ASSESSING SUSTAINABILITY OF FREE SENIOR HIGH SCHOOL IN GHANA

A Master of Science Project Report Presented to the Department of Building Technology of the Kwame Nkrumah University of Science and Technology in partial fulfillment of the requirements for the award of a Master of Science (MSc.) honors degree in Project Management.

By:

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November, 2018

CERTIFICATION

I hereby declare that this submission is my own work towards the MSc. in Project Management and that, to the best of my knowledge, it contains no material previously published by another person, nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

Access to education remain a challenge for most Ghanaian students especially at the secondary level due to high expenditure responsibilities that comes with it despite government numerous subsidy provisions available. In view of this, the government of Ghana has initiated the free SHS project. However. The issue of sustainability continues to be a concern of stakeholder. . The research aimed at assessing the sustainability of free SHS in Ghana. The specific objectives were; to identify the critical success factors of free SHS; to identify the potential causes of free SHS failure; and recommend strategies to sustain the free SHS initiative in Ghana. The study employed a quantitative research method using the structured questionnaire approach. The Relative Importance Index (RII), descriptive statistics and the One-sample T-test were used in analyzing the data collected. The research revealed that, Primary responsibility for education by the state; High allocation of government budget to secondary education; Adoption of cost-effectiveness measures and Utilizing abounded infrastructure are the critical success factors for the free SHS project. It also identified inadequate teaching space and materials, shortage of teachers; Inadequate and late disbursement of government fund; Inadequate of teaching and learning materials and well equipped library; Lack of motivated and qualified teachers; and Poor supervision and support as the potential causes of free SHS failure. It is therefore recommended that government collaborates with all stakeholder institutions to clearly design the roadmap for the success of the initiative. As a result, all possible set-backs could be predetermined and planned for and prevent undue interruptions.

Keywords: Education, Free Senior High School, Sustainability.

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DEDICATION

This dissertation is dedicated to my children; Edmund Sesi Togobo Jrn and Edra Selinam Togobo for their patience and tolerance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

As there continuous to be increasing number of children in developing countries who enroll in primary school and gender gaps in primary enrollment shrinks, policymakers' attention has shifted to secondary school (Blundell et. al, 2000). For example, the principal focus under education for the U.N's new "Manageable Advancement Objectives" is "by 2030, guarantee that all young ladies and young men finish-free, evenhanded and quality essential and secondary education prompting significant and compelling learning results." In Ghana, the setting of this investigation, the present government guaranteed to make secondary education free when voted to intensity of which the guarantee is being satisfied in faces as a technique to meet the said activity as guaranteed (Peter, 2017).

Many see secondary education as having possibly transformative monetary and social effects, especially for young ladies. However others have more negative perspectives; a few specialists trust that quickly extending access to secondary education will create minimal extra learning, given shortcomings in the educational system (Pritchett, 2001). Another speculation is that youngsters see secondary education as promising access to tertiary education and eventually an administration work, with related rents, and that since such employments are inalienably constrained, quickly growing education may prompt a companion of "overeducated" youngsters, disappointed in their goals, and to related social and political pressures (Krueger and Maleckova 2003; Heckman, 1991). A third theory is that extending access to secondary school in creating nations will require curricular changes to plan students for the work showcase. At the point when the Assembled States moved from a system of secondary schools intended to plan elites for tertiary education to a system of mass

secondary education, numerous secondary educational module dropped Greek and Latin and consolidated professional education (Goldin, 1999).

This discussion is shockingly ignorant by brilliant confirmation from the creating scene. Numerous investigations in the created world have utilized normal examinations to evaluate the rates of come back to education (example, Angrist and Krueger, 1990). Nonetheless, it isn't clear if the outcomes sum up to creating nations which have immensely more prominent levels of education than did created nations when they had practically identical pay levels (Pritchett, 2001). While numerous investigations archive the positive connection among's education and different results, there are shockingly few very much recognized examinations from bring down pay nations on the causal effects of education.3 We know about no randomized controlled preliminary (RCT) and just a single report in light of relapse discontinuities in confirmation test scores on the work showcase effect of secondary education (Ozier, 2016).

In spite of the fact that there are solid claims about the impacts of secondary education for young ladies, particularly on regenerative wellbeing, ripeness, and strengthening (UNGEI, 2010; Warner, Malhotra and McGonagle, 2012; Ackerman, 2015), wellidentified ponders are rare. Various examinations analyze the effect of absolutely professional education, however less think about pretty much professional tracks inside general secondary schools.

Senior secondary school in Ghana, similar to English A-levels, has verifiably been specific. Confirmation depends on a portal exam directed toward the finish of review 8, which just around 40% of middle school participants pass. Five (5) Students apply not exclusively to a specific school, yet additionally to a specific major (Shephard and Vignoles, 2016). Two majors (General Expressions and General Science) are scholastically engaged, while alternate majors join professional education nearby customary scholarly subjects.

Secondary school enlistment is likewise constrained by educational cost expenses, which added up to around 20% of Gross domestic product per capita in Ghana yearly amid our scholarship period (Lamtey, 2016). Ghana has had a system of constrained incomplete scholarships for certain select populaces and, as said, a repeating race guarantee in the course of the last two presidential decisions was to make secondary education free (Kumi, 2015).

1.2 Problem Statement

The free SHS logo was launched with the wide topics of Access, Equity and Quality. The import of this slogan implies that, this arrangement is intended to guarantee access to secondary education in Ghana, to guarantee value in our secondary education system and all the more critically to accomplish the worldwide focal point of value education in senior secondary schools in Ghana. These are exceptionally splendid and noteworthy subjects that should support the logic of our educational system in Ghana. Anyway as per Peter,(2017), the way in which the present government has set out on actualizing the free SHS arrangement probably won't fall in accordance with these three topics.

Also, access to education is one of the issues of education around the world. The Education for All (EFA) development driven by UNESCO which went for meeting the adapting needs all things considered, youth and grown-ups by 2015 was not met. Despite the fact that this was not accomplished, it reveals to us that endeavors are being made everywhere throughout the world to enhance access to education. Along these lines, the two parts of openness which are reasonableness and framework ought to dependably be the beginning stage (Kumi, 2015).

At last, accomplishing quality education isn't simply an issue of trademark or presenting free SHS, it is a "perplexing system implanted in a political, cultural and monetary setting" (UNICEF, 2000). In this way, more should be done if genuinely our center is to accomplish quality education. MoE and GES have certain factors they use to quantify quality education,

they call it, quality data sources. Some of them are; student educator proportion, student prepared instructor proportion, student reading material proportion, student classroom proportion, and student work area proportion among others. These information assumed be moderately sensible to accomplish quality education. For instance, the GES standard is that, students to teacher proportion at the SHS level is 25. In this way, every 25 students ought to be dealt with by a teacher. The national normal is around 1:35/40. Likewise, students to classroom proportion floats around 46, consequently, on the normal 46 students are doled out to one classroom. The ramifications of this is, by eradicating the hindrances of availability (reasonableness and foundation), the programmed result is an expansion in enrolment. The final product will be an expansion in student teacher proportion, student classroom proportion among others. Utilizing the information factors from the GES, much should be done to accomplish the topic of value.

1.3 Research Questions

1. What are the critical success factors of free SHS?
2. What are the potential causes of free SHS failure?
3. What strategies have been put in place to ensure sustainability of free SHS?

1.4 Aim

The study aims to assess the sustainability of free SHS in Ghana.

1.4 Objectives

In order to achieve the above aim the following specific objective will be set:

1. To identify the critical success factors of free SHS;
2. To determine the potential causes of free SHS failure;
3. To recommend strategies to sustain the free SHS initiative in Ghana.

1.5 Scope of study

The study contextually delves into the Education Strategic Plan which is the backbone of Ghana's policy on quality education. The objectives, strategies and targets of the policy will be examined. The policy will be also assessed within the context of Public Second-Cycle Institutions in Greater-Accra metropolis.

1.6 Methodology

The research method used was quantitative. A case study strategy was adopted by specifically focusing on a three selected Senior High Schools within the Accra metropolis. Questionnaires was used in the collection of primary data.

A survey is conducted employing a mixture method strategy. Both quantitative and qualitative methods are employed to achieve the study objectives.

Secondary data will however be obtained through the existing literature on the subject matter from journals, bank reports, newspapers and the internet.

The data collected in the study will be analyzed using Descriptive statistics (mode, pie charts, bar graphs, frequency tables and cross tabulations in Statistical Package for Social Sciences to determine the relationship between variables and deliverables.

1.7 Benefits of the Study

The reason for conducting the research emanates from the fact that secondary school education in Ghana has gone through many educational reforms to heighten the standard of education for social and economic development of the country. In spite of the efforts put in by governments, there is continuous criticism from various stakeholders about the low quality of education at the Senior High School (SHS) level, which is the link between the primary and higher stages of learning.

The outcome and recommendations that emerge from the study will generate interest for further research into other aspects of education in Ghana and the world at large by the universities and other research institutions. This is because, development challenge is a multifaceted phenomenon and no one research is capable of addressing it in full.

Also, the study will contribute to the existing knowledge and literature on Quality Education. The findings of the study will therefore be put at the disposal of students and other researchers in development work for reference purposes, hence it will add to knowledge. Furthermore, the research will inform government, policy makers and development partners of the relationship between education quality in the secondary education and development.

1.8 Organization of Thesis

This study will be presented in five chapters focused towards identifying and describing the factors that affect the outcomes of projects and programs. Chapter one will be based on the general introduction to the research. This includes an exposition on the background study to the research, the problem statement, the research questions, the aim and objectives of the study, the scope and significance of the study. The Chapter two comprises of the review of literature on previous research works. The chapter will provide a literature based on information provided by other prominent researchers, identify the gaps in the literature that the research seeks to address and also draw conclusion on what was found in relation to the area of study. Chapter Three will present the research methodology of the study. It focuses on the method and the strategy in carrying out the research and the data collection as well as the analytical tools and techniques that will be used. Chapter four provides details discussions the results and analysis of the findings from all the above chapters. Chapter five will summarizes the study, draws conclusions and makes recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

The concern of this chapter is to reviews literature related to the study. It considers the meaning of education and its types as well as quality education. It also examines significance of quality education to development, factors that influence quality education and Ghana's policies toward quality education in the Second-Cycle institutions mostly, the public ones.

2.2. Definition of Concepts in Education

2.2.1 Meaning of Education

In the perspective of Diminish (2002), there is no particular and brief method for characterizing the term education.

This is on account of various scholars characterize a similar term in an unexpected way. To him, aside from a lexicon definition which appends minimal down to earth an incentive to the significance of a term or word, the which means relegated to a word is a conviction, not a flat out truth. Hence, the definition utilized for the term relies upon the pointers that people need to gauge and the reason for which they need education to be utilized. Independent of the definitions given to the term, certain highlights are unmistakable in them accordingly, instructing and learning. Education is clarified as the deliberate transmission of amassed knowledge, aptitudes, culture also, estimation of a general public starting with one age then onto the next.

Rosado (2000) then again, characterizes education as "agreeable improvement of the physical, mental, moral (other worldly), and social resources, the four measurements of life, for an existence of hard work. These definitions consider intellectual and psychomotor improvement of identity as the point of convergence of education.

In the perspective of Schultz (1971) education implies bringing out of a man something imminent or dormant with the goal that he can be created socially and ethically to make him not just wind up touchy to his individual and social decisions yet additionally respond them. The directions that the individual gets from education prepare to him to get certain abilities and end up restrained in the public arena. It tends to be reasoned from Schultz's piece that education places people in the correct temper and conduct to fit into any condition he or she may get herself. Smith (1976) considering education to be an aggregate advancement in person's life just clarified the wording as, all kind of upgrades notwithstanding exchange of knowledge and abilities.

Any medium of association that is arranged and is maintainable to advance learning is viewed as education. The sort of discovering that happens ought to have the capacity to build up the aptitude of people with the end goal that they can deal with their own particular assets and lives in a way that they can figure out what their future should resemble (UNESCO, 1975). The exchange of social esteem and standardizing legacy from age to age formally is in this manner principal for societal advancement (Fingerland and Saha, 1989). The preparation of individual to gain knowledge, abilities, culture and estimations of a general public ought to in this manner, be precise and deep rooted system.

In the perspective of Thomson (1981), the significance of education and its significance rises above societal limits to incorporate national and worldwide circles. Education is a readiness of life and to a vast degree a procedure of amassing knowledge for later application in neighborhood networks and countries.

Making derivations from the above definitions, education could be viewed as the procedure of

educating and realizing which prompt usage of assets for securing of knowledge and ability that achieve alluring change in person's life for his self-awareness what's more, that of the

general public. Likewise, the term education could be seen well in the event that it is considered as far as it comprises.

2.2.3. Types of Education

Education or learning of any kind, depending on its nature, can broadly be categorized into three (3) groups namely; Formal, Informal and Non-formal. In the perception of Coombs (2003), Formal education is "the hierarchically structured, chronologically graded educational system running from primary school through the university". It includes what is taught in school within a certain time frame using curricula and syllabi.

Kleis et al (1973) who associate themselves with the explanation of Informal Education said that this type of education is not organized and concerns itself with cultural transmission or everyday events which are passed onto the younger generations by the elders of the society. It includes all forms of non-school experiences and those on the job.

Non-formal Education exists at any environment in which there is deliberate attempt to provide a methodical content of knowledge according to the desire and aspirations of the learner. It occurs outside the school environment. A typical example of this form of education is adult literacy programme. Apart from absence of application of curriculum and syllabi for organization of education of this sort, there is also, minimisation of other elements associated with formal system of education namely; roll calls, enforcement of discipline, report writing, supervision among other things (Kleis *et al,* 1973).

The concern of this research is limited to the formal type of education since it is the line along

which secondary education is organized in Ghana. Secondary schools in the country are designed to have curricula and time frame within which programmes that they pursue are completed.

2.3 Historical Development of Education in Ghana

2.3.1 Castle and Mission Schools

European merchants presented formal education in Gold Drift in 1471 with the goal of instructing the Gold Coasters how to peruse, compose and guzzle in them the guideline and estimations of Christianity. Their schools were limited in the dividers of Elmina Castle. Anyway the Dutch who in 1637 caught the Elimina castle sustained castle education. The British and the Danes joined the race of building up the castle schools in 1694 and 1772 individually. The base of the British was the Cape Drift castle and that of the Danes was Christiansborg Castle. The merchants opened numerous schools in Accra, Anomabu and Dixcove in 1822 (Eyiah 2004). The accentuation of religious examinations in the school curriculum was to ingrain moral uprightness in the general public in view of Christian qualities. The significant imperative of the system of education had been its constrained access to all offspring of school going age. Just offspring of the European dealers and that of the compelling identities in the general public were considered for confirmation. The contribution of the teachers in the arrangement of schools for the Gold Drift expanded the extent of affirmation for some Ghanaians (Graham 1976).

As per Graham (Eyiah, 2004), Wesleyans (Methodists) and Basel mission were the leaders in the race for arrangement of mission schools in Gold Drift (Ghana) to supplement government exertion toward that path. The landing of Wesleyan and Basel preachers in Gold Drift in 1835 emphatically added to the improvement of education by the Christians. The principal school of the Wesleyans was built up in Cape Drift Castle where they settled. Nine Wesleyan mission schools had been opened by for young men and 3 for young ladies. Their push to

open extra schools in Ashanti district was baffled by Kumasi boss who had a reservation that enabling the Wesleyans to acquaint the Asantes with the western education system would adversely effect on the cultural convictions and estimations of the people (Asantes). This advancement restricted Wesleyan endeavors to extend schools to the costal zones all through the nineteenth century. (Graham 1976) Upon landing the Basel (Presbyterian) mission fabricated their castle at Christiansborg close Accra. By the 1850s, they had life experience schools at Christiansborg and schools on the Akuapim Edge, including one for young ladies at Aburi. At their school in Akropong, the Basel preachers prepared educators, utilized the schools as agency for the spread of Christianity, and distributed a rudimentary syntax book and word reference in the nearby Akan language (U.S College Catalog, 2010).

2.3.2 Education in the Gold coast from 1840-1901

Government endeavors to increment educational exercises on the Gold Drift started with the marking of the bond of 1844 between the British and the Fantis. It was as per the spirit of the bond that Governor Hill proposed his 1852 Mandate in which suggestion was made that a survey assess be forced to back the general change of the territories—including the arrangement of education that could prompt the foundation of a better educated class of African (U.S College Catalog, 2010).

Having the authority over Gold Coast administration, the British turned out to be more forceful in the quest for its educational strategy. To help change issues faced by the mission schools, for example, preparing local teachers and enhancing the nature of education the organization made stipends to both the Wesleyan and Basel missions in 1874 and passed two more Educational Statutes in 1882 and 1887. The former specified that government grants to denominational schools ought to be made reliant on an appraisal of the level of effectiveness whiles the later emphasized government's call for changes in the school curriculum, instructor confirmation, and pragmatic education for students. The help that the preachers procured

from government urged them to open extra schools in the nation. By 1901, the aggregate number of mission schools in Gold Cost was 132 (U.S College Catalog, 2010).

2.3.3 Education in the Gold Coast from 1840-1901

Government attempts to increase educational activities on the Gold Coast began with the signing of the Bond of 1844 between the British and the Fantis. It was in accordance with the spirit of the bond that Governor Hill proposed his 1852 Ordinance in which recommendation was made that a poll tax be imposed to finance the general improvement of the territories—including the provision of education that could lead to the establishment of a better educated class of African (U.S University Directory, 2010).

Having the hegemony over Gold Coast administration, the British became more aggressive in the pursuit of its educational policy. To help redress problems faced by the mission schools such as training local teachers and improving the quality of education the administration made grants to both the Wesleyan and Basel missions in 1874.and passed two more Educational Ordinances in 1882 and 1887. The former specified that government grants to denominational schools should be made dependent on an assessment of the level of efficiency whiles the later emphasized government's call for improvements in the school curriculum, teacher certification, and practical education for pupils. The support that the missionaries acquired from government encouraged them to open additional schools in the country. By 1901, the total number of mission schools in Gold Coast was 132 (U.S University Directory, 2010).

2.3.4 Improvements in Education during the First Half of the Twentieth Century

Arrangement of education in the Gold coast was done essentially by Christian denominations. For the most part, the mission schools gave simple instructing at the primary level. Students looking for advanced education went to either Europe or the Fourah Bay College in Sierra Leone. The arrangement of General Gordon Guggisberg as the governor of Gold Coast from

1919 to 1927 brought a considerable measure of advantages. The governor started a few formative projects to recreate Gold Coast as a modern country. He was of the conviction that the present system couldn't maintain future developments. Despite the fact that the administration proposed a technical school for Accra, Prince of Wales College (now Achimota School) was the genuine accomplishment of the administration's educational program. This school catered for students of preuniversity education including those at kindergarten. Full teacher preparing and kindergarten programs were presented in the school in January, 1928. The governor's commitments to education were basic to developing a firm foundation for the future manpower training of the people of the Gold Coast.

A few secondary schools were built up by secular as well as the various Christian denominations. These schools included Adisadel College, Aggrey Memorial College, Mfamtsipim School, Wesley Girls School, St. Augustine School, Prempeh School, Ghana National, and a few Presbyterian institutions in the Akuapem and Kwahu districts (Quist 2003; Graham 1976). The schools were amassed in the southern piece of the nation. The Catholic Church began missionary activities in the nation's northern region in 1910. Notwithstanding the way that there were a few primary and middle schools, teaching colleges and no less than 60 secondary schools, yet the schools were thought to be terribly inadequate at independence to meet the demands of the nation.

The soul of educational extension and improvement proceeded even after freedom. Before the finish of Nkrumah's organization in 1966, the quantity of open and government helped secondary schools expanded to 105 with an aggregate enrolment of 42,628 (GOG 1966). Under the administration of Commonplace National Guard Committee (PNDC) organization, network Senior Secondary Schools (SSS) and Junior Secondary Schools (JSS) with

specialized and professional introduction were opened. Toward the finish of 2000, the legislature could expand the quantity of SSS across the country to 500 and that of the JSS to 4,918 (Quist 2003). The new system changed the structure and substance of the nation's secondary education. The span of SSS was 3 years and JSS 3 years. The substance of the JSS was overhauled to incorporate, Agricultural Science, Cultural Investigations, Ghanaian Language, Natural Examinations and Fundamental abilities. The SSS subject substance was additionally overhauled to mirror the national yearnings. The new structure annulled the 4-year center school, 5-year secondary school and two-year 6th shape system (Africa Recuperation 1998). The New Enthusiastic Gathering's administration strengthened the vocationalisation of secondary education and stretched out the program of SSS to four years. Aside from that, the legislature presented the model school system where each area in the nation was relied upon to be a recipient of no less than one secondary school of higher standard (Higgins 2009) As of now, Ghana's education part is organized to accomplish the accompanying mission to give applicable education to all Ghanaians at all levels to empower them obtain abilities that will help them to build up their capability to be profitable in order to encourage destitution decrease and advance financial development and national improvement" (GOG, 2004). The strategy on quality education as contained in ESP is hence, actualized to upgrade the fulfillment of this statement of purpose.

2.4 Contribution of Education to National Development

Quality Education has for some time been perceived as one of the backbones of enhancing the lives of the exceptionally poor as globalization continues. This is on the grounds that its effect to national improvement cuts over all divisions of the economy (Hewlett Establishment 2008; Sahlberg, 2009). The relationship between quality education and the advancement of these factors; human capital, business age, financial development, salary dispersion, quality wellbeing, vote based system and strengthening would be the thought of this area.

2.4.1 Human Capital Development

As indicated by Gilmore (1999), the term human capital in financial speech implies, the connection among abilities and profit. In his commitment to education and human advancement, Oxaal (1997) utilized human Capital Hypothesis (related with crafted by Gary Becker, Check Blaug and numerous others), to re-reverberate the way that, quality education gives mental and physical abilities to literates who contribute very to the profitability of a nation when contrasted with the low efficiency from their uninformed partners. This advises why the propelled nations contribute an expansive lump of their advantages in the advancement of their populace through advancement of science and predominant education. Speedy headway of some poor nations could be disclosed to the significance that they joined to education and sound education approaches for human capital improvement (UNESCO 1996).

Be that as it may, Gilmore (1999) contends that organizations are hesitant to put resources into the education of their workers in light of the little affirmation they have that the prepared representatives would not clear out their organizations to another with their new however quality aptitudes for better wages and pay rates. The system nowadays is giving preparing to workers just important to the regions of tasks of the organizations.

2.4.2 Health and Education

Todaro and Smith (2009) legitimize that wellbeing and quality education are interrelated. More noteworthy wellbeing capital may enhance returns on education speculation since it is an essential determinant of school enrolment and learning procedure of a kid in a formal education setting. A ton of well-being programs depend on principal abilities learnt at school

for their usage. A superior school shows singular fundamental cleanliness and sanitation issues and it is a domain where the wellbeing workforce is prepared for occupations.

Watkins (2000) has additionally contended that there is a relationship between maternal education and child birth. Labour rate is conversely identified with the level of nature of maternal education. The higher a mother is taught, the more beneficial she and her kids are probably going to be. For moms finishing five long stretches of value education, the danger of youth mortality diminishes around 45 over 1000 births and their youngsters are not liable to be malnourished. He credited the mass rejection of ladies in education in Sub-Saharan Africa to the demise of one youngster in each four children. The immortality of referrals, take-up of vaccination and the utilization of antenatal administrations and centers are for the most part decidedly identified with quality education. Every one of these elements diminishes the dangers of numerous conceivably life debilitated sicknesses.

2.4.3. Income Distribution

Globally, governments give need worry to SHS because of the way that it fills in as a terminal purpose of planning students for the universe of work or education of larger amount (Sekyere 2009).

Endeavors are made to upgrade its quality for the reason that, accessibility of value educational openings in a nation has a connection with the pay dispersion. Quality education breaks the ignorance hindrance and gives the essential aptitudes which enable people to partake in profitable and advertise wanders on even grounds and exploit financial reconstruction (Watkins 2000).

Besides, people with the coveted abilities and knowledge procured through formal education or preparing, in light of current circumstances, get higher wages than those with lower educational foundation. The reason being that they can escape from joblessness circumstance and can adaptably move starting with one geological area then onto the next looking for

occupations, as interest for their work by businesses through the span of their working life is higher (Decker 1999, refered to in Gilmore 1999; Hanusshek and Wobmann, 2000; Mill operator, 2000).

Human capital scholars contend in accordance with the above statement (Oxaal, 1997). Right off the bat, they are of the view that, generally, there is experimentally evident, constructive connection between the wages and compensations individuals get at work and the level or quality education which they have gotten. In the aggressive markets, businesses utilize education as the model of estimating the reasonableness, possibility and efficiency of workers. Representatives with higher yet quality education are likened to higher creation of a firm thus procure higher reward for the administration rendered. The suggestion is that quality education influences representatives to get important knowledge which can be connected to their business to render them more profitable to expand efficiency and improve their odds of acquiring more in an organization than for those with less or second rate education (Oxaal, 1997 and Blondal et al, 2001).

Notwithstanding, the human business people counter contended that the premium set on quality education by managers isn't because of the psychological aptitudes it gives to individuals but instead the "non-intellectual characteristics and properties taught at various levels of the education system". These characteristics what's more, qualities given by the education are answers to necessities for incompetent, center and larger amount works in the organizations. To them education rather make systematic social orders in a word related condition as opposed to expanding gainful abilities of laborers (Oxaal, 1999).

2.4.4 Governance/Democracy

There is no denying the way that linkages exist between cooperation in basic leadership and education. Therefore, UNESCO (2000) distinguished planning of students for dynamic

inclusion in basic leadership as a segment of value education. In addition to other things, the effect of value education on great administration can be felt in the accompanying ways;

Right off the bat, citizenry with quality education is said to be more equipped for partaking in multicultural and pluralistic culture and the nearby, local and national government (UNDP, 1999 referred to in Gilmore, 1999).

In both substance and process, quality education teaches majority rule mentality of advancing peace, soundness and how to oversee struggle and regard different perspectives in a multi-cultural society. Figuring out how to oversee differences in a classroom circumstance opens students to how to by and large manage societal issues. The school additionally gives a situation to individuals to find out about their fundamental rights and obligations and how to guard them when mishandled (USAID, 2003).

Buttressing the point, Watkins (2000) expressed that, arrangement of value education to natives will give them the abilities and mentalities required for strengthening, limit building and interest in basic leadership.

In a related advancement, report of the World Financial Gathering (2005), affirms that quality education is a principal prerequisite for enabling ladies (powerless gathering) in all circles of society. Inability to give ladies access to education proportional to that of the contrary sex (men) as far as quality, substance and importance to existing knowledge and genuine needs, deny them support and portrayal in administration to increase political impact. The report additionally pinpoints that the staggering outcome of the general public overall is the evil readiness that future age needs to languish over absence of women education.

2.4.5 Poverty Reduction

The overall goal that a country can achieve for using quality education or education to improve its Human Resource, Wellbeing, Wage Dissemination and Great Administration/Vote based system is a reduction of its neediness level. This has been set in World Education Gathering held in Dakar in April 2000 by the worldwide network who promised to utilize education as a road of killing outrageous destitution on the planet (UNESCO 2001).

Oxaal (1997) underlines that quality education can be a solid wellspring of boosting the yield of individuals, especially worker ranchers when other cultivating inputs are accessible, to limit neediness which is high in the Agricultural segment of the creating scene. The author finds out that an informed individual stands a superior possibility of showing signs of improvement work and in addition wages and pay rates to accommodate himself the essential needs throughout everyday life and security against destitution. Likewise, the reward (profit) for the independently employed who are instructed and work either in the urban and informal segment is higher than the individuals who are uneducated. By making reference to Correspondence hypothesis, Oxaal declared that headway in tutoring in the work constrain advances business development yet not really a surest path for the informed who neglect to anchor occupations in the formal part to better their lot.

It is contended facilitate by Todaro and Smith (2009) that change in the education of women (the powerless) isn't just a contributory factor to her fruitfulness control yet in addition gainful to her wellbeing status and that of her relatives. It is in this manner, closed by UNESCO (2001) that quality education is one of the social mediations that has the possibilities of managing the danger of neediness and it is additionally a methods for riches creation for a nation financial development and national improvement. Nature of education of

any country or society can be gotten through coordinated government strategies to impact certain pointers (factors) in educational system.

2.5 Initiative of free SHS

According to the Minister for Education, Mathew Opoku Prempeh, Implementation of the free Senior High School (SHS) education policy will begin in September when the 2017/2018 academic year starts. The programme will start with first year students in all public SHSs and Technical and Vocational Education Training (TVET) institutions across the country.

The free SHS policy implies the absorption of all approved fees currently charged to students in public SHS and TVET Institutions.

Mr Prempeh explained that under the free SHS and TVET policy, Day students would benefit from a fully-sponsored scholarship package of GH₵ 648.47, while Boarders would benefit from GH₵ 1,002.47 annually in addition to free textbooks and other learning materials. Government, he said, would also absorb all fees approved by the Ghana Education Service Council for 1st year students in public schools. the Free SHS and TVET programme would address inequality and ensure equal opportunities for all students through the removal of cost barriers in public second cycle schools, adding that there would also be a physical expansion of school infrastructure and improvement in the quality of secondary education.

On eligibility, a Ghanaian student is qualified to access free SHS only if he or she wrote 2017 BECE and was placed by Computerized School Selection and Placement System (CSSPS) into a Public-funded second cycle institution, adding that there would also be 30% placement in the elite reserved for entrants from public Junior High Schools.

In order to increase accessibility, the government would continue with on-going SHS projects, upgrade 42 SHS into model schools and construct new public schools, where

necessary. The government charged parents to play a supervisory role of encouraging their wards to study hard as government played its part of ensuring free education for all students who otherwise would have terminated at the JHS level.

2.6 Benefits of free SHS

Secondary education has long been recognized as one of the pillars of improving the lives of the very poor as globalization proceeds. This is because its impact to national development cuts across all sectors of the economy (Hewlett Foundation 2008; Sahlberg, 2009). The relationship between education and the development of these variables; human capital, employment generation, economic growth, income distribution, quality health, democracy and empowerment would be the consideration of this section.

2.6.1 Human Capital Development

As per Gilmore (1999), the term human capital in monetary speech implies, the connection among abilities and profit. In his commitment to education and human improvement, Oxaal (1997) utilized human Capital Hypothesis (related with crafted by Gary Becker, Stamp Blaug and numerous others), to re-reverberate the way that, secondary education gives mental and physical aptitudes to literates who contribute profoundly to the profitability of a nation when contrasted with the low efficiency from their oblivious partners. This illuminates why the propelled nations contribute a huge lump of their advantages in the advancement of their populace through the advancement of science and predominant education. Fast headway of some poor nations could be disclosed to the significance that they joined to education and sound education strategies for human capital improvement (UNESCO, 1996).

Nonetheless, Gilmore (1999) contends that organizations are hesitant to put resources into the education of their representatives due to the little confirmation they have that the prepared workers would not clear out their organizations to another with their new yet quality abilities for better wages and salaries.

2.6.2 Income Distribution

Universally, governments give need worry to SHS because of the way that it fills in as a terminal purpose of getting ready students for the universe of work or education of larger amount (Sekyere 2009). Endeavors are made to improve its openness for the reason that, accessibility of free educational openings in a nation has a connection with the salary appropriation. Availability to free education breaks the absence of education hindrance and gives the essential aptitudes which enable people to participate in profitable and showcase wanders on even grounds and exploit monetary transformation (Watkins 2000).

Besides, people with the coveted aptitudes and knowledge gained through formal education or preparing, in light of present circumstances, get higher wages than those with lower educational foundation. The reason being that they can escape from joblessness circumstance and can adaptably move starting with one topographical area then onto the next looking for employments, as interest for their work by managers throughout their working life is higher (Decker 1999, refered to in Gilmore 1999; Hanusshek and Wobmann, 2000; Mill operator, 2000).

2.6.3 Poverty Reduction

The general objective that a nation can accomplish for utilizing quality education or education to make strides its Human Asset, Wellbeing, Pay Conveyance and Great Administration/Majority rules system is decrease of its destitution level. This has been placed in World Education Gathering held in Dakar in April 2000 by the universal network who

promised to utilize education as a road of killing outrageous neediness on the planet (UNESCO 2001). Oxaal (1997) underlines that quality education can be a dependable wellspring of boosting the yields of individuals, especially worker ranchers when other cultivating inputs are accessible, to limit destitution which is high in the Agricultural part of the creating scene.

The essayist discovers that an informed individual stands a superior shot of showing signs of improvement work and also wages and pay rates to accommodate himself the essential needs throughout everyday life and assurance against destitution. Additionally, the reward (income) for the independently employed who are taught and work either in the urban and informal area is higher than the individuals who are uneducated. By making reference to Correspondence hypothesis, Oxaal affirmed that headway in tutoring in the work compel advances business development yet not really the surest path for the informed who neglect to anchor employments in the formal segment to better their part.

It is contended encourage by Todaro and Smith (2009) that change in the education of women (the defenceless) isn't just a contributory factor to her ripeness control yet in addition gainful to her wellbeing status and that of her relatives. It is along these lines, finished up by UNESCO (2001) that quality education is one of the social intercessions that has the possibilities of managing the threat of neediness and it is additionally a method for riches creation for a national financial development and national improvement. Nature of education of any country or society can be gotten through coordinated government approaches to impact certain pointers (factors) in the educational system.

2.7 Critical Success Factors of Free SHS

During the 1980s, proponents of fees in secondary education focused on fiscal arguments. The main argument states that a developing country’s government could not raise sufficient

fiscal resources to finance secondary education (Birdsall's, 1986). Experience has shown, however, that the fiscal argument has not held up in practice, as asserted by Kuma, (2013).

According to proponents, government expenditure in free SHS can also help correct imbalances in access to education created by poorly targeted or inefficient public spending on education (Hillman and Jenker 2002). However, public spending on education in many countries favors secondary and tertiary schooling, largely benefiting the poor. Meanwhile, Levels of public expenditure on education in many developing countries are insufficient to create sustainable quality education systems. Some countries are already spending at high levels and user fees have been used to augment meager government resources. There is evidence that countries need not have strong economies to provide free and accessible secondary education to all.

Rather, they need a comprehensive plan and public commitment to funding. Barbados, Costa Rica, Mauritius, and Zimbabwe all achieved high primary enrollment rates during periods of interrupted economic growth or decline (Mehrotra and Jolly 1997). A study of these four countries, in addition to Malaysia, Republic of Korea, and Sri Lanka, which all achieved high primary enrollment rates early on in their economic growth, cites the combination of policies and interventions that made it possible to achieve free secondary education as listed in table 2.2 below.

Table 2.2: Critical success factor for free SHS

No	Critical success factor for free SHS	Sources
1	primary responsibility for education by the state	Mehrotra and Jolly 1997
2	High allocation of government budget to	Mehrotra and Jolly 1997

	secondary education	
3	Adoption of cost-effectiveness measures	Mehrotra and Jolly 1997
4	Use of automatic promotion and double-shifting to increase internal efficiency and cost-saving	Birdsall's work in Mali, 1986
5	Utilizing abounded infrastructure which was supposed to achieve similar agenda by previous government	Hillman and Jenker 2002, Mehrotra and Jolly 1997
6	Implementation of school feeding programs	Birdsall's, 1986
7	Motivating and training qualified teachers	Mehrotra and Jolly 1997
8	Adequate monitoring, measurement, support, and recognition by authority	Hillman and Jenker 2002, Mehrotra and Jolly 1997

Source: UNESCO, (1996).

2.8 Potential Causes of failure of free SHS Education

2.8.1 Inadequate of Teaching and Learning Materials/Well Equipped Library

According to UNESCO (2005), the achievement of teaching and learning is influenced by the availability of resources to use for the process and how these resources are regulated. Thus, schools that have no textbooks and learning materials or well-equipped library cannot do effective and efficient work. Adeyemi (2010) citing Gibbs (1990) maintains that a well-equipped library provides assortment of material resources like books and journals. Thus, the library is a reference source for any school and a point of individual studies in schools where

relevant information from primary and secondary sources can be extracted. Adequacy of library resources and their usage by students and teachers are therefore, associated with better learning results.

2.8.2 Lack of Motivated and Qualified Teachers

A teacher has a powerful influence on students. For schools to provide opportunity to learn, they must operate regularly and teachers must be present and care about what students learn, and they should also be competent to teach the curriculum. Motivation of teachers can reduce absenteeism among them and go a long way to foster child-centered learning environment. Carnoy (1999) and Hanushek and Wobmann (2007) point out that investigations conducted in both advanced and developing world revealed that investment in physical infrastructure of the educational system does not improve performance of learners substantially than the quality of the instructor or facilitator. Good instructors within the learning environment influence their students to perform better than those considered being poor or bad. It behaves therefore, that policy makers and the institutional arrangement of the school should provide incentives that will encourage teachers to upgrade their academic and professional qualifications to improve lessons delivery for good results.

2.8.3 Inadequacy of Appropriate Class Size

Measured pupil-teacher ratios are reasonable approximations of actual class sizes, especially, in schools. Ankomah *et al* (2005) cited (Lockheed *et. al.*, 1991) that education quality is much

higher and improves students' achievement when the student-teacher ratio is much lower in class. A study conducted by Beebout (1972) cited in Adams (2000) on class size in Malaysia secondary schools proves that, fewer students per teacher in a class improves the quality of interaction and for that matter raises accomplishment.

2.8.4 Inadequate Favourable School Environment

Watkins (2000) affirms that the school physical environment reassures parents about the safety

and performance of their children at the place of learning hence, its influence on the school enrolment rates. In the views of (UNESCO, 2005, p.28; Watkins 2000), expansion in educational facilities improves the social, economic and political benefits for children. Besides that, parents are motivated to invest in the education of their wards because it offers them high knowledge, reasoning abilities, skills and the cherished values that they need. In another dimension, the authors also affirm that improvement in enrolment figures and completion rates are not perfect indicators of progress in measuring the substance of quality education and that participation in schooling is not an end in itself, but a means to sustain the course of free SHS.

However, the availability of a favourable school environment seem to be an issue that has not been properly addressed by the current N.P.P Government and this is a potential threat to the sustainability of free SHS.

2.8.5 Poor Supervision and Support

The quality of administrative support and effective leadership for supervision is another critical

element in school processes for both students and teachers. At a more macro level, teachers need governments who are supportive and provide machinery for inspection of education systems.

Organizational support for teaching and learning takes many forms, including such measures as advocating for better conditions and professional development, respecting teachers' autonomy and professionalism and developing inclusive decision-making processes. Such support has been shown to have impact on student learning (UNICEF 2000). In Malawi, for

example, supervisors in the schools that showed the greatest learning gains regularly evaluated teachers, contributing to professional development and improved teaching practice (Miske *et al.,* 1998).

However, Watkins (2000) concludes that, the factors affecting education as discussed above are inadequate in the developing world because the countries are not able to meet minimum requirements. Children learn in overcrowded and ramshackle school structures. The rate of untrained teachers is still high while teacher motivation is low. There is also inadequate provision of teaching and learning materials aside weak design of curriculum to address the need of the people. Beside poverty which militates against parents nourishing their children and taking them to school, the educational system is gender bias and the language of the minority groups are relegated to the background in the educational curriculum.

Table 2.1 Potential Causes of Free SHS Failure

No.	Potential Failure Factors	Source
1	Inadequate teaching space and materials, shortage of teachers,	Adeyemi (2010) , Ankomah *et al* (2005), Adams (2000)
2	Inadequate and late disbursement of government fund.	Watkins 2000
3	Inadequate of Teaching and Learning Materials/Well Equipped Library	UNICEF 2000, Miske *et al.*, 1998).
4	Lack of Motivated and Qualified Teachers	Miske *et al.,* 1998).
5	Inadequate of Appropriate Class Size	UNICEF 2000 Miske *et al.,* 1998).
6	Inadequate favourable School Environment	Watkins 2000, Miske *et al.,* 1998).

7	Poor Supervision and Support	Adeyemi (2010) , Ankomah *et al* (2005), Adams (2000)
8	Tradeoffs in expanding access and improvising quality	Watkins 2000

Source: (UNICEF, 2000: Ankomah *et al* 2005;Adams 2000).

2.9 Sustainability of Free SHS Education

The development of any educational system and standards will be an illusion if viable efforts and structures are not put in place to ensure continuous improvements and sustainability of the gains that have been made in terms of its quality. The interdependence pillars that come into play when educational sustainability is considered include; decentralization, developing quantifiable indicators, an in-depth understanding and equitable development of all levels of the education scheme (Chapman and Adams 2002).

Heneveld (1994) and Horn (1992) maintain that participation in decision making by all stakeholders in the educational practices is paramount. At the grass root level, the heads of the

institutions cooperate with the community in which their schools are established to mobilize their human and material resources which will be required in the strategic planning processes for quality improvement. The educational planner at the central and local government levels also require some amount of information from the head of institutions and communities to understand their needs which are factored into policy formulation.

Chapman and Adams (2002) are of the view that, if free and quality education is to be sustained, vital statistical data that is required by policy makers to prepare a checklist to monitor adequacy of facilities, teacher qualification, instructional materials, textbooks, class size and school

environment among the few factors is provided by the schools and communities who are major

players in the school supervision. The school authorities and the communities should therefore,

collaborate with each other in order to provide information relevant to policy makers' monitoring and evaluation exercises of schools (Adams 2002).

In his assessment of sustainability of free and quality education, Heyneman (1997 cited in Adams 2002) emphasised that, levels of educational system should not be analysed in isolation in a quest to attain continuous improvement. Concentration of efforts on one to the detriment of others could lead to distortion. Indeed, the training, management, excellence and effectiveness of every stage are highly determined by those traits in preceding levels. It thus connotes that the quality of students produced at the lower stage could become inputs for the middle stage that further processes them for the higher level. Whatever materials that are also produced from the higher stage have either direct or indirect effect on the lower and middle levels. Also, the following are practical measures in order to aid sustain free senior high school education.

2.9.1 Increase Provision and Accessibility to Textbooks and other Teaching/Learning Materials in the Senior High Schools in the Country.

The policy of supply of textbooks to all secondary schools (public) which is in the hands of Ghana Education Service (GES) was introduced in the country as far back as 1963 when the government solely started supplying free teaching and learning materials like textbooks and stationery as well as educational infrastructure to schools. Despite the fact that parents were invited from 1966 by the government to make some contribution to the cost of textbooks and stationery, the supply system was found not to be effective as many second-cycle institutions lacked the required books needed for all subjects they pursue.

For example, in the Education Strategic Plan (ESP) which was initiated under the New Patriotic

Party (N.P.P) administration, it is spelt out that the target of government is to provide every secondary school with 70 percent of a set of computers it requires and a science resource centre

by 2012. Also, all teachers were expected to gain access to teaching support materials by 2008

and by 2015, there should have been 50 Resource Centres for their training nationwide. There shall also be procedure for the usage and maintenance of the resources that will be supplied to schools. The government undertakes needs and readiness assessment as a strategy to determine

the requirements of the second-cycle school before the resources are committed into their possession (NDPC, 2005; MOE, 2003). These and other reforms can be made in order to aid the sustainability of the free senior school.

2.9.2 Effectiveness of Teacher Preparation, Upgrading and Development

Ankomah *et al* (2005) explain that preparation of teacher for teaching and to relate well with his students is a key indicator for quality education. Recognizing this, the government of Ghana has expressed its avowed intension to reduce the number of unqualified teachers in the Senior High Schools by providing a sufficient number of teachers with adequate training and skills to meet the demands of the schools. In line with this, teacher training colleges in the country have been upgraded to diploma awarding institutions and the minimum qualification required of SHS teachers is first degree (GOG, 2004).

To achieve the objective, the Ministry of Education embarks on teacher deployment and volunteer programmes to ensure equity in their distribution and address the problem of shortage

of teaching staff which is more pronounced in the deprived areas. Quite apart from that, the study leave with pay policy is sustained but on quota basis to reduce the tendency of high number of teachers leaving the classrooms for further studies. Emphasis therefore, is on motivation of teachers to undertake distance education, sandwich and "Top Up" programmes in the tertiary institutions for Diploma and Degree certificates in education (GOG, 2006). What is more, teachers especially those who accept posting and serve in the deprived communities should benefit incentive packages such as accommodation and means of transportation to inspire them put in maximum efforts in the delivery of quality teaching amidst the numerous challenges that they encounter in their profession (NDPC, 2003).

2.9.3 Motivated Teaching with Support from the Private Sector and all stakeholders.

The ministry of education hinted clearly that it would define the career path and criteria for promotion for teachers which would be subjected to annual review. What is more, condition of

service for teachers are revised and implemented in the country (NDPC, 2005).

2.9.4 Effective Accountability Systems

Inspection of schools in Ghana whose origin can be traced from the colonial era is an integral part of the educational system. Hence the educational system should make provision for schools and teachers to be well supervised and the quality of what they deliver maintained and continuously improved. However, Ghana Education Service (GES) in whose domain is the inspection of schools is confronted with the problems of inadequacy of inspectors and means of transportation. To make the inspectorate Division of the service more vibrant and productive, the ministry of education should modify its supervisory, monitoring and inspection structure in the 2004 educational reform to check teachers' absenteeism, lateness and maladministration. The reform called for the creation of separate and independent unit to be directly responsible to the Ministry. The division will be in charge of supervision and

inspection of departments, agencies and schools under Ghana Education Service. In addition, inspectors are expected to be trained and provided the needed logistics for more efficient and effective execution of their duties (GOG, 2003).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter examines the research methodology adopted in this study. Under this section, the approach to which records were collected and the instrument used for the collection of information were discussed. The overview of the populace of the research, approach used in sampling and analysis unit were included in this chapter. The validity of response price and a section on the coverage of the survey made the conclusion of this chapter.

3.2 Research Method

The approach to which a research is being undertaken is affirmed by Bouma and Atkinson (1995) as the means by which the objectives of the research are being questioned. Quantitative research and qualitative research are the two strategies used in research as affirmed by Bouma and Atkinson (1995). Deciding on which type of research to follow, relies upon on the purpose of the study and the kind and availability of the facts which is required.

3.2.1 Qualitative and Quantitative Research Method

Denzin and Lincoln (1998) intimated that qualitative research emphasizes the method of discovering how the social that means is developed and stresses the relationship between the investigator and the subject studied. Berg (2001) delivered that qualitative research refers to the meanings, concepts, definitions, characteristics, metaphors, symbols and descriptions of

things. Quantitative research is an inquiry into a social or human problem, based on testing a hypothesis or a concept composed of variables, measured with numbers, and analyzed with statistical procedures, in order to decide whether or not the speculation or the concept hold true (Creswell, 1994). Bouma et al. (1995) indicated that quantitative data is, therefore, not abstract, they are tough and reliable; they are measurements of tangible, countable, sensate facets of the world (Bouma and Atkinson), numerical statistics is being generated by the usage of structured equipment and uses information to interpret, gather accordingly and signify the amassed information as attested by Burns et al., (2001). These methods of research that is the qualitative and the quantitative methods were noted for fluctuating in some predominant areas primarily which is inclusive of their analytical objectives; kinds of questions being posed; sorts of series strategies of data being used; the various records being generated; the degree of flexibility in learn about sketch by Mark et al. (2005)

The approach of research for this study was quantitative because the techniques used for important information series in this lookup used to be questionnaires. Identical questions with responses that were predetermined were asked by the researcher with the help of this approach.

3.3 Approaches to Collection of Data

Naoum (2007) affirms that, fieldwork (primary collection of data) and desk study (secondary collection of information) are the two techniques to data series. The researcher used more than one sources of statistics due to the benefits (such as the validity of the data gathered) related with sources more than one as affirmed by Owusu, et al., (2007). The two divided fundamental components used for this study in the collection of records were discipline survey and desk survey.

3.3.1 Desk Survey

The desk survey (literature review) forms a critical thing of the research on the grounds that it units the pace for the development of subject survey contraptions the use of questionnaires, and interview (Fadhley, 1991 and Owusu, 2008). Secondary sources of data will be recognized and accrued in books, articles, technical journals and from databases. The secondary source of information for this research will be amassed from two sources; primarily inside and external sources.

3.3.2 Internal Secondary Sources

These are published within businesses or organizations, such as annual reports, facts booklets, brochures, magazines, financial information memoranda, economic reports, plant and gear registers. This kind of inside secondary source of data for the research will be those accumulated from instructors and head teachers of the selected senior secondary schools.

3.3.3 External Secondary Sources

According to Wahab (1996), external secondary supply of facts gathering is a very source of literature. As affirmed earlier by Wahab (1996), this is regarded as the most correct supply of statistics as it carries the unique research. Other alternative sources that are exterior sources that are secondary, of data encompass journals that are technical, magazines, newspapers, textbooks and sources from the internet.

3.3.4 Field Survey: Primary Data Source

According to Naoum (2007), the survey approach, the problem fixing method (action research) and the case learn about approach are the three practical approaches that can be related to fieldwork. Mouton (2001) affirms that, in collection of unique information for a giant population which is cannot be examined at once, a survey is used. For information to be obtained from a pattern of people, a survey helps in this manner (Polit et al., 1993). Survey

was used by the researcher due to the fact in accordance to Robson (2002), surveys are used for surprisingly giant variety of respondents inside a limited time frame. Robson (2002) added that there are two types of surveys available: the descriptive survey and the analytical survey (Robson, 2002).

3.4 Descriptive Survey

Burns et al. (2001) in explaining descriptive survey intimated that it is a study that observes and describes the presence, frequency or absence of characteristics of a phenomenon as it naturally occurs, in order to obtain additional information. The fundamental cause of a descriptive survey research is to describe the situation, preferences, practices, opinions, worries or interests of the phenomenon of interests (Polit *et al.,* 2006). Naoum (2007) added that the descriptive survey ambitions to answer such questions as: How many? Who? What is happening? Where? and When? It deals with counting the wide variety of respondents with certain opinions/attitudes toward a unique object. The counting can be later analysed to evaluate or illustrate fact and trends. Descriptive research supply precious base line information. The approach is also flexible and can be used to gather information from a large group of respondents (Mouton, 2001).

The descriptive survey was chosen due to the fact it offers a correct account of the features for instance behavior, capabilities, opinions, and expertise of a precise individual, group or situation as affirmed by Naoum, (2007). This format was once chosen to meet the objectives of the study, which are; to become aware of the indispensable success elements of free SHS; identify the achievable reasons of free SHS failure; and to endorse techniques to sustain the free SHS initiative in Ghana.

3.5 Questionnaire

A self-report form designed to elicit statistics that can be got via written responses of the subjects is known as a questionnaire. According to Burn et al., (1993), the statistics got through a questionnaire is comparable to that received by way of an interview, but the questions tend to have less depth. Questionnaires have been developed because of the following: They provided opportunity of anonymity because subjects' names had been no longer required on the performed questionnaires. There will be less opportunity for bias as they will be presented in a consistent manner. Most of the objects in the questionnaires will be closed, which made it simpler to examine the responses to every item. They required much less time and power to administer.

3.5.1 Questionnaire design

It was once essential to set up the information to accumulate for relevant questions to be solicited (Oppenheim, 1996). Contemplations of appeal to respondents ease of studying and offering the required facts guided the layout of the questionnaires. This greater applicable utilization of time all through the facts collection.

The questionnaire is in two sections. The respondents' profile and brief background constitute the first section. The 2nd part aimed to tackle the questions that is linked to the study's objectives. The questions were developed for respondents to submit their number views on the knowledge on the free senior High School initiative. Again, questions on imperative success factors of free SHS; possible causes of free SHS failure; and strategies to sustain the free SHS initiative in Ghana using the Likert scale according to their degree of importance on a scale of 1 to 5 the place 1= 'Not important', 2= 'Less important', 3= 'Neutral', 4= 'Important' and 5= 'Very important'.

These devices were used because it had been researched to be legitimate and dependable and due to restrained time, the researcher had to undertake these based on its success use in

comparable surveys on the concern conducted by way of other researchers, (Rozilah, et al., 2013); (Red Book Solutions, 2012).

3.5.2 Questionnaire Administration

The research questions will be developed with the aid of the researcher and had been reviewed with the aid of some specialists in the immigration service. Subsequently, a structured questionnaire will be administered to each officers and administrators whiles making sure that all attainable ambiguity in the questionnaire are eliminated. Questionnaires will be reviewed and well-structured to enhance the validity and reliability. The questionnaires were personally administered to individuals. Follow up was done in other to enhance the rate of response. However, this was once no longer considered to be viable, as Schneider (1985; stated in Dunn and Huss, 2004) located that growing the response rate can also have a bad effect on the reliability of the records obtained.

To overcome that, a vary of measures to enhance the response fee primarily based on established standards of legitimacy, social proof, reciprocity and authority as admonished by means of Bednar et al., (2006) will be included within the survey.

3.6 Scope of the Study

The validity of the records collected will deepened a great deal on the shape and the structure of questions addressed. The study about will adopt questionnaires developed in comparable researches by (Anvuur and Kumaraswamy 2006). As formerly mentioned, facts amassed will be accomplished solely by using the use of self-administered questionnaire. The find out about will be performed on some chosen senior excessive faculties two within the Greater Accra metropolis The stretch is dotted with many factors of entry and exit into Ghana. The questionnaires will target Teacher, head teachers, head masters, assistant headmasters and

non-teaching staff. For ease of understanding, the questionnaires phrased to be self-explanatory and structured to elicit the wanted information

3.7 Sampling

A system of choosing a component of the populace to characterize the complete populace and representing the findings of the populace component for the entire team is known as sampling as attested by Burns et al., (2001). Sampling is beneficial because it is less steeply-priced and also saves time. The result of the chosen sample is a reflection of the entire team. According to Burns et al., (2006), non-probability and particularly chance are the two sampling types. Non-probability sampling type was used in the study.

3.7.1 Non-Probability Sampling

A sampling method where the samples are brought together in a system that does not provide all the men and women in the populace the same probabilities of being chosen is known as non-probability sampling. In any form of research, true random sampling is continually tough to achieve. Non-probability sample subjects are normally chosen on the foundation of how accessible they are.The non-probability sampling approach will be used because the researcher will be bounded with the aid of, cash, workforce and time and because of these restrictions, it is nearly not possible to randomly pattern the complete population.

3.7.2 Selection of Respondents' Criteria

Probability sampling strategies consist of easy-going sampling and purposive sampling will be adopted for obtaining the pattern size. The purposive sampling method will be used to ascertain respondents that have labored lengthy adequate to understand and contribute to the objectives of this study.

3.7.3 Sample Size

A pattern consists of a difficulty of the units that represent the population (Polit and Hungler, 1999) and usually used in large-scale survey research for the sake of economy and accuracy (Weisberg andamp; Bowen, 1977). However, research use in reality a small fraction of the population, referred to as a sample. This is due to the fact the use of a pattern is more realistic and much less steeply-priced than collecting information from the complete population. Polit and Hungler (1999) asserted that, the main chance of the usage of a selected sample is that it might now not safely reflect the behaviours, traits, or beliefs of the population.

Kish's (1974) provides a formula that has be simplified to the calculation of sample sizes. This formula will be used to calculate the sample size. A 95% confidence level is assumed. Purposive sampling was used for this endeavour due to the design, practical implication and purpose of the research topic.

The targeted population are teaching and non-teaching staff, head maters and assistant heads from the three selected senior high schools within Accra which totals 210 as obtained from empirical studies. Kish formular will be used to determine the sample size form the population of 210 assuming a 95% confidence interval from the equation below:

To aid determine the sample size, Kish (1995) provides a formula that

$$\boldsymbol{n = \frac{n^1}{1 + \frac{n^1}{N}}}$$

Where,

n = the sample size

$n^1 = \frac{S^2}{V^2}$

S^2 = the maximum standard deviation of the population

V^2 = the standard error of sampling distribution

N = total population size = 210

p = the proportion of the population elements that belongs to the defined region

that is - p = 0.5 at 95% confidence interval

$$S^2 = p(1-p)$$

= 0.5 (1-0.5)

= 0.25

Since, $n^1 = \frac{S^2}{V^2}$

$$= \frac{0.25}{0.05^2} = 100$$

Hence if; N = 210

$$\boldsymbol{n = \frac{100}{1 + \frac{100}{210}}}$$

n = 65. 75 ≈ 66

Adding 10% for non-responsiveness;

$\frac{10}{100}$ x 66 = 6.6

≈ 7

Sample size = 66 + 6.6= 72

This sample size formula provided the minimum number of questionnaires that were to be administered.

Simple random sampling technique will be utilized for finding research subject (Atkinson and Flint, 2001). This strategy is viewed as a response to overcome the problems associated with overwhelming populations. The process based on the assumption of obtaining random numbers within a target population, allows series of referrals made within a circle of acquaintance (Berg, 1988; Atkinson and Flint, 2001).

Additional list of respondents will be obtained from the initial contacted respondents and this will bring the total number of respondents undertaking the study to seventy two (72) personnel participating.

Targeted respondents shall comprise of individuals at managerial level, technical and surveillance. These respondents that will be selected have experience and knowledge enough on the sustainability of free SHS hence, meets the criteria of interest in this research.

This chapter documents the analysis of the primary data retrieved from the seventy-five (75) respondents from selected Senior High Schools (Odorgonno SHS, Westley Grammar SHS and Accra Academy SHS) within the Accra metropolis. The mentioned schools were selected for the reason of easy to access information and proximity. Out of 80 questionnaires that were administered indicative of a response rate of approximately 93%. The number retrieved also represents approximately 68% of the sample population of 210. Respondents were chosen using the snowball technique from various senior high schools.

3.8 Analysis of the Data

The completed questionnaires will be edited to ensure completeness, consistency and readability. Once the data has been checked, they will be arranged in a format that enabled easy analysis. Quantifiable data from the questionnaires was coded into the software for analysis. The data received for the first objective was analysed using the Relative Importance Index (RII) method to determine the relative importance of the competencies as ranked by the respondents.

RII = Sum of weights (W1 + W2 + W3 + ……+ Wn) / A x N

Where W = weights given to each factor by the respondents and ranges from 1 to 5, where '1' is very low and '5' is very high. A = highest weight (i.e. 5 in this case), and N = total number of respondents.

The data for the second and third objectives was analysed using SPSS 16.0 (Statistical Package for Social Sciences) software computer program and the statistical tool employed was the One Sample T-test. Descriptive and inferential statistics, such as frequency tables, percentages and cross tabulations were used in the data analysis and summaries.

3.9 Summary

This chapter addressed the various methodologies available for the research and the reason for the adoption of the methodology used for this research. The research approach used and the method of data collection was discussed that is, the use of survey questionnaires. Subsequently, questionnaire response formats, content and design of the questionnaires, distribution of questionnaire, targeted respondents, the scope of questionnaire survey, sample size determination, and data analytical tools used were discussed. With this background, statistical results obtained from the data are discussed in chapter four.

CHAPTER FOUR

ANALYSIS AND DISCUSSION

4.1 INTRODUCTION

The analyses consisted of simple descriptive statistics, Relative Importance Index and one sample T-test. The results have been presented in tables and interpreted accordingly. The analysis has been presented in four sections; the demographic variables, critical success factors of free SHS, potential causes of free SHS failure and strategies to sustain the free SHS initiative in Ghana. The analysis is pivoted around the objectives of the study.

4.2 PRESENTATION AND DESCRIPTIVE ANALYSIS OF DATA (DEMOGRAPHIC)

This section of the questionnaire comprised questions seeking basic information and some related issues to ascertain the respondents' understanding about the study in order to provide detailed respondent characteristics. The relevance of this section is to generate confidence in the data collected to provide detailed respondent characteristics. Data included: Academic, Qualification, Position and How long respondents have worked at their various schools.

4.2.1 Position held

With regards to the position held by the respondents from the various Senior High Schools involved in the study, as seen from Table 4.1, 7 respondents representing 9.30% were Head teachers, 15 of the respondents representing 20% were House master/mistress, 47 of the respondents representing 62.70% were teachers. Also, 3 of the respondents representing 4.00% were bursars. Finally, 3 of the respondents representing 4.00% were head

masters/mistress. Hence as can be seen from the below table, the teaching were the most available respondents followed by house masters/mistresses who were more vested in the subject matter under study.

Table 4.1 Occupation

	Frequency	Percent	Valid Percent	Cumulative Percent
Head Teacher	7	9.30	9.30	9.30
House master/mistress	15	20	20	29.30
Teacher	47	62.70	62.70	92.00
Bursar	3	4.00	4.00	96.00
Head master/mistress	3	4.00	4.00	100
Total	75	100.0	100.0	

Source: field survey (2018)

4.2.2 How long have you worked as per your current position

As seen fork table 4.2 below a total of 3 of the respondents corresponding to 4.0% had worked for less than five years, 38 respondents corresponding to 50.7% also have worked for 5-10 years, 15 respondents corresponding to 20.0% have worked for 11-15 years, 10 of the respondents also corresponding to 13.3% have worked for 16- 20 years and 9 of the respondents also corresponding to 12.0% have worked for 20- 25 year. Hence it is clear from the above data that respondents have worked in the various place of work enough to make significant and useful contribution to the study.

Table 4.2 How long have you worked as per your current position

	Frequency	Percent	Valid Percent	Cumulative Percent
Under 5years	3	4.0	4.0	4.0
5 – 10 years	38	50.7	50.7	54.7
11 – 15 years	15	20.0	20.0	74.7
16 -20 years	10	13.3	13.3	88.0

	20 – 25 years	9	12.00	12.00	100
	Total	75	100.0	100.0	

Source: field survey (2018)

4.2.3 How long have you worked here in this school

As seen fork table 4.3 below a total of 10 of the respondents corresponding to 13.3% had worked in their current schools for less than five years, 25 respondents corresponding to 33.3% also have worked for 5-10 years, 20 respondents corresponding to 26.7% have worked for 11-15 years, 10 of the respondents also corresponding to 13.3% have worked for 16- 20 years and 10 of the respondents also corresponding to 13.3% have worked for 20- 25 year. Hence, this data is also clear from the below table that respondents have worked in the various place of work enough to make significant and useful contribution to the study.

Table 4.3 How long have you worked here in this school

	Frequency	Percent	Valid Percent	Cumulative Percent
Under 5years	10	13.3	13.3	13.3
5 – 10 years	25	33.3	33.3	46.6
11 – 15 years	20	26.7	26.7	60.0
16 -20 years	10	13.3	13.3	73.3
20 – 25 years	10	13.3	13.3	100
Total	75	100.0	100.0	

Source: field survey (2018)

4.2.4 Level of Education

This part of the questionnaire sought to ascertain the present academic qualification of the respondents involved in the study. From table 4.4, a total of 50 representing 66.7% had acquired Diploma certificate in Education, 20 respondents representing 26.7% had obtained BSC and 5 of the respondents representing 6.7% had obtained MSC. Consequently, majority

of the staff of Senior High Schools are Bsc holders which places the respondents in a better position to provide useful contribution to the study.

Table 4.4 Level of Education

	Frequency	Percent	Valid Percent	Cumulative Percent
Diploma	50	66.7	66.7	66.7
college/university	20	26.7	26.7	93.3
post graduate	5	6.7	6.7	100.0
Total	75	100.0	100.0	

Source: field survey (2018)

4.2.5 View on free SHS being an important initiative of the current Government to promote education in Ghana?

As observed from Table 4.5 below, a total of 64 respondents representing 85.3% consider the free SHS initiative to be very important. Also 10 respondents, constituting 13.3% of the total regard free SHS initiative as important and 1 respondent representing 1.3% consider free SHS as fairly important. The conclusion from these results is that free education is generally considered to be very important.

Table 4.5 What is your view on free SHS being an important initiative of the current Government to promote education for Ghana?

	Frequency	Percent	Valid Percent	Cumulative Percent
Very important	64	85.3	85.3	85.3
Important	10	13.3	13.3	98.7
Fairly Important	1	1.3	1.3	100.0
Total	75	100.0	100.0	

Source: field survey (2018)

4.2.6 Do you assert to the fact that the current economic situation of Ghana may be a major obstacle to this initiative?

As seen fork table 4.6 below a total of 10 of the respondents corresponding to 13.3% strongly agree that current economic situation of Ghana may be a major obstacle to this initiative, 25 respondents corresponding to 33.3% also agree that current economic situation of Ghana may be a major obstacle to this initiative, 20 respondents corresponding to 26.7% seam not to have any idea that current economic situation of Ghana may be a major obstacle to this initiative, 10 of the respondents also corresponding to 13.3 disagree that current economic situation of Ghana may be a major obstacle to this initiative and 10 of the respondents also corresponding to 13.3% strongly disagree that current economic situation of Ghana may be a major obstacle to this initiative. Hence, this data is to claim that while others believe the current economic situation of the country may not be stable enough to ensure sustainability, others believe the economy is just fine and capable.

Table 4.6 current economic situation of Ghana may be a major obstacle to this initiative

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	10	13.3	13.3	13.3
Agree	25	33.3	33.3	46.6
Neutral	20	26.7	26.7	60.0
Disagree	10	13.3	13.3	73.3
Strongly disagree	10	13.3	13.3	100
Total	75	100.0	100.0	

Source: field survey (2018)

4.2.7 General impression on current economic situation of Ghana that may be a major obstacle to the few SHS initiative?

This section of the questionnaire sought ascertain from respondents what they think of the state of the economy to support the free SHS initiative. Consequently, whiles majority of the respondents the respondents are of the view that the state of the economy is not ready to support free SHS, quite a number seem to disagree and believe that the state of the economy can support the initiative provided the right streams for allocation of responsibilities are strategically put in place to meet the objectives of the free SHS initiative.

4.3 Critical success factors of free SHS

From **Table 4.7** below, critical success factors of free SHS on a Likert scale 1 – 5; 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree. The mean as well as RII scores of all seventy five (75) respondents were calculated for each outlined benefits as documented in literature and have been presented in the table. Respondents were asked to rate in their opinion to what extent they agree to the critical success factors of free SHS.

According to advocates, government expenditure on free SHS can also help correct imbalances in access to education created by poorly targeted or inefficient public spending on education (Hillman and Jenker 2002). However, public spending on education in many countries favors secondary and tertiary schooling, largely benefiting the poor. Meanwhile, Levels of public expenditure on education in many developing countries are insufficient to create sustainable quality education systems. Respondents of this study submitted that the following factors can actually determine the success of the free SHS initiative;

From the results in the table, *Primary responsibility for education by the state* is the most significant critical success factors this is evidenced by obtaining a mean of *4.960*. Followed

by *Adoption of cost-effectiveness measures* which ranked 2nd with a RII of *0.959* and a mean of *4.839. High allocation of government budget to secondary education* ranked 3rd, with RII of 0.948 and a mean of *4.740.* Again, as shown in table 4.2, *Utilizing abounded infrastructure which was supposed to achieve similar agenda by previous government ranked* 4th with RII of 0.932 and a mean of 4.600. *Motivating and training qualified teachers* ranked 5th with an RII of 0.892 with a mean of 4.460. *Use of automatic promotion and double-shifting to increase internal efficiency and cost-saving* scored 6th with a RII of 0.868 and a mean of 4.340. *Adequate monitoring, measurement, support, and recognition by authority* ranked 7th, with RII of 0.836 and a mean of *4.180.* Finally, as shown in Table 4.7, *Implementation of school feeding programs* ranked 8th with RII of 0.740 and a mean of 3.700.

From the analysis above it was established that the success factors with RII above 0.90 were critical. Owing to this, the analysis indicates that, the following success factor are critical for the sustainability of free SHS: Primary responsibility for education by the state; High allocation of government budget to secondary education; Adoption of cost-effectiveness measures and Utilizing abounded infrastructure.

Table 4.7: Critical Success Factors of Free SHS

		FREQUENCY OF RANKING					**TOTAL**	**∑W**	**RI**	**MEAN SCORE**	**RANKING**
NO.	CRITICAL SUCCESS FACTOR	1	2	3	4	5					
1	Primary responsibility for education by the state.				7	68	75	248	0.967	4.960	1st
2	High allocation of government budget to secondary education.			6	9	60	75	244	0.948	4.740	3rd
3	Adoption of cost-effectiveness measures.				10	65	75	247	*0.959*	*4.839*	2nd

4	Use of automatic promotion and double-shifting to increase internal efficiency and cost-saving.				15	60	75	239	0.868	*4.340*	6th
5	Utilizing abounded infrastructure which was supposed to achieve similar agenda by previous government.				17	58	75	242	0.932	4.600	4th
6	Implementation of school feeding programs.				24	51	75	236	0.740	3.700	8th
7	Motivating and training qualified teachers.			6	7	62	75	240	0.892	4.460	5th
8	Adequate monitoring, measurement, support, and recognition by authority.			7	14	54	75	237	*0.836*	*4.180*	7th

Source field survery (2018).

SECTION C: POTENTIAL CAUSES OF FREE SHS FAILURE

The potential causes of free SHS failure have been outlined in **Table 4.8**. Respondents were asked to rank the outlined the potential causes of free SHS failure on a Likert scale 1 – 5; 1 = not severe, 2 = less severe, 3 = neutral, 4 = severe and 5 = very severe. The mean as well as RII scores of all seventy five (75) respondents were calculated for each potential causes of free SHS failure and have been presented in the table. Respondents were asked to rate in their opinion the level of severity of the below stated potential failures.

From the results in the table, *Inadequate and late disbursement of government fund is* the most severe potential cause of Free SHS failure and evidenced by obtaining an RII of *1.000* and a mean of *5.000*. This is to say that, there is no way the other factors can be carefully managed without adequate and timely disbursement of government funds. Hence government should allocate the required budget to responsibilities for the free SHS programme and make sure the funds are channeled to the right allocations.

Inadequate teaching space and materials, shortage of teachers ranked 2nd with a RII of *0.987* and a mean of *4.933.* Hence, Watkins (2000) concludes that, the factors affecting education as discussed above are inadequate in the developing world because the countries are not able to meet minimum requirements. Children learn in overcrowded and ramshackle school structures. The rate of untrained teachers is still high while teacher motivation is low. There is also inadequate provision of teaching and learning materials aside weak design of curriculum to address the need of the people.

Inadequate of Teaching and Learning Materials/Well Equipped Library ranked 3rd, with RII of *0.981* and a mean of *4.907.* The achievement of teaching and learning is influenced by the availability of resources to use for the process and how these resources are regulated. Thus, schools that have no textbooks and learning materials or well-equipped library cannot do effective and efficient work.

Again as shown in **Table 4.8,** *Poor Supervision and Support* ranked 4th with RII of 0.973 and a mean of 4.867. The quality of administrative support and effective leadership for supervision is another critical element in school processes for both students and teachers. At a more macro level, teachers need governments who are supportive and provide machinery for inspection of education systems. Organizational support for teaching and learning takes many forms, including such measures as advocating for better conditions and professional development, respecting teachers' autonomy and professionalism and developing inclusive decision-making processes.

Lack of Motivated and Qualified Teachers ranked 5th with an RII of 0.960 with a mean of 4.800. A teacher has a powerful influence on students. For schools to provide opportunity to learn, they must operate regularly and teachers must be present and care about what students learn, and they should also be competent to teach the curriculum. Unfortunately, this is not

the case of many schools in Ghana. Teachers will rather priorities personal issues that are more financially rewarding as most often than not, teachers' salaries are delayed. Hence they turn to abandon the classroom or are reluctant to deliver since they are not properly motivated.

Inadequate of Appropriate Class Size ranked 6th with an RII of 0.896 and a mean score of 4.480. Measured pupil-teacher ratios are reasonable approximations of actual class sizes, especially, in schools. Ankomah *et al* (2005) that education quality is much higher and improves students' achievement when the student-teacher ratio is much lower in class. A study conducted by Beebout (1972) cited in Adams (2000) on class size in Malaysia secondary schools proves that, fewer students per teacher in a class improves the quality of interaction and for that matter raises accomplishment.

Inadequate favourable School Environment ranked 7th with an RII of 0.886and a mean score of 4.4780 and availability of a favourable school environment seem to be an issue that has not been properly addressed.

Finally, *Tradeoffs in expanding access and improvising quality* ranked 8th with an RII of 0.881and a mean score of 4.4750. Consequently, the issue of government trying to fulfill a promise and hence doing all things possible to expand access to free education may compromise quality since there will be pressure on limited resources available to support the initiative.

From the analysis above it was established that the failure factors with RII above 0.90 were critical. As a result, the analysis indicates five critical potential failure factor are n adequate teaching space and materials, shortage of teachers; Inadequate and late disbursement of government fund; Inadequate of teaching and learning materials/well equipped library; Lack of motivated and qualified teachers; and Poor supervision and support.

Table 4.8: Potential causes of free SHS Failure

NO.	CAUSES OF FREE SHS FAILURE	FREQUENCY OF RANKING					TOTAL	∑W	MEAN	RII	RANKING
		1	2	3	4	5					
1	Inadequate teaching space and materials, shortage of teachers.				5	70	75	370	4.933	0.987	2nd
2	Inadequate and late disbursement of government fund.					75	75	375	5.000	1.000	1st
3	Inadequate of teaching and learning materials/well equipped library.				7	68	75	368	4.907	0.981	3rd
4	Lack of motivated and qualified teachers.			3	9	63	75	360	4.800	0.960	5th
5	Inadequate of appropriate class size.				39	36	75	336	4.480	0.896	6th
6	Inadequate favourable school Environment.			9	30	36	75	336	4.4780	0.886	7th
7	Poor supervision and support.				10	65	75	365	4.867	0.973	4th
8	Tradeoffs in expanding access and improvising quality.			9	36	30	75	336	4.4780	0.886	8th

Source: field survey (2018)

This section of the questionnaire sought to give respondents the opportunity to recommend with the help of a five point Likert scale, strategies to sustain the free SHS initiative in Ghana.

The one sample t-test was used to establish the relative significance of the variables. Ahadzie (2007) purports that for a usual one sample t-test, the mean of the test group, degree of freedom for the test (an approximate of the sample size), the t-value (strength of test) and the p-value (probability of test being significant) are reported usually. Moreover, the mean for each variable with its corresponding standard deviation and standard error are presented. The significance level was set at 95% in accordance with predictable levels of risk (Cohen, 1992). This is premised on the five point Likert scale rating where a success variable is deemed important if its mean was equal to or more than 3.5 (Field, 2005).

The standard error is the standard deviation of sample means and it is a measure of how likely a sample is representative of the population (Field, 2005). Hence, a large standard error suggests a high degree of variability between means of different samples and a small standard error indicates that most sample means are similar to the population mean, therefore the sample is likely to be an accurate reflection of the population (Ibid). Standard deviation values of less than 1.0 indicate consistency in agreement among the respondents of the reported level of results (Ibid).

From **Table 4.4.1** all the variables, have mean values above the test mean of 3.5, it is reasonable therefore to conclude that they constitute strategies to sustain the free SHS initiative in Ghana.

The standard error associated with some the means are close to zero whiles the others are equal to zero suggesting that the sample chosen is an accurate reflection of the population. As a final argument, from the results in **Table 4.4.1** most standard deviations of a recognised percentage are less than 1.0 indicating that, there is little degree of variability in the data collected and consistency in agreement among the respondents. This therefore implies that there is consistency in agreement between the respondents' interpretations of these outlined strategies.

SECTION D: STRATEGIES TO SUSTAIN THE FREE SHS INITIATIVE IN GHANA.

Table 4.9 One-Sample Statistics

STRATEGIES	N	Mean	Std. Deviation	Std. Error Mean
Participation in decision making by all stakeholders in the educational practices.	75	4.39	.655	.076

Policy makers vital statistical data require to prepare a checklist to monitor adequacy of facilities, teacher qualification, instructional materials, textbooks, class size and school environment among the few factors provided by the schools and communities who are major players in the school supervision.	75	4.80	.569	.066
The school authorities and the communities should therefore, collaborate with each other in order to provide information relevant to policy makers' monitoring and evaluation exercises of schools.	75	4.91	.293	.034
Increase Provision and Accessibility to Textbooks and other Teaching/Learning Materials.	75	4.84	.369	.043
Effectiveness of Teacher Preparation, Upgrading and Development	75	4.19	.512	.059
Motivated Teaching with Support from the Private Sector and all stakeholders.	75	4.33	.577	.067
Effective Accountability Systems	75	4.35	.581	.067
Legislation from the Parliament of Ghana to back the initiative to prevent successive governments from discontinue the flagship program.	75	4.52	.503	.058

Source: field survey (2018)

From the t-test table, the p-value is for two-tailed test and since the study is interested in one-tailed test, the p-values are divided by two. The results of the strategies are detailed in Table 4.5.1.

Table 4.10 One-Sample Test Strategies to Sustain the Free SHS Initiative in Ghana.

STRATEGIES	Test Value = 3.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Participation in decision making by all stakeholders in the educational practices.	11.716	74	.000	.887	.74	1.04
Policy makers vital statistical data require to prepare a checklist to monitor adequacy of facilities, teacher qualification, instructional materials, textbooks, class size and school environment among the few factors provided by the schools and communities who are major players in the school supervision.	19.769	74	.000	1.300	1.17	1.43
The school authorities and the communities should therefore, collaborate with each other in order to provide information relevant to policy makers' monitoring and evaluation exercises of schools.	41.597	74	.000	1.407	1.34	1.47
Increase Provision and Accessibility to Textbooks and other Teaching/Learning Materials.	31.443	74	.000	1.340	1.26	1.42
Effectiveness of Teacher Preparation, Upgrading and Development	11.618	74	.000	.687	.57	.80
Motivated Teaching with Support from the Private Sector and all stakeholders.	12.500	74	.000	.833	.70	.97
Effective Accountability Systems	12.618	74	.000	.847	.71	.98
Legislation from the Parliament of Ghana to back the initiative to prevent successive governments from discontinue the flagship program.	17.563	74	.000	1.020	.90	1.14

Source: field survey (2018)

The initial descriptive analysis of the results indicates that there is a consensus between respondents' views and the identified variables as being the strategies that can be adopted to sustain Free SHS in Ghana. It was therefore necessary to test the data with an appropriate statistical method to confirm the statistical significance of the strategies. The mean scores were compared to a hypothesized mean of 3.5 (as noted previously) to know the level of importance according to respondents strategies to sustain the free SHS initiative in Ghana.

From **Table 4.9**, *The school authorities and the communities should therefore, collaborate with each other in order to provide information relevant to policy makers' monitoring and evaluation exercises of schools* ranked as the first and most crucial challenge with a mean score of *4.91* with a corresponding level of significance at 0.000, making it a statistically significant strategy with regards to the issue of free SHS. It also recorded a standard deviation of *0.293*, indicating the existence of agreement between responses.

Increase Provision and Accessibility to Textbooks and other Teaching/Learning Materials. 2nd, with a mean score *4.9* well above the hypothesized and a corresponding level of significance at 0.000, making it a statistically strategy. It also recorded a standard deviation of .0369 which is less than one.

Ranking 3rd was *Policy makers vital statistical data require to prepare a checklist to monitor adequacy of facilities, teacher qualification, instructional materials, textbooks, class size and school environment among the few factors provided by the schools and communities who are major players in the school supervision* with a mean score of *4.80* with a corresponding level of

significance at 0.000, making it a statistically significant strategy. It also recorded a standard deviation of *0.569,* indicating the existence of agreement between responses.

Legislation from the Parliament of Ghana to back the initiative to prevent successive governments from discontinue the flagship program ranked as the *4th* significant challenge. It recorded a mean score of *4.52* and a standard deviation of 0.*503,* with a corresponding level of significance at 0.000, making it a statistically significant strategy. Porwal and Hewage (2013) argue that in the attempt to promote free SHS in Ghana, the Legislation from the Parliament of Ghana to back the initiative to prevent successive governments from discontinue the flagship program is a significant strategy.

Again as seen from **Table 4.10**, *Participation in decision making by all stakeholders in the educational practices* ranked as the 5th important among the strategies for sustainability of free SHS and this is evidenced with a mean score of *4.39* with a corresponding level of significance at 0.000, making it a statistically significant strategy. It also recorded a standard deviation of *0.655*, indicating the existence of agreement between responses. This can be achieved by asking stakeholders to provide suggestions. Remembering that if you ask their opinion, they expect you to consider it. The simple act of asking will make them feel valued. It shows that you considered their input, and this makes stakeholders less likely to treat you poorly in their comments.

Effective Accountability Systems ranked 6th, with a mean score *4.35* well above the hypothesized and a corresponding level of significance at 0.000, making it a statistically significant strategy. Here again, it recorded a standard deviation of .581 which is less than one and hence confirming the strong level of agreement among the respondents.

Ranking 7th *Motivated Teaching with Support from the Private Sector and all stakeholders* with a mean score of *4.33* with a corresponding level of significance at 0.000, making it a statistically strategy. It also recorded a standard deviation of *0.577*, indicating the existence of agreement between responses.

Effectiveness of Teacher Preparation, Upgrading and Development ranked as the *8th* challenge. It recorded a mean score of *4.11* and a standard deviation of 0.*512*, with a corresponding level of significance at 0.000, making it a statistically significant.

Table 4.11: Strategies to Sustain the Free SHS Initiative in Ghana

STRATEGIES	Mean	Std. Deviation	Ranking	***Sig. (1-tailed)***	***Statistically significant***
Participation in decision making by all stakeholders in the educational practices.	4.39	.655	5th	.000	***Yes***
Policy makers vital statistical data require to prepare a checklist to monitor adequacy of facilities, teacher qualification, instructional materials, textbooks, class size and school environment among the few factors provided by the schools and communities who are major players in the school supervision.	4.80	.569	3rd	.000	***Yes***
The school authorities and the communities should therefore, collaborate with each other in order to provide information relevant to policy makers' monitoring and evaluation exercises of schools.	4.91	.293	1st	.000	***Yes***

Increase Provision and Accessibility to Textbooks and other Teaching/Learning Materials.	4.84	.369	2nd	.000	***Yes***
Effectiveness of Teacher Preparation, Upgrading and Development	4.19	.512	8th	.000	***Yes***
Motivated Teaching with Support from the Private Sector and all stakeholders.	4.33	.577	7th	.000	***Yes***
Effective Accountability Systems	4.35	.581	6th	.000	***Yes***
Legislation from the Parliament of Ghana to back the initiative to prevent successive governments from discontinue the flagship program.	4.52	.503	4th	.000	***Yes***

Source: field survey (2018)

CHAPTER FIVE

RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

This dissertation essentially delved into sustainability of free SHS initiative in Ghana of which it is divided into five (5) independent but interrelated chapters. The aim of this research as indicated in chapter one was to assess the sustainability of free SHS initiative in Ghana. The study also sought to identify the critical success factors of free SHS, the potential causes of free SHS failure, and recommend strategies to sustain the free SHS initiative in Ghana.

This chapter summarizes the study‘s findings and provides evidence based recommendations of the researcher based on the findings of the study. This section ends with recommendations for further research and the conclusion of the study.

5.2 SUMMARY OF FINDINGS

The aim of this research was assess the sustainability of the free SHS initiative in Ghana. In pursuing this aim, three objectives were set out. The achievement of each of the three research objectives is clear spelled-out in the following subsections.

5.2.1Critical Success Factors of Free SHS

Findings of this study revealed, the following success factors are critical to free SHS. They are; primary responsibility for education by the state; adoption of cost-effectiveness measures; high allocation of government budget to secondary education; and utilizing abounded infrastructure.

5.2.2 Potential Causes of Free SHS Failure

Finding of this study also reveal potential causes of free SHS failure are:: Inadequate teaching space and materials, shortage of teachers; Inadequate and late disbursement of government fund; Inadequate of teaching and learning materials/well equipped library; Lack of motivated and qualified teachers; and Poor supervision and support.

5.2.3 Sustainable Strategies for the Free SHS Initiative in Ghana

. Arising from this enquiry were seven (7) recommended strategies to facilitate the sustainability of free SHS in Ghana which are:

1. School authorities and the communities should therefore, collaborate with each other in order to provide information relevant to policy makers' monitoring and evaluation exercises of schools.
2. Increase Provision and Accessibility to Textbooks and other Teaching/Learning Materials.
3. Policy makers need to have a vital statistical data require to prepare a checklist to monitor adequacy of facilities, teacher qualification, instructional materials, textbooks, class size and school environment among the few factors provided by the schools and communities who are major players in the school supervision.
4. Legislation from the Parliament of Ghana to back the initiative to prevent successive governments from discontinue the flagship program.
5. There should be conscious effort to ensure participation in decision making by all stakeholders in the educational practices.
6. Effective Accountability Systems

7. Motivated Teaching with Support from the Private Sector and all stakeholders.
8. Effectiveness of Teacher Preparation, Upgrading and Development

5.3 Conclusion

The study has confirmed that the initiative of free SHS is welcomed by all stakeholders However, the realization of the objectives of this initiative is challenged by shortage of professional teachers, teaching and learning materials, low motivation of teachers, unpopularity of guidance and counselling coordinating units and lack of intensive supervision.

Findings of this study has outlined some strategies that can aid in sustaining and realization of the objectives of free SHS. The degree of successes attained in the implementation of the initiative has not significantly impacted on students' performance in external examinations yet. Since the introduction of initiative, the average academic achievements of the schools in not yet known. It is therefore recommended that government collaborates with all stakeholder institutions to clearly design the roadmap for the success of the initiative. As a result, all possible set-backs could be predetermined and planned for and prevent undue interruptions.

5.4 Limitations

Due to time and financial constraints the study was limited to three only three schools within Accra metropolis. This aided the researcher to easily access information and also work within the limited time available for the study.

5.5 Recommendations

It is recommended that, considerations in strategies to be adopted to promote free SHS should include the following:

1. The school authorities and the communities should therefore, collaborate with each other in order to provide information relevant to policy makers' monitoring and evaluation exercises of schools;
2. Increase Provision and Accessibility to Textbooks and other Teaching/Learning Materials;
3. Policy makers should obtain vital statistical data require to prepare a checklist to monitor adequacy of facilities, teacher qualification, instructional materials, textbooks, class size and school environment among the few factors provided by the schools and communities who are major players in the school supervision;
4. Legislation from the Parliament of Ghana to back the initiative to prevent successive governments from discontinue the flagship program;
5. Participation in decision making by all stakeholders in the educational practices;
6. On the supervision of SHS, District Education Offices (DEOs) which are closer to the schools in their areas of jurisdictions should be tasked to make regular visits to the SHS in

   order to check absenteeism among teachers and students. Inspectorate Division of both Regional and District Education Offices should be adequately staffed and provided with necessary logistics so as to frequent the schools for supervision;
7. Effective Accountability Systems;
8. Motivated Teaching with Support from the Private Sector and all stakeholders; and
9. Effectiveness of Teacher Preparation, Upgrading and Development

Furthermore, efforts should be made to ensure appropriate selection and delegation of authority to team leaders, appropriate guidelines for maintaining good discipline, provision of training to

enable all responsibilities to fulfill their roles and the institution of reward structures that recognise both individual and team achievements.

The above findings is not exhaustive but includes other issues that need to be considered. It should also be pointed out that there are many barriers to sustainability of free SHS, and consideration needs to be given to overcoming these to ensure successful sustainability of free SHS.

5.6 Recommendation for Future Research

Further research can be undertaken to identify the impact of free SHS on the quality of education in Ghana.

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APPENDIX

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF BUILDING TECHNOLOGY
MSC PROJECT MANAGEMENT

QUESTIONNAIRE

ASSESSING SUSTAINABILITY OF FREE SHS

This questionnaire forms part of a M.Sc. Project Management program being undertaken at the Kwame Nkrumah University of Science and technology.

The purpose of the questionnaire is to enable the achievement of the following research objectives:

4. To identify the critical success factors of free SHS;
5. To identify the potential causes of free SHS failure.
6. To recommend strategies to sustain the free SHS initiative in Ghana.

Your assistance in answering the questions set out below would be much appreciated. Please do not leave any identification marks on the forms in order that the replies remain anonymous. The information provided will be used solely for academic purposes and will be treated confidentially.

Thank you.

For any enquiries please contact;

……..
Tel. No: +233……..
Email: ……..

Please provide the correct information by ticking [√] in the appropriate box and fill in the blank Spaces where necessary.

SECTION A: BACKGROUNG INFORMATION OF RESPONDENT

1) Kindly indicate your position here at your school?
   a. Head Teacher [ ]

b. House master/mistress [ ]

c. Teacher [ ]

d. Bursar [ ]

e. Head master/mistress [ ]

Others, specify ……..

2) How long have you worked as per your current position?

a. Under 5years [ ]

b. 5 – 10 years [ ]

c. 11 – 15 years [ ]

d. 16 -20 years [ ]

3) How long have you worked here in this school?

a. Under 5years [ ]

b. 5 – 10 years [ ]

c. 11 – 15 years [ ]

d. 16 -20 years [ ]

e. 20 – 25 years [ ]

4) What is your highest level of education?

a. Diploma [ ]

b. Bachelor‘s degree [ ]

c. Master‘s degree [ ]

d. Doctorate degree [ ]

Other, specify ……..

5) What is your view about free SHS being an important initiative of the current Government to promote education for Ghana?

a. Very important

b. Important

c. Neutral

d. Less important
e. Not important

6) Per your experience, do you assert to the fact that the current economic situation of Ghana may be a major obstacle to this initiative?

a. Strongly agree [ ]
b. Agree [ ]
c. Neutral [ ]
d. disagree [ ]
e. Strongly disagree [ ]

7) Kindly state your reason for the above choice of answer

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SECTION B: CRITICAL SUCCESS FACTORS OF FREE SHS.

The following are the critical success factors of free SHS that are to be observed if free SHS is to be sustained. With your experience, kindly rank on a Likert scale of 1-5, the following success factors.

1	2	3	4	5
Strongly disagree	Disagree	Neutral	Agree	Strongly agree

	Critical Success Factor	1	2	3	4	5
1	Primary responsibility for education by the state					
2	High allocation of government budget to secondary education					
3	Adoption of cost-effectiveness measures					
4	Use of automatic promotion and double-shifting to increase internal efficiency and cost-saving					
5	Utilizing abounded infrastructure which was supposed to achieve similar agenda by previous government					
6	Implementation of school feeding programs					
7	Motivating and training qualified teachers					
8	Adequate monitoring, measurement, support, and recognition by authority					

Other Please specify

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SECTION C: POTENTIAL CAUSES OF FREE SHS FAILURE

Please in your own opinion, how will you rate the severity of the following potential causes of free SHS failure? Use a scale of 1-5 as indicated in the table below.

1	2	3	4	5
Not severe	Less severe	Neutral	Severe	Very severe

	Potential Failure Factors	1	2	3	4	5
1	Inadequate teaching space and materials, shortage of teachers,					
2	Inadequate and late disbursement of government fund.					
3	Inadequate of Teaching and Learning Materials/Well Equipped Library					
4	Lack of Motivated and Qualified Teachers					
5	Inadequate of Appropriate Class Size					
6	Inadequate favourable School Environment					
7	Poor Supervision and Support					
8	Tradeoffs in expanding access and improvising quality					

Other, please specify

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SECTION D: OBJECTIVE THREE: STRATEGIES TO SUSTAIN THE FREE SHS INITIATIVE IN GHANA

The following are strategies that can be adopted to sustain free SHS initiative in Ghana. Kindly rank on a Likert scale of 1-5, the following strategies.

1	2	3	4	5
Not important	Less important	Neutral	Important	Very Important

		RANK				
NO.	**STRATEGIES**	1	2	3	4	5

1	Participation in decision making by all stakeholders in the educational practices.					
2	Policy makers vital statistical data require to prepare a checklist to monitor adequacy of facilities, teacher qualification, instructional materials, textbooks, class size and school environment among the few factors provided by the schools and communities who are major players in the school supervision.					
3	The school authorities and the communities should therefore, collaborate with each other in order to provide information relevant to policy makers' monitoring and evaluation exercises of schools.					
4	Increase Provision and Accessibility to Textbooks and other Teaching/Learning Materials.					
5	Effectiveness of Teacher Preparation, Upgrading and Development					
6	Motivated Teaching with Support from the Private Sector and all stakeholders.					
7	Effective Accountability Systems					
8	Legislation from the Parliament of Ghana to back the initiative to prevent successive governments from discontinue the flagship program.					

Other please specify

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