

UNIVERSITY OF EDUCATION, WINNEBA

THE INFLUENCE OF SCHOOL FEEDING PROGRAMME ON PUPILS'
ENROLMENT IN BASIC SCHOOLS IN THE 4 GARRISON EDUCATION UNIT IN
THE KUMASI METROPOLIS

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Studies, University of Education, Winneba, in partial fulfilment of the
requirement for award of the Master of Arts (Educational Leadership) degree**

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DECLARATION

STUDENT'S DECLARATION

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

SIGNATURE:.....

DATE:

SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of this work were supervised in accordance with the guidelines on supervision of dissertation as laid down by the University of Education, Winneba.

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DEDICATION

To my family, my girl, Princess and all loved ones.

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ABSTRACT

The study was conducted to investigate the influence of School Feeding Programme on school pupils' enrolment and the challenges thereof in Basic Schools of 4 Garrisons Education Unit in the Kumasi Metropolis of the Ashanti Region. The objectives of the study were to find out the educational benefits of the Programme, establish the influence of the programme on pupils' enrolment and to identify the challenges associated with the programme. The study used descriptive survey design with the quantitative approach. The target population was 200 head teachers and teachers. Purposive sampling was used to select eight head teachers for the study. Simple random sampling was used to select 130 teachers making a total of 138 for the study. The reliability test yielded Cronbach Alpha of 0.79. The data were analyzed with descriptive statistics. The study found that the school feeding programme was implemented to reduce malnutrition by providing pupils with one hot nutritious meal using home-grown food crops to stimulate local economics. Also, school feeding programme reduced absenteeism to improve duration of schooling to stimulate educational outcomes and decreased pupils drop out of school to improve attendance. Again, influences of the school feeding programme on school enrolment was that it helped in improving pupils health condition to increase attendance to improve enrolment. The challenges of the school feeding programme were inconsistencies in the release of available funds and inadequate facilities for sanitation and hygiene. It is recommended based on the findings that the Kumasi Metropolitan Directorate of Education organize training workshop for caterers and cooks of the school feeding programme on the need to adopt healthy hygienic practices in the discharge of their duties.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Education is the bedrock of any country that seeks to develop better (Amon & Joviter, 2003). About 57 million children around the world are not going to school, most of who are found on the African continent (UNESCO, 2012). In Ghana, successive governments have made attempts to influence access to quality basic education by drawing their success stories from other third world countries. It is significant to note that the importance attached to basic education has motivated its recognition in the 1992 Constitution of the Republic of Ghana [Article 25 (1) (a)]. In support of this effort is the “Education for All” (EFA) campaign and the Millennium Development Goals (MDGs), initiated in the year 2000 to achieve universal primary education by 2015. Ghana, therefore, initiated specific interventions such as the Primary Education Project (PREP), Capitation Grant, Free Compulsory Basic Education (FCUBE), free books provision, free school uniforms, and school feeding (Akyeampong, 2009; Chachu, 2011). The purpose of these reforms, among other things, was to address gaps in enrolment, attendance and performance, enhance quality of teaching, increase access to quality education and improve academic performance.

Additionally, some of the pro-poor programmes initiated by the Ghana government to increase enrolment levels is the School Feeding Programme (SFP). School feeding is an in-school meal adopted over the years intended to provide meals or snacks at school with the hope of reducing children’s hunger during schooling days (Del Rosso, 2009). The World Food Programme (2004) recommended that it is a tool capable of enabling hundreds of millions of poor children worldwide to attend school both in developed and developing countries. Building on this strength, the government

of Ghana with the support of the Dutch Government began the SFP in 2005. The objectives include: reduction of hunger and malnutrition among school pupils, increasing school enrolment, attendance, and retention (Ministry of Education, 2010). Since 2005, the coverage of the programme is being increased and sustained.

Over the years, school feeding has meant providing food or snacks in school to alleviate hunger among children on school days (World Food Programme, 2004). School feeding has become increasingly a diversified and integrated collection of food used to achieve academic outcomes. The provision of food is a strong incentive for pupils, according to Del Rosso (2009), to regularly attend school. School Feeding Programme will help parents save money by spending less on food and thus allow their children to go to school. In Jamaica, Del Rosso's (2009) report found a significant increase in enrolment in the provision of breakfast to primary school students.

The pilot study conducted over three months within the World Food Program (WFP) in Malawi has shown that the SFP has increased enrolment by 5% and increased participation by up to 36% (SFP, 2016). The evaluation results of the Canteen Feeding Programme in Burkina Faso also indicate that school canteens have been associated with increased school enrolment, regular attendance, lower repeater rates, lower dropout rates and higher national exam success rates (Moore and Kuntze, 2008). Gelli (2016) analysis showed an increase of 14 percentage annually in the number of schools assisted by the SFP in 32 countries of Sub-Saharan Africa that provided food to 21.7 million children in 2015.

From the Ghanaian perspective a lot of successes have been chalked as well. Arhin (2015) indicates that since the inception of the SFP, public basic schools benefitting from the programme have recorded an appreciable increment in enrolment

of pupils. According to Oduro-Ofori and Yeboah-Gyapong (2014), the SFP has reduced the level of primary School drop-out in the Kwaebibrim District in the Eastern Region since it serves as a motivational tool for primary children to stay in school. A study conducted on the SFP in the Garu-Tempene District in Ghana revealed that the programme increased gross enrolment rate by 24% among participating schools but decreased by 7% in non-participating schools (Bukari & Hajara, 2015). The Ghana News Agency (2014) observed an increment of pupils from 413,493 since the implementation of the SFP in the year 2006/2007 to 1, 739,352 pupils in 2013/2014.

The operation of the SFP in Ghana can be said to have been successful considering some of its achievements. At least, the introduction of the SFP has increased enrolment, attendance, and retention in various public schools across the country and government has often emphasized on its commitment to ensuring that children are well fed at school (Ghana Education Service, 2014).

The poor often do not have enough food at home and the majority of schools in developing countries lack cafeterias or canteens. School food is a good way for poor children to obtain essential nourishment. With a full stomach, you can focus on your lessons more efficiently. The commitment of at least one nutritious meal every day in countries with low attendance at school improves retention and facilitates regular attendance. School meals services can double school enrolments in the poorest parts of the globe in one year. Among the key beneficiaries are girls, who otherwise may never be given the opportunity to learn. This study therefore seeks to assess the impact of School Feeding Programme on the enrolment of pupils in basic schools of the 4 Garrisons Education Unit in the Kumasi Metropolis.

1.2 Statement of the Problem

There are areas of concern that should be handled well in schools with high enrolment rates. Other studies have shown that mental, physical and emotional developments of students are disabled by hunger (Oniago, 2010). Throughout the Kumasi Metropolis, children from deprived houses attend many public basic schools.

Mungai (2004) in his research findings on the role of SFP on education development found that it is a valuable instrument for stimulating enrolment and establishing attendance as well. It also helps to enhance learning performance because of the regular attendance.

A study conducted by Mahama Sumaila in some basic schools in the Wa Municipality in the northern part of Ghana indicated that 63% of the respondents were of the view that the introduction of the SFP has led to an increase in enrolment, attendance and retention of students in basic schools, motivates parents to enrol and keep their wards in school and also helps in addressing socio-economic factors affecting enrolment, attendance and retention that include poverty, early or forced marriage, and sexual harassment (Mahama, 2018).

These studies notwithstanding, much is yet to be discovered about SFP in Ghana, especially basic schools of the 4 Garrison Education Unit in the Kumasi Metropolis. Most of the research mentioned above and in the background to the study were carried out in countries such as the Europe, North America, Africa and the other parts of Ghana which has different climate and culture as far as the study is concerned, and as perceived by Dimmock and Walker (2002), it lacks contextual specificity and relevance as most of its findings are based on different theories, values and beliefs.

Also, this study not only concentrated on the School Feeding Programme and its influence on pupils enrolment, but also on the challenges associated with its implementation. As a teacher in the study area, it appears there has not been any research on SFP in schools in the study area as there is lack of empirical evidence to show. The study therefore, specifically seeks to investigate the influence of School Feeding Programme on school pupils' enrolment and the challenges thereof in Basic Schools of the 4 Garrison Education Unit in the Kumasi Metropolis of the Ashanti Region.

1.2 Purpose of the Study

The study was conducted to investigate the influence of School Feeding Programme on school pupils' enrolment and the challenges thereof in Basic Schools of 4 Garrisons Education Unit in the Kumasi Metropolis of the Ashanti Region.

1.3 Objectives of the Study

The following specific objectives were used for the study.

1. To establish the rationale behind the implementation of the School Feeding Programme in basic schools of 4 Garrison Education Unit in the Kumasi Metropolis
2. To find out the educational benefits of the School Feeding Programme in basic schools of 4 Garrisons Education Unit in the Kumasi Metropolis
3. To establish the influence of School Feeding Programme on pupils' enrolment in basic schools of 4 Garrisons Education Unit in the Kumasi Metropolis
4. To identify the challenges associated with School Feeding Programme in basic schools of 4 Garrisons Education Unit in the Kumasi Metropolis

1.4 Research Questions

These study research questions guided the study.

1. What have been the educational benefits of the School Feeding Programme in Basic Schools of 4 Garrisons Education Unit in the Kumasi Metropolis?
2. How has the School Feeding Programme influenced enrolment levels and attendance at the basic schools of 4 Garrison Education Unit in the Kumasi Metropolis?
3. What challenges are associated with School Feeding Programme in basic schools of 4 Garrison Education Unit in the Kumasi Metropolis?

1.5 Significance of the Study

The study will be significant in the following perspectives.

The study will contribute immensely to policy development by providing insights into enhancing the administration of the School Feeding Programme. Knowledge of the impact of School Feeding Programme on enrolment will provide sufficient grounds to critique current management regime of the School Feeding Programme in order to formulate a suitable policy.

The study will further provide policy makers with relevant information that will feed into other educational policy framework(s) that seeks to achieve universal basic education in a long run. A better understanding of the impact of the School Feeding Programme will help create new structures or measures that will deliver on the developmental aspirations of the beneficiary schools in the Metropolis and the country as a whole.

It must be understood, however, that the work may present or reveal some weakness of the structures regarding enrolment in the observed schools and the prescription/recommendation will pave the way for further research into the ever

changing or unstable aspect of the education process and consequently give policy direction.

1.7 Delimitation of the Study

The aim of the study was to assess the impact of School Feeding Programme on the enrolment and attendance of pupils as well as the challenges of selected schools of the 4 Garrisons Education unit in the Kumasi Metropolis. The study was carried out in beneficiary basic schools of the 4 Garrison Education Unit in the Kumasi Metropolis. Therefore, the study was geographically delimited to Kumasi Metropolis in the Ashanti Region. The study was conceptually delimited to the following research objectives stated above. The respondents were head teachers and class teachers.

1.8 Organisation of the Study

The study was divided into five chapters. Chapter One covers the background to the study, problem statement, research objectives and questions, significance of the study, theoretical framework/conceptual framework. Chapter Two presents the literature review. The Chapter would critically review similar studies that have been done on the topic and draws inferences expected to support or challenge the problem statement of the study. Chapter Three offers a detailed methodological approach to the study while chapter Four would focus on data presentation and analysis of the study. The final Chapter five provides the summary of findings conclusions of the study, recommendations and suggestions for further studies.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0. Introduction

This chapter dealt with an overview of School Feeding Programme with proper nutrition and review related factors such as higher enrolment, attendance rate, good health, increased participation, attention in class and prevention of hunger, using literature to support them.

2.1 An Overview of Ghana School Feeding Programme

Ghana is the first of ten countries in Sub-Saharan Africa implementing an SFP modeled to the guidelines of the New Partnership for Africa's Development (NEPAD) as described in the Comprehensive Africa Agriculture Development Programme (CAADP). The formulation of the SFP started in the year 2004 and the programme has been running from January 2006 until December 2010. It was preceded by a pilot programme, which was carried out from September to December 2005 (NEPAD, 2005). In the year 2010, the programme intended to serve about 1.04 million children in all 138 districts of Ghana (NEPAD, 2005). The long-term objective of the SFP is to contribute to poverty reduction and food security and to increase school enrolment, attendance and retention.

The SFP is based on locally grown food products, which should promote domestic food production and improve market access for resource-poor farmers. The government wants to achieve this objective through an increase in employment and income level of farmers at community and national level. In addition, greater availability, access and utilization of food crops and products at community level are assumed to enhance food security. By the end of the programme, it is expected that there will be: a real increase in income at national and community levels, an increased

employment at community level and a greater availability, access, utilization and stability of food crops at community level. This strategy complements the development strategies of the government of Ghana (Quaye, 2010).

However, in designing and implementing a SFP, a number of options are available, depending on the primary and secondary objectives of the programme. SFPs can range from simple snack provision (usually fortified biscuits) to provision of breakfast or lunch. Often, these programmes operate in conjunction with other health and nutrition initiatives to increase their success and impact. A number of objectives may be formulated for SFPs, including: increase enrolment and attendance; decrease gender disparity; alleviate short-term hunger, thereby increasing learning capacity; improve nutritional status, thereby increasing learning capacity; improve micronutrient status, etc. (World Food Programme, 2005)

In an attempt to reduce poverty and hunger and to bring about sustainable development in Ghana, the Government of Ghana (with support from the Dutch Government) commenced the SFP in 2005 as an initiative of the Comprehensive Africa Agriculture Development Programme (CAADP) Pillar 3 of the New Partnership for Africa's Development (NEPAD). The SFP was inspired by the recognition of the impact of Home-Grown School Feeding (HGSF) by the international development community that HGSF constituted an essential entry point to reducing poverty and hunger in Africa. Earlier in 2003 NEPAD and the UN Millennium Task Force on Hunger had advocated for the implementation of SFPs that linked school feeding with agricultural development through the purchase of locally produced foods.

The central aim of the HGSF programme is the adequate nutrition of school-going children, which is achieved by supplementing their diet with a complete meal that is adequate in energy, protein, vitamins, and minerals. The reason NEPAD gives for

focusing on school-going children is to improve nutritional status in formative years. Since primary education is compulsory in most African countries, children can be more easily reached by going to schools, so schools can be used as efficient distribution centres. They also argue that school feeding will enhance enrolment and attendance, with attendant improvements in literacy (particularly for girls), an important component of poverty reduction (NEPAD 2003).

The concept and objective of the SFP in Ghana is to provide children in public primary schools and kindergartens in the poorest areas with one hot, nutritious meal per day, using locally-grown foodstuffs. Local is defined in the following order of priority: the local community, the district, and, lastly, national level (GSFP 2007).

The three key objectives of the programme are to: reduce hunger and malnutrition by providing all primary and kindergarten students in beneficiary schools a nutritious meal each school day; increase school enrolment, attendance, and retention; boost domestic food production by sourcing GSFP meals locally, and providing a sustainable market for local food producers in the community.

These objectives are aligned closely with the United Nations' MDGs surrounding hunger, poverty, and primary education (GSFP 2007). A pilot programme started at the end of 2005. In the first year, a broadly agreed programme document was drawn up for the period 2007–2010. By the end of 2010, around 1.4 million children had benefited from the programme and US\$147 million was injected into the local economy. According to the report, this was achieved with a total budget of US\$211.7 million over the four years. Most costs were met by the Ghanaian Government. As the only donor, the Dutch embassy reimbursed half of the costs of purchasing food (with fixed

maximum contributions from 2007). The GSFP is providing 0.30 new Ghanaian cedis a day (approximately US\$0.60) for every child in the programme.

In order to realise the aims and objectives of the HGSP, the GSFP began with ten pilot schools drawn from each of the ten regions in Ghana. By August 2006, the number had increased to 200 schools covering about 69,000 pupils in 138 districts. As of March 2007, the programme covered 975 schools and benefited about 408,989 pupils daily, with the expectation that it would expand to feed about a cumulative 1.4 million pupils by 2010 (GSFP 2008). The programme is supposed to link the demand for food created by school feeding to the supply of food by small-scale farmers through local procurement procedures. The demand for home-grown food is expected to stimulate local market forces and inspire small scale farmers to expand production. In this way, the programme is expected to achieve its objectives of boosting domestic food production; reducing hunger and malnutrition in addition to the improvement in school enrolment, attendance and retention in beneficiary communities.

It is worthy of note that Ghana adopted the GSFP as one of the Millennium Development Goals (MDGs) under the Ghana Poverty Reduction Strategy I and Ghana Poverty Reduction Strategy II which is expected to impact positively on school enrolment, attendance and retention. WFP and GSFP signed a Memorandum of Understanding (MOU) in 2006 that outlines collaboration in the following areas: providing a fortified food basket to complement GSFP menus; supporting district-level planning and implementing school feeding; harmonizing planning and managing cash and food inputs at the district level; testing procurement processes; building capacity of PTAs, SMCs and other stakeholders; testing models for sustainable funding; developing systems for monitoring and evaluation.

This development provided collaborative assistance for the implementation of the programme. The literature provides evidence of School Feeding Programmes that have been implemented in the country. The GSFP is considered as one of the major interventions to improve quality of education and improved enrolment and this call for an investigation into its influence on enrolment in basic schools of the Kumasi Metropolis.

2.2 School Feeding

The term school feeding has been used over the years to mean the provision of meals or snacks at school to reduce children's hunger during the school day (SFP, 2004). School feeding is also defined as in-school meals only. School feeding has increasingly come to represent a more varied and comprehensive set of uses of food for the achievement of educational outcomes.

The Purpose of School Feeding in Schools

According to WHO (2003), these objectives are to be achieved through measurable targets by the year 2015. Many countries throughout the world, including the Netherlands, South Korea and the Philippines have in the years before the 2000 MDGs adopted poverty reduction strategies including SFP. Education is widely regarded to be significant for the development of many countries. Afoakwa (2009) emphasized the impact of education on economic growth, although some others, such as Ahmed (2004) raised questions about the causal relationship between education and economic growth. Education has also been found to play a crucial role in the adoption of new agricultural technologies in those countries (Del Rosso, 2009).

Finally, the effectiveness of the SFP has succeeded in making education a means to improve health and nutritional requirements of pupils so as to motivate them

to stay in school thereby reducing fertility (Ahmed, 2004) and is seen as an intrinsic good in itself (He, 2009). This general notion is emphatically expressed under the Millennium Development Goal aimed at achieving universal access to primary education by the year 2015, and eliminating gender disparity in education by 2015 (He, 2009).

Implementation of Ghana School Feeding Programme

The programme was born out of the New Partnership for African Development/Hunger Task Force Initiative (NEPAD/HTFI) under the Comprehensive Africa Agricultural Development Programme (CAADP) of the African Union (AU). Ghana was selected as one of the initial nine focus countries in sub-Saharan Africa to pilot the programme. The Government of Ghana and NEPAD were to equally finance the programme; however, delays from NEPAD required the government to fully fund it. It started on a pilot basis from September to December in 2005 in ten districts, one from each of the ten regions, and was intended to last for five years (WFP, 2007). By August, 2006, the beneficiary schools increased to 200 in about 138 districts (International Business Development Program, 2015).

The Ghana School Feeding Programme is an initiative under the Comprehensive Africa Agricultural Development (CAADP) pillar 3 which intends to enhance food security and reduce hunger in line with the United Nation Millennium Development Goals (ECASRD & SNV Ghana, 2009). The rationale behind the Ghana School Feeding Programme is to provide pupils with one hot nutritious meal using home grown food crops on daily basis on every schooling day (Kedze, 2013).

Aliyar et al (2012) points out that the use of home – grown food crops under the Ghana school feeding programme is to stimulate local economies through increase in demand for the produce. Gyawu (2012) argues that the Ghana school feeding

programme met its aim of providing hot nutrition meals to pupils during schooling days and has therefore, increased enrolment and retained pupils in school. While agreeing with the arguments postulated by Gyawu (2012), Bukari et al. (2015) add that there is a positive link in the Ghana School Feeding Programme and students' achievement. The implementation of the GSFP had its basic objectives to feed children in public primary schools and Kindergartens with one hot nutritious meal prepared from locally grown foodstuffs on every school going day. The policy has other targets of achieving increased enrolment, increasing academic performance and boosting food production in the country (GSFP, 2007).

The health component involves the fact that pupils of the beneficiary schools are to be given good drinking water, de-wormed and fed in a good sanitary environment. In line with improvement of education, enrolment of pupils will improve so as to achieve universal basic education. In the agriculture sub sector, the patronage of locally produced goods will be increased and food production in the country will be improved resulting from farmer access to ready market.

Programme implementation partner organizations such as Netherlands Development Co-operation (SNV), and World Food Programme (WFP) are to carry out training sessions for caterers and cooks to enhance their capacities. The recruitment of caterers and cooks as required by SNV is based on an academic qualification and standard for hygiene. (GSFP Pilot Programme Review Report, (2007-2010). The GSFP has extensive targeting criteria for the selection of beneficiary communities. In several respects, the criteria are no different from targeting criteria used by WFP and other SFPs, except that WFP and the others target the north, while GSFP focuses on the whole nation. The GSFP criteria include: willingness of a community to provide basic infrastructure (e.g. kitchen, store, dining room); commitment of the District Assembly,

demonstrated by its interest to sustain the programme; poverty status of the district and community; low school enrolment and/or attendance and gender parity index; high drop-out rates; low literacy levels; presence of planned health and nutritional interventions or expansion of existing ones; no participation in an already existing SFP; poor access to potable water; high community spirit and management capability.

Using the above criteria, the Ministry of Education, Science and Sports (MOESS), working with the Metro, Municipal and District Assemblies, developed an initial list of communities and schools that met the criteria of poverty, high drop-out rates and low literacy, including the Kumasi Metropolis.

Implementing agencies of the GSFP

To achieve the objectives of the programme, roles were assigned to the following key stakeholders as follows; the government made up of Cabinet and Parliament are responsible for passing the GSFP Bill to legitimize the operations of the programme and sourcing for funds; the Ministry of Local Government and Rural Development (MLGRD), in collaboration with the Ministry of Education (MoE) is responsible for the implementation and supervision of the programme; Ministry of Food and Agriculture (MoFA) is responsible for the achievement of the agricultural aspect objectives; Ministry of Finance and Economic Planning (MoFEP) is responsible for the release of funds; Ministry of Women and Children Affairs (MoWCA) is responsible for monitoring and supervision; Ghana School Feeding Programme National Secretariat is responsible for the implementation of the policy at the national level. (GSFP Annual Operating Plan, 2008)

The Regional Coordinating Councils (RCCs) are to form the programme steering committee in every region. The RCCs are to plan and execute the programme

with inputs from the national level. Each Assembly in collaboration with the District Implementation Committee (DIC) and School Implementation Committee (SIC) is to manage and implement the programme at the local level. They are in charge of food procurement and logistic spending.

The Ministry of Agriculture through the District Agriculture Directorate is to sensitize the farmers to produce and supply foodstuffs. The Directorate is also to provide training for farmers especially cooperative farmer groups and assist them to access loans to increase their productivity. The DICs are in charge of planning and monitoring of the programme in all the beneficiary schools whilst the SICs do the implementation and supervision in each school.

According to the Ghana government, the institutional framework for implementation of GSFP is designed to avoid corruption, embezzlement and misapplication of funds. The institutions responsible for the implementation are: Ministry of Local Government and Rural Development; National Implementation Secretariat; District Implementation Committee [Metropolitan, Municipal and District Chief Executive (MMDCE) as chairman; School Implementation Committee including PTA.; Other actors who play several roles in the GSFP are Send Foundation, International, Centre for Social Fertility and Agric Development (IFDC), Ghana Agricultural Initiative (GAIN) and Plan Ghana International.

A review of the SFPs in 5 regions in Ghana by the Netherlands Development Organization revealed that regional/district/school partnerships and organizational mechanisms were limited, and many schools lacked a functional school implementation committee (Quaye 2010).

Quaye (2010) summarizes the challenges as follows: Lack of kitchens, storage, and dining halls in GSFP schools; Insufficient supply of food to schools, creating inadequate/irregular food portions; Lack of training in hygiene and nutrition for school cooks; Lack of sanitation facilities and regular safe water (a large proportion of schools are still without poly tanks); Inadequate resources for students following influx of attendees in response to SFPs; Varying degrees of linkage to local farmers/local food supply for food procurement; Difficulties in monitoring cooking done outside the school; lack of transparency in records of food supply and payment procedures; students not receiving daily meal, lack of communication with parents; cooks paid irregularly; low community involvement; high regional disparity in the allocation of beneficiary schools; lack of preparedness of most districts to pre-finance supplies; increasing school enrolment without commensurate increases in food supply, number of classrooms and teachers.

In spite of the challenges some notable successes have been chalked by the programme. These successes are enumerated by Quaye (2010) in five regions in Ghana: increased school enrolment by 20% in pilot schools (SFP); reduction in truancy and absences, improved punctuality; reduced dropout rates; improved school performance; reduction in the number of children reported sick to the school authority; opportunities for local employment for school food vendors, cooks, and programme administrators; integration of nutrition education into school curriculum.

Among the poor, there is often not enough food at home, and most schools in developing countries lack canteens or cafeterias. School meals are a good way to channel vital nourishment to poor children. Having a full stomach also helps them to concentrate better on their lessons. In countries where school attendance is low, the promise of at least one nutritious meal each day boosts enrolment and promotes regular attendance. Parents are motivated to send their children to school instead of keeping

them at home to work or care for siblings. In the poorest parts of the world, school meal programmes can double primary school enrolment in one year. Among the key beneficiaries are girls, who otherwise may never be given the opportunity to learn.

Food programmes work towards achieving several Millennium Development Goals (MDGs). The programmes directly address the goals of reducing hunger by half and achieving universal primary education by 2015, and of achieving gender parity in education by 2005 (Sessional Paper, 2005). School meals contribute in the long term to combating poverty, but it also helps to reduce disease. It provides a platform for directly addressing child health and nutrition. It can also be a platform for other health interventions. SFP (2004) school meals can take the form of a mid-morning snack or a nutritious breakfast of porridge. SFP uses fortified food to ensure that children get the micronutrients they need. Studies show that diet and nutrition play a critical role in physical and intellectual development, however, something more is needed to attract the poorest girls to school. In its "take-home rations" projects, SFP provide basic food items, often including a sack of rice and a can of cooking oil, to families who send their daughters to school.

2.3 School Feeding Programme and Enrolment

According to Collins Thesaurus, (2002) the term school enrolment means admission, enlisting, recruitment or signing in of students to undergo training. Studies on the evaluation of the impact of School Feeding provide several benefits that have changed human life in different places. Economic, social and health impacts have been outlined by several empirical studies. Solid empirical evidence of the impact of school feeding programmes on educational outcomes proves that school feeding increases school enrolment and attendance by reducing drop-out (Ahmed, 2004; Dreze and Kingdon, 2001; Lazmaniah et al., 1999). These studies have justified that feeding in

schools serves as pull factors for poor families as it reduces home expenditure on food. Besides, the quality of food given at school in many instances meet the nutritional requirement compared with those prepared by poor families.

Consequently, families are motivated to get their children enrolled because of the immediate benefits. There is also significant evidence that such interventions go beyond traditional educational outcomes by providing a wider range of short and long term social and economic impacts. Furthermore, World Food Programme and the World Bank provide that school feeding remains a productive safety net in times of economic shock, protracted crisis and vulnerability, and emergency (Bundy et al., 2008). According to their assessment reports, school feeding was regarded as one of the programmes eligible for support from the US\$1.2 billion Global Food Crisis Response Facility established in 2008 to address the global food and financial crises (Grosh et al., 2008). This means that among all possible food assistance interventions, school feeding represents a unique opportunity by providing multiple benefits at both the outcome/short-term and the impact/long-term levels.

The implications of these findings is that, in period of economic crises, disasters and vulnerability, school feeding can minimize the magnitude of the effect through the provision of relief items (food) for the most affected and vulnerable groups (students).

Viewing school feeding from a different angle leads to increased time spent in school, through increased enrolment and attendance and decreased drop-out rates (Ahmed, 2004). It motivates parents to enrol their children in school and have them attend regularly. Moreover, when programmes succeed in reducing absenteeism and increase the duration of schooling, educational outcomes (performance, dropout, and repetition) get improved (Del Rosso, 1999). This position may be convincing especially in deprived areas of Ghana where some parents cannot afford three square meals per

day. Children have to regularly attend school to meet the quantity of food requirement per day.

In the context of Ghana, Dua (2011) points out that one of the major aims of the Ghana School Feeding programme is to increase enrolment and retention in the basic school level. School feeding serves as a magnet that will attract school children to be in school every day and be consistent throughout the stages of learning. Thus, improve feeding increase enrolment and reduce school dropout. Oduro-Ofori and Yeboah-Gyapong (2014) observed that the SFP has reduced the level of primary School dropout in the Kwaebibrim District in the Eastern Region thereby increasing enrolment. Correspondingly, Abotsi (2013) concluded that the programme has not only improved enrolment, but also attendance and retention. Abotsi continued further that the reverse in terms of these achievements has taken place in non-participating schools.

The Ghana School Feeding Programs has improved the health status of the pupils. It has got the components needed for growth and development. The Ghana school feeding programme has increased dietary diversity of the diet of children in school. The programme has attained its own recommendation for protein and energy intake. However, iron intake is low while vitamin A intake is enough (Martens, 2007).

Alhassan (2013), Nkosha et al. (2013) and Dua (2011) contended that school feeding programmes cannot be seen as the only factor that influences enrolment in Ghana's schools but other factors, such as, high pupil to teacher ratio, classroom accommodation, inadequate furniture, teacher pupil relationship, teacher absenteeism, cultural beliefs, among others, should be considered. This position implies that an assessment of the role of the feeding programme on enrolment should include a consideration of other factors that can have a significant influence besides feeding.

2.4 Educational Benefits of the SFP

SFPs can help to get children into school and help to keep them there thereby enhancing enrolment and reducing absenteeism and once the children are in school, the programmes can contribute to their learning, through avoiding hunger and enhancing cognitive abilities. These effects may be potentiated by complementary actions, especially deworming and providing micronutrients. The analysis presented here benefited from early work in this area (Strickland, 2000) and from three recent reviews (Bundy & Burbano, 2009), which arrived at similar conclusions about the direction of the effects. What is less clear is the scale of the effect.

Different studies have shown an increase in both Gross Primary School Enrolment Rates (GSPER) and Net Primary School Enrolment Rates (NSPER), an increase in school attendance rates and a reduction of dropout rates compared to controlled schools (Ahmed and Billah, 2004). The fact that poorly nourished children benefit cognitively from SFPs has also been demonstrated in several studies (Ahmed and Billah, 2004). In all these studies, a significant increase was detected in school test-performance between under-nourished children receiving breakfast or lunch and children in the control group not receiving breakfast or lunch at school.

2.5 The Objectives of Ghana School Feeding Programme

According to Ghana School Feeding Programme (GSFP) policy document, GSFP (2006) Programme Pilot Review Report, and Programme Document 2007-2010, the basic objectives of GSFP is to provide children in public primary schools and kindergartens with one hot nutritious meal prepared from locally grown foodstuffs on every school going day. The policy has a secondary objective of improving education, health and agriculture of the country. The health component involves the fact that the pupils of the beneficiary schools are to be given good drinking water, de-wormed and

fed in a good sanitary environment. In line with the improvement of education, enrolment of pupils will improve so as to achieve universal basic education. In the agriculture sub sector the patronage of locally produced goods will be and food security in the country will be achieved. Programme implementation partner organizations such as Netherlands Development Co-operation (SNV), (SEPD), and World Food Programme (SFP, 2004) are to carry out training sessions for caterers and cooks to enhance their capacities. To achieve the objectives of the programme, roles were assigned to the following key stakeholders as follows; the government made up of Cabinet and Parliament is responsible for passing the SFP Bill to legitimize the operations of the programme and sourcing for funds; the Ministry of Local Government and Rural Development (MLGRD), in collaboration of the Ministry of Education (MoE) is responsible for the implementation and supervision of the programme; Ministry of Food and Agriculture (MoFA) is responsible for achievement of the agric objectives; Ministry of Finance and Economic Planning (MoFEP) responsible for the release of funds; Ministry of Women and Children Affairs (MoWCA) responsible for monitoring and supervision; Ghana SFP National Secretariat responsible for the implementation of the policy at the national level.

2.6 Effects of School Feeding Programs on Performance

Afoakwa (2009) noted that the SFP is one of several interventions that can address some of the nutrition and health problems of school-age children. SFPs, and other school-based nutrition and health programs, can also motivate parents to enroll their children in school and to see that they attend regularly.

Cognition Improvement and Alleviation of Hunger

The number of hungry school-age children is unknown, but is likely to be a significant problem in various circumstances. Many factors contribute to hunger in school children; the long distances children have to travel to school, cultural meal practices that include no or small breakfasts or a lack of family time or resources to provide adequate meals to children before and/or during the school day. Simply alleviating this hunger in school children helps them to perform better in school (Afoakwa, 2009).

Improvement of Attendance and Enrolment

Children in poor health start school later in life or not at all. A study in Nepal found that the probability of attending school was 5% for stunted children versus 27% for children of normal nutritional status (Afoakwa, 2009). In Ghana, malnourished children entered school at a later age and completed fewer years of school than better nourished children (Ghana News Agency, 2014). The number of days that a child attends school is related to cognition and performance. SFPs can have a positive effect on rates of enrolment and attendance. A recent evaluation of an on-going school feeding program found that school canteens were associated with increased school enrolment, regular attendance, consistently lower repeater rates, lower dropout rates in disadvantaged provinces, and higher success rates on national exams, especially among girls (Afoakwa, 2009).

Afoakwa (2009) further noted that the availability of subsidized in-school meals will increase school enrolment if the program changes the household's schooling decision for some children who would not have been enrolled in school otherwise. And for these households to enrol their children, they need to be convinced that the net benefits of participating in the program exceed the gap between direct and opportunity

cost of schooling and the expected benefit of schooling (Afoakwa, 2009). In other words, households usually compare the size of the transfer relative to the size of the cost-benefit gap and these comparisons ultimately determine the magnitude of the increase in enrolment rates. Another important point is about the roles that school meals play in encouraging early enrolment. Afoakwa (2009) found increased participation resulting from school breakfasts respectively. On the other hand, Levinger (2006) found that school lunch as well as take home rations increase new enrolment for girls by 5 to 6 percentage points.

On the other hand, one of the important impacts of SFP is that it has a power of reducing the gender gap by increasing girls' primary school enrolment than boys which leads to the gross enrolment difference to be smaller between boys and girls (Del Rosso (2009). In addition, Levinger (2006) found that a 44% increase in enrolment for girls and a 28% increase in boys' enrolment in Food for Education (FFE) schools in Bangladesh where take home rations were provided to children.

School Feeding Program and Class Attendance

School meals can be effective at increasing class attendance because children receive the meal only when they attend school. According to Levinger (2006) the impact of school feeding on attendance in Bangladesh was evaluated and found that the SFP has a statistically significant positive impact and the programme showed an increment of class attendance of participating pupils by 1.34 days per month. However, class attendance from school registers showed attendance increased in both programme and control schools during this period, and that the increase was 1.1 percentage points higher in programme schools (Case, (2010).

School Feeding Program and Student Drop-out

Adelman, Gilligan and Lehrer (2009) presented the interplay between school meals on one hand and grade repetition, learning achievement, and school performance on the other. They show that this effect works in two mechanisms. First, because school meals improve class attendance, children will spend more time learning in school. So the more time children spend in school, the better they learn and these interplays ultimately result in improved school performance, which thus minimizes the probabilities of drop-out. This is, however, dependent on other factors such as school quality, availability of learning materials and teacher quality.

Thus, unless properly implemented, school feeding has rather the potential to increase drop-outs. Second, improved nutrition may also enhance school retention and performance in the short and overlong run. In the short run, school meals could alleviate hunger and make children concentrate and learn better so that school performance will be improved and hence drop-out is minimized. In the long run, school meals could enhance learning, provided that school meals improve the nutritional status of children and if nutritional status also affects learning. According to Ahmed (2004), SFPs have a statistically significant negative impact on pupil drop-out.

School Feeding Program and School Performance

Pollit (2005) noted that SFPs have indeed positive impact on school pupils' performance, school enrolment, class attendance, student drop-out. According to Galloway (2009) school meals programmes are seen as an effective tool for attracting pupils to school, reducing drop-out rate, increasing female enrolment, alleviating short term hunger, thereby improving concentration ability and academic achievement, and improving nutritional and micronutrient status, thereby improving learning capacity (Del Rosso, 2009). The total development of pupils' well-being is the prime

concern of every government, parents and the state at large. Most countries in the world use several means to get the citizenry to be well informed and contribute to the national development. The SFPs, the school lunch or snacks are used by several countries to achieve these universal goals for education. In order to realize this vision, pupils' output in schools and outside schools must be put into consideration (UNESCO, 1990).

According to World Food Programme (2001) the Millennium Development Goals phase two sought to increase enrolment, attendance and retention through its several policies put in place to realize this vision ranging from improving teacher quality and infrastructure development. The SFP is the target to foster universal basic education to all children in the world. The target also encompasses the improvement of pupils' out-put of work in the classrooms and outside the classrooms to enhance rapid social-economic development. Furthermore, Vermeersch and Kremer (2004) asserted that SFP improves enrolment and attendance. They added that children looked better and healthy in schools with the program than those without from their findings in the district. The performance of the schools with SFP stood tall against those schools without the program. They concluded that there was a relationship between the SFP and learning outcomes as children attending school regularly fosters their cognitive development and goes a long way to improve their performances.

Levinger (2009) noted that some pupils from poor families or the disadvantage children around the world go to school with an empty stomach. Giving them free meals a day, especially the breakfast and take home ration play a vital role in ensuring the active participation and performance in schools. The various studies conducted by SFP (2004) indicated that the SFP has helped the pupils to concentrate at school and perfect their academic performance. Levinger (2011) stated that SFP and its fortified meal has improved attendance and performance based on the nutritional content of the meal which has the potency to improve pupils' brain for the learning process. In three

Northern regions of Ghana, Mohammed and Sakara (2011) examined that the performance of the pupils had improved when the SFP was initiated in 2007. It had reduced dropout rate among pupils especially the girl-children. Chambers (2001) discusses that an estimated 120 million pupils were beneficiaries to the SFP in India. The daily diet for the pupils at school has enriched their performance in the country. The deworming segment of the programme in India has reduced the pupils' burden of worms which obstruct cognitive development, and has improved pupils' achievements.

World Food Programme, (2001) enumerated that in Niger, the programme has induced attendance and improved pupils' out-put of work since its introduction in 2007. The arid regions in Niger have witnessed tremendous attendance and positive outcomes. The main aim of the programme has been achieved in Niger, Ghana, India, and New Zealand in relation to pupils' output of work and performance. In Pakistan, the initiative has increased attendance and performance in schools and health needs of the children (Neumann, 2009). According to Levinger (2006) school breakfast has a significant impact on the children's performance because of the fortified grains which enrich mental development.

School Feeding Program and School Participation

The majority of the literature analyzed for this study reveal that SFP has indeed positive impact on school participation as measured by school enrolment, class attendance, and student drop-out status (Meng and Ryan 2013; Ahmed 2014; Vermeersch and Kremer 2014). However, most of these findings are based on empirical data obtained from schools where the program was popular and has been relatively effectively implemented. Vermeersch and Kremer (2014) conducted a field-study in Western Kenyan preschools between 2000 and 2002 to evaluate the impacts of School Feeding Program on school participation and achievement. Pre-schoolers, in

this context, are defined as children between ages of 4 and 6 who lived within walking distance of school. They found that children in the treatment group participated 35.9 percent of the time compared to 27.4 percent in the comparison (control) group and this difference was statistically significant (Vermeersch & Kremer, 2014).

The program increased participation of both children who were previously enrolled (what they call intensive margin) and children who would have gone to school in absence of the program (extensive margin). But they emphasize that any increase in school participation in the absence of qualified teaching falls short of better educational achievement since there are strong complementarities between teacher characteristics and school meals. Nevertheless, their study was on preschools and hence this may not have much relevance for primary school children. Besides, pre-schoolers are early-age children and may not have family obligations like many primary school age children might have in poor areas. Thus pre-schoolers are relatively free of duties that could keep them away from school. Another study conducted in Jamaica shows that school meals indeed improve education of beneficiaries (Grantham-McGregor, Chang *et al.* 2008).

They found that school performance indicators (enrolment, attendance, drop-out rate, repetition of grades, school attainment levels, cognitive function, and class-room behavior) have all improved in response to school feeding. This is because the provision of school meals reduces the parent's cost of sending children to school thereby promoting early enrolment and improving attendance. The more time children spend on learning in response to school meals, the more they will learn and the less they repeat school or drop-out. To the contrary, certain other studies are critical to school meals and they doubt if they have any positive impact on school participation whatsoever.

Afoakwa (2009) for instance found that SFP assisted School Feeding Program (what he calls the standard program) does not increase enrolment at any level compared to control schools. In the following subsections, some of the literatures in relation to the three aspects of school participation (school enrolment, class attendance and student drop-out) will be discussed.

2.7 The Impact of Nutrition and Student's Academic Performance

Relationships between nutrition and brain function have been the focus of much research. Studies have shown the impact of dietary foundations on normal brain functions. Chemical messengers within the brain called neurotransmitters have been studied in conjunction with nutrition. Growden and Wurtman (2010) suggested that the brain can no longer be viewed as an autonomous organ, free from other metabolic processes in the body; instead, the brain needs to be seen as being affected by nutrition, the concentration of amino acids and choline (in the blood) which let the brain create and use many of its neurotransmitters such as serotonin, acetylcholine, dopamine, and norepinephrine. Food consumption is vital to the brain being able to make the right amount of amino acids and choline. These are two precursor molecules obtained from the blood that are needed for the brain to function normally. It is no surprise that what we eat directly influences the brain (Colby-Morley, 2011).

Kretsch *et al.* (2011) showed further possibilities that our nutrition has a role with affecting our cognitive functioning. Studies have been done with school-aged children and point to a direct correlation between poor nutrition and lowered school performance. Iron has also been shown to play an important role in brain function as well. Kretsch *et al.* cited details from a study done with men aged 27 to 47 that looked at iron and its effect on concentration. Low scores on a concentration test corresponded with lowered levels of iron in the bodies of the subjects. A connection was made

between low iron levels in children with attention span; children with iron deficiency anemia have been shown to have short attention spans. Kretsch *et al.* also found that zinc was another nutrient that had a role with cognition, specifically with memory. In a test of mental function called verbal memory, scientists found that volunteers' abilities to remember everyday words slowed significantly only after three weeks of a low-zinc diet (Wood, 2011).

Erickson (2016) pointed out five key components, based on research, required to keep the brain functioning correctly. The substances, all found in food, are important to brain development and function. Proteins are found in foods such as meat, fish, milk, and cheese. They are used to make most of the body's tissues, including neurotransmitters, earlier identified as chemical messengers that carry information from brain cells to other brain cells. A lack of protein, also known as Protein Energy Malnutrition, led to poor school performance by children and caused young children to be lethargic, withdrawn, and passive, all of which help affect social and emotional development.

Carbohydrates are commonly found in grains, fruits, and vegetables. Carbohydrates are broken down into glucose (sugar) which is where the brain gets its energy. Fluctuating levels of carbohydrates may cause dizziness and mental confusion, both of which can affect cognitive performance. Eating a carbohydrate-heavy meal can cause one to feel more calm and relaxed because of a brain chemical called serotonin and its effect on mood. Serotonin is created within the brain through the absorption and conversion of tryptophan. Tryptophan is absorbed within the blood and this absorption is enhanced with carbohydrates (Erickson, 2016).

Erickson also noted that fat makes up more than 60% of the brain and acts as a messenger in partial control of aspects such as mood. Omega-3 fatty acids are very important to the optimum performance of the brain and a lack of these fats can lead to

depression, poor memory, low intelligent Quotient (IQ), learning disabilities and dyslexia. Important foods to consume to ensure an Omega-3 fatty acid diet are certain fish and nuts (Erickson, 2016). Erickson (2016) discussed vitamins and minerals as an important substance for the functioning of the brain. Most important are the vitamins A, C, E, and B complex vitamins. Manganese and magnesium are two minerals essential for brain functioning; sodium, potassium and calcium play a role in message transmission and the thinking process. Aforementioned in the research, neurotransmitters are crucial to brain function in the transferring of messages. Erickson stated research that shows nutrition is important to the production of key neurotransmitters such as acetylcholine, dopamine, and serotonin.

Wolpert and Wheeler cite research done by Gomez-Pinilla, a professor of neurosurgery and physiological science. According to the article, diet, exercise, and sleep have the potential to alter brain health and mental function. Gomez-Pinilla stated that it stands to reason that changes in diet could be used to enhance cognitive abilities. His research has shown that Omega-3 fatty acids such as those found in salmon, kiwi fruit, and walnuts, provide many benefits in improving memory and learning, much of which occurs at the synapses. Omega-3 fatty acids support synaptic plasticity and seem to positively affect the expression of several molecules related to learning and memory that are found on the synapses. Omega-3 fatty acids are essential for normal brain function. The article states that a deficiency in Omega-3 fatty acids can lead to increased risk of attention-deficit disorder and dyslexia. According to Gomez-Pinilla, children who had an increase of Omega-3 fatty acids performed better in reading, spelling, and had fewer behavioral problems (Wolpert & Wheeler, 2008).

Wolpert and Wheeler also highlighted a study in England that found school performance improved among a group of students receiving Omega-3 fatty acids. The article also tells of an Australian study of 396 children between the ages of 6 and 12

who were given drinks with Omega-3 fatty acids along with other nutrients like iron, zinc, folic acid and vitamins A, B6, B12, and C. These students showed higher scores on tests measuring verbal intelligence, learning skills, and memory after six months and one year as compared to a controlled group of students who did not receive the drink (Wolpert & Wheeler, 2008).

Wolfe and Burkman (2010) began by creating an equation: good nutrition + exercise = optimal learning. They support the following questions with research:

1. How does breakfast help children do better in the classroom?
2. Can certain foods enhance a child's learning or memory?
3. Do supplements help children perform better in the classroom?

Wolfe and Burkman cited research that confirmed proper nutrition can help the brain to function at its highest ability and to enhance learning. Wolfe and Burkman suggested that it didn't take much complication or obscurity through expensive foods and supplements to help students reach their potentials; healthful nutritional habits learned early in life help ensure normal physiological and neurological growth and development, which translated into students' achieving optimal learning, thus the ability to recall information, to problem solve, and to think critically. Wolfe and Burkman pointed out the importance of utilizing the Food Guide Pyramid for Young Children, which is an adaptation of the Food Guide Pyramid from the U.S. Department of Food and Agriculture. This food guide focuses on food preferences and nutritional requirements of young children and needs to be the foundation of their diets (Wolfe & Burkman, 2010).

2.8 Impact on Educational Achievements

To NEPAD (2002) the potential impact of targeting children through SFPs is to increase their educational achievement so as to improve their potential future

productivity and earnings. There are three paths through which SFP help to achieve the desired educational achievement impact. The three paths of SFP programmes are enumerated below. These paths are the benefits that SFPs offer beneficiaries.

1. SFPs increase school attendance by lowering the opportunity costs of attending school and providing additional incentives to engage in formal education. This leads to more time spent in school and more time spent towards learning
2. SFPs help to alleviate short term hunger thereby improving children's cognitive functioning and attention span particularly in class
3. SFPs improve nutritional status of children which provides them with calories and nutrients which promote good health, strong resistance to infectious diseases and illnesses that keep children from school is identified as the third path. Consequently, better nutrition indirectly improves educational achievement of children by increasing their school attendance.

Increases in school enrolment may lead to overcrowding thereby lowering the effectiveness of classroom time or stretch the limited amount of school resources as well as increase the work load of teachers affects the first and third paths Neumann, 2009). Depending on how the SFP is set up, teaching time may be reduced if teachers are used in overseeing the meal time (Services, 2001). However, the SFPs have demonstrated the potential for improved educational attainment. Pollitt and Jacoby (2005) in a study on the impact of breakfast on cognitive development found that eating breakfast before being taught enables students to perform better on a number of discrimination activities.

In supporting these findings, Simeon (2008) found that students who eat breakfast are better inclined to study, concentrate and listen better, Ranivnder (2007) found that students' attention to task in school increased significantly with the provision of breakfast. School meals increase test scores in school where the teacher is

experienced (Neumann, 2009). More so, NEPAD (2005) has shown that, the implementation of SFPs has led to increase in test scores, and improved attendance and study skills. Consequently, the SFP impacts on the academic achievement of pupils.

School meals keep children in school more frequently. For instance, parents feel that children who do eat breakfast are absent from school less (UNHTF, 2003). This leads to decreased rates of absence and tardiness. Nutritionally at risk students significantly had lower grades than students not classified as being at risk; with the introduction of SFP. Students whose nutritional risk decreased significantly saw greater improvement in academic performance than students who did not see a decrease in their nutritional risk (UNHTF, 2003). Secondly, pupils who suffer stress and amount of sleep also have great influences on students' performances because it affects their health (UNHTF, 2003).

In spite of the SFP, the socio-economic status of parents does affect the academic achievement of pupils. Simeon (2008) observes that there is a sort of positive relationship between parental socio economic status and academic performance of students. More so, parents' educational levels have influence on their teaching styles, parents' educational level enables them to engage their children in higher quality verbal interactions (Werner and Bower, 2002). Consequently, they are able to provide cognitively stimulating learning environment and literacy activities in the home (Werner and Bower, 2002). Additionally, students who have financial problems face various hurdles in school. This negatively affects the performance of students because they miss too many classes (Simeon, 2008). In effect, students can participate in the SFP yet their performance may not improve.

2.9 Successes and challenges of SFPs

Since the introduction and implementation of SFPs globally, a lot of successes have been achieved. As noted by Darko (2014), school feeding assists the “creation of job opportunities for skilled and semi-skilled workers.” Japan, Brazil, Chile, South Korea and the United States where the programme has been practiced for decades had witnessed major impact on the creation of jobs for local farmers, cooks and caterers. This has contributed to the rise of the Gross Domestic Product (GDP) and Per Capita Income (PCI) as well as the creation of a larger market for those countries”. Darko (2014) further observes that in Kenya, school meals have an impact on families by reducing the amount of money families spend to buy food which has automatically increased their savings for other purposes. In addition, parents use the time children are in school to work on a part time basis to earn extra money. Moreover, pupils who were underweight gained tremendously after weeks of good quality of food served while in school as well as being dewormed regularly. World Food Programme (2013) indicates that in Japan and Mexico, SFPs have gone a long way to help solve obesity problems. Foods, which were low in calories and made up of vegetables and fruits as well as milk, were basically executed on local preferences with the hiring of qualified nutritionists in the various schools.

It has been well documented in both developed and developing countries that school feeding with the right amount of quality ingredients have gone a long way to improve on pupil’s performance. Badri (2014) explains how in the USA the school feeding has improved on pupil’s academic performance, especially in mathematics and to some extent history based on the amount of calories in the food served to them. From India, Harounan *et al.*, (2012) report that the national meal program saw an increment in girls’ attendance and a slight increase in school enrolment. A study conducted in Burkina Faso shows increase in enrolment of girls due to the cereals take-

home rations (WB, 2012). Highlighting a similar account from Mali, Hoof (2014) indicates that SFPs especially in the Northern part of Mali witnessed a significant percentage of student enrolment. SFPs enticed pupils to get to school early since they are served with food before classes commence.

From the Ghanaian perspective a lot of successes have been chalked as well. Arhin (2015) indicates that since the inception of the SFP, public basic schools benefitting from the programme have recorded an appreciable increment in enrolment of pupils. According to Oduro-Ofori and Yeboah-Gyapong (2014), the SFP has reduced the level of primary School drop-out in the Kwaebibrim District in the Eastern Region since it serves as a motivational tool for primary children to stay in school. A study conducted on the SFP in the Garu-Tempene District in Ghana revealed that the programme increased gross enrolment rate by 24% among participating schools but decreased by 7% in non-participating schools (Bukari & Hajara, 2015). The Ghana News Agency (2014) observed an increment of pupils from 413,493 since the implementation of the SFP in the year 2006/2007 to 1, 739,352 pupils in 2013/2014.

In sub-Saharan Africa, Ghana is said to be the first country to achieve the MDG goal on poverty reduction and hunger by the standard set by the United Nations (UN) in the Millennium development initiatives (GNA, 2013). The creation of jobs through the SFPs generated incomes to caterers and farmers to enable them feed their families.

In spite of the successes that SFPs have achieved, SFPs are saddled with many challenges. Every project needs a good budget and adequate financing. However, the SFPs in many developing countries are faced with financial constraints. Masina (2013) observes in a survey in Malawi that the SFP is under threat. This is as a result of insufficient funds to acquire more firewood due to the increment of enrolled children. In Namibia, Ellis (2012) indicates that individual households are required to supply firewood for cooking meals due to financial constraints. In the view of Ellis (2012), the

situation is so bad that sometimes particular schools pay two bags of maize in exchange of firewood. Researchers believe that this practice is quite widespread. The National Coordinator for the SFP attributed the financial challenges facing the SFP to recent economic crises facing the country (Ghana News Agency, 2014). This has made the release of money from the SFP more difficult since the budget allocated to the program is too small. In Ghana the release of funds for the programme has been inconsistent. A delay in the release of feeding grants subsequently affects beneficiary pupils. The situation implies that caterers may not have access to funds to procure the needed items, cook and serve the beneficiary pupils. The delay in getting funds for caterers to cook has reduced the number of days meant for food to be served from five days to three days in a week (Kedze, 2013).

Evidences from schools on SFP shows that facilities for sanitation and hygiene are not up to the required standard. The Ghana News Agency (2013) further reports, that the Karaga district in the Northern Ghana is well noted for poor sanitation in the discharge of the SFP. It emphasizes lack of water and unhygienic practices among caterers and children as well. Due to political interference sometimes schools that need to be targeted are excluded from the SFP. As indicated by Abu and Quaye (2012), “Political party favouritism within the SFP remains a persistent challenge”.

2.10 Conceptual Framework

The Education sector faces various gaps (challenges and weaknesses) as far as enrolment, retention, completion, quality and transition are concerned. These are summarized including: Lack of clear policies and guidelines in early childhood education as most government documents are silent on key issues such as terms of service for pre-school teachers, the modalities of partnership with NGO’s and other organizations and the establishment and registration of educational institutions

(Mungai, 2004). The free primary education policy has become a major setback to early childhood education because many parents are refusing to enrol their children to early childhood education and wait to take their children to primary schools.

Mungai (2004) cite the costs in the centers and the corresponding free education in the primary schools. There is little ownership of early childhood education programmes by the government and 90% of programmes are funded by donors while many are opened by communities and individuals who dictate the different curricular they prefer used in their different schools, this brings disharmony as children go through different systems yet go to primary schools which are dictated by one national curriculum; Some of the centers lack curriculum flexibility to accommodate local needs; Limited access to the formal education centers due to long distances from home to school High infant mortality makes children unavailable for school because of sicknesses and death (Mungai, 2004). Many pre-school teachers are not trained; in addition, many parents (particularly in the rural areas) lack awareness on the role they should play in the formal early childhood development setups and many centers lack adequate physical facilities (e.g. some classes are conducted under trees), learning and teaching materials (Mungai, 2004). In addition, there is inadequate logistical support for monitoring and evaluation in some of the centers facilities for food preparing and serving to children.

In a study conducted by Quaye et al., (2010), a review of the SFPs in 5 regions in Ghana by the Netherlands Development Organization revealed that regional/district/school partnerships and organizational mechanisms were limited, and many schools lacked a functional school implementation committee.

Quaye *et al.*, (2010) summarizes the challenges as follows: lack of kitchens, storage, and dining halls in SFP schools; insufficient supply of food to schools, creating inadequate/irregular food portions; lack of training in hygiene and nutrition for school

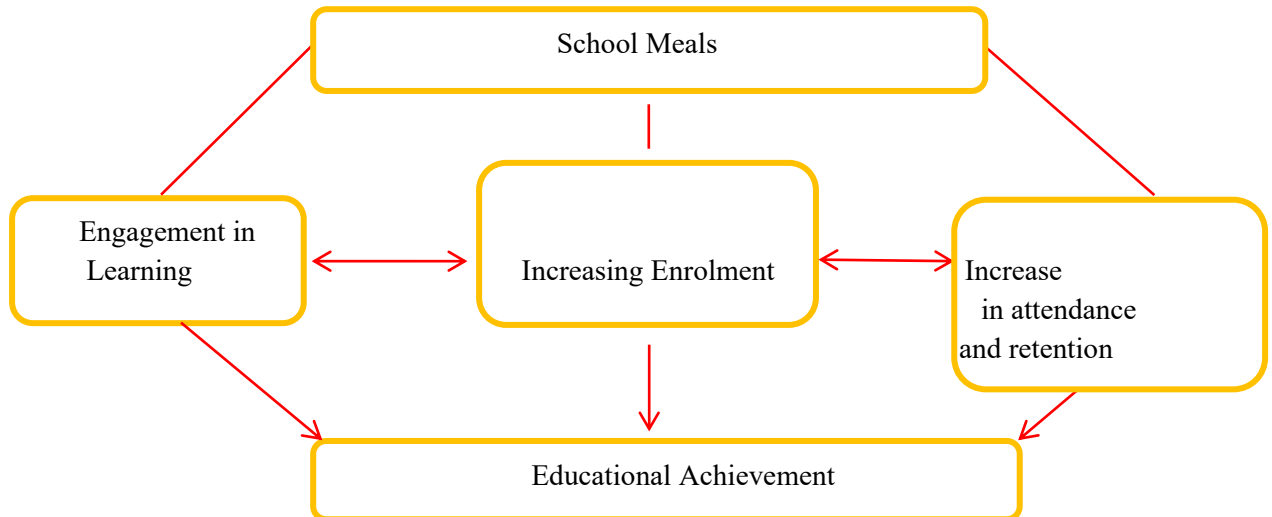
cooks; lack of sanitation facilities and regular safe water (a large proportion of schools are still without poly tanks). inadequate resources for students following influx of attendees in response to SFPs; varying degrees of linkage to local farmers/local food supply for food procurement; difficulties in monitoring cooking done outside the school; lack of transparency in records of food supply and payment procedures; students not receiving daily meal, lack of communication with parents; cooks paid irregularly; low community involvement; high regional disparity in the allocation of beneficiary schools; lack of preparedness of most districts to pre-finance supplies; increasing school enrolment does not commensurate increases in food supply, number of classrooms and teachers.

The SFPs are a visible social safety net used by political leaders around the world. Communities that participate in these programs can see the tangible benefits to their children, such as their children being fed regularly or families supplied with additional food. The Food for Education (FFE) programmes are typically targeted towards populations that are food insecure, reside in areas with high concentrations of low socio-economic status, which are facing poor attendance and enrolment in schools. According to Adelman et al. (2009), first thousand days of a child is the most vital period during which malnutrition may have its largest impact.

The possible goal of targeting children through FFE programme is to scale up their educational achievement so as to enhance their potential future productivity and earnings. However, school meals improvement in educational achievement due to serving food in SFPs is interdependent and connected, as shown in Figure 2.1 below. To begin with, FFE programs increase school attendance by lowering the opportunity costs of attending school and providing additional incentives to engage in learning (formal education). This culminates to more time spent in school and more time spent towards learning. When a child is interested in learning, there is high probability of

being retained in school to reap the assured benefits of education. Households may choose to have their children in schools for academic work because of the expectation of high return that comes with literacy.

Figure 2.1 Conceptual frameworks for food for education



Source: Author's own construct (2019)

2.11 Theoretical Framework

This study was guided by the human needs theory of Maslow (1970). According to this theory, there are certain minimum requirements that are essential to decent standards of living. These are known as physiological needs. They include food, shelter, health and clothing. They are primary needs and have to be catered for before other needs such as security and shelter, sense of belonging and affection, love, esteem and finally self-actualization are pursued. Maslow proposed that man's drive towards a certain direction can be arranged in a hierarchical order according to his needs as follows.

Maslow's Hierarchy of Human Needs

The first level of physiological needs is the needs that everyone needs on a daily basis for survival and includes basic needs like food, shelter and clothing (Maslow, 1970). The second level is that of security of the self and of the physiological needs. The third level is of social need, which is a need to belong to a certain group or association. This includes friendship, love and belonging. The fourth level is self-esteem, which is a sense of self-respect and self-motivation (Maslow, 1970). It also includes how one may relate to other people. The last level is of self-actualization, whereby man strives towards a viable experience and personal growth.

Maslow says that a human being goes through a hierarchy needs, starting with physical needs, for example, food to much higher needs for example, and emotions. For a child to achieve this, care givers for example, teachers or parents should ensure that they provide nutritious foods to the child in order to have a healthy growth. Safety and security needs are referred to as freedom from fear and anxiety and also protection from emotional harm. Children should be provided with safety and security so as to do well in school and even at home. Failure to provide security creates discontentment. The social needs include love and belonging where children should be accepted and provided with friendship. The self-esteem needs are the prestige needs whereby one feels he/she wants to be recognized. This makes children feel proud of themselves. The utmost need is the self-actualization, which is the motive to become all that a person is able to be. This requires self-drive so as to achieve the goal one desires.

According to Maslow's hierarchy of needs, it demonstrates that when needs are met or fulfilled, pupils are generally happy and contented. The atmosphere in the school is good and learning goes on smoothly. The reverse is true in that when the needs are not met or fulfilled there is discontentment. This model highlights the importance of food provision and security. From a broader view of development, it

means that countries must also struggle to provide basic needs for use by their population. For a developing country like Ghana, it means that poverty must be prevented by making basic needs like food, clothing and shelter available to all citizens.

Since man cannot survive without food, the government should make an effort to reduce food insecurity, especially amongst vulnerable groups like children. Where food aid is available, for instance, in schools through SFPs, it will encourage good health, high motivation, participation, attention in class and will obviously reduce hunger. It should be properly monitored to ensure it assists the children (UNESCO, 1990).

CHAPTER THREE

METHODOLOGY

3.0. Introduction

This chapter deals with the methodology of the study. Methodology is the strategy, plan of action, process or design lying behind the choice and use of particular research method (White 2005). It includes the research design, population, sample and sampling techniques, data collection instrument, reliability and validity of the instrument, data collection procedure, data analysis plan and ethical consideration.

3.1. Research design

According to Polit, Beck and Hungler (2004), a research design is the overall plan for obtaining answers to the questions being studied and for handling some of the difficulties encountered during the research process. Research designs are developed to meet the unique requirements of a study.

The researcher used descriptive research design for the study with quantitative approach. According to Creswell (2012), descriptive research design involves collecting quantitative data using questionnaires, and statistically analyzing the data to describe the trends about responses to questions and test research questions or assumptions. Descriptive survey research design helps provide answers to the questions of who, what, when, where, and how associated with a particular research problem. It must however, be emphasized that, a descriptive study cannot conclusively ascertain answers to the research questions raised. The descriptive research method, in this study helped to obtain information concerning the current status of the phenomena and to describe "what existed" with respect to variables or conditions on the influence of school feeding programme on pupils' enrolment in basic schools (Fraenkel & Wallen, 2006).

Descriptive research design like other research designs has its own strengths and weaknesses. The major strength for using the descriptive design is that it provides researchers with a lot of information from various respondents. The data collected are also easy to analyze. However, one major weakness of descriptive survey design is how to retrieve all the questionnaires administered (White, 2005). The researcher put some measures in place to retrieve all the questionnaires administered.

3.2. Population

Polit, Beck and Hungler (2004) define population as the entire aggregation of cases that meet a designated set of criteria. The target population is the aggregate of cases about which the researcher would like to make generalisations (Polit, Beck & Hungler 2004). Kusi (2012) stated that population is a group of individuals or people with the same characteristics and in whom the researcher is interested. It may also be defined as a group of individuals that the researcher generalizes his or her findings to.

The target population was 200, consisting of eight (8) head teachers and 192 teachers in the eight (8) Basic Schools in the 4 Garrison Educational Unit of the Kumasi Metropolis. All the 200 head teachers and teachers consented to their participation in the study.

Table 3.1 Population of schools before sampling

Name of School	Number of teachers
2Brigade Basic school	25
Services Basic School	23
4BN Basic School	25
Forces Basic School	21
Garrison Basic School	23
Army Basic School	27
Station Basic School	23
Uaddara Basic School	25
Head teachers	8
Total	200

(Source: Author's Field Data, 2020)

3.3. Sample Size and Sampling Technique

After defining the population that is eligible for inclusion in the study, the next important step was sample size and the sampling technique.

Creswell (2005) posited that a sample is the set of actual participants that are drawn from a larger population of potential data sources. Howit and Cramer (2011) revealed that the quality of a piece of research does not only stand or fall by the appropriateness of methodology and instrumentation but also by the suitability of the sampling strategy that has been adopted.

Sampling is a technique used for selecting a given number of subjects from a target population as a representative of the population in research (Creswell, 2005). To determine an appropriate sample size for the study, an updated list of all the staff in Basic Schools in the 4 Garrison Educational Unit of the Kumasi Metropolis was obtained from the Educational Officer of the unit.

Purposive sampling was used to select all the eight (8) head teachers since they are directly responsible for supervising the implementation of the school feeding in the school. Amin (2005) stated that purposive or judgmental sampling is appropriate in situations where respondents are targeted due to their position, expertise, situation, and so on. Simple random sampling was also used to select a proportional sample of 130 teachers from all the schools. The total sample size was 138 comprising eight (8) head teachers, and 130 teachers in accordance with De Vaus (2002) sample size population proportion formula shown below.

$$n = \frac{N}{1+N(\alpha^2)}; n = \frac{192}{1+192(0.05^2)}; n = \frac{192}{1.48} = 130$$

n=Sample Size

N=Population

α =Significance level

A breakdown of the sample size of 138 respondents was as follows:

Table 3.2 Sample Size Breakdown

Name of School	Number of teachers	Number Sampled
2Brigade Basic school	25	17
Services Basic School	23	15
4BN Basic School	25	17
Forces Basic School	21	13
Garrison Basic School	23	15
Army Basic School	27	21
Station Basic School	23	15
Uadara Basic School	25	17
Head teachers	8	8
Total	200	138

(Source: Author's Field Data, 2020)

3.4. Data Collection Instrument

The researcher used structured questionnaire to collect data for the study. Questionnaire is the predetermined standardized set of questions meant to collect numerical data that can be subjected to statistical analysis, which requires self-reporting from the participants (Leedy & Omrod, 2005). The questionnaire was designed from the literature and personally administered to the respondents in each of the schools during break time at the staff common room.

The closed ended questionnaire consisted of four sections. Section A demanded responses on the demographic characteristics of respondents, section B dealt with rationale behind the implementation of the School Feeding Programme and section C sought respondent's views on educational benefits of the School Feeding Programme. Section D sought respondent's views on influence of School Feeding Programme on pupils' enrolment while section E covered challenges associated with School Feeding Programme. The questionnaire was mostly likert- typed scale. Sarankos (2005) contended that likert scale allows response to be ranked and it is easy to construct.

The closed ended questionnaire was intended to assist respondent to provide uniformity of response and to enable more information to be gathered. Closed ended questionnaire also provide a high degree of respondent's objectivity. A questionnaire is cost effective and less time consuming as compared to other research instruments (White, 2005).

3.5 Pilot-Testing of Instrument

Piloting of data collection instrument is one of the important stages in a research project and it is conducted to identify potential problem areas and deficiencies in the research instruments and protocol prior to implementation during the full study

(Sarantakos, 2005). The questionnaires' items were piloted on 30 respondents comprising 5 head teacher and 25 teachers at Prempeh Cluster of Basic schools in the Kwadaso Municipality which has similar characteristics with the study area. The purpose of the piloting was essential to prevent waste of time, energy and money (Blaxter, Hughes & Tight, 2006). The pilot study was carried out in order to pilot-test the feasibility of the research instruments, that is questionnaire schedules, and also of the research process itself.

The piloting also enabled the researcher to make necessary modifications to items which may be inappropriate and also to ascertain the level of ambiguity of the questions for corrections. Ambiguous items were modified and inappropriate items were deleted after the pilot test.

Validity

Validity is the degree to which a test measures what it is intended to measure to achieve the purpose. Face and content validity of the questionnaire were tested by the researcher. To achieve faced validity, the questionnaire was given to my supervisor to find out whether the items measure the intended purpose. Content validity is an important research methodology term that refers to how well a test measures the behaviour which is intended (Polit. Beck & Hungler, 2004). The supervisor founds out whether the items measure specific construct. The validity test enables the researcher to reshape and delete those items which were found to be ambiguous and inappropriate.

Reliability

Reliability is the degree to which an assessment tool produces stable and consistent results. Reliability is the extent to which the measuring instrument produces consistent scores when the same groups of individuals are repeatedly measured under

the same condition (Bell, 2008). To ascertain reliability, the questionnaires were administered to the same 30 respondents sampled for the pilot study, twice with two weeks interval between the first and second test and the result correlated.

3.6 Data Collection Procedure

The first step in conducting fieldwork is to get the authority to conduct the study. In this regard, an introductory letter was collected from the office of Head of Department of Educational Leadership of which copies were given to the Kumasi Metro Director of Education to seek permission to conduct the study.

After permission was given, the researcher visited sampled population to brief them on the purpose of the study and also establish rapport for them to feel at home in completing the questionnaire. The researcher thereafter administered the questionnaire to the respondents. Participants were allowed to study the questionnaire and later submit after responding to the questions. The researcher achieved a return rate of 100% as all the questionnaires administered were retrieved.

3. 7. Data Analysis Plan

The data collected were first cleaned, aimed at identifying mistakes and errors which may have been made and blank spaces which have not been filled. A codebook for the questionnaire was prepared to record the responses and then computed using the Statistical Package for Social Sciences (SPSS) software package version 20.0. The data were analyzed descriptively and presented in tables using frequencies and percentage to answer all the research questions.

3.8. Ethical Considerations

As social science research involves gathering data from people, questions of research ethics are important considerations. The following ethical issues were considered in this study.

Informed consent was one of the ethical issues considered in this study. Informed consent is one of the most important principles of research ethics. It is based on the need for participants to enter into research voluntarily, while understanding the nature of the research and any disadvantages or obligations that may be involved (Sarantakos, 2005).

The respondents were assured that any information that they would give would be used for the purposes of the study and that it would be treated with utmost confidentiality that it deserves. The researcher ensured the anonymity of respondents as they were not asked to write their names on the questionnaires. These ethics were assured in the introduction part of the questionnaire.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Introduction

This chapter analyzed and discussed the information gathered from the respondents from the questionnaires administered. The data collected were analyzed and presented in tables with frequencies and percentages. The chapter was also presented with sub-headings in line with the research questions of the study.

4.1 Demographic Characteristics of Respondents

Table 4.1-4.3 shows the demographic characteristics of respondents who took part in the study, which comprise gender, age and level of education.

Table 4.1 Gender of Respondents

Variable	Frequency	Percentage (%)
Male	76	55
Female	62	45
Total	138	100

Source: Field Data, 2020

Table 4.1 shows that, 76 respondents representing 55% of the respondents were males while 62 respondents representing 45% of the respondents were females which means that more males participated in the study than females. Since the study was not dependent on gender, the result has no effect on the study.

Age was also examined to find out the age of respondents who participated in the study. Table 4.2 presents the results.

Table 4.2: Age of Respondents

Age	Frequency	Percentage (%)
31-40 years	26	19
41-50 years	58	42
51-60 years	54	39
Total	138	100

Source: Field Data, 2020

Table 4.2 shows that 26 respondents representing 19% of the respondents were between the ages of 31-40, 58 respondents representing 42% of the respondents were between the ages of 41-50 while 54 respondents representing 39% of the respondents were between the ages of 51-60. The result implies that majority of the respondents were between the ages of 41 and 50 and were matured enough to participate in the study.

Highest Educational Qualification

The highest educational qualification of respondents was also examined. This was to find out the educational level attained by respondents. Table 4.3 shows the result.

Table 4.3: Highest Educational Qualification

Highest Educational Qualification	Frequency	Percentage (%)
Bachelor's Degree	92	67
Master's Degree	46	33
Total	138	100

Source: Field Data, 2020

Table 4.3 shows that 92 respondents representing 67% of the respondents were holders of the Bachelor's Degree while 46 respondents representing 33% of the respondents were holders of the Master's Degree. The result implies that majority of the respondents were holders of bachelor's degree and had the requisite qualifications as professionals to provide the needed information for the study.

4.2 Answers to the Research Questions

Research Question 1: What are the educational benefits of the School Feeding Programme in basic schools of 4 Garrisons Education Unit in the Kumasi Metropolis?

The respondents were asked a number of questions relating to educational benefits of the School Feeding Programme. The results are presented in Table 4.4.

Table 4.4 Educational Benefits of the School Feeding Programme

Statement	Strongly Agree N (%)	Agree N (%)	Disagree N (%)	Strongly Disagree N (%)
Reduced absenteeism to improve duration of schooling to stimulate educational outcomes	62(45)	56(41)	20(14)	-
Decreased pupils drop out of school to improve attendance	70(51)	46(33)	22(16)	-
Increased school participation to increase enrolment	64(46)	56(41)	18(13)	-
Improved nutritional status of pupils to improve health condition to promote attendance	69(50)	59(43)	10(7)	-
Increased pupils class attendance to improve teaching and learning	61(44)	58(42)	11(8)	8(6)
Reduced parental expenditure on food and increased attendance	52(38)	69(50)	17(12)	-

Source: Field Data 2020

Table 4.4 shows that 62 representing 45% of the respondents strongly agreed that reduced absenteeism to improve duration of schooling to improve educational outcomes was one of the educational benefits of the school feeding programme, 56 representing 41% of the respondents agreed while 20 representing 14% of the

respondents disagreed. The result means reduction in absenteeism that results in improving duration of schooling to improve educational outcomes is an educational benefit of the school feeding programme. Del Rosso (1999) posited that, when school feeding programmes succeed in reducing absenteeism and increase the duration of schooling, educational outcomes (performance, dropout, and repetition) get improved (Del Rosso, 1999). This position may be convincing especially in deprived areas of Ghana where some parents cannot afford three square meals per day. Children have to regularly attend school to meet the quantity of food requirement per day.

Also, 70 representing 51% of the respondents strongly agreed that decreased in pupils dropping out of school to improve attendance was one of the educational benefits of the school feeding programme, 46 representing 33% of the respondents agreed while 22 representing 16% of the respondents disagreed. The result means decreased pupils drop out of school to improve attendance is an educational benefit of the school feeding programme. Viewing school feeding from a different angle leads to increased time spent in school, through increased enrolment and attendance and decreased drop-out rates (Ahmed, 2004). It motivates parents to enrol their children in school and have them attend regularly.

Again, 64 representing 46% of the respondents strongly agreed that increased school participation to increase enrolment was one of the educational benefits of the school feeding programme, 56 representing 41% of the respondents agreed while 18 representing 13% of the respondents disagreed. The result means increased school participation to increase enrolment is an educational benefit of the school feeding programme. The majority of the literature analysed for this study reveal that SFP have indeed positive impact on school participation as measured by school enrolment, class

attendance, and student drop-out status (Meng & Ryan 2013; Ahmed 2014; Vermeersch & Kremer 2014).

Besides, 69 representing 50% of the respondents strongly agreed that improved nutritional status of pupils to improve health condition to promote attendance was one of the educational benefits of the school feeding programme, 59 representing 43% of the respondents agreed while 10 representing 7% of the respondents disagreed. The result means improved nutritional status of pupils to improve health condition to promote attendance is an educational benefit of the school feeding programme. NEPAD (2002) indicated that SFPs improved nutritional status of children which provide them with calories and nutrients to promote good health, strong resistance to infectious diseases and illnesses that keep children from school is identified as the third path. Consequently, better nutrition indirectly improves educational achievement of children by increasing their school attendance.

Moreover, 61 representing 44% of the respondents strongly agreed that increased pupils class attendance to improve teaching and learning was one of the educational benefits of the school feeding programme, 58 representing 42% of the respondents agreed, 11 representing 8% of the respondents disagreed while 8 representing 6% of the respondents strongly disagreed. The result means increased pupils class attendance to improve teaching and learning is an educational benefit of the school feeding programme. Pollit (2005) noted that SFPs have indeed positive impact on school pupils' performance school enrolment, class attendance, student drop-out. According to Galloway (2009) school meals programmes are seen as an effective tool for attracting pupils to school, reducing drop-out rate, increasing female enrolment, alleviating short term hunger, thereby improving concentration ability and academic

achievement, and improving nutritional and micronutrient status, thereby improving learning capacity (Del Rosso, 2009).

Finally, 52 representing 38% of the respondents strongly agreed that reduced parental expenditure on food and increased attendance was one of the educational benefits of the school feeding programme, 69 representing 50% of the respondents agreed while 17 representing 12% of the respondents disagreed. The result means reduced parental expenditure on food and increased attendance is an educational benefit of the school feeding programme. Ahmed (2004) justified that feeding in schools serves as a pull factors for poor families as it reduces home expenditure on food. Besides, the quality of food given at school in many instances meet the nutritional requirement compared with those prepared by poor families.

Research Question 2: What are the influences of School Feeding Programme on pupils' enrolment in basic schools of 4 Garrisons Education Unit in the Kumasi Metropolis?

The respondents were asked a number of questions relating to the influences of School Feeding Programme on pupils' enrolment. The results are presented in Table 4.5.

Table 4.6 Influences of School Feeding Programme on Pupils' Enrolment

Statement	Strongly Agree N (%)	Agree N (%)	Disagree N (%)	Strongly Disagree N (%)
Helps in reducing home expenditure on food to motivate parents to enroll their children to improve enrolment	51(37)	56(41)	31(22)	-
Helps in improving pupils health condition to increase attendance to improve enrolment	56(41)	58(42)	24(17)	
Help in reducing school drop out to improve enrolment	66(48)	48(35)	24(17)	-
Motivate pupils to attend school regularly to improve enrolment	62(45)	54(39)	22(16)	-
Help in reducing absenteeism to improve enrolment	57(41)	48(35)	22(16)	11(8)
Help in increasing time spent at school through increased enrolment and attendance	52(38)	58(42)	28(20)	-

Table 4.5 shows that 51 representing 37% of the respondents strongly agreed that school feeding programme helped in reducing home expenditure on food to motivate parents to enrol their children to improve enrolment, 56 representing 41% of the respondents agreed while 31 representing 22% of the respondents disagreed. The result means school feeding programme has positive influence on pupils enrolment. Ahmed (2004) indicated that school feeding programme help to reduces parents' home expenditure on food. Consequently, families are motivated to get their children enrolled because of the immediate benefits.

Also, 56 representing 41% of the respondents strongly agreed that school feeding programme helped in improving pupils' health condition to increase attendance to

improve enrolment, 58 representing 42% of the respondents agreed while 24 representing 17% of the respondents disagreed. The result means school feeding programme has positive influence on pupils' enrolment. The Ghana School Feeding Programs has improved the health status of the pupils. It has got the components needed for growth and development. The Ghana school feeding programme has increased dietary diversity of the diet of children in school. The programme has attained its own recommendation for protein and energy intake. However, iron intake is low while vitamin A intake is enough (Martens, 2007).

Alhassan (2013), Nkosha et al. (2013) and Dua (2011) contended that school feeding programmes cannot be seen as the only factor that influences enrolment in Ghana's schools but other factors, such as, high pupil to teacher ratio, classroom accommodation, inadequate furniture, teacher pupil relationship, teacher absenteeism, cultural beliefs, among others, should be considered.

Again, 66 representing 48% of the respondents strongly agreed that school feeding programme helped in reducing school drop out to improve enrolment, 48 representing 35% of the respondents agreed while 24 representing 17% of the respondents disagreed. The result means school feeding programme has positive influence on pupils' enrolment. Dua (2011) points out that one of the major aims of the Ghana School Feeding programme is to increase enrolment and retention in the basic school level. School feeding serves as a magnet that attracts school children to be in school every day and be consistent throughout the stages of learning. Thus, improve feeding increase enrolment and reduce school dropout. Oduro-Ofori and Yeboah-Gyapong (2014) observed that the SFP has reduced the level of primary school drop-out in the Kwaebibrim District in the Eastern Region thereby increasing enrolment.

Besides 62 representing 45% of the respondents strongly agreed that school feeding programme motivated pupils to attend school regularly to improve enrolment, 54 representing 39% of the respondents agreed while 22 representing 16% of the respondents disagreed. The result means school feeding programme has positive influence on pupils enrolment. Some of the pro-poor programmes initiated by the Ghana government to increase enrolment levels is the School Feeding Programme (SFP). The World Food Programme (2004) recommended that it is a tool capable of enabling hundreds of millions of poor children worldwide to attend school both in developed and developing countries.

Moreover, 57 representing 41% of the respondents strongly agreed that school feeding programme helped in reducing absenteeism to improve enrolment, 48 representing 35% of the respondents agreed, 22 representing 16% of the respondents disagreed while 11 representing 8% of the respondents strongly disagreed. The result means school feeding programme has positive influence on pupils' enrolment. SFPs can help to get children into school and help to keep them there through enhancing enrolment and reducing absenteeism and once the children are in school, the programmes can contribute to their learning, through avoiding hunger and enhancing cognitive abilities. These effects may be potentiated by complementary actions, especially deworming and providing micronutrients.

Finally, 52 representing 38% of the respondents strongly agreed that school feeding programme helped in increasing time spent at school through increased enrolment and attendance, 58 representing 42% of the respondents agreed while 28 representing 20% of the respondents disagreed. The result means school feeding programme has positive influence on pupils' enrolment. SFP increase school attendance by lowering the opportunity costs of attending school and providing

additional incentives to engage in learning (formal education). This culminates to more time spent in school and more time spent towards learning. When a child is interested in learning, there is high probability of being retained in school to reap the assured benefits of education (GSFP, 2007).

Research Question 3: What challenges are associated with School Feeding Programme in basic schools of 4 Garrisons Education Unit in the Kumasi Metropolis?

The respondents were asked a number of questions relating to challenges are associated with School Feeding Programme. The results are presented in Table 4.6.

Table 4.6: Challenges Associated with School Feeding Programme

Statement	Strongly Agree N (%)	Agree N (%)	Disagree N (%)	Strongly Disagree N (%)
Insufficient funds to acquire the needed inputs due to increased enrolment	52(38)	68(49)	18(13)	-
Inconsistencies in the release of available funds	54(39)	62(45)	22(16)	-
Inadequate facilities for sanitation and hygiene	44(32)	64(46)	22(16)	8(6)
Political party interference and favoritisms	58(42)	45(33)	24(17)	11(8)
Unhygienic practices of some caterers in the discharge of their duties	66(48)	54(39)	18(13)	-
Delays in the release of funds to caterers to facilitate their work	52(38)	68(49)	18(13)	-

Source: Field Data 2020

Table 4.6 shows that 52 respondents representing 38% strongly agreed that insufficient funds to acquire the needed inputs due to increased enrolment was a challenge associated with the school feeding programme, 68 respondents representing

49% of the respondents agreed while 18 respondents representing 13% of the respondents disagreed. The result implies that insufficient funds to acquire the needed inputs due to increased enrolment are one of the challenges of the school feeding programme. The National Coordinator for the SFP attributed the financial challenges facing the SFP to recent economic crises facing the country (Ghana News Agency, 2014). This has made the release of money from the SFP more difficult since the budget allocated to the program is too small.

Again, 54 respondents representing 39% strongly agreed that inconsistencies in the release of available funds was a challenge associated with the school feeding programme, 62 respondents representing 45% of the respondents agreed while 22 respondents representing 16% of the respondents disagreed. The result implies that inconsistencies in the release of available funds are one of the challenges of the school feeding programme. In Ghana the release of funds for the programme has been inconsistent (Ghana News Agency, 2014).

Also, 44 respondents representing 32% strongly agreed that inadequate facilities for sanitation and hygiene was a challenge associated with the school feeding programme, 64 respondents representing 46% of the respondents agreed 22 respondents representing 16% of the respondents disagreed while 8 respondents representing 6% of the respondents strongly disagreed. The result implies that it is one of the challenges of the school feeding programme. Evidences from schools on SFP shows that facilities for sanitation and hygiene are not up to the required standard. The Ghana News Agency (2013) further reports, that the Karaga district in the Northern Ghana is well noted for poor sanitation in the discharge of the SFP.

Besides, 58 respondents representing 42% strongly agreed that political party interference and favoritisms was a challenge associated with the school feeding

programme, 45 respondents representing 33% of the respondents agreed, 24 respondents representing 17% of the respondents disagreed while 11 respondents representing 8% of the respondents strongly disagreed. The result implies that political party interference and favoritisms is one of the challenges of the school feeding programme. Due to political interference sometimes schools that need to be targeted are excluded from the SFP (Ghana News Agency, 2014).

Moreover, 66 respondents representing 48% strongly agreed that unhygienic practices of some caterers in the discharge of their duties was a challenge associated with the school feeding programme, 54 respondents representing 39% of the respondents agreed while 18 respondents representing 13% of the respondents disagreed. The result implies that unhygienic practices of some caterers in the discharge of their duties are one of the challenges of the school feeding programme. There is lack of water and unhygienic practices among caterers and children as well in the SFP (Ghana News Agency, 2014).

Finally, 52 respondents representing 38% strongly agreed that delays in the release of funds to caterers to facilitate their work was a challenge associated with the school feeding programme, 68 respondents representing 49% of the respondents agreed while 18 respondents representing 13% of the respondents agreed. The result implies that the delays in the release of funds to caterers to facilitate their work is one of the challenges of the school feeding programme. A delay in the release of feeding grants subsequently affects beneficiary pupils. The situation implies that caterers may not have access to funds to procure the needed items, cook and serve the beneficiary pupils. The delay in getting funds for caterers to cook has reduced the number of days meant for food to be served from five days to three days in a week (Kedze, 2013).

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The chapter consists of the summary of the findings of the study, the conclusions, recommendations based on the findings and suggestions for further study.

5.1 Summary of the Study

The study was conducted to investigate the influence of School Feeding Programme on school pupils' enrolment and the challenges thereof in Basic Schools of 4 Garrisons Education Unit in the Kumasi Metropolis of the Ashanti Region. The objectives of the study were to find out the educational benefits of the School Feeding Programme in basic schools of 4 Garrisons Education Unit in the Kumasi Metropolis, establish the influence of School Feeding Programme on pupils' enrolment in basic schools of 4 Garrisons Education Unit in the Kumasi Metropolis and to identify the challenges associated with School Feeding Programme in basic schools of 4 Garrisons Education Unit in the Kumasi Metropolis.

The researcher used descriptive survey design for the study with quantitative approach. The target population was 200, consisting of eight (8) head teachers and 192 teachers in the eight (8) Basic Schools in 4 Garrison Educational Unit of the Kumasi Metropolis. Purposive sampling was used to select all the eight (8) head teachers. Simple random sampling was also used to select a proportional sample of 130 teachers for the study. The researcher used structured questionnaire to collect data for the study.

The data were analyzed descriptively and presented in tables using frequencies and percentage to answer all the research questions.

The study revealed that reduced absenteeism to improve duration of schooling to stimulate educational outcomes, decreased pupils drop out of school to improve attendance, increased school participation to increase enrolment, improved nutritional status of pupils to improve health condition to promote attendance, increased pupils class attendance to improve teaching and learning and reduced parental expenditure on food and increased attendance were some educational benefits of the school feeding programme.

The study further revealed that the influences of the school feeding programme on school enrolment was that it helped in reducing home expenditure on food to motivate parents to enroll their children to improve enrolment, helped in improving pupils health condition to increase attendance to improve enrolment, helped in reducing school drop out to improve enrolment, motivated pupils to attend school regularly to improve enrolment, helped in reducing absenteeism to improve enrolment and also helped in increasing time spent at school through increased enrolment and attendance.

The study finally revealed that the challenges of the school feeding programme were insufficient funds to acquire the needed inputs due to increased enrolment, inconsistencies in the release of available funds, inadequate facilities for sanitation and hygiene, political party interference and favoritisms, unhygienic practices of some caterers in the discharge of their duties and delays in the release of funds to caterers to facilitate their work.

5.2 Conclusions

The study concluded that there are some educational benefits in the school feeding programme which included reduced absenteeism to improve duration of schooling to stimulate educational outcomes, decreased pupils drop out of school to improve attendance, increased school participation to increase attendance, and

improved nutritional status of pupils to improve health condition to promote attendance, which would eventually facilitate teaching and learning to improve performance.

The study further concluded that some of the influences of the school feeding programme on school enrolment was that it helped in reducing home expenditure on food to motivate parents to enroll their children to improve enrolment, helped in improving pupils health condition to increase attendance to improve enrolment, helped in reducing school drop out to improve enrolment and also motivated pupils to attend school regularly to improve enrolment which would help to improve instruction and pupils achievement.

Finally, the study concluded that there were some challenges associated with the implementation of the school feeding programme. These challenges if managed well would bring further improvement in the school feeding programme to fully achieve its objectives.

5.3 Recommendations of the Study

It is recommended based on the findings that the Kumasi Metropolitan Directorate of Education organize training workshop for caterers and cooks of the school feeding programme on the need to adopt healthy hygienic practices in the discharge of their duties.

The Kumasi Metropolitan Directorate of Education in collaboration with the Ghana Education Service should ensure regular and consistent release of funds to caterers to enable them serve better in the school feeding programme.

The Kumasi Metropolitan Directorate of Education in collaboration with the Ghana Education Service should provide school under the school feeding programme with adequate sanitary and storage facilities for smooth implementation of the programme.

5.4 Suggestions for Further Study

The study was conducted to investigate the influence of School Feeding Programme on school pupils' enrolment and the challenges thereof in Basic Schools of 4 Garrisons Education Unit in the Kumasi Metropolis of the Ashanti Region so further study should be conducted in the other public junior high schools in the Metropolis.

Further study should also be conducted to investigate the influence of School Feeding Programme on school pupils' enrolment and the challenges thereof in private Basic Schools in the Kumasi Metropolis of the Ashanti Region to see if they have the same characteristics.

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APPENDIX A
QUESTIONNAIRE FOR RESPONDENTS
INTRODUCTION LETTER

Dear Respondent,

I am conducting a study on the influence of school feeding programme on pupils' enrolment and the challenges thereof in Basic Schools of 4 Garrisons Education Unit in the Kumasi Metropolis of the Ashanti Region in partial fulfillment for the award of the Master of Arts in Educational Leadership at the University of Education, Winneba. You have therefore been selected to participate in the study.

I would be very grateful if you could give your response to the attached questionnaire which seeks to collect data for the study.

Please be informed that the information you would give would be used for academic purposes only and would be treated with utmost confidentiality that they deserved. You are also guaranteed complete anonymity as you are not required to write your name on the questionnaire. Thank you for your co-operation.

Yours sincerely

ESTHER WHAJAH
(POST GRADUATE STUDENT)

QUESTIONNAIRES FOR RESPONDENTS

SECTION A: RESPONDENTS' INFORMATION

(1) Indicate your gender by ticking the appropriate box.

Male ()

Female ()

(2) Indicate your age in the appropriate box

(a) 31 – 40 ()

(b) 41 – 50 ()

(c) 51 – 60 ()

(3) What is your highest academic qualification?

(a) Diploma ()

(b) Bachelor's Degree ()

(c) Master's Degree ()

SECTION B: EDUCATIONAL BENEFITS OF SCHOOL FEEDING PROGRAMME

The statement listed entails various issues on benefits of school feeding programme. Please indicate by ticking the appropriate column which reflects your view on each of the statement on a likert scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

N/S	STATEMENT	SA	A	D	SD
1	Reduced absenteeism to improve duration of schooling to stimulate educational outcomes				
2	Decreased pupils drop out of school to improve attendance				
3	Increased school participation to increase enrolment				
4	Improved nutritional status of pupils to improve health condition to promote attendance				
5	Increased pupils class attendance to improve teaching and learning				
6	Reduced parental expenditure on food and increased attendance				

SECTION C: INFLUENCE OF SCHOOL FEEDING PROGRAMME ON ENROLMENT

The statement listed entails various issues on influence of school feeding programme on enrolment. Please indicate by ticking the appropriate column which reflects your view on each of the statement on a likert scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

S/N	STATEMENT	SA	A	D	SD
1	Help in reducing home expenditure on food to motivate parents to enroll their children to improve enrolment				
2	Helps in improving pupils health condition to increase attendance to improve enrolment				
3	Help in reducing school drop out to improve enrolment				
4	Motivate pupils to attend school regularly to improve enrolment				
5	Help in reducing absenteeism to improve enrolment				
6	Help in increasing time spent at school through increased enrolment and attendance				

SECTION D: CHALLENGES OF SCHOOL FEEDING PROGRAMME

The statement listed entails various issues on challenges of school feeding programme. Please indicate by ticking the appropriate column which reflects your view on each of the statement on a likert scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

S/N	STATEMENT	SA	A	D	SD
1	Insufficient funds to acquire the needed inputs due to increased enrolment				
2	Inconsistencies in the release of available				

	funds				
3	Inadequate facilities for sanitation and hygiene				
4	Political party interference and favoritisms				
5	Unhygienic practices of some caterers in the discharge of their duties				
6	Delays in the release of funds to caterers to facilitate their work				

Thank you