba.

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I hereby declare that the preparation and presentation of the thesis was supervised in accordance with the guidelines on supervision of thesis laid down by the School of Graduate Studies, University of Education, Winneba.

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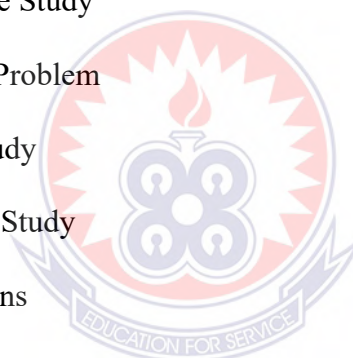
DEDICATION

To my wife, Sarah and sons, Perez, Peniel and Othniel for their love and continuous support.

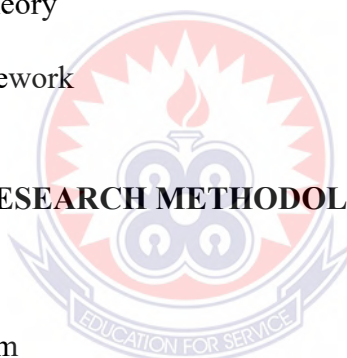


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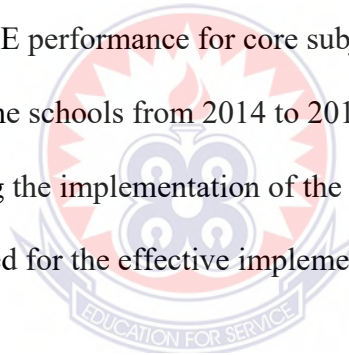
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GLOSSARY

BECE:	Basic Education Certificate Examination
CPD:	Continuing Professional Development
CSSPS:	Computerized School Selection and Placement System
DEOs:	District Education Offices
ESPRR:	Education Sector Policy Review Report
ESR:	Education Sector Review
EFA:	Education for All
ESP:	Education Strategic Plan
EMA:	Education Maintenance Allowance
FCUBE:	Free Compulsory and Universal Basic Education
GET Fund:	Ghana Education Trust Fund
GNATs:	Ghana National Association of Teachers
GSFP:	Ghana School Feeding Programme
SSA:	Sub-Sahara Africa
SFP:	School Feeding Programme
GES:	Ghana Education Service
GoG:	Government of Ghana
JHS:	Junior High School
JSS:	Junior Secondary School
LEAP:	The Livelihood Empowerment Against Poverty
MoE:	Ministry of Education
MDGs:	Millennium Development Goals
NEPAD:	New Partnership for African Development

NGOs:	Non-Government Organizations
PTAs:	Parent-Teacher Associations
SSS:	Senior Secondary School
SHS:	Senior High School
SEIP:	Secondary Education Improvement Project
GER:	Gross Enrolment Ratio
GPRS:	Ghana Poverty Reduction Strategy
UPE:	Universal Primary Education
UK:	United Kingdom
UNESCO:	United Nations Educational, Scientific and Cultural Organization
WFP:	World Food Programme



ABSTRACT

This study examined the influence of the Secondary Educational Improvement Project (SEIP) on educational outcomes in three (3) Senior High Schools in the Brong Ahafo region. Specifically, the study examined the effects of SEIP on enrolment, its influence with regards to academic performance, the challenges facing its implementation and factors essential to its effective implementation. Using a sequential explanatory design, primary data was collected in two phases using semi-structured questionnaire and interview guide. Simple random sampling was resorted to in the selection of the three schools. Purposive sampling was used to select 143 beneficiary students and 1 District SEIP Coordinator whereas census sampling was used to select 3 SEIP Coordinators. Criterion sampling technique was resorted to in the selection of 42 qualified teachers. In all, 189 respondents were sampled. The analysis was done using econometrics techniques to establish the effects of the SEIP programme on educational outcomes. The study revealed that the SEIP policy does not have a significant effect on both academic performance and enrolment. The study revealed the lack of means for verifying the authenticity of socio-economic background of beneficiaries and lack of a proper accountability system. The study concluded by noting that although the results are not consistent with prior expectations, the findings reflect the fact that SEIP started in 2014 and thus it is too early to see its effects. However, the study noted that these results may point to the fact that SEIP alone cannot deliver on important educational outcomes. There is the need to carefully look at the design of future similar SEIP-like programs to encompass other factors that might affect educational outcomes. Among other things, the study recommended a rigorous system of selecting students who are really in need. Also, the study recommended regular monitoring and evaluation from the national office.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter deals with the background to the study, the statement of the problem, the general purpose as well as the specific objectives of the study under consideration. Also covered in this chapter are the research questions, the hypothesis of the study, study significance, delimitation and the specific organization of the study. It is significant to note that the first section of this chapter provides the definitions of some concepts in this study.

All over the world, governments prioritize education for obvious reasons of national and economic development. In the specific situation of Ghana, the standard prescription has always been a hefty investment in public education, as opposed to inequality-widening private education. The ultimate aim has consistently been to increase quality and access at all levels. As a matter of fact, this is in perfect accord with the Education for All (EFA) objectives that currently remain a universal preoccupation. Specifically, the Government of Ghana (GoG) is mandated by article 38 of the Constitution of Ghana to ensure access to the Free Compulsory Universal Basic Education (FCUBE). This provision is expected to be further extended to senior high school, technical, tertiary and life-long learning endeavors (Kamaludeen, 2014).

1.2 Background to the Study

Education is upheld as a fundamental human right. Its recognition as a pivotal element in the attainment of self-fulfilment and national development (UNESCO, 2010) is without controversy or disputation. Rendered another way, education is widely perceived as the most important factor with regards to the overall achievement of

sustainable development goals around the world. It is also worth noting that education remains an important tool for changing undesirable attitudes and behaviours. This behaviour-changing potential of education is without question, a given of universal relevance. Wolfensohn (1999) deepens this basic understanding about education with his insistence on education as the single most important key to poverty alleviation and development efforts around the world. According to him, the starting point of developmental endeavours consists in a universal primary education that equitably or in equal proportions, makes room for both boys and girls. According to Boateng, Boakye-Yiadom & Oduro (2000), formal education and wage earnings are two factors that are strongly correlated with poverty reduction. The interplay of poverty and level of schooling has been considered in various studies (World Bank, 2004). Perhaps, this explains why governmental attempts to increase educational access and quality at the Senior High School (SHS) level remain highly critical to the nation's economic and developmental prospects.

Over the years, the Government of Ghana has been involved in several initiatives with the view of achieving stipulated educational goals and bringing about quality education outcomes. These diverse undertakings have found expression in frameworks and reports which include but is not limited to the following as outlined by Kamaludeen (2014) : Ghana Poverty Reduction Strategy 2002 – 2004 (GPRS I); Education Sector Policy Review Report (ESPRR, August 2002); Education Sector Review (ESR, October 2002) and the Government's White Paper on the Report (2004); Meeting the Challenges of Education in the 21st Century, Review of Education Reforms in Ghana, October (2002); Education for All (UNESCO, 2000) and Education Strategic Plan (ESP) covering 2003-2015, etc.

Bishop (1986) draws attention to the utmost need for a comprehensive understanding of basic education. The current writer argues that basic education goes beyond years of schooling or amount of subject content covered. Consequently, the acquisition of skills, knowledge and attitudes by an individual within and outside school settings remain an essential component of basic education. This is particularly so because of its role in the improvement of an individual's quality of life and the continuation of his or her education with the best of his or her abilities. In a similar vein, Braslevsky (2001) perceives basic education as the "type of education needed for a quality life and for lifelong learning in an increasingly complex and challenging world".

Owing to the above perspectives and other schools of thought that consider basic education from a comprehensive viewpoint, it is not surprising to come across diverse proposals for the extension of basic education to the senior high school level. Researchers who share in this view believe that such a step would enable students to acquire the relevant skills, knowledge, attitudes, values and other survival skills needed to enter the world of work in the event of being unable to further their education at the various higher institutions of learnings (Becker, 1964). Proponents of this school of thought are always quick to point to the fluidity of the country's constitution as enshrined in article 38 of the constitution. Over here, there is an allowance made (on the basis of resource availability) for governmental provision for senior secondary, technical, tertiary education and life-long learning initiatives geared towards an encouraging increment in national access.

The 1950s and 1960s witnessed significantly great strides as far as the first concerted national attempt at making basic education accessible to all was concerned. This phenomenon inspired other subsequent interventions on the part of the Government of

Ghana. As a matter of fact, the year 2000 saw the international adoption of six goals which formed the basis of UNESCO's Education for All (EFA) initiative. It is significant to stress that the six key measurable education goals were agreed upon by representatives from 164 countries who assembled in Dakar, Senegal, of which Ghana was part.

Without doubt, Ghana has seen some highly significant gains in access to basic education in all the ten (10) regions over the years (Baku, 2003). This is obvious when the subject of equal access for all is considered from the standpoint of poverty, gender and rural and urban status. Koramoah (2016) indicates that contemporary Ghana has witnessed a drastic increment in the number of senior high schools and its attendant student enrolment since independence. A current enrolment of 750,217 at the senior high school level (MOE, 2014) speaks volumes of an increase in the number of senior high schools catering to the diverse needs and interests of students across the country. To cite some interesting specifics about general school enrolment at the basic level in Ghana, there has been a near doubling of enrolment figures at the basic education level in less than 15 years (MOE, 2008; MOE, 2012). It must be noted that this increment in overall enrolment as observed by Ghana's Ministry of Education does not necessarily imply a corresponding increase in the Gross Enrolment Ratio (GER). Official statistics indicates that the GER across the country has remained stagnant from the 2009/2010 academic year to the 2012/2013 academic year (MOE, 2016).

Ghana is a proud signatory to the Universal Primary Education (UPE) Convention on Millennium Development Goals (MDGs). This has created a situation where more attention has been focused on basic education than secondary education by both the

national government and its development partners in their diverse and critical development initiatives. In reality, this supposed neglect is being rectified by current emphases on initiatives and data-driven policy interventions seeking to tackle among other things, the prevailing challenges of access and the overall quality of senior high school education.

Other governmental interventions to increase access and quality educational outcomes are worth noting. The GoG has distributed over 100 million exercise books since 2009. The number of textbooks distributed in 2013 was 32 million. 4,768,806 pupils were beneficiaries of this intervention (MOE, 2014).

A typical example of an already-existing intervention is the Ghana School Feeding Programme (GSFP). GSFP is a social intervention programme introduced by the Government of Ghana to improve upon school attendance, retention, regularity and student nutrition. This was in the face of an increase in the estimated number of out-of-school children around the world from 29 million in 2008 to 31 million in 2010 (World Food Programme, 2013).

The capitation grant introduced by the Government of Ghana represents another attempt at subsidizing education. According to official government records, school enrolment in the forty most deprived districts increased with the piloting of this intervention. This led to a decision to roll it out to the whole country after the first year instead of the original plan of doing so after three years of piloting.

Despite the implementation of these policies and the various official reports that highlights the strategic educational plans and directions for Ghana, not much has been achieved in the crucial areas of enrolment and performance in the rural parts of the

country known to have high prevalence of poverty. This and other associated challenges have led to the development of a programme known as the Secondary Education Improvement Project (SEIP). As consistently emphasized by the GoG, the overarching objective of SEIP is to increase the momentum towards educational quality and sharpen the focus for the realization of the Free Compulsory Basic Education (FCUBE).

1.3 Statement of the problem

Present national demand for SHS education (also, senior secondary education) has increased by remarkable leaps and bounds. This has been largely attributed to the increasing population and high completion rate at the Junior High School (JHS) level (SEIP Implementation Manual, 2014). However, there remains several inequities in this demand as 3/4th of youth in the country typically either do not have adequate qualification to enter SHS or cannot afford to move or commute to the schools where they are placed by the Computerized School Selection and Placement System (CSSPS). Usually, students drop out before sitting for the Basic Education Certificate Examination (BECE). Also, those fortunate to write the BECE consistently fail to meet the qualifying grade needed for entrance into senior secondary schools. With those coming from the poorest 20% of the households, students from the most deprived districts and/or from rural areas are about 5 to 6 times less likely to access education at the SHS level (SEIP Implementation Manual, 2014).

Significantly, among the public schools there is disparity between schools that are selective, preferred by the majority of students, and oversubscribed schools (mainly community schools) that remain undersubscribed either because they have less quality inputs, services and outcomes, or because families may not be able to afford privately

provided hostel facilities or transportation to these schools (SEIP Implementation Manual, 2014). In the latter, they have extra space for additional admission leading to persistent inefficiency. Additional facilities at existing community day schools and private schools could significantly contribute to the planned expansion.

The overall quality of SHS in terms of WASSCE performance shows large disparities between the best 100 schools and the rest of the senior secondary schools in the country (SEIP Implementation Manual, 2014). The top schools produce the bulk of those entering tertiary education whereas for those enrolled in the majority of the schools, SHS represents the terminal form of education. As a matter of fact, 46% of the students who qualify for tertiary education by successfully sitting for the WASSCE are from the top 20% of Senior High Schools in the country whilst 8% of students from the bottom 20% of the schools (106 schools) qualify for tertiary education (SEIP Implementation Manual, 2014).

These and other factors are behind the 2014 introduction of SEIP by the Government of Ghana in collaboration with the World Bank. The Secondary Education Improvement Project (SEIP), which is funded by the World Bank, is expected to increase access in targeted districts, increase enrolment of poorest students and improved learning outcomes for selected low-performing Senior High Schools across the country.

Despite the introduction of SEIP and other governmental interventions aimed at increasing enrolment and performance at under-subscribed selected beneficiary schools, official records have consistently observed that these under-subscribed schools are still struggling with enrolment and academic performance (MOE, 2016).

This observation was true of the beneficiary school (Goka Senior High School) where the researcher happens to teach. In addition, there has been another observation of bitter teacher and student complaints about the selection criteria of the associated scholarship and the lack of basic academic materials for the beneficiaries of the scholarship component of the programme. There has also been the worrying case of low academic performance of beneficiaries in WASSCE examinations conducted at the various beneficiary schools. This has naturally kept not just the researcher but other interested stakeholders worried and at the same time curious about the causal factors. Inevitably, this has led to the raising of critical questions about the supposed effects of the SEIP in bringing about the needed enrolment and student academic performance.

As a result, this study examines the influence of SEIP in three beneficiary schools in the Brong Ahafo region of Ghana.

1.4 Purpose of the study

The overall purpose of this study was to examine the influence of the SEIP on educational outcomes with specific reference to enrolment and academic performance and to investigate the challenges of the SEIP implementation in three Senior High Schools in the Brong Ahafo Region.

1.5 Objectives of the study

The following are the specific objectives that guided the study.

1. To examine the effects of SEIP on enrolment in the three selected beneficiary schools in the Brong Ahafo region.

2. To find out the influence of SEIP with regards to the improvement of academic performance in the three selected beneficiary schools in the Brong Ahafo region.
3. To investigate the challenges facing the implementation of the SEIP in the three selected beneficiary schools in the Brong Ahafo region.
4. To identify the various factors needed to improve the SEIP implementation in the three selected beneficiary schools in the Brong Ahafo region.

1.6 Research questions

The study sought to address the following questions.

1. To what extent has SEIP influenced the enrolment of students in the three selected beneficiary schools in the Brong Ahafo region?
2. To what extent has the SEIP improved academic performance in the three selected beneficiary schools in the Brong Ahafo region.
3. What are the challenges of the SEIP implementation in the three selected beneficiary schools in the Brong Ahafo region?
4. How can the SEIP implementation be improved in the three selected beneficiary schools in the Brong Ahafo region?

1.7 Hypotheses and Null Hypotheses

H₁: There is a significant relationship between the enrolment before and after the introduction of SEIP in the three selected beneficiary schools in the Brong Ahafo region.

H₀: There is no significant relationship between the enrolment before and after the introduction of SEIP in the three selected beneficiary school in the Brong Ahafo region.

H₁: There is a significant relationship between the academic performance before and after the introduction of SEIP in the three selected beneficiary schools in the Brong Ahafo region.

H₀: There is no significant relationship between the academic performance before and after the introduction of SEIP in the three selected beneficiary schools in the Brong Ahafo region.

1.8 Significance of the study

This study will contribute immensely to policy formulation or development within the general area of quality SHS education provision. It is beneficial in terms of its potential contribution of research-driven insights into ways of enhancing the general administration of the SEIP programme in beneficiary schools and any other selective scholarship-based government intervention or initiative.

Knowledge of the influence of SEIP on school enrolment and academic performance will provide sufficient grounds to critique the current management regime of the SEIP in order to make the policy sustainable and relevant to national hopes and aspirations. The study will further provide policy makers with relevant information that will feed into other educational policy frameworks that seek to achieve universal basic education in the long run.

It is worth emphasizing that this study basically attempts to contribute to the filling of gaps in research literature. Also, as the country continues to employ the SEIP as a means of improving access to education, it is highly necessary to explore the various factors that could ensure the effective implementation of the SEIP. To this end, it would be appropriate to conduct an empirical study using a beneficiary school as a

case study. This study therefore attempts to study the influence of the SEIP in the three selected beneficiary schools in order to identify the critical ingredients needed for the successful implementation of the programme.

Having established the significance of the study, it appears there are no empirical studies that endeavour to assess the influence of the SEIP on school enrolment and academic performance in beneficiary schools. It is also important to note that whilst there have been occasional references in the literature on some of the challenges facing other government interventions, it appears there has not been any concerted attempt at identifying the specific challenges confronting the SEIP in beneficiary schools.

This study will also be useful to international bodies like the World Bank, UNICEF, Non-Government Organizations (NGOs) and other foreign donors and/or development partners. This is very important as the study will reveal areas in critical need of improvement, support and assistance.

A better understanding of the effects of the SEIP will help create new structures or measures that will deliver on the developmental aspirations of the beneficiary schools in the Brong Ahafo region and the country as a whole. It will create the necessary avenues for examining the possibilities for increasing access without compromising overall quality. It must be understood, however, that the work may present or reveal some weaknesses of the structures regarding enrolment and performance in the observed beneficiary schools. The resulting prescription or recommendation will pave the way for further research into the ever-changing aspect of the educational process and consequently give relevant policy advice and directions.

1.9 The Delimitations of the study

This study was conducted in only three beneficiary schools out of seven (7) beneficiary schools in the Brong Ahafo region of Ghana. It is important to note that this study did not concern itself with other beneficiary schools in other regions of Ghana. This was irrespective of the fact that there are other beneficiary schools of the SEIP in other regions of Ghana.

1.10 Operational definitions of terms

Research usually incorporates different terms from many fields. There is therefore the question of understanding when presenting the result of a study to an audience. A section devoted to the explanation of concepts used enhances the understanding of an audience about a particular work of research. Following are concepts used in this work and their corresponding definitions.

Academic performance: Academic performance in this study refers to the students' marks in the core subjects in WASSCE examination results.

Basic education: Basic education refers to two years of kindergarten education, six years of primary school education and three years of Junior High School education (Ministry of Education, 2003).

Secondary education: Secondary education refers to three years of post-Junior High School education.

Enrolment: refers to the number of children registered in a particular school.

Equity: refers to the efficient allocation of educational resources to cover the most disadvantaged (poor households) students.

Effectiveness: has to do with achieving the intended effect of the SEIP intervention.

Subsidy: constitutes the non-salary payment of recurrent costs by government for the running costs of schools.

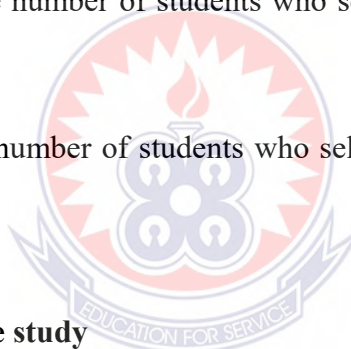
Educational outcomes: The results achieved by students in terms of WASSCE performance and enrolment.

Scholarship: Subsidy given to SEIP beneficiary students.

Direct enrolment: The number of students who enrolled in a beneficiary school because of SEIP.

Undersubscription: The number of students who select a school being less than the declared vacancies.

Oversubscription: The number of students who select a school being more than the declared vacancies.



1.11 Organisation of the study

The rest of the study are organised as follows: The second chapter presents a review of relevant literature on the research topic. It provides the empirical, theoretical, and conceptual framework needed to carve a methodology for the research.

Chapter three details the research paradigm and research design adopted. It also outlines the data requirement and the source of the data, the data collection tools employed, the sampling technique, the key data variables and the framework for data analysis and reporting. Moreover, it provides a guide as to the conduct of the field work.

The fourth chapter presents the results of the questionnaires and interviews collated from the three selected beneficiary schools in the Brong Ahafo region. It also discusses the findings from the questionnaires and interviews gathered from the respondents in the selected beneficiary schools. This is a very important chapter in the research because it provides the information to answer the various research questions and the hypotheses raised.

The fifth chapter constitutes the summary, conclusion and recommendations. This remains very relevant to the study because it discloses data-driven and verifiable information which hitherto was unknown. By so doing, it adds significantly to the existing body of knowledge.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, there is an empirical review of related literature in areas relevant to enrolment, performance and delivery at the senior high school level. The areas reviewed include but are not limited to SEIP-like interventions and enrolment of students in schools, SEIP-like interventions and academic performance, the role of infrastructural facilities on performance, in-service training for teachers and performance and the challenges of various policy interventions that seek to increase student enrolment and performance. Other areas which are amply highlighted include the theoretical and the conceptual frameworks resorted to in this study.

Obviously, this section utilizes the advantage of accumulated knowledge through a review of SEIP-like interventions and matters arising as considered in various journals, dissertations, government policy documents and other research sources. Such an attempt is definitely in line with conventional practice in the dynamic field of research. Koul and Kaewkuekool (2010) maintains that literature review primarily provides an opportunity for researchers to familiarize themselves with existing knowledge. This results in an updated knowledge which remains very pivotal to the determination of research limits and the avoidance of superfluous, useless and extraneous problem areas.

2.2 Historical development of secondary education in Ghana

Secondary education in Ghana commenced in 1876 (Quist, 2003). According to this researcher, secondary education was initially started by religious bodies or missionary organisations. The colonial government joined in the provision of secondary

education from 1924 onwards. The government's focus on education led to the dramatic increment of middle school pupils by 6,000 in 1964. This naturally paved the way for the expansion of secondary education. This expansion was necessary because of the urgent need to absorb the large number of middle school leavers. The action taken by government was the establishment of the Ghana Education Trust (GET) in the 1960s. This was intended to cater for the expansion of secondary schools.

One of the early initiatives of the Trust was the building of twenty-four (24) schools known as GET schools. These schools were situated in different parts of the country. Recent education reforms have led to a number of initiatives with regards to the provision of secondary education. The concept of community senior high schools is an inevitable result of these education reforms. Aside this has been continuous government undertakings with regards to the upgrading of at least one community senior high school to a model school in the various districts across the country. Without doubt, these initiatives demonstrate the continuing commitment of various governments to increase the rate of access and participation in secondary education (Anamuah-Mensah, 2007).

2.3 Current status and policies of secondary education in Ghana

Publicly funded government schools constitute the bulk of Ghana's education system. The general structure of the education system is made up of eleven years of basic education followed by three years of senior high school and either three or four years of tertiary education depending on the programme of study and institution. Basic education consists of two years of Kindergarten, six years Primary and three years Junior High School (MOE, 2004).

Enrolment in senior high schools since independence keeps on increasing. Available figures indicate that secondary school enrolment stood at 6,162 at a total of fifty-seven (57) schools in 1950 (Quist, 2003). In 2003, there were about 558 public secondary schools and 281 private secondary schools. In all, there was a total enrolment of 750, 217 students in all the schools (MOE, 2014).

It is a fact that the nation's education structures and facilities critical to a mass participation in secondary education remain inadequate. Baku (2003) shares the view that this situation inspired the entry and subsequent growth of private schools. Despite this phenomenon, many are unable to participate in education because of the question of high costs which apparently exempt the participation of students from poor households. As a matter of fact, it leads to the creation of another unsolicited challenge of inequality in terms of educational participation.

Like most Sub-Saharan African countries, Ghana has signed the Universal Primary Education (UPE) convention on Millennium Development Goals (MDGs). This has led to a situation where Development Partners (DPs) channel the bulk of support to basic education, and by so doing, focus less attention on secondary education (Nudzor, 2012). Notwithstanding, the GoG has been resolute in tackling the critical questions of access and quality in secondary education. The 2014 announcement of government's commitment to build two hundred (200) community day schools had something to do with this desire to improve educational access and quality.

Out of the two hundred (200) SHSs, twenty-three (23) were constructed under the World Bank-funded Secondary Education Improvement Project (SEIP). The objective was to improve access and quality in the critical field of secondary education. Aside new school buildings and/or infrastructure, fifty (50) schools were marked for an

upgrade in facility and quality improvement. Seventy-five (75) schools were also targeted for quality improvement under the programme. The GoG duly considered demand-size interventions by granting scholarship access to a total of 10,400 SHS students. There was also an official communication to the effect that some form of scholarship would be provided to all day school students in the country (MOE, 2014). This was aptly termed “Progressively Free SHS” by the implementing government.

In sum, there have been attempts by past Governments of Ghana to expand the financing of secondary education through the formulation of several policies and initiatives. There has also been significant increase in both the number of Senior High Schools and secondary enrolment since independence. Overall, previous and present governments have in diverse ways attempted to expand the quality provision of secondary education through various policies and initiatives. This implies a national situation of continuous increment in SHS enrolment since independence.

2.4 The concept of SEIP

SEIP is a relatively new intervention and this accounts for the relative lack of existing literature on it. As a government programme, it seeks to address a critical challenge within Ghana’s problem-ridden education system. It however cannot claim novelty in view of the existence of other social and government intervention programmes initiated in education over the past years. It is expected that the SEIP will aid in the implementation of government’s Community Day Senior High School Project through two critical components. The first has to do with support to increase access with equity and quality in senior high schools. The second component has to do with management, research, monitoring and evaluation (SEIP Implementation Manual, 2014).

Through the SEIP vehicle, government is financing results with verifiable facts on increased access in designated districts, increased enrolment of poor students and also improved learning outcomes for specific low-performing senior high schools. Those expected to directly benefit from the SEIP include about 30,000 new senior high school students, 150,000 students in schools ranked as low-performing, 2000 teachers affiliated to various high schools, head teachers and the GES and MOE officials (SEIP Implementation Manual, 2014).

There has also been an official emphasis on mathematics and science education at selected low-performing schools. The SEIP has also been tasked to offer three-year scholarship support for at least 10,400 needy but qualified senior high school students, with girls particularly encouraged to take advantage of this educational opportunity. Delivering the 2016 State of the Nation Address, Ghana's former president John Mahama, made reference to the scholarship component of SEIP. According to the president, 10,400 students benefitted from scholarships. He stressed that 60% of these beneficiaries were female SHS students. The scholarship scheme under the SEIP is intended to tackle the challenge of low participation of poor students. Ample room is left here for the consideration of female senior high school students of diverse poor backgrounds (SEIP Implementation Manual, 2014).

The figure with regards to the number of scholarship beneficiaries remain the original figure as contained in the official SEIP document. This scholarship is expected to be assessed every year for a period of three years. Both students of the fifty schools benefitting from facilities and qualities and those from the 75 schools benefitting from qualities only are eligible for the scholarship. The amount involved in the scholarship was arrived at after the realistic calculation of school costs such as school fees,

examination fees, uniforms, textbooks, stationery, footwear, school bag, sanitary materials, transport cost and other student necessities. Per the programme guideline, funds are transferred directly to the schools involved. There are deductions made by the school and the remaining amount given to students to cater for their individual needs (SEIP Implementation Manual, 2014).

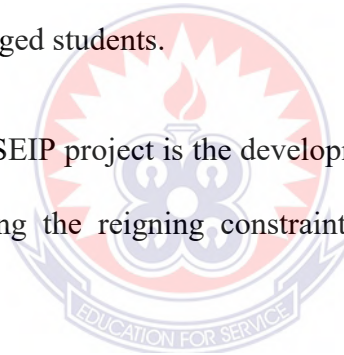
This scholarship scheme can only be assessed for a period of three years. In terms of attendance, scholarship beneficiaries are expected to attend at least 80% of the school year. 60% of the scholarship amount is given to females whilst 40% is given to males for reasons relating to gender empowerment. It is worth noting that a scholarship administrator is responsible for the disbursement of scholarship awards to students in the various schools covered under the programme. This oversight responsibility remains under the general umbrella of the Girls Education Unit that is tasked with the implementation and monitoring of the scholarship scheme. In other words, the scholarship administrator is consulted when it comes to technical advice and know-how governing the disbursement of scholarships (SEIP Implementation Manual, 2014).

All students of poor economic backgrounds in the various beneficiary schools are eligible for the scholarship. Prospective beneficiaries only need to read the information sheet made available under the programme. This must be followed by the filling of an application form that would eventually be reviewed by a constituted scholarship committee. All scholarship applications must satisfy the general criteria of the applicant being a Ghanaian and needy. There is also the requirement that the application should be a junior high school graduate or in the final year of junior high school. It is also required that the applicant's choice of SHS must be from the list of

schools covered under the SEIP programme. With regards to specifics, students who are deemed poor include orphans without any form of support, students who cater for themselves, special needs students, students living with HIV/AIDS, students in households with income below the national minimum wage, students from LEAP beneficiary households, etc. (SEIP Implementation Manual, 2014).

According to the GoG, there has been the construction of new senior high schools in deprived areas, refurbishment and expansion of a number of low-performing schools. Already existing low-performing schools have also been earmarked for improvement in terms of quality educational offerings and outcomes. Also of importance in the SEIP scheme of affairs is the continuing support with regards to educational attainment for disadvantaged students.

Also included under the SEIP project is the development of a research programme for purposes of understanding the reigning constraints and challenges in senior high school education.



2.5 SEIP- like intervention programmes and enrolment

Yendaw & Dayour (2015) maintain that Ghana was part of the first ten (10) countries in Sub Saharan Africa that implemented a School Feeding Programme (SFP) in accordance with guidelines as stipulated by the New Partnership for African Development (NEPAD). The general idea behind this was to boost domestic food production and increase enrolment, attendance and retention. The authors further reveal that the Ghana School Feeding Programme (GSFP) is on course as far as the improvement of pupils' retention in schools is concerned. According to these researchers, the intervention had led to a desirable situation where more time was spent in school and towards learning on the part of students. Throughout the world,

SFPs are understood as targeted social safety nets that provide both educational and health benefits to vulnerable children, thereby increasing enrolment rate, reducing absenteeism and improving food security at the household level (Meyers, Sampson, Weitzman, Rogers & Kayne, 1989; WFP, 2014).

SFPs are common interventions resorted to by governments in other parts of the world. This is especially true of the developing world where conflicts, natural disasters and extreme poverty are rife. Understandably, governments in this part of the world usually implement SFPs among populations of low socioeconomic backgrounds and inadequate nutritional nourishment. It has usually been the common approach of targeting all students in a school rather than some selected ones (Mkanyika, 2014).

Without doubt, there is a consensus among researchers that the attainment of better health and resistance to infectious diseases and illnesses remains a strong justification for the implementation of SFPs (Buttenheim, Alderman, Friedman & Arnold, 2011). This improved health and nutritional status has its unique way of fostering quality educational outcomes in targeted schools (Levinger, 2005; Glewwe, Jacoby & King, 1996). The capitation grant introduced by the Government of Ghana represents another attempt at subsidizing education. According to official government records, school enrolment in the forty most deprived districts increased with the piloting of this intervention. This led to a decision to roll it out to the whole country after the first year instead of the original plan of doing so after three years of piloting. The genesis of the capitation grant goes to the GoG's desire to meet the Millennium Development Goals (MDGs) for education and national targets. Asante (2011) records that the first year of the piloting of the capitation grant saw an increase in overall enrolment by

14.5%, with significant enrolment gains for pre-school. This researcher maintains that the replacement of school fees with the capitation yielded some positive dividends during the 2005/06 academic year. Among other things, UNICEF (2007) identified an increment in primary school gross enrolment by nearly 10%, a nationwide increment in primary net enrolment from 62% to 69%. There is a further iteration of the fact that every region in the country experienced a rise in enrolment, with the interesting case of the Northern region experiencing the highest increase after many years of recording the lowest national enrolment rates.

According to GES, there has been an increase of 49.4% in pupil enrolment. Specifically, this translates into an increment from 3.7million to 5.5 million since 2005/2006 academic year to 2013/2014 academic year. This statistic is cautiously stated in view of the possibility that other interventions could have also contributed to the overall increase in enrolment. During the 2012/2013 academic year, the GoG paid an amount of GHC 24,472,840 in capitation grant to cover 5,741,198. This represented 30% of pupils in public basic schools.

In assessing the effects of the capitation grant on learning outcomes in Ghana, Osei, Owusu, Asem & Afutu-Kotey (2009) revealed the fact of the non-existence of a significant relationship between capitation grant and gross enrolment. Also, the researchers were categorical about the inability of the capitation grant programme to bridge the existing gap in terms of the BECE pass rates for males and females. This conclusion was arrived at through the use of regression analysis of district-wide data obtained from the Ghana Education Service from 2003 to 2007.

Actually, the PROGRESA programme in Mexico bears some resemblance to the capitation grant in terms of its stated objective to achieve an increment in school

enrolment. It is different from the capitation grant in the sense that cash grants are given to families on the condition that they enroll their children in school. Assessing the impact of the PROGRESA programme on student enrolment, Schultz (2004) observed an increase in enrolment on the part of students from grade 1 to grade 8. Interestingly, this was especially true of girls who had completed the sixth grade.

Another national intervention known as The Livelihood Empowerment Against Poverty (LEAP) parallels the PROGRESA programme in many forms. Ghana's Department of Social Welfare (2009) asserts that participation in education remains a non-negotiable condition in this conditional cash transfer programme. The implication here is that whilst LEAP is not an exclusively educational intervention, it does contribute in its own unique way to educational access, enrolment and learning outcomes.

Attanasio, Fitzsimons and Gomez (2005) conducted a study into the short term impact of a conditional education subsidy on school enrolment in Columbia. The study looked at the welfare programme "Familias en Acción" (FA) which began implementation in 2001 and became fully operational in all 57 targeted (treatment) communities. The targeted population was made up of individuals living in the poorest 20% of households in selected rural areas. The education 'treatment' was a monthly subsidy offered to eligible mothers on condition that their children attended school. Other eligibility requirements included having a household welfare indicator that is below a predetermined level and having at least one child between the ages of 7 and 17 and residing within the treatment community.

Attanasio et al. (2005) made use of a baseline dataset comparing enrolment rates in rural and urban centres in Columbia before and after the commencement of the

programme. An underlying factor for these comparisons was that they examined at least two pre-programme periods to establish whether there were differences between treatment and control areas. This was to enable them determine whether those differences were the result of anticipation effects and/or fundamental factors that vary across areas. This is because, for half of the ‘treatment with payment’ areas, the programme had already begun by the time the baseline data was collected. This however raises concerns about the anticipation effects of the programme for the areas under the ‘treatment without payment’.

The study found that the programme had been effective as it helped increase enrolment amongst 14-17 year olds in both rural and urban areas. As indicated in their statistics, enrolment in rural areas without subsidy was 54.4% as against 60.3% for enrolment with subsidy. In the urban centres, enrolment rates for ages 14-17 was 72.0% without subsidy and 77.3% with subsidy. In addition, with respect to gender, the study showed that males benefited more than females. Furthermore, for the age group of 13-18 years there was a marginal increase in enrolment levels as attendance before the commencement of the programme were relatively high. Therefore, it was deduced that subsidies impacted on enrolment rates (Attanasio et al., 2005).

Dearden et al. (2005) also examined the impact of the EMA taking into consideration four different variants of the EMA which were piloted. They were interested in finding out whether the impact varied according to either the generosity of the scheme and/or the recipient (parent or child) of the scheme. They sampled the population partially eligible for the subsidy and those ineligible comparing the outcomes relative to the appropriate comparison group and used propensity score matching to balance the distribution of observable characteristics.

They also carried out sensitivity analysis using differences based on aggregate data and on behaviour of older siblings. In doing so, they explored aggregate school participation data for 16 year olds and also compared the changes in school participation between the younger and older siblings in the pilot and control areas.

The results of the study revealed that the EMA had a positive and significant effect on post compulsory education participation among eligible young people with an overall estimate of percentage points from a baseline of 64.7% in their matched samples of controls. According to Dearden et al. (2005), the EMA increased the initial participation in education of eligible male and female by 4.8 and 4.2 percentage points respectively in the first year and again by 7.6 and 5.3 percentage points respectively in the second year.

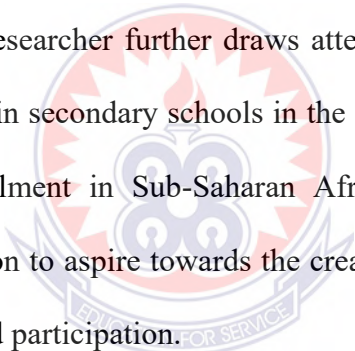
2.6 Enrolment at the secondary education level

The confronting challenge of universal school dropout rates has led to a number of initiatives and plans of action. Policies such as the World Conference on Education for All in Jomtien, Thailand, Education for All Movement and its Fast Track Initiative, and the World Economic Forum's Global Education Initiative were all formulated with the express view of reducing school dropout rates. Most OECD countries after the end of the World War II took drastic measures with the view of enabling free access to secondary school education. Dearden, Emmerson, Frayne and Meghir (2005) observed that these and other measures adopted in the various countries led to an increase in the compulsory school leaving age.

In the specific case of the United Kingdom, there was an abolishment of school fees for all public secondary schools. This was made possible by the Education Act of 1944 (The Butler Act). By so doing, there was an increase in the compulsory school

leaving age from 14 years to 15 years and then ultimately from 15 years to 16 years after more than two decades. According to the World Bank (2007), the gap between developed and developing countries in the area of access to secondary education is very wide. In addition, this gap has been widening since 1990. The obvious explanation for this phenomenon has been the rapid expansion of opportunities in secondary education in the developed world vis-à-vis the relatively slow expansion and reforms in secondary education in the developing world.

Lewin (2008) states that only a little over one quarter of the children of secondary school age in Sub-Sahara Africa (SSA) actually enroll in secondary schools. Specifically, this constitutes twenty-five (25) million out of the ninety-three (93) million children. This researcher further draws attention to the irregular attendance among those who enroll in secondary schools in the first place. Lewin's statistics and observations about enrolment in Sub-Saharan Africa remains an urgent call for governments in this region to aspire towards the creation of an enabling environment that grants full access and participation.



Michaelowa and Weber (2007) believe that access to quality secondary education remains the best way of acquiring skills and competencies required for economic success and participation in civic affairs. Adawo (2011) encourages the expansion of secondary education because of the potential contribution to overall economic growth. He makes a compelling case for secondary education expansion by pointing to the successes chalked by developed countries due to their upgrading of primary, secondary and tertiary levels of education. In admitting that this path remains laudable, Uyttersprot (2008) referred to the relative neglect of secondary education.

His argument was based on the outmost need for allocating to secondary education the priority that it deserves or has been denied of.

The conventional international development idea has always been tilted towards the need to expand public secondary education. However, Laasibille, Tan and Sumra (2000) see private schools as another means of expanding access to secondary education in countries with low allocation of public resources for public education. Belfield and Levin (2002) perceive private schools as great avenues to meet the excessive and often unmet demands of public secondary education. The reasoning here primarily has to do with the potentiality of private schools to ease pressure on governments in terms of general expenditure on education.

Belfield and Lewin (2002) are not unaware of the prevailing criticism because of the relatively higher cost of private secondary education. The main criticism is that the toleration of the private school phenomenon in secondary education disadvantages poor students and makes education an expensive privilege instead of a fundamental human right. In other words, the cost recovery mechanisms (whether full or partial) employed in the private education domain has raised and continue to raise numerous eyebrows because of the issue of profitability on the part of educational entrepreneurs. The overarching fear is that private secondary education compounds the already existing problem of non-participation in education.

This has led to numerous suggestions for the systematic removal of barriers to private education. The removal of these barriers is understood to mean a corresponding or complementary institution of sound measures to ensure adequate participation of students from poor and disadvantaged backgrounds. Educational subsidies and quality

educational offerings in schools are deemed as very necessary to bringing about a dramatic change in the educational status quo (Sowa, 2010).

2.7 The role of scholarship/subsidies in enrolment

The idea of a scholarship to mitigate the cost of education and thus encourage enrolment has been confirmed in many studies around the world. Schultz (1993) and Basu (1999) found direct costs associated with education, such as fees, books, etc. as crucial factors affecting school enrolment. Also, Mutangadura and Lamb (2003) stressed that government expenditure on education, GNP per capita, and debt categories are also factors capable of influencing school enrolment.

The use of educational subsidies is common to both first and third world countries. Sowa (2010) perceives subsidies as a type of intervention that enables a getting around the market system. According to Sowa (2010), it is a type of market intervention that can be used to get around the market system in terms of resource distribution for the primary purpose of improvement in welfare. This can be extended to mean that governments usually resort to subsidies because of the possibilities for balancing the inevitable trade-offs in an economic undertaking. In the reasoning of Sahin (2004), educational subsidies entail the difference between the long-run cost of the service to governments and the price charged to students and their parents.

Koranmoah (2016) draws the attention of researchers and policy makers to the unending debate about the levels of education to be subsidized and the specifics of the subsidies within the critical framework of equity, affordability, efficiency and sustainability. This lends credence to Trostel's (1996) stance which maintains that the decision to subsidize or not subsidize education cannot overlook the critical concerns of equity and affordability. Koramoah (2016) disagrees with Trostel's conclusion on

the undesirability of subsidies. Rather, he maintains that the absence of poorer households in the developing world justifies official government decisions to subsidize education.

Miron (2009) extends the argument further by likening the acquisition of education to physical investment. He makes a case highlighting the need for crediting, which resonates with Penrose's (2010) reasoning that the mere absence of easy-to-obtain education-centred credit facilities provides a compelling reason for the introduction of education subsidies. This inevitably benefits the poor who are unable to afford the generally high cost of education. Koramoah (2016) sums up this argument with his insistence on the power of subsidies to lower the cost of education for individuals and by so doing, help with attempts at the equitable redistribution of public finances.

Other reasons and/or arguments for subsidizing education exist. Garcia-Penalosa and Walde's argument for education subsidies is one typical example. Garcia-Penalosa and Walde (2000) advances the equity argument for educational subsidies. Starting from the premise of literacy and numeracy as a fundamental human need, these scholars maintain that those unable to acquire such a need ought to be assisted in their acquisition. This aligns perfectly with the redistribution concept and externality perspectives that entail the need for people to start from a similar position and the idea that education benefits the society rather than an individual.

Available research reveals the existence of different types of subsidies. Moyano and Gonzalez (2009) make reference to partial subsidies and suggest the elimination of this type of subsidy since its impact is somewhat negligible and does nothing substantial to enable poor households participate in education.

Cross subsidies thrive on the principle of risk-sharing, with rich households effectively partaking in the financing responsibility. Over here, loans are given and borrowers are expected to repay these loans over a long period of time (Usher, 2005). To Abdallah (2013), cross-subsidies give little hope for long-term impact since they are generally not sustainable.

Uniform subsidies are usually deemed as simple and fair because increment in student per-period amount affects every student (Romero, Levi & Perakis, 2014). Whilst a uniform subsidy may provide an ideal aggregated market consumption, there is definitely no guarantee about it being the best social welfare intervention. When implemented, uniform subsidies provide a succour for students from poor households to enroll and then complete their education (Garriga & Keightley, 2007). However, uniform subsidies are not capable of influencing an individual's educational choices (Blanchard & Willmann, 2013).

Koramoah (2016) posits that uniform subsidies could address both the incidental and opportunity cost of schooling. According to him, Ghana's secondary education subsidy remains a uniform subsidy given to public schools based on enrolment figures. He then furthers the argument about the likelihood of uniform subsidies leading to inefficient selection of students which will eventually culminate in poor students dropping out of school.

Selective subsidy is targeted towards a specific group or audience. There are special criteria to meet before benefitting from selective subsidies (Eriksson et al., 1998). Educational subsidies that target poor and disadvantaged students usually qualify as selective subsidies.

Yakita (2003) maintains that education is subsidized either to a greater or lesser extent by countries around the world. Şahin (2004) expands the debate with the insistence that education subsidies create two distinct adverse effects on human capital. Whilst a high subsidy strategy causes an increase in the ratio of less able and less highly-motivated college students, a low subsidy strategy leads to a lowering of efforts on the part of students. In addition, Fgatabu (2012) reveals that education subsidies lead to an increment in enrolment rates, retention and completion rates of public secondary school students. This aligns perfectly with the thinking that acquiring education is like making a physical investment. This physical investment eventually improves the quantity and/or quality of human capital, which eventually seeks to increase productivity (Miron, 2009). On the other hand, government subsidies for education promote individual investment in human capital. This consequently leads to the acceleration of economic growth (Shindo, 2010).

Human capital development advocates share in the thinking about the present inability of educational subsidies to bring about desirable economic gains (Bronchi, 2003; Castronova, 2002; Crepez & Morse, 2004). Owing to this, they recommend some substantial structural reforms since educational subsidies on their own cannot result in the achievement of desired societal development goals.

The idea of access to education for all is fast becoming a universal preoccupation. That is why Patrinos and Ariasingam (1997) advocate for subsidies channeled directly to individuals, or to institutions. This, according to them, should be done on the basis of demand by potential beneficiaries. When done, it would go a long way in lowering education costs, relieving households and increasing enrolment. Poor households are

bound to have a reduction in overall opportunity costs (Patrinos & Psacharopoulos, 2002; Ravallion & Wodon, 1999).

Schools also stand the chance of quality improvements as a result of the direct reception of educational subsidies. This could incentivize households to value education and put in the necessary response needed in terms of demand and enrolment. Copious research has found a positive link between educational subsidies and school enrolment. Empirical evidence from both developed and developing countries confirm this conclusion. As an example, the Education Maintenance Allowance (EMA) implemented in England increased participation in post compulsory secondary education.

2.8 SEIP-like interventions and academic performance

According to Mkanyika (2014), progress in educational achievement occurs because of the potentialities of SFPs to increase school attendance through the lowering of opportunity costs associated with school attendance. Also, SFPs enables the alleviation of different kinds of student hunger even as it improves their attention span and cognitive functioning. This researcher assessed the influence of SFP on pupils' participation in a flood-prone Tana River County. This assessment confirmed the significant influence of SFP on primary school pupils' attendance and enrolment. Another observation was SFP's direct enhancement of active class participation and its contribution to the reduction of general school dropout rate. This is very significant, especially upon consideration of the fact that areas with extreme poverty and food insecurity often record low school attendance and dropout rates. The obvious effects can be seen in the low levels of educational attainment commonplace in these areas (Alderman, Alderman, Giligan & Lehrer, 2009).

Generally, education is perceived as an investment that should be available to every student. Essentially, financial aid programmes seek to increase educational equity. Stater (2009) believes that an understanding of the effects of financial aid on student persistence is necessary to efforts at gauging the effectiveness of policies relating to college completion. Unsurprisingly, Stater discovered that student finances ultimately determine academic outcomes or student performance.

2.9 The role of infrastructural facilities on performance

Rivera-Batiz, Francisco & Lillian (1995) emphasized that the improvement of the physical conditions of schools is as closely related to learning [performance] as other educational inputs including home environment, motivation, good teachers, libraries, technologies or student services. A comprehensive review of modern literature reveals that investments in school infrastructure and facilities come with substantial impact on educational quality in at least three dimensions: attendance and completion of academic cycles, teacher motivation and learning results. The World Bank (2004) found out that investments in education by the Peruvian government resulted in a very significant and positive effect on student attendance.

Research in countries like Bangladesh, Ecuador, India, Indonesia, Peru and Uganda reveals that teachers in schools with good infrastructure have on average, 10% less absenteeism than their colleagues in infrastructure-deficient schools. One of the interesting conclusions of these studies have to do with the conclusion that infrastructure had a better and greater effect when it comes to reducing teacher absenteeism. In fact, it surpassed salaries and administrative discipline in the ability to control habits of absenteeism among teachers. Various studies conducted in the United States also lends credence to the claim of a direct relationship between school

infrastructure and educational performance, which inevitably improves economic performance. 1st Century School Fund (2010) observed positive results which are statistically significant between school infrastructure and standardized tests to measure learning processes. Hanushek (1995) also found a mostly positive effect with his thirty-four (34) studies on production functions in developing countries that analyzed the relationship between school facilities and learning mostly found a positive effect. Velez, Schiefelbein and Valenzuela (1993) also affirmed a positive result between infrastructure quality and learning. They arrived at this conclusion after a review of about seventy (70) models of functions of production carried out during 20 years in Latin America.

Opoku-Asare & Siaw (2015) share the belief that the equitable supply of educational infrastructure and facilities has the potential to promote high academic performance in both junior and senior high schools. The reasoning of these authors parallels a great number of studies that maintain that variations in provision of educational infrastructure have led to noticeable differences in educational opportunities and by implication, performance and achievement across the country (Atuahene & Owusu-Ansah, 2013; The President's Committee on Review of Education Reforms in Ghana, 2002).

2.10 Role of in-service training for teachers and its effects on performance

In-service teacher training has long been held as a tool capable of improving the supply of public education. In a randomized experiment conducted in Mexico to ascertain whether teacher training could increase teacher efficiency in public secondary schools, there was an observation of student improvement in English. This study was carried out on a sample of Mexican teachers teaching English as a second language (ESL) in public secondary schools in the two states of Puebla and Tlaxcala.

Teachers observed under this experiment somehow managed to change their classroom practices. This was done through the provision of more opportunities for active student engagement in learning in their various classrooms. This evidence is perceived as a strong indication of the effectiveness of training in the improvement of student learning and performance (Romero, Levi & Perakis, 2014).

Other studies have not been so optimistic. For example, Mexico's Ministry of Education reported in 2003 that their numerous investments in in-service teacher training have not necessarily led to improvement in student. According to Vegas and Petrow (2008), investment in in-service teacher training derives support from qualitative research and comparisons across different educational systems which lend credence to the view that teaching training should necessarily lead to learning.

Scholars maintain that the difficulty of qualitative studies and international comparisons has to do with separating the effects of teacher training from unrelated ones. Research has revealed that better-trained and experienced teachers usually work in schools with students noted for more ability (Harris & Sass, 2011). Teachers that are better trained and more experienced tend to seek work in schools with students with more ability (Harris & Sass, 2011). These authors reviewed quantitative studies in an attempt to assess how in-service teaching training affects student learning. In all, only three randomized controlled trials on the interplay of in-service teacher training on student learning in the United States were found. A significant number of research maintains that the attendant strong self-selection effects usually result in non-experimental designs guilty of overestimating effects (Mano et al., 2013; Hamalainen, Uusitalo, and Vuori, 2008; Hotz, Imbens & Mortimer, 2005).

As already indicated, available quantitative evidence on the impact of in-service teacher training on student performance is not consistent. While some studies conclude that there are likely no effects on student learning (Metzler and Woessmann, 2012; Chingos & Peterson, 2011; Garet et al., 2011; Harris & Sass, 2011; Rockoff, 2004), others support the idea of training as having the potential to affect student learning and performance (Sunardi, Widyarini, & Tjakraatmadja, 2012; Angrist & Lavy, 2001; Mason, O'Leary & Vecchi, 2012).

Most of these studies on in-service teacher training have been very consistent in accentuating the role of context in bringing about observed results, i.e. understanding how teacher training affects classroom practices and teacher behaviour. Darling-Hammond et al. (2009) adds to this discussion about some specific characteristics needed to ensure the effectiveness of in-service teacher training. According to these authors, these characteristics involve a connection to practice, intensity, incentives linkage and continuity. In their reviewing of available literature, these authors suggested some conditions necessary for the effectiveness of an in-service teacher training programme. These include but are not limited to:

- i. The need for the training programme to be intensive so as to ensure a substantial change in teacher behaviour. A minimum duration of fifty (50) hours is suggested in this regard.
- ii. The utmost need for training to be connected to practice.
- iii. The critical requirement of continuity apparently for reasons of mastery and ease of recall.
- iv. The need for training to be aligned with incentives meant to target teachers.

A teacher's thinking pattern to a large extent, influences his or her performance and achievements. This thinking pattern goes beyond the teacher to have a strong influence on student performance. The point being made is that an improvement in a teacher's thinking pattern leads to the enhancement of teaching quality. In other words, how job requirements are evaluated somehow influences teaching abilities, organizational efficiency and teaching effectiveness (Haycock, 1998).

In-service training programmes for teachers are known for enhancing desirable qualities which ultimately affect performance in a positive way. Harris and Sass (2001) revealed an association of in-service teacher training with productivity in middle and high school mathematics. They further aver that experienced teachers remain more effective in the teaching of elementary and middle school reading.

In examining the effects of teacher training on the administrative work and teacher's behavior in schools, Samupwa (2008) found some resulting significant changes in teacher classroom and administrative behaviour. Further training of teachers culminates in substantial teacher changes, role redefinition, vision broadening and overall attribute enhancement. Owing to this, teachers become more systematic and logical in their various teaching styles (Kazmi, Pervez , Mumtaz, 2011).

2.11 Challenges with the management of the SEIP-like interventions

This section explores the main challenges associated with the administration of the SEIP-like intervention programmes. Among other things, this section specifically focuses on the delays, mismanagement and refusal to authenticate the enrolment data submitted by schools to GES headquarters.

Delays

To have access to subsidies, the GES ought to apply through the MOE to the MOF. This is the specifically laid-down procedure to request for fund release with regards to the payment of subsidies in schools. The rule is to calculate subsidies based on estimated enrolment figures of the previous academic year in every first term of an academic year. This subsequently changes into the use of actual enrolment figures during the second and third terms. Akyeampong (2009) maintains that the mechanism for subsidy delivery goes through delays which have the effects of affecting quality. He recommends a balance between procedures for accountability purposes and the elimination of delay-enhancing processes if subsidies are to have their required impact on educational provision. As a matter of fact, the Ghana National Association of Teachers, GNAT (2014) share the same views that delays in subsidy, feeding, and capitation grant disbursement imperil the effective management of schools in the country.

A review of the literature reveals some factors noted for occasioning the needless delays in the transfer of subsidies for secondary education. These include late submission of enrolment data, lack of coordination, lack of funds, formula for disbursement, government's fiscal and monetary policy, lack of proper record keeping, etc. (Azeem, Boateng, King, Abbey & Mevuta, 2003; MOE, 2014; World Bank, 2000; Amanchukwu and Ololube, 2015).

Late submission of enrolment data

During the beginning of every academic year, enrolment figures make it possible for the computation of subsidies. These figures are usually derived from that of the previous academic year. As already indicated elsewhere, the late submission of

enrolment figures means inevitable delays as far as the release of subsidies are concerned. The practice of delaying the submission of enrolment data is quite rampant. Added to this is the absence of penalties and sanctions for school heads noted for such delays. There is at the moment no system of deterrence available to deal with this challenge.

Lack of coordination

Another persisting challenge is the glaring lack of proper coordination between the various bodies like BOG, MOF, CAGD and MOE (Daily Guide, January 17, 2014). These bodies ought to seamlessly work together in order to ensure that subsidies get to the various schools at the right time, the very time when they are needed.

Lack of funds

Sometimes there are challenges with regards to the availability of funds because of the many competing national needs (Azeem, Boateng, King, Abbey & Mevuta, 2003). The observation of Azeem et al. (2003) about the non-disbursement of funds to the districts for some three-year period was confirmed by the MOE (2014).

This basically stems from the ability to release funds on the part of government. This compounds an already existing problem by leading to the accumulation of arrears. By so doing, a culture of dependency on donor support is created despite the inability of this kind of support to be of great help in the long term.

Formula for disbursement

Funds from the Ghana Education Trust Fund (GETFund) are disbursed based on a formula approved by Parliament. Due to the fact that subsidies are sometimes paid from the GETFund, there are instances of delay in getting the proposed formula,

leading to delays in disbursement. In terms of formula, the GETFund is thrives on contributions equivalent to “Two and one half percent or such percentage not being less than two and one half percent of the Value Added Tax rate, as Parliament may determine out of the prevailing rate of the Value Added Tax”.

Government’s fiscal and monetary policy

The Government's consideration of existing fiscal and monetary policies sometimes leads to delays. This could be as a result of governmental efforts to control money supply and expenditure through the withholding of subsidies (Azeem, et. al., 2003).

Lack of record keeping

The MOF has been categorical in its concern about the widespread failure to keep records of fund disbursement on the part of District Education Offices (DEOs). This poor record keeping and inadequate data about fund disbursement pose serious questions about accountability and efficiency. It sets the way for the disbursement of funds that are either inadequate or excessive. Poor record keeping impedes the effectiveness and efficiency of a system. Good and easy-to-access public records remain crucial to the preservation of law, fairness, equality, and a useful consistency in fund transfer (World Bank, 2000).

After a rigorous study of school record behaviour for effective management of educational systems in Nigeria, Amanchukwu and Ololube (2015) concluded that poor records management caused diverse challenges to the administration, development and supervision of educational systems. They were very emphatic about the fact that a great number of management and policy implementation challenges emanates from an entrenched practice of poor record keeping in schools.

Mismanagement

Ghana is no stranger to several worrying cases of financial irregularities and misappropriations within the education sector (Afful-Broni, 2004; Opong, 2011). Various findings by the Auditor General (2013) and the Internal Audit Unit of the GES (2013) reveal an ever-increasing trend of fund embezzlement. This usually happens as a direct result of egregious breaches of laid-down regulations and the lack of an effective system of supervision in the schools and organisations concerned. It is worth noting that proper and comprehensive reporting about educational subsidies in secondary education remains relevant to a better understanding of subsidies and their effects on equitable access and participation in secondary education. It should be stressed that delays in the release of subsidies account for the rampant cases of mismanagement.

A survey by the Centre for Democratic Development Ghana (CDD-Ghana) implicated GES officials for various leaks in the nationwide appropriation of the capitation grant. Essuman (2010) draws attention to the prevailing corruption which usually consists in the inflation of enrolment figures for obvious reasons. There are fears that this could perpetuate the undesirably corrupt phenomenon of funds being released by government for ghost pupils. This nagging problem is further compounded by the consistent delays encountered in the yearly release of the capitation grant.

The Ghana Education Service also acknowledges that the capitation grant scheme is not without its own share of problems. According to Asante (2011), some challenges admitted by the GES as confronting the capitation grant scheme are:

- (i) Increasing demand for additional teaching postings
- (ii) Increasing demand for classrooms because of an overflow in student numbers

- (iii) The attendant increase in terms of demand for teachers
- (iv) Increasing demand for textbooks and other teaching and/or learning materials
- (v) Transparency challenges in the disbursement and appropriation of released funds.

This official acknowledgement about confronting challenges however has not preempted the optimism of the GES concerning the impact of the capitation grant on student enrolment and quality learning outcomes in schools across the country.

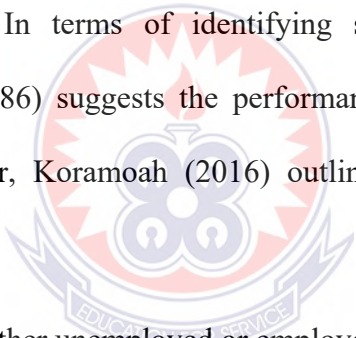
According to Dur and Teulings (2003), many credible reasons justifying the subsidizing of education abound around the world. In line with the position of these researchers, Akyeampong (2009) stressed the crucial role played by subsidies with regards to the participation of poor households in education. Without the necessary assistance, the average person will shun any type of investment in education apparently because of inadequate information on the associated benefits (Miron, 2009). Penrose (2010) ascribes this hindering challenge of inadequate information to various shortfalls in information availability and dissemination. It is believed that situations such as this justify the need for educational subsidies. In this particular instance, the introduction of educational subsidies would enable the individuals concerned to make the right decisions in the area of education.

2.12 Factors essential to improvement in the implementation of SEIP-like interventions

Research has identified the need for involving all relevant stakeholders in interventions geared towards eliminating the ineffectiveness associated with most government intervention programmes (Kamaludeen, 2014; Koramoah, 2016;

Psacharopoulos et.al, 1986). Odden and Picus (2004) remind policy makers and implementers about the difficulty and lack of consensus about the best alternatives of measuring the cost of an adequate provision of education. These researchers believe that factors like the health of parents, student intelligence, student character and employment status can be of much help in determining those eligible for various subsidies in government interventions.

Koramoah (2016) makes the point that one essential factor necessary to an effective subsidy management has to do with an equitable and targeted distribution of funding. According to him, the categorization of students on the basis of ability to pay, with the most disadvantaged group having access to most subsidies, remains a very good and effective practice. In terms of identifying students eligible for subsidies, Psacharopoulos et.al (1986) suggests the performance of a socio-economic profile analysis. Delving further, Koramoah (2016) outlined a number of factors which include:

- 
- (i). Income of parents, either unemployed or employed in petty occupations
 - (ii). Living conditions of family of students measured by indicators used by the Ghana Living Standard Surveys (GLSS) including household consumption expenditure, covering food and non-food items including housing
 - (iii). Health condition of parents (incapacitated) and
 - iv. Type of school attended.

Kamaludeen (2014) makes similar claims with his observations about school feeding programmes. According to him, constant monitoring and evaluation has a way of providing the necessary information on student needs and thus on the overall effectiveness of interventions. Specifically, he recommended the periodic collection

of baseline data in order to help with efforts at determining progress. He went further to outline some measures necessary to the effectiveness of intervention programmes. These measures include consultation with parents, staff and teachers to address all associated concerns and issues associated with the implementation of government interventions.

Researchers have drawn attention to the need to take a relook at the work of internal auditors because of the need for accountability in resource allocation (Mullins, 2010). This also means the need for better information systems capable of recording, tracking and monitoring disbursements for reasons of achieving better resource management and making schools accountable on termly and yearly basis. There is also the suggestion of an annual review of the various subsidies and attendant progress and shortcomings. Random checks on students' bills have also been found out as a factor necessary to an effective implementation of programs that aim at giving subsidies to students.

Also, a period reconciliation of enrolment figures in the case of computed figures and figures submitted for subsidy request purposes has been suggested as a way of eliminating randomness and making government interventions effective and by so doing, relevant to the needs and situations of students (Koramoah, 2016).

Dearden, Emmerson, Frayne and Meghir (2005) examined the impact of the Education Maintenance Allowance (EMA) programme that was launched in September, 1999, in 10 local education authorities in England. The EMA was paid to 16-18 year olds who remained in full-time school after the end of the statutory education age of 11 years. The 16-18 year olds were paid a weekly allowance (during school term only), retention bonus every term for those who attend school every time

as well as an achievement bonus at the end of the course for those who achieved goals set out in a learning agreement signed by parents and students when they started receiving the EMA. As part of the scheme, benefits could be claimed for two years and up to three years for young people with special educational needs.

2.13 Summary of Literature Review

The literature review brings to light the novelty of SEIP even though there are a number of SEIP-like interventions in Ghana and around the world. These include but are not limited to GSFP, Capitation grant, EMA, PROGRESSA, etc. These interventions have primarily aimed to increase the rate of access and participation in secondary school. There is a general consensus amongst researchers about increase in school enrolment as a direct result of these interventions.

In terms of performance, some SEIP-like interventions increased active class participation which indirectly point the way to possibilities in enhanced performance. Since student finances affect student academic performance, the utilization of subsidies from SEIP-like programmes is believed to be capable of increasing performance though not all findings confirm this assumption. It was also observed that the equitable supply of educational infrastructure and facilities has the potential to promote high student performance. Also, the available evidence on the impact of in-service teacher training on student performance is not consistent.

Delays, late submission of enrolment data, lack of coordination among others, remain some of the persisting challenges in government interventions.

The literature review also pointed to monitoring and evaluation, promptness in the release of subsidies, annual reviews and others as factors essential to effective implementation of SEIP-like programmes.

2.14 Theoretical framework

As a matter of fact, the purpose of a framework in research is to primarily be a guide, in terms of ensuring coherence and determining the boundaries of a study (Bak, 2004). A framework is expected to be duly mindful of the conditions under which a phenomenon of study is likely to be found (Stjelja, 2013). In like manner, Vithal & Jansen (2012) perceive theoretical framework as a well-developed, coherent explanation of an event. This implies that sense can be made out of data because theoretical frameworks take into consideration the constitution, nature of knowledge and the ways of acquiring a particular knowledge. Despite the multiplicity of forms assumed depending on circumstances, theories essentially assist in the interpretation and understanding of events and also in the ordering of experience through the utilization of concepts.

Coser (1981) draws attention to the role of theory in the selection of relevant facets and data from a great multitude of facts surrounding an event. With regards to this role, there is the provision of tools needed for the correct interpretation of data. In addition, these tools prevent the undesirable fragmentation of knowledge through the ordering of an inquiry to give it a focus and the supply of theoretical explanations and reasons underlying the subject of study (Kamaludeen, 2014).

The use of theories in research has its own share of limitations and/or criticisms. Kamaludeen (2014) highlighted the major criticism which has to do with inconsistency. This researcher contends that the requirement of concepts and constructs aligning with a study's theoretical framework takes away every vestige of study originality. He further adds that the logic of theoretical discourse usually

becomes irrelevant to the experience of practitioners because of the tendency of theories to limit discussion within academic remits.

2.15 Vroom expectancy theory of motivation

This study is guided by Vroom expectancy theory of motivation as advocated by Victor H. Vroom (1964). Motivation at its most basic level requires a desire to act or ability to act and having an objective (Ramlall, 2004). Depending on approaches, motivational theories can be grouped into content theories, process theories and consolidation theories. The reasoning of content theories is that people act in certain ways based on their needs. Consolidation theories stress the link between an individual's behavior and certain specific. Process theories, on the other hand, endeavor to explain how motivation occurs, the factors that influence it and the relations between these factors.

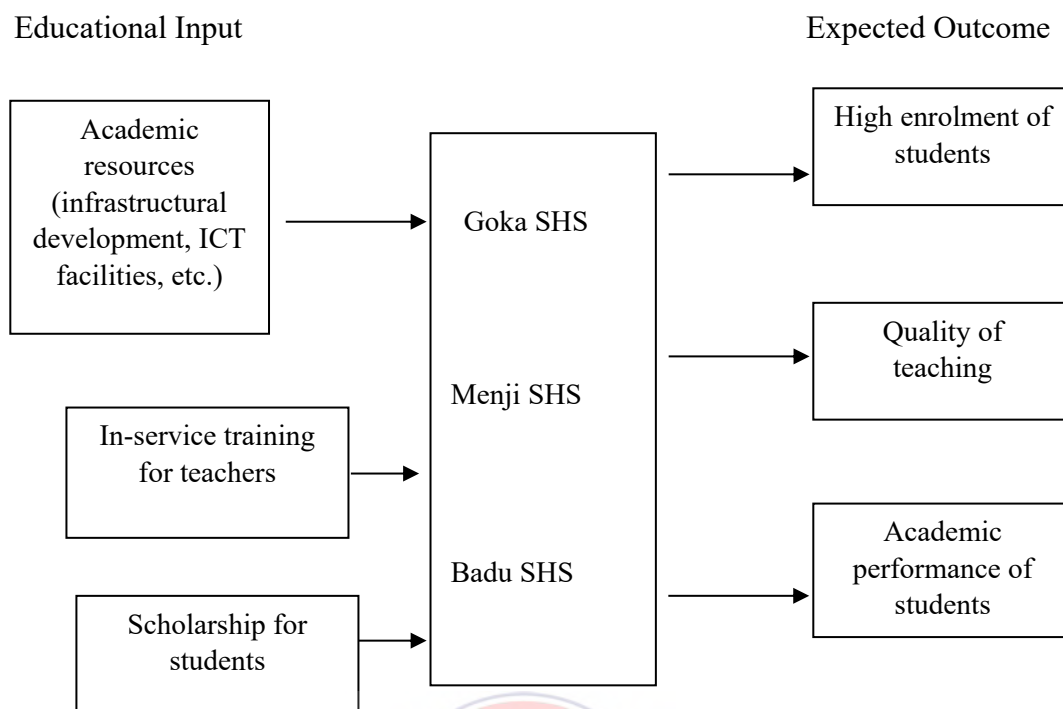
Vroom's expectancy theory belongs to the process theories category. It is known to integrate many of the elements of the needs, equity and reinforcement theories (Gordon et al., 1990). According to the Vroom's expectancy theory, the strength of a tendency to act in a certain way depends on the strength of an expectation that the act will be followed by a given outcome and on the attractiveness of that outcome to the individual (Robbins, 1993). Tolman (1932) attributed the results of reinforcement but never regarded reinforcement as a necessary condition for learning to take place. Students unable to attend school consistently as a result of poverty would be motivated to improve upon their performance in view of the prospects of receiving financial assistance. The reasoning is that people consciously choose alternatives and the choices are related to psychological processes, especially in the areas of perception and also beliefs and attitudes formation (Pinder, 1984).

As already indicated, students unable to take advantage of secondary school education due to reasons of poverty would have the opportunity to receive the full benefit of education. This of course would be as a result of a rare motivation made possible by SEIP. In other words, the SEIP, by its objectives remains an incentive to students in terms of attendance and performance. Within Vroom's theory, expectancy basically constitutes the belief about the likelihood of a particular act giving way to a particular outcome. It builds on the basic assumption that better efforts obviously eventuate in better performance. Relating it to the SEIP situation under study, expectancy is seen as the internalized beliefs of students that school attendance and consequent improvement in performance would enable them to exploit great educational opportunities through subsidies, vouchers, to name just a few. In a nutshell, SEIP affords students the opportunity to study without distractions insofar as the attainment of enviable educational goals and laurels are concerned.

2.16 Conceptual framework

The conceptual framework is based on the reasoning that SEIP will eventually help to increase student enrolment and performance. The Secondary School Improvement Programme (SEIP) remains the independent variable whilst student performance and enrolment qualifies as the dependent variable. Student enrolment (and subsequently performance) stands to be influenced by the SEIP. Apparently, the SEIP is likely to provide a strong motivation for students who would otherwise be out of school in the long run. The SEIP with its offering of alleviating measures is capable of providing diverse incentives for an increased attendance rate, regularity of school attendance and an overall improvement in student performance.

Figure. 2.1: Influence of SEIP on overall student performance



Source: Author's own construct (2018)

Simply put, the framework suggests that student enrolment results from the motivation provided by SEIP and student expectation of scholarships within a well-resourced teaching and learning environment. Without doubt, this would come with tangible effects on student performance, both in the short and long term.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

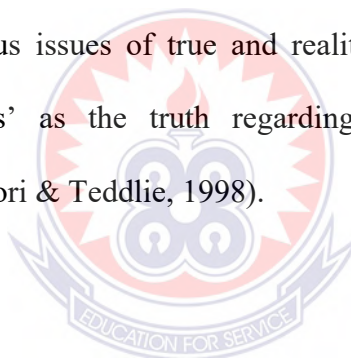
The research seeks to examine the impact of SEIP on enrolment and performance in three beneficiary senior high schools in the Brong-Ahafo region of Ghana. The researcher designed a plan to visit, interview and administer questionnaires in the three (3) beneficiary schools in order to obtain data to answer the research questions. This chapter discusses issues like research paradigm, research design, population of the study, sample size and sampling techniques, instruments for data collection, instrumentations, validity and reliability, questionnaire administration, data analysis and procedure of the research.

3.2 Research paradigm

Henn, Weinstein and Foard (2006) indicate that a paradigm is ‘a set of assumptions about how the issue of concern to the researcher should be studied’. Basically the researcher came across four main types of research paradigm that existed in literature these are positivist, interpretivist, critical and pragmatic paradigm. The positivist paradigm is located within the normative studies and is linked to the objectivist epistemological perspective. It argues that social reality exists ‘out there’ and is independent of the observer. Esterberg (2002) believes that ‘the aim of the positivist researchers is to discover a set of laws that can be used to predict general patterns of human behavior’. Interpretive paradigm argues that social reality is created jointly through meaningful interaction between the researcher and the researched on agreement (Grbich, 2007; Rugg & Petre, 2007) in the latter’s socio-cultural context. Social reality is experienced in a number of ways and interpreted ‘often in similar but not necessarily the same’ (Bessey, 1999) manner. Interpretive research acknowledges

the feelings, experiences and viewpoints of the researched as data (Verma & Mallick, 1999; Walliman, 2005). Therefore, researchers working within the interpretive paradigm collect data verbally. Critical paradigm aims to ‘expose inequalities, malpractices, injustices, and exploitation; give a voice to the excluded and marginalized groups; and help explain generalised oppression in order to precipitate social change’ (Henn et al, 2006).

Taken the objective of the research into consideration, the combination of both positivist and interpretivist assumptions is best fitted for the study of this phenomenon, this is called pragmatic paradigm. Pragmatic paradigm is a deconstructive paradigm that advocates the use of mixed method. In research “sidesteps the contentious issues of true and reality” (Feilzer, 2010) and “focuses instead on what works’ as the truth regarding the research questions under investigation” (Tashaskori & Teddlie, 1998).



3.3 Research design

An assessment of the overall and secondary objectives of the study’s research questions and objectives indicates that a mixed method design (combining both qualitative and quantitative method) was necessary due to the wide range of data needed to draw the necessary conclusion on the impact of the SEIP on enrolment and academic performance of the beneficiary’s schools. According to Gray (2009), the mixed methods approach in social research “include at least one quantitative method and one qualitative method, where neither type...is inherently linked to any particular inquiry paradigm.” In the view of Creswell (2003), mixed methods involves “the collection or analysis of both quantitative and qualitative data in a single study in which the data are collected or analyzed concurrently or sequentially, are given a

priority, and involve the integration of data at one or more stages in a process of research.”

According to Morse (2016), any researcher who collects, analyses and integrates qualitative and statistical data and methods within a single study can be rightly said to be using a mixed method approach. It is important to emphasize that the mixed method approach comes with its own set of philosophical assumptions. The nature of the research questions as well as the purpose of the study suggests the use of a sequential explanatory design. Specifically, this involves collecting quantitative data first, analyzing and later gathering qualitative data to fill the gaps identified and then give further explanation to the statistical analysis (Creswell, 2003).

In studying a phenomenon such as the SEIP, the researcher came across various respondents whose responses were motivated by several contextual dictates and subjective perceptions. In other words, knowledge was not necessarily seen as objective. The use of a qualitative approach therefore assisted the researcher to eschew possible bias and rather appreciate the phenomenon through the lenses of the respondents and mediate such responses with his own experiences. However, there were other aspects of the impact of the SEIP which required objective measuring or quantifying in order to make definitive statements or conclusions about the volume or extent of effect (or lack of effect) believed to have been occasioned by the SEIP, hence the choice of the quantitative approach as a complementary force. Similarly, the quantitative approach allowed the researcher “identify relationships between variables” related to the SEIP and thus permitted generalization of some of the observations or findings (Gray, 2009). In effect, the mixed approach was deemed to be appropriate for the study because the weaknesses of one approach were eventually

compensated for by the strengths of the other (Creswell, 2013). Hans et. al (2005 cited in Gray, 2009) provides further proof of the significance of the mixed method approach when he asserts that “using mixed methods allow researchers to simultaneously generalize from a sample to a population and to gain a richer, contextual understanding of the phenomenon being researched” (Gray, 2009).

Qualitative data were collected through in-depth interviews with the SEIP coordinators of the beneficiary schools, as well as one (1) coordinator at the District Education office catering to one of the beneficiary schools. Quantitative data on the other hand, were obtained from the analysis of data received from the beneficiaries’ schools on their enrolment and WASSCE performance.

Although there are both conceptual and practical challenges in dealing with data from mixed methods research studies the rationale for employing mixed methods in this study is grounded in the view that it broadens understanding by incorporating both positivist and interpretivist paradigms. Integrating quantitative data and qualitative research methods in this study was relevant to discover the multi-level coordination mechanisms relevant for the effective implementation of the SEIP while uncovering the strengths, weaknesses, opportunities and threats for enhancing effective sustainable mechanisms for improving similar intervention that aims at access to secondary education through education grants. The integration of the mixed research approach in this study further provided a trade-off between the breadth and depth of the field data.

3.4 The study area

This section provides a background of the schools that participated in the study. It is worth noting that this study was conducted in the three out of the seven beneficiary schools in the Brong Ahafo Region.

Goka Senior High School

The Goka Senior High School was established in 1993. Goka SHS operates as a non-denominational day and boarding mixed school in the Brong Ahafo Region. Current total student population of the school is 1632. Form one students are around 638. There are a total of 307 form two students. The final-year students (form three) are 687. This is made up of 634 boarding students and 998 day students. In terms of infrastructural facilities, Goka SHS is endowed with the following facilities from the SEIP project, 3-unit classroom block, solar panel, 6-seater toilet facility, 1 ibox, 14 laptop computers and 1 projector. Other facilities of the school include computer Lab, classroom block, headmasters' bungalows (Researcher's fieldwork report, 2018).

There are 57 members of teaching staff in the school, currently teacher to student ratio is 28.63. Goka SHS is also one of the least preferred schools for placement from junior high school to senior high school. It is always undersubscribed in the sense that every year few students as low as 200 students select the school for placement as against 700 vacancies declared by the school. The school runs courses in Business, General Science, General Arts, General Agricultural, Technical and Home Economics leading to the award of a West African Senior High School Certificate (MoE, 2015).

Menji Senior High School

Menji Senior High School was founded in 1993. Menji SHS operates as a non-denominational day and boarding mixed school in the Brong Ahafo Region. Current

total student population of the school is 185 with 40 being form one students and 78 being form two students. The number of form three students stand at 67. This is made up of 63 boarding students and 122 day students. Menji SHS is one of the least preferred schools for placement from junior high school to senior high school. It is always undersubscribed in the sense that every year few students as low as 96 students select the school for placement as against 150 vacancies declared by the school. There are 15 members of teaching staff in the school, currently teacher to student ratio is 12.33 (MoE, 2015). Menji SHS is endowed with the following facilities from the SEIP project three units' classroom block, solar panel, six seater toilet facility, I box, school entrance gate and fence wall. Other facilities of the school include Library, Science laboratory and computer Lab. The school runs courses in Business, General Science, General Arts, General Agricultural and Visual Arts and Home Economics leading to the award of a West African Senior High School Certificate (Researcher's fieldwork report, 2018).

Badu Senior High school

Established in 1991, Badu SHS operates as a non-denominational day and boarding mixed school in the Brong Ahafo Region. The total student population of the school as at 2014-2015 academic year is 621. There are a total of 101 form one students. Form two students have the highest number with 331. The number of form three students is 189. This is made up of 102 boarding students and 519 day students. Badu SHS is also one of the least preferred schools for placement from junior high school to senior high school. It is always undersubscribed in the sense that every year few students select the school for placement than the vacancies declared by the school. There are 30 members of teaching staff in the school, currently teacher to student ratio is 20.70 (MoE, 2015).

In terms of infrastructural facilities, Badu SHS is endowed with the following facilities from the SEIP project three units' classroom block, solar panel, six seater toilet facility, I box, school entrance gate and fence wall. Other facilities of the school include Library, Science laboratory and computer Lab. The school runs courses in Business, General Science, General Arts, General Agricultural and Visual Arts leading to the award of a West African Senior High School Certificate (Researcher's fieldwork report, 2018).

The areas were selected for the study based on the following reasons.

Firstly, the researcher is a teacher in one of the beneficiary schools and had observed the way the school was still struggling to get enrolment especially in first year despite the intervention. He was convinced that the same situation might exist at the various beneficiary schools especially in the same region. The three schools that were randomly selected from the seven beneficiary schools in the Brong Ahafo region are Goka Senior High/Technical School, Badu Senior High/ Technical School and Menji Senior High School.

Secondly, its size meant that it would be manageable within the duration of the study. Thirdly, it was geographically convenient. The transportation system within the region is well developed compared to other regions, making it less difficult to reach the participants to collect data.

Finally, the problem under study remains a typical subject of enquiry. This implies that it could be conducted in any of the beneficiary schools in Ghana. It is worth iterating that the findings of the study have been limited to the study area but can still be applied to areas where such conditions exist.

3.4 Population of the study

Population is the group from which the researcher would like the results of the study to be generalized. In other words, a population includes all individuals with certain specific characteristics. The population for the study was all the second and third year students from three (3) participating schools in the Brong Ahafo region. These students joined the respective schools from the first year. The researcher was particular about this characteristic because of the possibility of other factors (apart from the SEIP) influencing their transfer to the school in the second year. The current form one students were also exempted from the population because of the introduction of the free SHS intervention programme in the 2017/2018 academic year. The total population under study is 977 which comprises of 406 second-year students and 571 third-year students (2017/2018 academic year). In terms of gender, it is made up of 499 male students and 506 female students. Following is a table that depicts the population.

Table 3.1 First-year enrolment for second and third year students (2017/2008 academic year)

School	Male	Female	Male	Female	Total	Total
	2 nd year	2 nd year	3 rd year	3 rd year	2 nd year	3 rd year
Goka SHS	90	60	60	122	150	295
Badu SHS	97	88	133	94	187	227
Menji SHS	57	12	32	17	69	49
Total	244	273	225	233	406	571

Source: Schools' registers (2018).

Apart from the students already indicated, the 3 SEIP Coordinators at beneficiary schools and all teachers who have been in the school for not less than seven years also

constituted part of the study population. This is because they could give adequate information about the state of the school before and after the implementation of the SEIP intervention. In all, there was a total number of 59 teachers who had been in the beneficiary schools for not less than 7 years. Goka SHS had 27 teachers whilst Badu SHS had 18 teachers. Menji on the other hand, had 14 teachers. Also part of the study population was 3 District SEIP Coordinators. In effect, the total population was 1042.

3.5 Sample size

In general, it is better to have a large sample because of the need to reach general conclusions. The larger the sample, the more representative of the population it becomes and thus the more reliable and valid the results (Nwana, 1982). In view of this, out of seven schools that benefited from facility and quality improvement in the Brong Ahafo region, the researcher used a reasonable sample of three (3) schools from which the respondents were selected purposively for the study. Within this sample, the researcher was able to draw conclusions with a high degree of accuracy. In all, a total of 143 respondents were sampled from the second and third-year student population by the researcher. The beneficiary schools and SEIP officer at the District Education office constituted the study population.

Table 3.2 Sample size across units of analysis

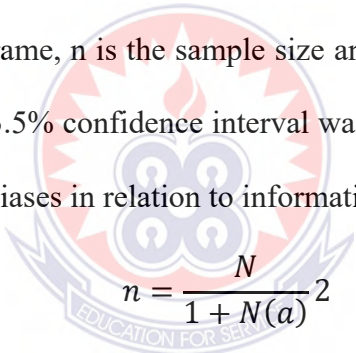
Sample	Population	Sample size
Students	977	143
Teachers	59	42
SEIP coordinators (beneficiary schools)	3	3
SEIP officer at the District Education Office	3	1
Total	1042	189

Source: Researcher Construction (2018)

Miller and Brewer's mathematical formula for calculating sample is as follows:

$$n = \frac{N}{1 + N(a)^2}$$

Where N is the sample frame, n is the sample size and α is the margin of error which is in case is 6.5%. The 93.5% confidence interval was chosen for this study because it deals with humans with biases in relation to information accuracy.



$$n = \frac{N}{1 + N(a)^2}$$

$$n = \frac{1042}{1 + 1042 (0.065)^2}$$

$$n = \frac{1042}{1 + 1042(0.0432964)}$$

$$n = \frac{1042}{1 + 4.51148488}$$

$$n = \frac{1042}{5.5148488}$$

$$n = 189$$

From the above formula, the sample size arrived at is 189.

3.6 Sampling techniques

Sampling technique is the process of choosing the units of the target population which is to be included in the study (Ebel, 1972). To study a whole population in order to arrive at generalization would be impracticable. Thus, there is need for sample selection (Morris & Nguyen, 2008). According to Seidu (2006), the main interest in sampling is to extend the result of analysis based on the sample to the universal group from which the sample was drawn.

As a matter of fact, this study uses both probability and non-probability sampling techniques. The simple random sampling of the probability sampling techniques was used to select the schools whereas purposive sampling of the non- probability was used to select the students.

The simple random sampling was resorted to in the selection of three (3) schools from the seven (7) beneficiary schools in order to give each school the opportunity to be selected. The lottery method of the simple random sampling technique was used to select the schools for the study. The names of all the seven schools was written on pieces of papers which were then folded and put in a container and shaken for a while. Afterwards, the researcher picked one after the other until the 3rd name was reached.

Census sampling technique was used to select the 3 SEIP coordinators from the beneficiary schools. The choice of this sampling technique was to ensure that all the 3 SEIP coordinators in the study population had the opportunity to be interviewed. The teachers were selected based on a criterion sampling technique. According to Patton (2001), it involves selecting cases that meet some predetermined criterion of importance. This was resorted to because the researcher wanted teachers who had been in the school for not less than 7 years because of the advantage of a thorough

before and after understanding of the policy. One of the district SEIP coordinators and all the scholarship beneficiary students were purposively selected in order to verify some of the information given by the SEIP coordinators at the school level. The nature of answers given by 1 district SEIP coordinator did not justify a further interviewing of the 2 other district SEIP coordinators. With regards to the students, purposively sampling was used because the researcher was interested in all the students who had benefitted from all the 3 components of the SEIP programme which included infrastructural facilities, teacher in-service training and scholarship.

Generally, purposive sampling was used because of the assumption that the research wanted to discover, understand and gain insights into the SEIP with regards to enrolment, academic performance, challenges facing the intervention and effective measures of improving the overall performance of the intervention thus was obliged to select a sample from which the most could be learned. Gay & Airasian (1992) argue that the logic and power of purposive sampling lies in selecting information-rich cases for study in depth. Information rich cases are those from which one can learn about issues of central importance to the purpose of the research. According to Cohen, Manion & Morrison (2002), purposive sampling enables researchers to handpick the cases to be included in the sample on the basis of their judgment of their typicality or possession of the particular characteristics being sought. The objective is to acquire in-depth information from those who are in a position to give it. The use of purposive sampling was necessary because most of the second and third year students were likely to have come from the beneficiary schools on transfer basis. Thus, any attempt at random selection might have wrongly led to their inclusion.

As the target population was too large for meaningful research to be carried out, the researcher settled on one hundred and eighty-nine (189) respondents, comprising of

fifty-six (56) students from Goka Senior High School, thirty-seven (37) students from Menji Senior High School and fifty (50) students from Badu Senior High School. Three (3) SEIP coordinators from the various schools (one representing each school) were interviewed together with the forty-two (42) teachers. Of these teachers, Goka SHS teachers constituted 20 teachers, Menji SHS constituted 10 teachers and Badu 12 teachers. There was one (1) SEIP coordinator at the District Education Office.

3.7 Instruments for data collection

Data for the study was collected from both primary and secondary sources. The secondary data included the school register and academic performance (based on WASSCE results). The primary data was collected in the field through the use of both interviews and questionnaires.

3.7.1 Structured and semi-structured questionnaire

The primary data were collected using self-administered questionnaires in the three selected schools. The choice of a questionnaire for data collection purposes was because of the following:

- (i) The questionnaire method is noted for facilitating the collection of a large amount of data;
- (ii) By their nature, questionnaires provide a wider coverage of the sample than the interview method;
- (iii) The use of questionnaires is relatively economical. This is because questionnaires can be duplicated and distributed to many respondents to produce a large amount of data (Fraenkel, Wallen & Hyun, 2011).

The development of the questionnaire was greatly influenced by information obtained from the literature reviewed at the early stages of the study. This was done to

determine the extent of coverage of this area. The preliminary set of questions went through many drafts before it was put into a form for self-administration. Questionnaires consisting of mainly close-ended questions were used for the study because they provided control over the participants' range of responses by providing specific response alternatives (Borden & Abbott, 2002). This made it easier to summarize and analyze responses. Since responses from information derived from close-ended questions are not rich enough, the researcher included open-ended questions in the questionnaire. This was purely intended to enable the respondents elaborate on their own responses and provide answers to questions based on their own perceptions, attitudes and suggestions insofar as the impact of SEIP on enrolment, and performance in the selected schools in the Brong Ahafo region was concerned.

3.7.2 Semi-structured Interview guide

Pole and Lampard (2002) viewed interview as “a verbal exchange of information between two or more people for the principal purpose of one gathering information from the other(s)”. Interviews come in various forms or kinds and it is important that the kinds of interviews used have a relation with the structure and the kind of data which will yield appropriate results. In view of this, the type of interview which was employed in this study was the semi-structured interview.

Semi-structured interview guide is unique in the sense that the order in which the various topics are dealt with and the wording of the questions are left to the interviewer's discretion. Within each topic, the interviewer is free to conduct the conversation as he or she thinks fit. He or she is at liberty to ask the questions he or she deems appropriate and in words deemed best. The interviewer is also free to give explanation and ask for clarification if the answer is not clear, to prompt the

respondent to elucidate further if necessary, and to establish his or her own style of conversation (Corbetta, 2003). Semi-structured interview guides have some noticeable usefulness. Wragg (2002) also indicates that it is mostly used by researchers in education 'as it allows respondents to express themselves at length, but offers enough shape to prevent aimless rambling'. semi-structured interview offers investigators an opportunity to clarify or probe and expand the interviewee's responses in order to ascertain their feelings (Opie, 2004). This is what structured questionnaires and interview schedules fail to achieve. However, the openness of some of the questions in the schedule leads to gathering of massive volumes of qualitative data, which is time-consuming to analyse. Also, the flexibility of the instrument makes it difficult for the reasearcher's bias to be dealt with (Opie, 2004).

It must be pointed out that the quality and usefulness of the information given by the respondent is dependent on the quality of the various questions asked by the interviewer.

This style of interviewing was used to gather information from three (3) SEIP coordinators for the various schools and the District SEIP Coordinator. They were all interviewed based on predetermined questions. These questions were predetermined after the analysis of the quantitative data. For uniformity and the ability to compare responses of each individual at the end of the study, the respondents were made to answer the same questions in different ways and open-ended questions were used so that probing could be done to acquire further information. The responses of the interviewees and the questions were duly confined to the issues in need of clarification after the analysis of the quantitative data. This enabled the researcher to

get first-hand information on the effects of the SEIP on enrolment and performance in the selected beneficiary schools.

3.9 Validity and reliability

Validity is an important characteristic of a research data since important decisions are taken based on the data. According to Lewis (1974), validity is one of the basic principles of research and is the ability to produce, in a word, to obtain findings that are in agreement with theoretical or conceptual values, accurate result, and measures what it is supposed to measure. A valid measure produces true results that reflect the true situation and condition of the environment it is supposed to study.

In order to ensure the face validity of the questionnaires, the researcher gave questionnaires to two (2) MPhil students. These questionnaires were duly examined and the necessary corrections effected. Few revisions included the reframing of the items, identifying repetitive items, ambiguous items as well as ensuring that the key issues to be investigated were included.

In order to ensure content validity, the researcher gave a questionnaire and the interview guide to one SEIP coordinator. This was to ensure that the instruments actually covered all the content of the study. The coordinator's comments were considered before the administration of the actual questionnaires. Construct validity refers to what is meant to be measured and what is actually measured. In order to ensure construct validity, the interview guide as well as the questionnaire was given to the two supervisors for scrutiny since validity is determined by expert judgment. The questionnaire items were vetted and the needed corrective measures put in place by the supervisors before its administration.

Apart from this, the instrument was pre-tested in determining how reliable it was for the data collection in the main survey. According to Nitko (1983), reliability is the degree to which a measure is consistent or stable. Carver and Scheier (2004) have stated that all techniques of assessment confront several kinds of problems or issues. One issue is termed reliability of measurement. The nature of this issue can be conveyed by putting it as a question. When an observation is reliable, it has a high degree of consistency or repeatability. Low reliability means the observation is less consistent. In support of this, Almes, Kantowitz and Roediger (2003) point out that reliability refers to the consistency of behavioral measures.

In order to establish the reliability of the instruments, the questionnaire items were piloted at Banda Senior High School which is one of the SEIP beneficiary schools in the Brong Ahafo region which was not included in the study setting. This took the context of the study into consideration. The researcher chose this Senior High School for the preliminary field testing exercise because the school as well as the students has similar characteristics as those in the study area. Kusi (2008) indicated that piloting the questionnaire in the context of the study would give the participants fore-knowledge about the information required, leading to pre-determined responses. Opie (2004) also argues that 'those undertaking the pilot will have become sensitized to the questions so that any answers they give in the main study will be influenced in a different way from those who have not'. The questionnaires were completed and returned, resulting in a response rate of 90%. The returned questionnaires were carefully studied to find out if respondents had difficulty answering or understanding any of the questions. Comments from the respondents were used to enrich the questionnaire. The reliability Cronbach alpha was calculated and the results were given as .836 for question 7 and .743 for question 14. Question 16 had .634.

3.10 Data collection procedure

After using the lottery method of the simple random sampling technique to select the schools for the study, prior appointments with the various head masters were secured. The researcher showed a letter of introduction from the Department of Educational Administration and Management introducing the researcher and explaining the work being undertaken (See Appendix A). This letter was read to the various respondents. The headmasters of the various school were informed about the administration of the instruments on their teachers and students and they gave their consent to the exercise. The data collection tools employed in the research include the use of structured and semi-structured questionnaires, mostly through the use of Likert scale. The data that was collected included demographic characteristics of the respondents, the effects of the SEIP on enrolment and academic performance of students, challenges facing the implementation of the intervention as well as factors needed for effective implementation of the intervention. The study relied on both secondary and primary data for the analysis.

The secondary data included enrolment data before and after the implementation of the SEIP and WASSCE reports before and after the intervention. Enrolment and WASSCE performance record forms were filled and returned after a month by the SEIP Coordinators.

After the analysis of the received questionnaires and enrolment and WASSCE performance record forms from the various schools, a letter was given to all SEIP Coordinators seeking permission to interview them for purposes of clarifying initial data. The responses to the interviews were tape-recorded with the permission of all the respondents and these were supported with notes taken by the researcher. Each

interview lasted between 30-40 minutes. This was necessary in eliminating the boredom often associated with long interviews including interviewer fatigue.

The interviews took place in a location selected by the respondents to ensure that the respondents were comfortable. In other words, all interviews were conducted in various offices. In relation to the administration of the structured and semi-structured questionnaire to the teachers, purposive method was used for the selection of the respondents for the questionnaire administration. This was due to the fact that some of the teachers were relatively new and could not give fair assessment of the intervention. Hence, there was the need to deliberately select teachers who had been at beneficiary schools for not less than 7 years.

3.11 Data analysis and procedure

This study is informed by the pragmatic paradigm. In view of this, the quantitative data was collected, edited and coded. The Statistical Package for the Social Sciences (SPSS) program was used to analyze the coded data. The SPSS was also used in the generation of frequency tables and pie charts for the analyses. In relation to the primary data, descriptive statistical analysis was employed using percentages and frequencies.

The analysis was done using econometrics techniques to establish the influence of the SEIP programme on education outcomes. SEIP started in the 2014/2015 academic year. As a result, the year 2015 was used as the baseline in terms of discussing trends in educational outcomes. However, the trend for the whole period for which there is data (2012 to 2017) was observed for conclusions in this study.

The primary indicators of school performance were identified to include student-teacher ratio and class size. These indicators are expected to impact the West African

Senior Secondary Education Certificate Examination (WASSCE) pass rate. The effects of SEIP on the WASSCE results is determined by making WASSCE pass rate a function of SEIP and other indicators. The data collected provide information on individual behaviour, both across schools and over time – they have both cross-sectional and time series dimensions requiring panel data estimation.

Besides, there was a question-by-question analysis of qualitative data to support the quantitative data. The results of both the qualitative and statistical data were interpreted concurrently to determine whether there was agreement in the data collected through each approach. Question-by-question analysis was used for the qualitative data gathered from the interviews.

Specifically, in relation to the question-by-question analysis, both written and recorded materials were immediately transcribed. The actual analysis began with reading through the transcribed responses and listening to the audio records in order to have a good grasp of all the data. The transcriptions were very detailed to capture features of talk such as emphasis, speed, tone of voice, timing and pauses since these elements can be crucial for interpreting data. The key ideas were identified and were used to support the quantitative data.

3.12 Ethical considerations

In order to ensure full participation of the respondents, an introductory letter from the University of Education's Department of Educational Administration and Management introducing the researcher and explaining the work being undertaken and a letter of application by the researcher seeking permission to undertake the research was taken along. (see appendix A).

Informed consent was obtained from all the respondents including the head masters, all teachers, SEIP coordinators for the various schools as well as all the students from the beneficiary schools. Anonymity and confidentiality of respondents were assured, and the names of respondents were not asked during data collection. In most cases, the researcher decided to use alphabets to represent the names of the three SEIP coordinators for the various schools.



CHAPTER FOUR

DATA ANALYSES AND DISCUSSIONS

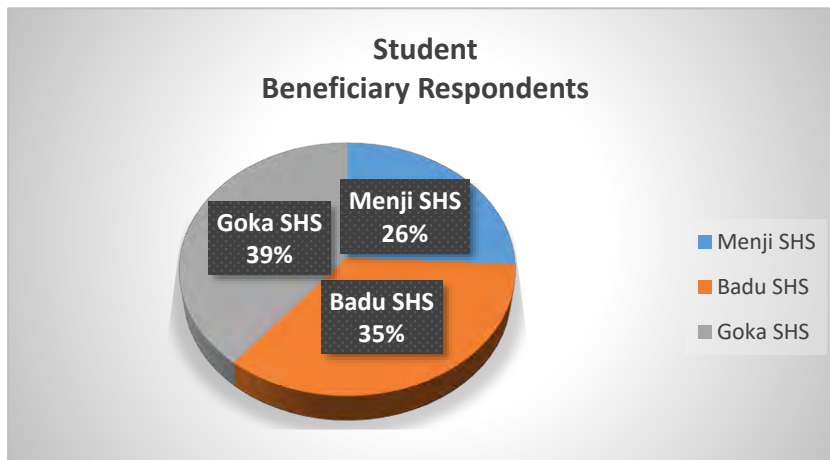
4.1 Introduction

This chapter discusses the findings from the fieldwork conducted to examine the influence of SEIP on enrolment and academic performance. It also examines the challenges as well as the factors necessary for an effective implementation of the policy in three (3) beneficiary SHS schools in the Brong Ahafo region. The researcher solicited the views of respondents through an administration of questionnaires to a total of 189 respondents. Forty-two (42) of these respondents were teachers and one hundred and forty-three (143) were students. Semi-structured interview was conducted for responses from three (3) SEIP coordinators from the selected beneficiary schools and one (1) District Coordinator at the District Education Office. The chapter also presents the statistical findings of the secondary data obtained from the three (3) beneficiary schools in relation to enrolment and WASSCE performance.

Chapter four discusses the findings of the study under four (4) main areas: the effects of the SEIP on enrolment of the beneficiary schools, the effects of SEIP on academic performance of the beneficiary schools, challenges facing the implementation of the SEIP in the beneficiary schools as well as the factors essential to an effective implementation of the policy by the respondents. The analyses of findings are done in relation to relevant literature.

Per a stipulated criterion, 230 participants out of a total population of 1042 were expected to answer the questionnaires (see table 3.2). The researcher was able to administer one hundred and eighty-nine (189) representing 82.2%. Kemoni (2006) reports that a response rate of 60% and above is necessary to ensure that response

from a sample will reflect the exact population. This suggests that the response rate in this study was highly encouraging and representative.



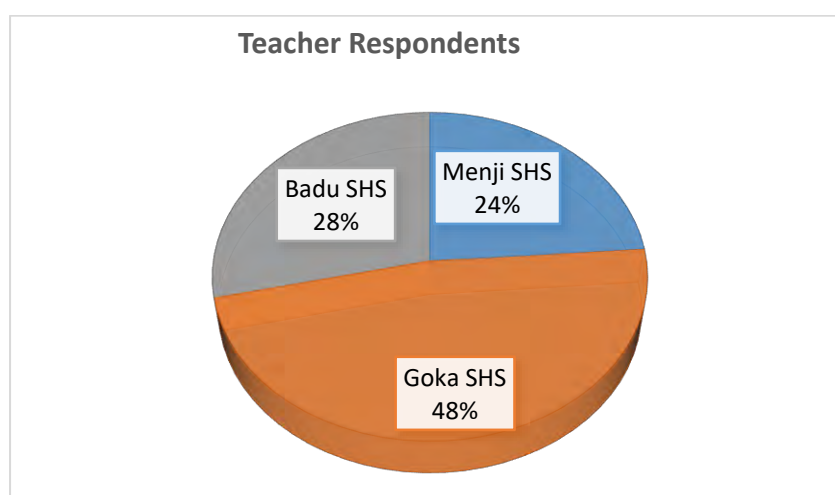
Source: Fieldwork data (2018)

Figure 4.1 Number of student beneficiaries

Out of the 143 beneficiary students who participated in the study, Goka SHS had a total number of 56 representing 39. % of the respondents. Menji SHS represented 37 (25.9) % of the total respondents. Badu SHS represented (50) 35 %.

Gender of beneficiary students

In terms of gender, the male students were 45 representing 31.5% whilst the females were 98 representing 68.5%. This means that more attention was given to female students during the selection of the beneficiaries.

Figure 4.2 Distribution of sampled teachers

Source: Fieldwork data (2018)

With regards to the teachers who participated in the study from the various schools, Goka SHS teachers were 20, representing 48%. The number of teachers from Menji SHS were 10, representing 24%. Badu SHS produced 12 respondents which represented 28%.

Gender of teacher respondents

Concerning the gender of teachers who responded to the questionnaires, 39 (representing 92.9%) were male teachers whilst 3 (representing 7.1%) were females. During an interview session with the SEIP coordinators, the researcher enquired as to the possible cause of the disparity between male and female teachers. The response given was that female teachers after some few years sought for transfers to join their husbands who usually work in the cities. The ages of the respondents in this study also shows that they are comparatively young with 28 (representing 66.7%) between the ages of 31 and 40. Only 1 (representing 2.4%) was between the ages of 51 and 60. Questionnaires were developed to cover all the aforementioned respondents except the three (3) SEIP Coordinators.

4.2 The Enrolment before and after the Implementation of the SEIP

In the first research question, the study sought to find out whether the SEIP intervention has significantly increased enrolment in the beneficiary schools. In view of this, the first-year enrolment figures of the three schools were collated. School by school first-year enrolments before and after are shown in the Table below.

Table 4.1: First year school enrolment figures for the past five years

School	Year	Male	Female	Total
Goka SHS	2012	97	79	176
	2013	178	167	345
AFTER SEIP				
Badu SHS	2014	164	113	277
	2015	175	122	295
	2016	90	60	150
	2012	60	54	114
AFTER SEIP	2013	97	90	187
	2014	120	100	220
	2015	133	94	227
Menji SHS	2016	97	88	185
	2012	35	15	50
	2013	37	26	63
AFTER SEIP				
	2014	31	18	49
	2015	32	17	49
	2016	57	12	69

Source: Schools' records (2018)

The analysis was done using econometrics techniques to try and establish the effects of the SEIP programme on education outcomes. SEIP started in the 2014/2015

academic year. As a result, the year 2015 was used as the baseline in terms of discussing trends in educational outcomes. However, the trend for the whole period for which there is data (2012 to 2017) was observed for conclusions in this study. Variants of the model was also estimated with the school enrolment as dependent variable. School enrolment was measured as number of first year students enrolled at the end of the academic year. During model estimation, the natural log of school enrolment was taken to measure percentage change in enrolment. The model is estimated as a panel over the 3 SEIP schools from 2012 (2012/2013 academic year) to 2016 (2016/2017 academic year).

This section presents an analysis of the effects of SEIP on school enrolment after its introduction. The results of the estimated equation are given in Table 4.2.

Hausman Test

The Hausman test shows insignificant ($\chi^2 = 0.16$, $p=0.9249$) differences between the coefficients for the fixed effects and the random effects. Therefore, we proceed the analysis with the random effects model.

Rho

Rho is the proportion of variation due to the individual specific term. Over 80% of the variation is explained by the individual specific term and the rest due to idiosyncratic error.

R-square

The R-squares show the pooled OLS, fixed effects and random effects explain 63.5%, 63.4% and 63.5% respectively.

Table 4.2: SEIP impact on school enrolment (2012-2017)

School Enrolment	Pooled OLS	Fixed Effects	Random Effects
SEIP	0.195 (0.242)	0.160 (0.161)	0.177 (0.150)
STR	0.0682*** (0.0150)	0.0448 (0.0410)	0.0563* (0.0288)
Constant	3.283*** (0.389)	3.816*** (0.942)	3.553*** (0.738)
Observations	15	15	15
R-squared	0.635	0.136	
Number of id		3	3
R2-within		0.1363	0.1351
R2-between		0.7167	0.7167
R2-overall		0.6342	0.6351
Sigma u(α)		0.4724	0.5683
Sigma e		0.2820	0.2820
Rho		0.7372	0.8024

Source: Fieldwork data (2018)

Standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The results show that both pooled and random effects estimation, SEIP do not have significant effects on school enrolment. The researcher however found a significant (5% for pooled OLS and 10% for random effects) and positive effect of student teacher ratio on school enrolment.

Using school level data over the period 2012-2017 and 3 SEIP schools, the study found that SEIP did not have any significant effect on school enrolment.

Generally, first-year enrolment for the schools before the introduction of the SEIP was low (see Table 4.1). The statistics of the secondary data from the three selected senior high schools also confirmed that there is no significant relationship between the enrolment before and after the introduction of the SEIP programme (see Table 4.2). In view of this, the researcher sought to know respondent views about the possible reasons for the low enrolment rate in the first year despite the SEIP intervention.

4.3 Student's opinion on the effects of SEIP on enrolment

The study sought to find out how the SEIP has directly influenced the enrolment of the beneficiary schools. When asked whether they knew SEIP before coming to school, 46 of the students representing 32.2% indicated that they had prior knowledge of SEIP before coming to school. On the contrary, 97 students representing 67.8% indicated that they never knew anything about the SEIP. This finding is in agreement with Miron (2009) who maintains that the average person cannot take advantage of any investment in education because of a lack of information about its associated benefits. To Penrose (2010), this challenge of inadequate information is caused by various shortfalls in information availability and dissemination.

The interview with the SEIP coordinators also revealed that as part of efforts to increase enrolment in the various beneficiary schools, the various school administrators embarked on enrolment drives using the SEIP intervention as an inducement.

The interviews confirmed that the beneficiary students shared the news of the scholarship with their relatives and friends. Concerning the decision to come to school

in the absence of the scholarship package, 68.6% of the students were still willing to enroll in the schools even if SEIP scholarships were not available to them. 31.4% on the other hand, indicated they would have stopped school if they knew they were not going to be beneficiaries of the SEIP scholarship. Though the coordinators interviewed were of the view that awareness of the program affected direct enrolment, majority of the needy students who might have stopped schooling because of financial difficulties were able to successfully complete their studies. As a matter of fact, a student respondent indicated that the scholarship amount is used to pay the admission fees of most of the beneficiary students and that their school fees were in arrears before the scholarship.

4.4 Teachers opinions on the effects of SEIP on enrolment

Key: Strongly Agree (SA) Agree (A) Not Sure (NS) Disagree (D) and Strongly Disagree (SD) to certain statements.

After computing the values for the responses if $SA + A > N + D + SD$ i.e. the sum of SA and A is greater than that of N, D and SD then it is concluded that the statements holds, however if the opposite happens the statement is rejected.

The study sought to find out the opinion of teachers concerning the factors that have contributed to an increase in enrolment in their various schools. In all forty-two (42) teachers responded to the questionnaire by ticking to indicate their level of agreement on each of the statements provided in the table below.

Table 4.3: The opinion of teachers concerning the factors that have contributed to an increase in enrolment in their various schools

ITEM	SA	A	NS	D	SD	TOTAL
	F %	F %	F %	F %	F %	F %
computerized placement system	15(35.7)	23(54.8%)	1(2.4%)	2(4.8%)	1(2.4%)	42(100%)
transfer of students from different school	9(21.4%)	19(45.2%)	4(9.5%)	9(21.4%)	1(2.4%)	42(100%)
registration of remedial students	14(33.3%)	9(21.4%)	5(11.9%)	9(21.4%)	5(11.9%)	42(100%)
SEIP scholarship for students	13(31%)	19(45.2%)	5(11.9%)	5(11.9%)	—	42(100%)
High academic performance	9(21.4%)	21(50%)	6(14.3%)	5(11.9%)	1(2.4%)	42(100%)
Unplaced students from the community	6(14.3%)	15(35.2%)	10(23.8%)	5(11.9%)	6(14.3%)	42(100%)

Source: Fieldwork data (2018)

Key: Strongly Agree (SA) Agree (A) Not Sure (NS) Disagree (D) and Strongly Disagree (SD) to certain statements.

One single most important part of the study was to find out how the SEIP as a policy has influenced enrolment in the beneficiary schools. The result of the study indicates that 76.2% of teacher respondents are convinced that the policy has increased enrolment whilst 23.8% of them disagreed with this assertion. Besides, an interview with the SEIP coordinator revealed that the SEIP has indirectly influenced the enrolment in the following ways.

1. The SEIP project has provided some ultramodern three-unit classroom blocks for all the beneficiary schools. The buildings serve as classrooms for midstream

admissions and also provide them with the opportunity to absorb the large student numbers resulting directly from the Free SHS policy.

2. The SEIP coordinators indicated that most of the students could not have completed their programmes of study. “The first scholarship money was used to pay the admission fees of most of the form one students whose first year admission was in arrears.” This directly suggests that most of them were able to complete the course of study because of the money given to them under SEIP. In effect, the intervention increased the retention rate of the beneficiaries. When these students were asked whether they knew about the policy before coming to the school, only 32.2% indicated that they had a prior knowledge of SEIP. 67.8% indicated that they had no knowledge of the policy before coming to the schools. Thus, it is obvious that most students came to know about SEIP as a result of admission to the beneficiary schools. Out of the 32.2% who even knew about the policy, 35 of them indicated that they would have still been in school even without any prospect of receiving a scholarship under SEIP. 6 of them however confirmed they would not have been in school without the prospect of obtaining a scholarship. During the various interviews, SEIP Coordinators were unanimous about the low publicity of SEIP being a major hindrance to its implementation. According to them, the small numbers of direct beneficiaries of the scholarship also contributed to its inability to attract large student applications. For example, the total number of students at Badu SHS in 2014-2015 was 621 but only 50 students eventually benefitted from the scholarship.

71.4% of teacher respondents believed that past performance of the beneficiary schools remains one factor that has increased enrolment in the schools. 28.6% of the teacher respondents however held a contrary view. Student respondents also expressed a similar sentiment. 102 students (representing 71.3%) pointed to the past

performance of the schools as the main reason behind their selection of the schools. This is irrespective of the particular location of a school. The extended implication is that students are bound to opt for a particular school with a record of a consistently good academic performance.

On another terrain, 50% of the teacher respondents believed that unplaced students from the community constituted a source of enrolment. Only 17.5% of student respondents conceded that they were in schools because of the nearness of the school to the community in which they lived. This confirmed an assertion by a SEIP Coordinator that students from the community usually desired to explore schools elsewhere. It is only after they have failed one or two subjects that they apply to the community schools as midstream students.

It should be mentioned however that this finding contradicts the findings from other research which was conducted by Attanasio et al. (2005). This research made use of a baseline dataset comparing enrolment rates in rural and urban centres in Columbia before and after the commencement of the programme. The study found that the programme had been effective as it helped increase enrolment amongst 14-17 year olds in both rural and urban areas. The emphatic conclusion of this research was that subsidies impact on enrolment rates. It must be noted however that this was not the case of SEIP's effects with regards to increased enrolment in the beneficiary schools in view of the indication of no significant relationship between enrolment before and after the SEIP intervention.

The finding from this study also contradicts the results of a study conducted in the UK by Dearden et al. (2005). The results of this particular study revealed that the EMA had a positive and significant effect on post compulsory education participation

among eligible young people. According to Dearden et al. (2005), the EMA increased the initial participation in education of eligible male and female by 4.8 and 4.2 percentage points respectively in the first year and again by 7.6 and 5.3 percentage points respectively in the second year. Using econometric techniques to establish the effects of SEIP on educational outcomes, this present study found no significant difference in terms of student enrolment. This was due to low public awareness of the SEIP intervention.

4.5 The academic performance before and after the Implementation of the SEIP

The second research question of the study sought to find out whether the SEIP intervention has significantly increased student academic performance in the beneficiary schools. To achieve this objective, the WASSCE results of all the core subjects of the three schools before and after the SEIP intervention were collated. The school by school WASSCE performance before and after the introduction of SEIP is shown in the table below.

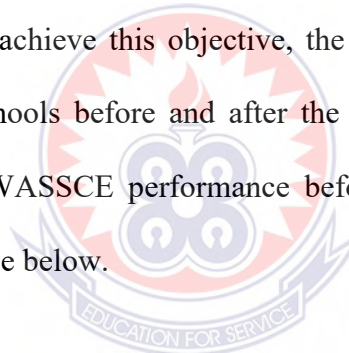


Table 4.4 Average WASSCE performance for core subjects from 2012 to 2017

SCHOOL	YEAR	PERCENTAGE (%)PASS
Goka SHS	2012	38.3
	2013	81.4
	2014	39.0
After SEIP	2016	47.4
	2017	71.0
Badu SHS	2012	37.7
	2013	35.6
	2014	50.6
After SEIP	2016	23.6
	2017	68.1
Menji SHS	2012	34.8
	2013	52.6
	2014	32.0
After SEIP	2016	37.1
	2017	39.7

Source: Fieldwork data (2018)

These figures were arrived at by collating the total number of students who passed all the four core subjects (i.e. A1 to C6) in all the three (3) schools. This was then divided by the total number of students who sat for the WASSCE. This was finally multiplied by 100 to give the total percentage pass by the various schools in the various years.

Table 4.5 SEIP Input into the schools from 2014 to 2018

SCHOOL	Year	Facilities received	No. of Scholarship Beneficiaries	No. of Participants (In-Service Training)	TEA/STU
Goka SHS	2014		22		34.72 (2012/2014)
	2015		29	3	
	2016	3-unit classroom 6-seater toilet facility	35	4	
	2017	10 laptop 3 computers		3	28.63 (2014/2015)
	2018	Ibox Solar panel Projector 4 laptop computers		5	
	Badu SHS	2016	3-unit classroom & 6-seater toilet facility	22 (2014) 29 (2015) 35 (2016)	11 (2014) 11 (2015) 1 (2016)
10 laptop computers & science lab					
ibox, solar panel, projector & 4 computers					
2018		Textbooks for core subjects, fence wall, entrance gate .			
2018					
Menji SHS	2016	3-unit classroom & 6-seater toilet facility			
	2018	10 computers, ibox, solar panel, projector, 4 computers, textbooks, fence wall, entrance gate & library books	23 (2014) 29 (2015) 35 (2016)	0 (2014) 0 (2015) 8 (2016)	14.83 (2012/2014) 12.33 (2014/2017)

Source: Fieldwork data (2018)

Data for the estimation was obtained from the SEIP Participating Schools. The model

was estimated using data for all the 3 participating schools. The model allows us to tell whether the presence of SEIP in a school has any effect on the academic performance of the school. This is estimated for different years to see if the effects of SEIP on WASSCE core subjects pass rates is changing over time.

This section presents an analysis of impact of SEIP on academic performance after its introduction. The results of the estimated equation are given in Table 2.

Empirical Estimation

The statistical model is estimated as:

$$WASSCE_{it} = \alpha_i + \beta_1 SEIP_{it} + \beta_2 STR_{it} + v_{it}$$

Where $i = 1, 2, 3$; $t=2012, 2013, \dots, 2017$ and $v_{it} = \mu_i + \varepsilon_{it}$

Also

μ_i	unobservable school specific effect
ε_{it}	the disturbance term
$WASSCE_{it}$	WASSCE Core Subjects Pass Rate for school i at time t
$SEIP_{it}$	Secondary Education Improvement Program (Dummy variable, before=0; after =1)
STR_{it}	Student Teacher Ratio
β_i	Coefficients

The vector of disturbance terms v_{it} is assumed to be uncorrelated with the regressors and the μ_i 's have zero mean and constant variance. The pooled OLS estimation of the model restricts the coefficients on the regressors to be common across i and t . A less restrictive estimation technique allows the slope to vary over time and across schools. If the group-specific effect is assumed constant (but allowed to differ across units) the model is estimated as a fixed effects (FE) model. The random effects (RE) model is

estimated by assuming heterogeneity in the group-specific effects. The Hausman test was used to select the appropriate estimation techniques. However, all the estimation techniques were presented to check the robustness of the results.

Hausman Test

The Hausman test shows insignificant ($\chi^2 = 0.48$, $p=0.7881$) differences between the coefficients for the fixed effects and the random effects. Therefore, we use the random effects model.

Rho

Rho is the proportion of variation due to the individual specific term. Over 48% of the variation is explained by the individual specific term and the rest due to idiosyncratic error.

R-square

The R-squares show the pooled OLS, fixed effects and random effects explain 16.9%, 1.4% and 0.66% respectively.

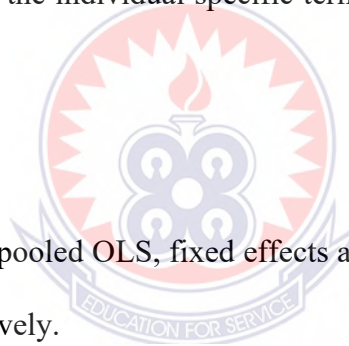


Table 4.6: SEIP Impact on Academic Performance, 2012-2017

Academic Performance	Pooled OLS	Fixed Effects	Random Effects
SEIP	-0.0735 (8.431)	-2.605 (9.728)	-0.0735 (8.431)
STR	0.808 (0.520)	-0.860 (2.473)	0.808 (0.520)
Constant	28.28* (13.54)	66.37 (56.87)	28.28** (13.54)
Observations	15	15	15
R-squared	0.169	0.014	
Number of id		3	3
R2-within		0.0140	0.0066
R2-between		0.9932	0.9932
R2-overall		0.1627	0.1689
Sigma u(α)		16.5934	0
Sigma e		17.0281	17.0282
Rho		0.4871	0
Theta (λ)			

Source: Fieldwork data

Standard errors in parentheses

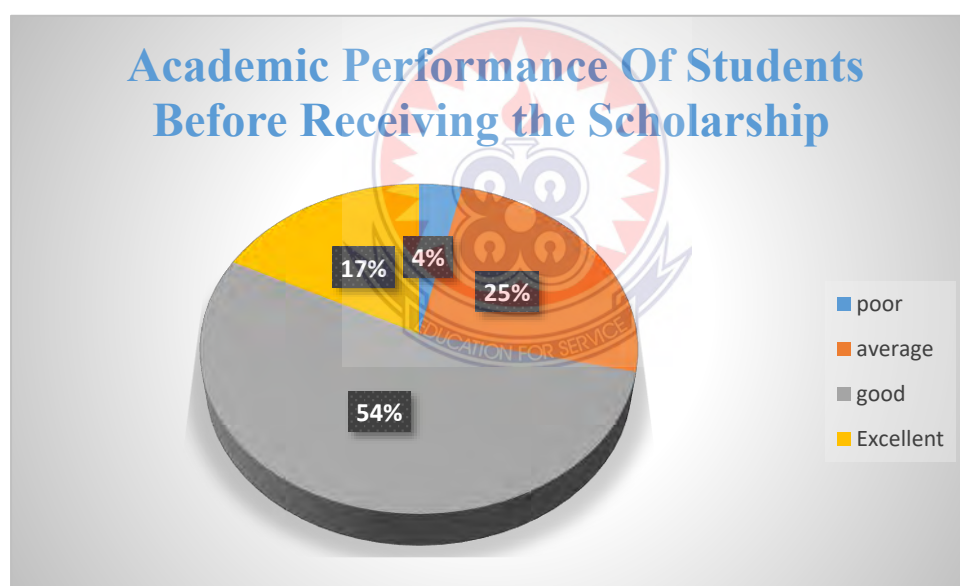
*** p<0.01, ** p<0.05, * p<0.1

Using school level data over the period 2012-2017 and 3 SEIP schools, the results show that for pooled, fixed and random effects estimation, SEIP does not have significant effect on academic performance. The study concludes by noting that although the results are not consistent with prior expectations (the researcher expected

positive impact on academic performance).

4. 6 Beneficiary students' opinion about the impact of the scholarship on their academic performance

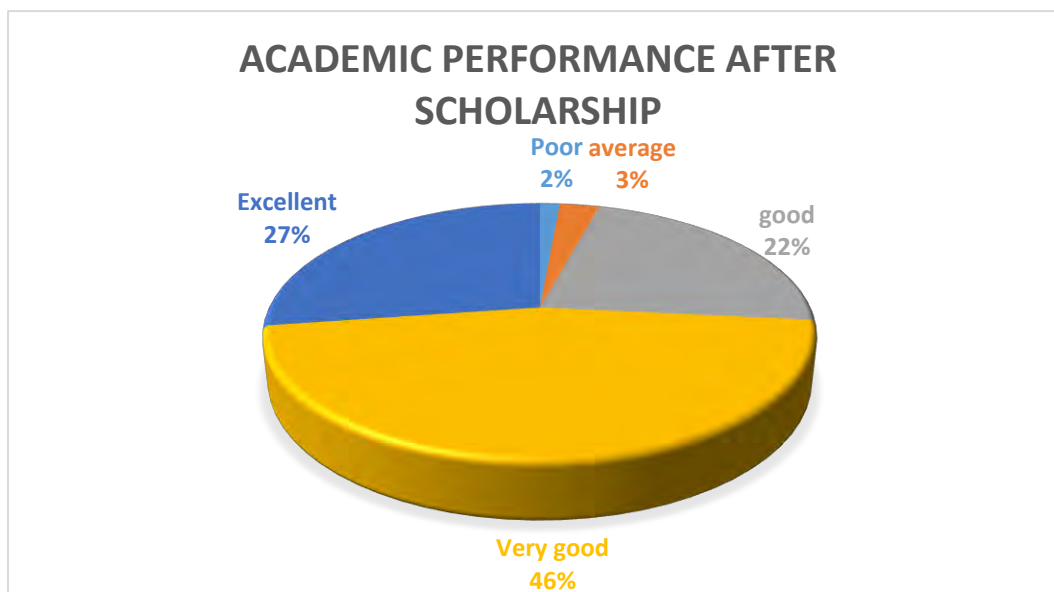
Apart from the overall impact of the scholarship on the various beneficiary schools, the researcher was also interested in its impact on individual student academic performance. Thus, student respondents were asked to indicate their academic performance before receiving the scholarship by using poor, average, good, very good and excellent. 54% of them indicated that their academic performance was good, whilst 17% marked their academic performance as excellent.



Source: Fieldwork data (2018)

Figure 4.3: Academic performance of students before receiving the scholarship

The same students were asked to indicate their performance after receiving the scholarship. The various responses received are indicated in the figure below.



Source: Fieldwork data (2018)

Figure 4.4: Academic performance after scholarship

The figure above shows that only 2% students marked their performance as still poor after receiving the scholarship, 4 students (representing 3%) indicated their academic performance was average, 32 students (representing 22 %) saw their performance as good and 66 students (representing 46 %) indicated that their performance was very good. On the other hand, 39 students (representing 27%) indicated that their performance was currently excellent. The findings from the primary data actually showed an improvement in the academic performance of the beneficiaries. These confirm the findings by Stater (2009) about the ability of student finances to ultimately determine academic outcomes or performance.

In order to ensure the authenticity of information given by the student beneficiaries, the study sought the opinion of the teachers about the impact of the SEIP on student performance. 62% of the teachers who indicated that the SEIP has led to an improvement in student academic performance. However, 38% of them insisted that there was little to show in terms of a real SEIP-inspired improvement in student academic performance. Thus, they considered whatever gains being touted as

insignificant. Specifically, 64% of the teachers held the view that the overall impact of the scholarship was significant whilst 14% indicated that the impact was very significant.

The interview with the SEIP coordinators also revealed that most of the scholarships beneficiaries were of low academic backgrounds. Consequently, the SEIP scholarship was capable of bringing about some level of improvement in performance. However, this does not necessarily imply a reflection of this improved performance on overall WASSCE performance. Respondent A indicated that the overall best student for 2017 WASSCE was a beneficiary of a SEIP scholarship. On the contrary, Respondent C bemoaned the rampant cases of absenteeism on the part of some of the beneficiaries of SEIP scholarships. According to him, these students barely attached any seriousness to their studies. He indicated that all efforts to withdraw or suspend their benefits in order to serve as a deterrent proved futile. This implies that once a student is selected for a SEIP scholarship, it becomes very difficult if not impossible to cancel or revoke his or her beneficiary status. This obvious lack of effective deterring measures directly and indirectly encouraged an undesirable beneficiary attitude towards academic work. These findings do not confirm what Rivera-Batiz, Francisco & Lillian (1995) said concerning the correlation between school infrastructure and academic performance. Once again, it is important to stress that this could be the case because of time element and the actual number (quantity) of infrastructure.

4.7 Hypothesis Testing

Research Strategy

The analysis is done using econometric techniques to try and establish the effects of the SEIP programme on education outcomes. SEIP started in the 2014/2015 academic

year. As a result, the year 2015 was used as the baseline in terms of discussing trends in educational outcomes. However, the trend for the whole period for which there is data (2012 to 2017) was observed for conclusions in this study.

The primary indicators of school performance were identified to include student-teacher ratio and class size. These indicators are expected to impact the West African Senior Secondary Education Certificate Examination (WASSCE) pass rate. The impact of SEIP on the WASSCE results is determined by making WASSCE pass rate a function of SEIP and other indicators. The data collected provide information on individual behavior, both across schools and over time – they have both cross-sectional and time series dimensions requiring panel data estimation.

Empirical Estimation

The statistical model is estimated as:

$$\text{WASSCE}_{it} = \alpha_i + \beta_1 \text{SEIP}_{it} + \beta_2 \text{STR}_{it} + v_{it}$$

Where $i = 1, 2, 3$; $t=2012, 2013, \dots, 2017$ and $v_{it} = \mu_i + \varepsilon_{it}$

Also

μ_i unobservable school specific effect

ε_{it} the disturbance term

WASSCE_{it} WASSCE Core Subjects Pass Rate for school i at time t

SEIP_{it} Secondary Education Improvement Program (Dummy variable, before=0; after =1)

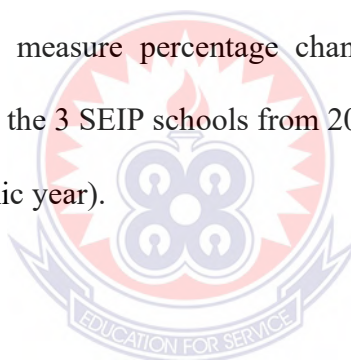
STR_{it} Student Teacher Ratio

β_i Coefficients

The vector of disturbance terms v_{it} is assumed to be uncorrelated with the regressors and the μ_i 's have zero mean and constant variance. The pooled OLS estimation of the

model restricts the coefficients on the regressors to be common across i and t . A less restrictive estimation technique allows the slope to vary over time and across schools. If the group-specific effect is assumed constant (but allowed to differ across units) the model is estimated as a fixed effects (FE) model. The random effects (RE) model is estimated by assuming heterogeneity in the group-specific effects. The Hausman test was used to select the appropriate estimation techniques. However, all the estimation techniques were presented to check the robustness of the results.

Variants of the model was also estimated with the school enrolment as dependent variable. School enrolment was measured as number of first year students enrolled at the end of the academic year. During model estimation, the natural log of school enrolment was taken to measure percentage change in enrolment. The model is estimated as a panel over the 3 SEIP schools from 2012 (2012/2013 academic year) to 2016 (2016/2017 academic year).



Hypothesis

1. SEIP impacts positively on school enrolment.
2. SEIP impacts positively on academic performance.

Sources of Data

Data for the estimation was obtained from the SEIP Participating Schools. The model was estimated using data for all the 3 participating schools. The model allows us to tell whether the presence of SEIP in a school has any effect on the academic performance of the school. This is estimated for different years to see if the effects of SEIP on WASSCE core subjects pass rates is changing over time.

Findings

This section presents an analysis of impact of SEIP on school enrolment and academic performance. Findings on school enrolment are presented followed by academic performance.

School Enrolment

This section presents an analysis of impact of SEIP on school enrolment after its introduction. The results of the estimated equation are given in Table 4.2.

Hausman Test

The Hausman test shows insignificant ($\chi^2 = 0.16$, $p=0.9249$) differences between the coefficients for the fixed effects and the random effects. Therefore, we proceed the analysis with the random effects model.

Rho

Rho is the proportion of variation due to the individual specific term. Over 80% of the variation is explained by the individual specific term and the rest due to idiosyncratic error.

R-square

The R-squares show the pooled OLS, fixed effects and random effects explain 63.5%, 63.4% and 63.5% respectively.

Results

The results show that both pooled and random effects estimation, SEIP do not have significant effect on school enrolment. We however found a significant (5% for pooled OLS and 10% for random effects) and positive effect of student teacher ratio on school enrolment.

Academic Performance

This section presents an analysis of impact of SEIP on academic performance after its introduction. The results of the estimated equation are given in Table 4.5.

Hausman Test

The Hausman test shows insignificant ($\chi^2 = 0.48$, $p=0.7881$) differences between the coefficients for the fixed effects and the random effects. Therefore, we use the random effects model.

Rho

Rho is the proportion of variation due to the individual specific term. Over 48% of the variation is explained by the individual specific term and the rest due to idiosyncratic error.

R-square

The R-squares show the pooled OLS, fixed effects and random effects explain 16.9%, 1.4% and 0.66% respectively.

Results

The results show that for pooled, fixed and random effects estimation, SEIP do not have significant effect on academic performance.

4.8 Challenges facing the implementation of the SEIP

The study also sought to find out the perceptions of teachers about the challenges facing the implementation of SEIP in their various schools. In all forty-two (42) teachers responded to the questionnaire by ticking to indicate their level of agreement on each of the statement provided in table 4.7.

After computing the values for the responses if $SA + A > N + D + SD$ i.e. the sum of SA and A is greater than that of N, D and SD then it is concluded that the statements holds, however if the opposite happens the statement is rejected. All the numbers are in percentages.

Table 4.7: Challenges facing the implementation of the SEIP

ITEM	SA	A	NS	DA	SD	TOTAL
Unqualified students selected for the scholarship	31.0	33.3	14.3	7.1	14.3	100.0
Discrimination, tribalism in the selection of beneficiaries	9.5	16.7	28.6	26.2	19.0	100.0
Lack of means to verify the authenticity of socio economic background of beneficiaries	47.6	35.7	11.9	2.4	2.4	100.0
Misuse of the funds by the students	28.6	33.3	21.4	14.3	2.4	100.0
Delay in the released of the funds by the school	26.2	35.7	19.0	9.5	9.5	100.0
Lack of proper supervision of the performance and attendance of the beneficiaries	31.0	45.2	2.4	14.3	7.1	100.

Source: Fieldwork data (2018)

Key; Strongly Agree (SA) Agree (A) Not Sure (NS) Disagree (D) and Strongly Disagree (SD) to certain statements.

With regards to the selection of qualified students for the scholarships, a majority of respondents affirmed their doubts about the beneficiaries. 64% strongly agreed that

beneficiaries selected were unqualified. This was against the 36. % who strongly disagreed with the claim of unqualified students being selected for the scholarship under SEIP. Respondents also expressed their views on the elements of discrimination and tribalism affecting the overall effectiveness of SEIP. Most of them could not pinpoint any reason for such and thus were not sure whether this was happening or not. Only 26% of the respondents actually believed that discrimination and tribalism were being resorted to in the selection of qualified beneficiaries for SEIP. As a matter of fact, only 74% of the respondents were of the view that discrimination and tribalism were nonexistent as far as the implementation of the SEIP programme was concerned. The issue of verifying the authenticity of the socio-economic background of beneficiaries remains very important to a programme like SEIP. There was an overwhelmingly strong agreement about the lack of means to verify the authenticity of the socio-economic backgrounds of students. 83% of respondents believed this to be the case whilst 17% thought otherwise. The overwhelming perception in this matter certainly calls for some reconsiderations and adjustment of policy and practice.

The interview with the SEIP Coordinators as well as the District Coordinator revealed the difficulty involved in authenticating most of the information provided by the students on the application form. Besides, there are no financial allocations to either the District Coordinator or coordinators at the school level for purposes of undertaking background checks of applicants. It is just a matter of strictly going by information provided on the form. This suggests that any ineligible student who is smart enough to fill the form to meet the demands of the scholarship would be selected. This actually confirmed the opinions of the teachers about the high possibility of poor students not receiving the scholarship. It is thus feared that the

programme might end up giving financial assistance from scarce resources to students who are not really in need of such assistance.

All the SEIP coordinators were worried about the apparent lack of an effective monitoring of beneficiary academic performance during the interviewed session with them. Till date, no SEIP scholarship has been revoked in the midst of abysmal performance and this in spite of an express policy stipulation. One SEIP Coordinator eventually gave up after his recommendations to revoke scholarships due to consistently poor performance were ignored by those at the SEIP Secretariat. In his own words, “the whole thing is a sham” because he could not identify any sense of seriousness attached to the administration of scholarships under SEIP.

Any programme that disburses funds directly to students is generally faced with the possibility of fund misuse by the students involved. The implications of this challenge to the effectiveness of the programme remain very obvious. When faced with a question relating to this, 62% of the respondents believed that students indeed misused funds disbursed to them under SEIP. Besides, the subsidies usually come at the end of the term. This directly undermines any proper effort by teachers geared towards checking the proper management of funds by the students. Students also accused the coordinators of withholding their money in attempt to control their spending. Besides, coordinators and teachers also had no motivation to follow-up on the use of SEIP funds. This apparently led to mass student misuse of subsidies received. These included but not limiting to the purchase of mobile phones by beneficiaries for themselves and their boyfriends and girlfriends.

Respondents also hinted on the delays encountered in the release of funds by the school. Those who agreed that funds indeed delayed constituted about 62%. This speaks volumes of a prevailing opinion and reality, especially when compared with the just 38% who saw nothing like delays with fund disbursement under SEIP. As already indicated, the subsidy which is meant to help the students through the term only comes at the end of the term. However, there were instances where one beneficiary school received its funds a month earlier compared to other schools. One coordinators indicated a culture of coordinators being sidelined by the head teacher and school accountant in matters relating to the disbursement of funds. This finding confirmed what is already revealed in literature. As a matter of fact, the Ghana National Association of Teachers, GNAT (2014) share the same view that delays in subsidy, feeding, and capitation grant disbursement imperils the effective management of schools in the country.

The SEIP has an objective of increasing both student attendance and performance by taking out of their way the associated hindrances. This explains why respondent perception on the supervision of the performance and attendance of beneficiaries was very valuable to the study. 76% of respondents shared in the belief that SEIP lacks a proper system that duly (and thus effectively) supervises beneficiary attendance and the attendant academic performance. It must however be noted that 14% believed that SEIP was on course as far as the proper supervision of student attendance and performance was concerned.

The interview with the coordinators also revealed that in the many instances where student performance declined or remain unchanged, there were no official measures taken to withhold the affected beneficiaries' utilization of given scholarships. It was

just the case of beneficiaries continuing to receive funds with nothing to show or an improved academic performance to justify their continuous inclusion in the list of selected beneficiaries.

The interviews brought out the persisting reality of a lack of expenditure tracking. SEIP Coordinators were for the most part, not very sure or emphatic about the various infrastructural projects that have been undertaken in the various beneficiary schools to enhance teaching and learning. A lack of expenditure tracking also meant a lack of a solid maintenance system to ensure the best utilization and longevity of facilities provided. Specifically, it was revealed in the course of the interview that the ibox responsible for internet connectivity in one of the beneficiary schools was not working and practically nothing in the way of drawing the necessary attention had been done.

As part of efforts to ensure the smooth implementation of SEIP, in-service training workshops were organized. Coordinators interviewed were convinced that limiting participation in these in-service training workshops to only core subject teachers was not the best of decisions. Also, there were widespread perceptions that the workshops organized for such a strategic programme like SEIP were not enough. Another challenge alluded to had to do with the lack of proper coordination between teachers who attended the training and those who did not. This created a situation where teachers who did not attend the workshops remain practically clueless about the programme objectives, implementation and how to tackle all other matters arising. In other words, there was no system (not to talk of a credible one) in place to ensure the dissemination of critical knowledge and information about SEIP-related matters.

SEIP beneficiary schools are still in dire need of basic facilities to enhance teaching and learning. The provision of these facilities could lead to an increase in student enrolment. Besides, it is possible to have a corresponding improvement in student performance in the face of the provision of the needed infrastructural facilities. Also, there should be proper information dissemination concerning infrastructural facilities among SEIP School Coordinators.

Other challenges under SEIP were identified by the respondents. These include but not limited to the lack of involvement of stakeholders in decision-making, the need to make academic performance as part of the selection criteria, the lack of proper communication between management and teachers, inaction in terms of the application of sanctions against truant beneficiaries, needless workshops, illegal deductions, etc.

4.9 Ways of improving upon the implementation of the programme

The study sought to find out the perceptions of teachers concerning the factors essential to an effective implementation of SEIP in their various schools. In all, forty-two (42) teachers responded to the questionnaire by ticking to indicate their level of agreement on each of the statements provided in table 4.8.

After computing the values for the responses if $SA + A > N + D + SD$ i.e.

the sum of SA and A is greater than that of N, D and SD then it is concluded that the statements hold, however if the opposite happens the statement is rejected. All the numbers are in percentages.

Table 4.8: The factors needed for the effective implementation of the SEIP

ITEM	SA %	A	NS %	D %	SD	TOTAL
------	---------	---	---------	--------	----	-------

		%			%
Attach the socio-economic status of parents to the admission form	47.6	42.9	4.8	4.8	100
The committee for the selection of beneficiaries should also include all the senior members of staff in the school	54.8	35.7		9.5	100
Provision of evidence of needs to authenticate their claims.	45.2	47.6	4.8	2.4	100
Financial accountability of the students to the SEIP coordinator termly	59.5	33.3	4.8	2.4	100
Prompt disbursement of the SEIP grants to the students	69	26.2		4.8	100
Payment should be based on regular attendance to school	71.4	26.2	2.4	0.0	100

Source: Fieldwork data (2018)

Key; Strongly Agree (SA) Agree (A) Not Sure (NS) Disagree (D) and Strongly Disagree (SD) to certain statements.

- (i) Dwelling on the challenges confronting SEIP was not enough to obtain the balanced picture that is needed to take the right decisions. Respondent were therefore asked to indicate their opinions with regards to the factors crucial to the effective implementation of the SEIP. 91% of respondents thought that it was very important to attach the socio-economic status of parents to the admission form for obvious reasons. 9% of the respondents however disagreed with this position. According to the respondents, there was the urgent need to include all senior members of staff on the

committee for the selection of beneficiaries under SEIP. Those who strongly consented to this position were an overwhelming 91%. Respondents who saw this move as not very necessary stood at 9%. Among other things, it was also suggested that there should be a mandatory provision of evidence of needs for purposes of authenticating the claims and supposed financial state of potential beneficiaries. Such a move, according to the respondents, would result in the elimination of many cases of fraud and misrepresentation of facts and realities associated with potential beneficiaries. Specifically, about 93% of respondents were all in support of the obligation to provide evidence of needs on the part of beneficiaries. This position was however not without contention, as 7% of the respondents disagree with the aforementioned recommendation.

- (ii) The uniform conclusion of the SEIP coordinators at the various schools' points to the disturbing lack of due diligence in ascertaining the socio-economic backgrounds of students applying for SEIP scholarship. Coordinators suggested the need for a rigorous system of ascertaining the claims of parents. This would lead to the elimination of a great number of falsified applications for obvious reasons. According to the coordinators, teachers who are usually abreast of the background and socio-economic lives of the students should be made members of the selection panel for obvious reasons. To them, this would be more useful than a panel that is mainly composed of members who have no adequate background information of prospective scholarship beneficiaries.
- (iii) Student financial accountability also received the necessary consideration by the respondents. 93% were very convinced that there ought to be a

system of financial accountability on the part of the students to SEIP coordinators on a termly basis. This suggestion was underlined by the prevailing perception about students using the funds for purposes other than those intended and agreed per the terms and conditions of SEIP. Only 7% of the respondents did not see the need for this proposed system of student accountability.

- (iv) As a matter of fact, the SEIP District Coordinator affirmed earlier claims about female beneficiaries committing a substantial outlay of funds received to purchase mobile phones for their boyfriends during an interviewed session. She also recounted the case of a bursar misappropriating funds meant to be disbursed to beneficiaries in one of the beneficiary schools. The rampant cases of wastage and misappropriation certainly calls for a credible system of financial accountability that will involve not only beneficiaries but head teachers, bursars and others who are directly involved in the various processes leading to the release of funds. There should also be stipulated timelines with regards to fund release and disbursement.
- (v) Respondents were also very decisive about the need to ensure a prompt disbursement of SEIP grants. As a matter of fact, 95% of respondents were strongly persuaded that the disbursement of funds lacked the necessary promptness and thus called for an expediting of the disbursement process to ensure that the needed financial support (disbursement) is received at the right time in order to ensure its optimal utilization.
- (vi) Concerning payment to student beneficiaries under SEIP, 98% of respondents suggested the need for payment based on student regularity of

attendance to school. This was against the 2% who held the view that disbursement should not be conditional as other legitimate factors could be responsible for irregular school attendance on the part of student beneficiaries. This suggestion is actually in line with findings about the Education Maintenance Allowance (EMA) programme that was launched in ten (10) local education authorities in England.

- (vii) Also, the coordinators were of the view that the clause that prohibits the transfer of a scholarship from one student to the other should be reconsidered. Otherwise, SEIP they believed, would end up creating a generation of entitled students who care less about making significant strides in their academics. In other words, allowance should be made to revoke the scholarship privilege of a non-performing beneficiary and transfer it to another promising student. As already indicated, this will deal effectively with the dangerous phenomenon of student entitlement and pave the way for the hard work required of every citizen in the country.
- (viii) SEIP beneficiary schools are still in dire need of basic facilities to enhance teaching and learning. The provision of these facilities could lead to an increase in student enrolment. Besides, it is possible to have a corresponding improvement in student performance in the face of the provision of the needed infrastructural facilities. Also, there should be proper information dissemination concerning infrastructural facilities among SEIP School Coordinators.
- (ix) The in-service training of teachers should make room for the inclusion of non-core subject teachers. There should also be a credible system of information dissemination and sharing among teachers under the SEIP

programme. Also, in-service training becomes irrelevant because of the lack of facilities at the various beneficiary schools. A SEIP Coordinator who attended an in-service training lamented about the inability to transfer knowledge to students because of the unavailability of the facilities necessary to facilitate such transmission. To achieve effectiveness in in-service training, Hammond et al. (2009) suggested the need for the characteristics of connection to practice, intensity, incentives linkage and continuity.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the major findings from the study as well as conclusions, recommendations and directions for further research. The chapter also highlights the implications of the findings from the study for policy formulation and also outlines the significant lessons emanating from the study.

5.2 Summary of key findings

The first major research question of the study examined the impact of the SEIP on enrolment in the three selected beneficiaries SHS schools. The following key findings and their corresponding conclusions are made:

- (i) The findings of both statistical data and the interview conducted revealed that the SEIP policy has not directly increased enrolment in the three selected beneficiary schools. Inadequate public education about the existence of the SEIP as well as the limited number of the scholarship beneficiaries affected direct enrolment of the first year students in the beneficiary schools.
- (ii) Notwithstanding, the building facilities provided under the SEIP has indirectly contributed to the enrolment of the remedial students and the huge student enrolment brought by the free SHS policy in 2017 -2018 academic year.
- (iii) Some of the reasons for the low enrolment rate despite the intervention include but not limited to so many SHSs concentrated at the study area vis-a-vis the limited number of JHSs.

The second major research question of the study examined the impact of the SEIP on the academic performance (WASSCE results) in the three selected beneficiary SHSs.

- (i) The statistical data which involved the collation of WASSCE results of the selected beneficiary schools before and after results contradict the findings from the primary data and the interview conducted. Whilst the statistical data revealed that there was no significant relationship between the SEIP intervention and academic performance, teachers and students actually believed that the intervention has improved student performance in the three selected beneficiary schools. The scholarship is need-based subsidy which means it does not consider current student performance in its determination.

The third major research question of the study examined the challenges facing the implementation of the SEIP in three selected beneficiary SHSs. The finding from the secondary data using Likert scale as well as the open-ended questions from the questionnaire as well as the interview conducted with the three SEIP coordinators and the District coordinator identified the following challenges bedeviling the implementation of the programme in the study area.

- (i) The study discovered a prevailing perception about the lack of means for verifying the authenticity of socio-economic background of beneficiaries. This apparently places the smart but dishonest students in a better position to benefit from subsidies under SEIP. In addition, the small number of beneficiaries selected also raises some legitimate questions concerning the substantial impact of SEIP in view of a large number of students who are poor.
- (ii) The findings revealed a lack of proper accountability system on the part of the students to the SEIP coordinators as grants received by students under SEIP are expended on things other than those prescribed and expected.

The study also discovered a case of a bursar misappropriating funds meant to be disbursed to beneficiaries in one of the beneficiary schools. The rampant cases of wastage and misappropriation certainly calls for a credible system of financial accountability that will involve not only beneficiaries but head teachers, bursars and others who are directly involved in the various processes leading to the release of funds. There should also be stipulated timelines with regards to fund release and disbursement.

- (iii) The findings indicated the apparent lack of an effective monitoring of beneficiary academic performance. To this, no SEIP scholarship has been revoked in the midst of abysmal performance and this in spite of an express policy stipulation. One SEIP Coordinator eventually gave up after his recommendations to revoke scholarships due to consistently poor performance were ignored by those at the SEIP Secretariat. In his own words, “the whole thing is a sham” because he could not identify any sense of seriousness attached to the administration of scholarships under SEIP. Actually, this lack of an effective monitoring system was the subject of reports by the Auditor General (2013) and the Internal Audit Service of the Ghana Education Service (2013).
- (iv) The findings of the study also discovered that in-service training becomes irrelevant because of the lack of facilities at the various beneficiary schools. It was also discovered that the assumptions that one teacher from each core subjects and science department as well as ICT department who attended an in-service should reorganize the same at the school level was not the case coordinators lamented about the inability of the teachers to

transfer knowledge to students as well as other staff because of the unavailability of the facilities necessary to facilitate such transmission.

- (v) In relation to the infrastructural facilities received by the various schools, the study brought out the persisting reality of a lack of expenditure tracking. A lack of expenditure tracking also meant a lack of a solid maintenance system to ensure the best utilization and longevity of facilities provided. Specifically, it was revealed in the course of the interview that the ibox responsible for internet connectivity in one of the beneficiary schools was not working and practically nothing in the way of drawing the necessary attention had been done.
- (vi) The study also discovered that SEIP beneficiary schools are still in dire need of basic facilities to enhance teaching and learning. The provision of these facilities would increase the capacities of the various beneficiary schools to accommodate the large number of students brought about by the free SHS policy introduced in the 2017- 2018 academic year. Besides, it is possible to have a corresponding improvement in student performance in the face of the provision of the needed infrastructural facilities.

5.3 Conclusions

The study examined the effects of SEIP on educational outcomes with reference to enrolment, performance, challenges and factors essential to an effective implementation.

Using school level data over the period 2012-2017 and 3 SEIP schools, the study finds that SEIP have not had any significant effect on these key education outcomes (school enrolment and academic performance). This answers the first and second major research questions. The study concludes on this by noting that although the

results are not consistent with prior expectations (the researcher expected positive impact on educational outcomes), the findings may reflect the fact that SEIP started in 2014 and so it is too early to begin to see its effects. However, the study notes that these results may be a pointer to the fact that SEIP alone cannot deliver on important education outcomes. There is the need to carefully look at the design of future similar SEIP-like programmes to encompass other factors that might affect education outcomes.

With regards to the third major research question, the study further concluded that SEIP lacked a credible means of verifying the authenticity of claims made in regards to student socio-economic background. SEIP also lacks a proper accountability system with regards to fund disbursement and use. Added to this, there is no proper mechanism for monitoring the academic performance of students within a stipulated time frame. Concerning the factors essential to an effective implementation of SEIP, there is the need for a commitment of resources for purposes of creating public awareness and instituting a credible system of monitoring and accountability within the SEIP beneficiary schools. The cases of falsification also mean that a rigorous system of verification ought to be implemented if SEIP is to be effective.

5.4 Theoretical implications

The study made use of Vroom's expectancy theory of motivation and Schultz's human capital theory. Basically, Vroom's expectancy theory maintains that the strength of a tendency to act in a certain way depends on the strength of an expectation that the act will be followed by a given outcome and on the attractiveness of that outcome to the individual (Robbins, 1993). It was expected that SEIP would provide a rare incentive to students, thereby increasing enrolment and performance in under-subscribed schools. The study concludes that this was not necessarily so as

majority of the student respondents were not even aware of the existence of SEIP before their enrolment. This observation aligns with the recommendation for adequate public awareness of government interventions seeking to increase enrolment and performance through subsidies. In addition, it would help in efforts at properly situating the human capital theory assumption of investment in education producing good returns within the context of SEIP.

5.5 The Limitation of the study

One major limitation of this study has to do with the sampling of the population of the study. This consisted only of the beneficiary students and teachers who had been in the schools for not less than seven years. It also had just one District Coordinator in one district instead of three because of time constraints and other practical impossibilities. The researcher recognizes that other stakeholders in relation to SEIP such as parents, headmasters, school bursars and the SEIP project coordinator at the national level had something to say about the phenomenon under examination. The exclusion of these stakeholders was felt, especially during the presentation of the findings and the data analysis. Apparently, their views could have clarified some of the issues raised by the participants.

In addition, the researcher paid attention to the results obtained in only the core subjects without considering all the other elective subjects in the computation and the analysis of the results. Perhaps the overall analyses of both core and elective subjects might have given an interesting twist.

In spite of these limitations, the blend of both positivist and interpretivist research paradigms through the combination of qualitative and statistical methods made it possible to analyze a wide range of data from primary and secondary sources for

purposes of drawing the necessary conclusions. Also, the mixed method application using primary and secondary data allowed validation of views with statistical analysis.

5.6 Recommendations

Jones et al (2006) are convinced that ‘recommendations arising out of research should allow for the empowerment of the people and improvement in the quality of life. Based on the findings of this study, several recommendations could be made for purposes of improving upon SEIP. Whereas some of them have to be considered at the local level (context of this study) after a critical consideration of the local and contextual factors, others need to be given attention at national level (i.e. by the GES and the government in general).

In view of the findings, the following recommendations have been made.

The findings revealed a lack of public awareness about SEIP. Therefore, the Government of Ghana should commit extensive resources into the work of creating the necessary public awareness about SEIP through the Information Service Department and various media platforms in the country.

It was revealed that there were more SHSs concentrated in the study area. Therefore, the construction of SHSs by government in communities with the aim of increasing national enrolment rate should take the number of JHSs in the locality into consideration. This would prevent the undesirable situation of extremely low student enrolment in undersubscribed schools.

The study revealed a high incidence of falsification. Therefore, a rigorous system of ascertaining the claims of students is recommended. This should be enforced by the

committee in charge of vetting scholarship applications. This would lead to the elimination of a great number of falsified applications for obvious reasons.

Teachers who are usually abreast of the background and socio-economic lives of the students should be made members of the selection panel. This would be more useful than a panel that is mainly composed of members who have no adequate background information of prospective scholarship beneficiaries. Besides, the necessary performance of socio-economic profile analysis (Psacharopoulos et.al, 1986) can only be effective with this arrangement in place.

Going forward, it is recommended that SEIP coordinators should work together with heads of the various beneficiary schools for purposes of submitting a number of critical regular reports. These include accurate, timely and regular reports on fund disbursement and its subsequent appropriation, reports on school attendance on the part of beneficiaries and its attendant academic performance.

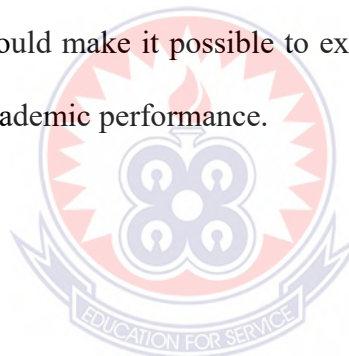
Also, there should be specific instructions for regular monitoring and evaluation from the SEIP Scholarship Coordinator at the national office. With a regular monitoring and evaluation system in place, the unintended shortcomings of SEIP operations would be identified and dealt with. This would also ensure decisive action and lead to a proper understanding of the workings of the hierarchy created under SEIP. As a matter of fact, it will deal with the embarrassing situation where SEIP School Coordinators had practically no inkling about their superiors and physical office locations.

The study revealed that in-service training was limited to some few core subject and science teachers. It is hereby recommended that the national office makes room for the inclusion of non-core subject teachers in the in-service training of teachers from beneficiary schools.

5.7 Suggestion for further studies

Given the small nature of the sample size used in this study, a further study should be done nation-wide to uncover the details of the various challenges facing the implementation of the SEIP in all beneficiary schools.

Also, it would be helpful for a study to be conducted after some substantial number of years. Obviously, this would make it possible to examine the real effects of SEIP on student enrolment and academic performance.



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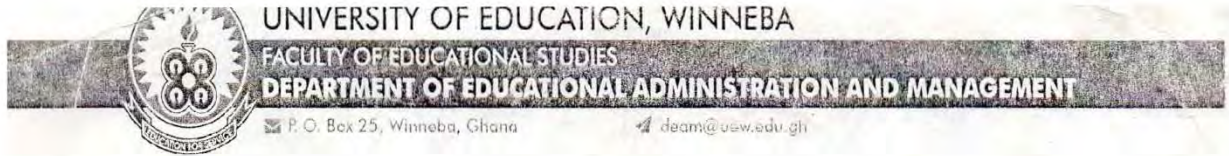
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APPENDIX A



UEW/EAM/INT/24

20th October, 2017

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION

We write to introduce Samuel Agyei Agyare a student on the M.Phil. Educational Administration and Management programme of the Department of Educational Administration and Management.

Mr. Agyare is working on a research project titled "*IMPACT OF SECONDARY EDUCATION IMPROVEMENT PROJECT (SEIP) ON ENROLMENT AND PERFORMANCE: THE CASE OF THREE SELECTED BENEFICIARY SENIOR HIGH SCHOOLS IN THE BRONG AHAFO REGION*"

Please, give him the necessary assistance and co-operation.

Thank you.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Dr. Hinneh Kusi".

Dr. Hinneh Kusi
Head of Department

cc: Dean, School of Graduate Studies

APPENDIX B

University of Education, Winneba,
Dept of Educational Administration & Management,
P.O. Box 25, Winneba, Central region.
22nd February, 2018.

The Headmaster,
Goka Senior High/Technical School,
P.O Box 84
Sampa- Goka, B/A.

Dear Sir,

REQUEST FOR COLLECTION OF RESEARCH DATA

I am a Master of Philosophy (MPhil) student at the University of Education Winneba. As part of the requirement for the award of the Master of Philosophy Degree in Educational Administration & Management, I am expected to undertake a research study. I am requesting for your permission to undertake the study that examines “The effects of Secondary Education Improvement Project on enrolment and performance the case of three selected Senior High School in Brong Ahafo region” in your school since the school is a beneficiary of the intervention.

I would be grateful if you could allow the teachers as well as the beneficiary students to participate in the study by providing me with the requisite information to complete this questionnaire. Please be assured that all information provided will be treated with utmost confidentiality and be used purely for academic purposes. Attached is a letter of introduction from the Department of Educational Administration and Management for your necessary study and consideration. Thank you.

Yours faithfully,

.....

Agyare Agyei Samuel

APPENDIX C

QUESTIONNAIRE FOR THE BENEFICIARY STUDENTS

DATE.....

QUESTIONNAIRE #.....

Dear Respondent,

I am Agyare Agyei Samuel a student of University of Education, Winneba (UEW). I am conducting a study on the topic “**The Impact of Secondary Education Improvement Project on Enrolment and Performance: the case of three selected Senior High Schools in the Brong Ahafo region**”. in partial fulfillment of the award of Master of Philosophy Degree in Educational Administration. and Management. I would be grateful if you could participate in the study by providing me with the requisite information to complete this questionnaire. Please be assured that all information provided will be treated with utmost confidentiality and be used purely for academic purposes. Thank you.

SECTION A DEMOGRAPHIC DATA

INSTRUCTON: PLEASE TICK ONE APPROPRIATE ANSWER AND WRITE WHERE APPLICABLE

Q1). Gender (1) Male [] (2) Female []

Q2). How old are you?

1)10-20yrs [] 2) 20-30yrs [] 3) 31-40yrs [] 4) 41-50yrs [] 5) over 50 yrs. []
Other (specify).....

Q3) Which form are you? Two [] Three []

Q4) Residential status Day [] Boarder []

Q5) Which region do you come from 1) Brong Ahafo [] 2) Ashanti [] 3) Northern region [] 4) Eastern [] other indicate

SECTION B THE EFFECTS OF SEIP ON ENROLMENT

Q6) How did you get to know this school?

- A) Placed by computerized system [] b) introduced by a teacher in the school [] c) friend [] d) lives in the community [] e) parent/ guardian [] others indicate
- Q7) Did you know about the SEIP before coming to the school? Yes [] No []
- Q8) If yes would you still have come if you knew you were not going to get the scholarship? Yes [] No []
- Q9) How did you get your first admission fees paid? A) parent/ guardian [] b) relatives [] c) self [] d) friend [] other indicate
- Q10) Why did you choose this school over the other schools around?
a) Past performance of the school [] b) the SEIP scholarship [] c) friends [] d) nearness to community [] e) Others []

SECTION C

THE INFLUENCE OF THE SEIP ON ACADEMIC PERFORMANCE OF STUDENTS

- Q11) How would you describe your academic performance **before** receiving the scholarship
a) poor [] b) average [] c) good [] d) Excellent []
- Q12) How would you describe your academic performance **After** receiving the scholarship
a) poor [] b) average [] c) good [] d) very good [] e) Excellent []
- Q13) To what a extent would you describe the impact of the SEIP on your overall academic performance. A) insignificant [] b) significant [] c) very significant []

SECTION D

CHALLENGES FACING THE IMPLEMENTATION OF THE SEIP

- Q14) Who is responsible for your education? A) parent [] b) relative [] c) friend [] d) self [] e) other indicate
- Q15) What is your guardian/parent occupation? A) farmer [] b) trader [] c) government worker [] d) unemployed []
- Q16) How did you get the form filled a) by a teacher [] b) friend c) self [] d) relative e) other indicate
- Q17) Do you have any relative in the school? A) YES [] b) NO []
- Q18). If yes, what capacity does he/she work? A) teaching staff b) non-teaching staff c) other indicate
- Q19) please indicate the one that apply to you
A) Orphan [] b) Special needs student [] c) HIV/AIDS patient [] d) from LEAP beneficiary household []
- Q20) Do you have any idea of how much you are supposed to receive from SEIP every term before the deduction of school fees? a) YES [] b) NO []
If yes, indicate the amount
- Q21) Do you have any idea of how much you are supposed to receive from SEIP every term after the deduction of school fees? a) YES [] b) NO []
How much do you receive after deduction of school fees? Indicate
- Q22) Do you render account on the SEIP grant to the SEIP coordinator? A) YES [] b) NO []
- Q23) What items do you spend the money on? A) mobile phone b) school related needs c) clothes [] d) given to my parent/guardian [] e) other indicate
- Q24) In your own opinion, what do you think should be done to improve the scholarship programme?

THANK YOU VERY MUCH FOR YOUR TIME.

QUESTIONNAIRE FOR TEACHERS

DATE.....

QUESTIONNAIRE #.....

Dear Respondent,

I am Agyare Agyei Samuel a student of University of Education, Winneba (UEW). I am conducting a study on the topic “**The Effects of Secondary Education Improvement Project on Enrolment and Performance: the case of three selected Senior High Schools in the Brong Ahafo region**”. in partial fulfillment of the award of Master of Philosophy Degree in Educational Administration. and Management. I would be grateful if you could participate in the study by providing me with the requisite information to complete this questionnaire. Please be assured that all information provided will be treated with utmost confidentiality and be used purely for academic purposes. Thank you.

SECTION A DEMOGRAPHIC DATA

Q1). Gender (1) Male [] (2) Female []

Q2) How long have been a teacher in this school

1) 1-5yrs [] 2) 5-10yrs [] 3) 10-15yrs [] 4) over 15 yrs. []

SECTION B**THE EFFECTS OF THE SEIP ON ENROLMENT**

Q7). The items on the table are related to the factors that have influenced enrolment in your school for the past three years. Please tick to indicate your level of agreement or disagreement to each of the statement.

ITEM	STRONGLY AGREE	AGREE	NOT SURE	DISAGREE	STRONGLY DISAGREE
Computerized placement system					
Transfer of students from different school					
Registration of remedial students					
SEIP scholarship for students					
High academic performance					
Unplaced students from the community					

SECTION C**THE EFFECTS OF THE SEIP ON THE SCHOOLS ACADEMIC PERFORMANCE**

Q8) In your opinion Has the SEIP aided students' academic performance in your school?

A) YES [] b) NO []

Q9) How would you rank the overall effects of SEIP scholarship on the student academic performance?

A) insignificant [] b) significant [] c) very significant []

Q10) Have you benefited from any of the in-service training organized under the SEIP programme before? A) YES [] b) NO []

Q11) If yes, in your own perception, how do you rank the overall effects of the in-service training programme organized under the SEIP programme on your teaching profession?

a) Not significant [] b) significant [] c) very significant []

Q12) Is there any difference between your quality of teaching before and after benefitting from the in-service training organized under the SEIP programme?

a) YES [] b) NO []

Q13) How many times did you attend the training

a) 1 b) 2 c) 3 d) 4 e) other indicate

SECTION D**CHALLENGES FACING THE IMPLEMENTATION OF THE SEIP**

Q14). The items on the table are related to the challenges facing the implementation of the SEIP in your school for the past three years. Please tick to indicate your level of agreement or disagreement to each of the statement.

ITEM	STRONGLY AGREE	AGREE	NOT SURE	DISAGREE	STRONGLY DISAGREE
Unqualified students selected for the scholarship					
Discrimination, tribalism in the selection of beneficiaries					
Lack of means to verify the authenticity of socio economic background of beneficiaries					
Misuse of the funds by the students					
Delay in the released of the funds to students					
Lack of proper supervision of the performance and attendance of the beneficiaries					

Q15) Apart from the points listed above, identify other challenges, in your opinion that are affecting the effective implementation of the SEIP in your school?

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SECTION E
FACTORS NEEDED FOR THE EFFECTIVE IMPLEMENTATION OF THE SEIP

Q16). The items on the table are related to the factors needed for the effective the implementation of the SEIP in your school for the past three years. Please tick to indicate your level of agreement or disagreement to each of the statement.

ITEM	STRONGLY AGREE	AGREE	NOT SURE	DISAGREE	STRONGLY DISAGREE
Attached the socio-economic status of parents to the admission form					
The committee for the selection of beneficiaries should also include all the senior members of staff in the school					
Provision of evidence of needs to authenticate their claims.					
Financial accountability of the students to the SEIP coordinator termly					
Prompt disbursement of the SEIP grants to the students					
Payment should be based on regular attendance to school.					

Q17) Apart from the points listed above, identify other factors needed for the effective implementation of the SEIP in your school.

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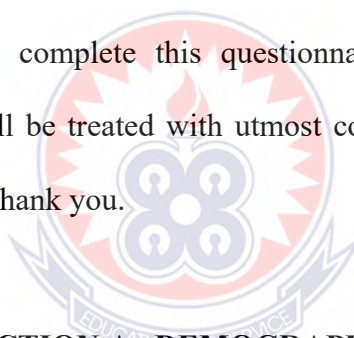
 THANK YOU VERY MUCH FOR YOUR TIME.

**INTERVIEW GUIDE FOR SEIP COORDINATORS AT THE SCHOOLS
AND DISTRICT OFFICERS**

DATE..... **INTERVIEW GUIDE** #.....

Dear Respondent,

I am Agyare Agyei Samuel a student of University of Education, Winneba (UEW). I am conducting a study on the topic “**The Effects of Secondary Education Improvement Project on Enrolment and Performance: the case of three selected Senior High Schools in the Brong Ahafo region**”. in partial fulfillment of the award of Master of Philosophy Degree in Educational Administration. and Management. I would be grateful if you could participate in the study by providing me with the requisite information to complete this questionnaire. Please be assured that all information provided will be treated with utmost confidentiality and be used purely for academic purposes. Thank you.



SECTION A DEMOGRAPHIC DATA

Q1). Gender (1) Male [] (2) Female []

Q2) How long have been a teacher in this school

- 1) 1-5yrs [] 2) 5-10yrs [] 3) 10-15yrs [] 4) over 15 yrs. []

SECTION B

Q3). What factors are responsible for low enrolment rate despite the introduction of SEIP?

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Q4). What is the average number of first year students placed by the computerized placement system in your school before 2017? And why few students do reports?

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Q7) In your view what is the reason for the progressive increased of student's enrolment from form two and form three?

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SECTION C

THE EFFECTS OF THE SEIP ON THE SCHOOLS ACADEMIC PERFORMANCE

Q8). In your opinion has the SEIP aided students' academic performance in your school?

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Q9). How would you rank the overall effects of SEIP scholarship on the student academic performance?

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Q10) In your opinion how do the building facilities given to your school under the SEIP is facilitating teaching and learning in your school?

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Q11) In your own perception, how do you rank the overall effects of the in-service training programme organized under the SEIP on your teaching profession?

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Q13) Is there any difference between the quality of teaching before and after benefitting from the in-service training organized under the SEIP programme?

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Q14) How would you rank the overall effects of SEIP on the schools WASSCE performance?

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SECTION D

CHALLENGES FACING THE IMPLEMENTATION OF THE SEIP

Q13) What are the challenges facing the implementation of the SEIP in the following areas?

✓ **Selection of the beneficiaries**

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- ✓ **The use of the grants by the beneficiaries**

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- ✓ **Supervision of beneficiaries' academic performance**

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SECTION E
FACTORS NEEDED FOR THE EFFECTIVE IMPLEMENTATION OF THE
SEIP

Q14) Please comment on the factors needed for effective implementation of the SEIP in the following areas

- ✓ **Selection of the beneficiaries**

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- ✓ **The use of the grants by the beneficiaries**

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- ✓ **Supervision of beneficiaries' academic performance**

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THANK YOU VERY MUCH FOR YOUR TIME.

The purpose of this form is to gather information on: The effect of secondary education improvement project on enrolment, and performance. The researcher is a student of University of Education, Winneba. conducting the study as part of the requirement for the award of a Master of Philosophy Degree in Educational Administration. and Management Your contribution towards completion of this form will be highly appreciated and the information provided will be used for academic purposes only and shall be treated with the utmost confidentiality it deserves. Attached is a copy of the letter of introduction from the Department of Educational Administration and Management for your necessary study and consideration.

ENROLMENT FOR THE BENEFICIARIES SENIOR HIGH SCHOOLS FROM 2012 -

20

YEAR	FORM	FIRST TERM			SECOND TERM			THIRD TERM			TOTAL	
		MA LE	FEMA LE	TOT AL	MA LE	FEMA LE	TOT AL	MA LE	FEMA LE	TOT AL	MA LE	FEMA LE
2012	ONE TWO THREE											
2013	ONE TWO THREE											
2014	ONE TWO THREE											
2015	ONE TWO THREE											
2016	ONE TWO THREE											
2017	ONE TWO THREE											



GRADE	<u>WASSCE RESULTS ANALYSIS FROM 2012-2017 (PLEASE PROVIDE FOR EACH YEAR)</u>																				TOT	TOTCAN	% PASS	% PASS			
	A1	B2	B3	C4	C5	C6	D7	E8	F9	X	P	*															
GENDER	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	TOT	M	F
SUBJECTS																											
SOCIAL STUDIES																											
ENGLISH																											
MATHS- CORE																											
INT. SCI																											
GOVERNMENT																											
HISTORY																											
GEOGRAPHY																											
C.R.S.																											
TWI																											
ECONOMICS																											
OTHER ELECTIVES																											
TOTAL																											

