THE EFFECTS OF IN-SERVICE TRAINING PROGRAMMES ON BASIC
SCHOOL TEACHERS’ PERFORMANCE IN CHIANA IN THE KASSENA
NANKANA WEST DISTRICT (KNWD)

BY

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UNIVERSITY FOR DEVELOPMENT STUDIES

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BY

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UNIVERSITY FOR DEVELOPMENT STUDIES, TAMALE

NOVEMBER, 2017
CANDIDATE’S DECLARATION

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

Candidate’s Name: Ronald Diwora Banki

Signature…………………………………… Date…………………………

SUPERVISORS’ DECLARATION

We hereby declare that the preparation and presentation of this thesis was supervised in accordance with the guideline and supervision of thesis laid down by the University for Development Studies.

Principal Supervisor’s Name: Dr. Anthony Kudjo Donkor

Signature…………………………………… Date…………………………

Co-Supervisor’s name: Dr. Rev. Thomas Asante

Signature…………………………………… Date…………………………
ABSTRACT

The research study examined the effects of in-service training programmes on basic school teachers’ performance in Chiana in the KNWD. The study design used was a descriptive survey and a mixed method approach was employed to obtain both quantitative and qualitative data. Simple random sampling technique was used to select five basic schools, census sampling was used to sample fifty-one teachers, whiles purposive sampling was used to select four officers in the education directorate. A total sample size of fifty-five (55) was used for the study. Questionnaire, interviews and documents/records were used to obtain data. Data from questionnaire and documents/records were descriptively analysed. Data from interview was transcribed and analysed manually. Frequencies and percentage distribution tables were used for analysing the data from the questionnaires whiles the interviews were transcribed and analysed. The study revealed that teachers are aware of INSETs as well as the effects on their performance. Also, teachers in Chiana appreciate the fact that when they attend INSETs, knowledge and skills are acquired for professional development and competency. The study further revealed that teachers in Chiana attend INSETs/workshops on methodology, SBA, classroom management and ICT, but the programmes were not enough for their professional development. With regards to the findings of this study, the researcher recommended that developmental partners in education in the KNWD in particular should collaborate and come out with well-designed INSET programmes for all teachers in the district.
DEDICATION

To my entire family especially my wife and daughter, Miss Tayam Florence Kada and Blessing Webatusa Banki and step mother, Esi Banki.
ACKNOWLEDGEMENT

The success of this study was based on the following personalities, hence the need to acknowledge them. Dr. Anthony Kudjo Donkor, my principal supervisor, Vice-Dean of the Faculty of Education, University for Development Studies, Tamale Campus. His supervision, guidance, kindness, encouragement and suggestions helped me to complete my thesis successfully. I must register my gratefulness to him.

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Finally, my profound gratitude is extended to all the Lecturers of the faculty for availing themselves during the thesis updates. Most of them were present to give us direction as to how we go about completing the thesis on time.
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<tbody>
<tr>
<td>BECE:</td>
<td>Basic Education Certificate Examination</td>
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<tr>
<td>CA:</td>
<td>Continuous Assessment</td>
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<td>CAMFED:</td>
<td>Campaign for Female Education</td>
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<td>CBI:</td>
<td>Cluster Based In-service Education and Training</td>
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<td>CPD:</td>
<td>Continuing Professional Development</td>
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<td>DEC:</td>
<td>District Education Committee</td>
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<tr>
<td>EDMAT:</td>
<td>Education and Management Training</td>
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<tr>
<td>FCUBE:</td>
<td>Free Compulsory Universal Basic Education</td>
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<td>GES:</td>
<td>Ghana Education Service</td>
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<tr>
<td>GNA:</td>
<td>Ghana News Agency</td>
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<td>INSET:</td>
<td>In service Education and Training</td>
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<tr>
<td>JICA:</td>
<td>Japan International Cooperation Agency</td>
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<tr>
<td>KNM:</td>
<td>Kassena Nankana West District</td>
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<tr>
<td>KNWD:</td>
<td>Kassena Nankana West District</td>
</tr>
<tr>
<td>MOE:</td>
<td>Ministry of Education</td>
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<td>MOEYS:</td>
<td>Ministry of Education Youth and Sports</td>
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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

As a result of poor academic performance by students in most of the schools in Ghana over the years, teacher Continuing Professional Development (CPD) has been an issue in the minds of educationists and other people across the country. Ghana News Agency (GNA) (2002) reported the increasing low performance of pupils at the Basic Education Certificate Examination (BECE). Harrington (2002) indicated that the most important factor in students’ learning is the quality of the teacher. Teachers who are fully prepared and have greater training are said to be more successful and effective in teaching and student handling than teachers with less preparation and training (Hama, 1998; Agyeman, 2000; Fergusson, 2001). Teachers’ continuing professional development (CPD) has become a major focus within the school reform and school improvement trends because of the belief that student learning and success is largely due to the effectiveness of teachers (Organisation for Economic Cooperation and Development-OECD, 2009).

Several studies (Shulman, 2000; Akeampong, 2003; Harris & Sass, 2008; Steyn, 2008; Sharp, 2009; Caena, 2011; Rahman, Jumani, Akhter, Chisti, & Ajmal, 2011; Ridley, 2011; Shriki & Lavy, 2012) generally acknowledged that promoting teacher quality is a key element in improving primary and secondary education. For this reason, the Ghana Education Service (GES) has since 2005 developed a framework for the implementation of In-Service Education and Training (INSET) policy for basic education. The aim is to establish an institutionalised structure for CPD of basic school teachers. This
implies that the GES places much importance on teachers’ CPD and is making efforts to ensure that quality teachers are maintained in the service.

The quality of education depends on the ability, hard work and dedication of the teacher (Rahman, et al, 2011). Strutt and Kepe (2010) in National Education Policy 2010 emphasised the need for teachers to keep in touch with the rapid scientific and educational developments in order to become efficient and effective. Also, the teacher is considered the most crucial factor in implementing all instructional reforms at the grassroots level. However, Rahman et al (2011) re-enforced the fact that academic qualifications, knowledge of the subject matter, competence and skills of teaching and the commitment of the teacher have quality impact on the teaching learning process. This explains why teachers are pressurized to be competent in their classrooms. It also justifies the urgent need for the professional development (PD) of teachers. By emphasizing learning and the development of teachers, schools are able to ensure that learning processes contribute to the attainment of goals and the enhancement of quality and learner performance in schools (Cullen, 1999; Browell, 2000).

The study examined in-service training programmes organised for teachers by management (GES and head teachers), Non-governmental organisations (NGOs) and other organisations that have interest in education. The in-service training programmes looked at include the following; school base assessment (SBA), classroom management, and methods of teaching and basic Information and Communication Technology (ICT) skills. These areas that classroom teachers deal with almost every day can be seen in five training programmes for teachers. These are induction or orientation training, foundation training, career development training, on-the-job training and maintenance or refresher training.
The researcher will interact with the teachers to know whether training programmes are conducted for them or not. If training programmes are organised, how they are organised, how regular are they organised? Who organises the training programmes? and what benefits have they gained from such programmes as teachers?

Constantino and Merchant (1996), commented that both training and education are necessary components for a successful conflict management system. One might clearly imagine how failure to provide training and education by the organisation could result in conflict between employer and employee. Such conflict could potentially lead to any number of complicated scenarios, including but not limited to formal complaints by the employee which eventually becomes actual law suits against the organisation, all of which could cost the industry time, energy and money.

These kinds of issues can be seen in education when management fails to train teachers on say SBA. Completing such reports by teachers may be difficult. Conflict may arise between management and the teacher(s) involved.

Cheng and Ho (2001) discussed the importance of training and its impact on job performance. While employee performance is one of the crucial measures emphasized by the top management, employees are more concerned about their own productivity and are increasingly aware of the accelerated obsolescence of knowledge and skills in their turbulent environment. Ghana as a developing nation is faced by a lot of challenges. The development of her human resource capacity base is one of the major problems.

Any institution of higher learning or business whose goals are to survive and prosper in this present day’s diverse and regressed economy has found it imperative to
invest in ongoing training and development to improve proficiencies in production as well as to acquire the greatest return in investment of human capital (Knoke & Kalleberg, 1994). Although this area of training effectiveness seems paramount, and although training is an integral part of the employer - employee relationship, Knoke and Kalleberg (1994) suggested direct evidence about organisational training practices based on representative samples of diverse employing organisations is almost non-existent. Furthermore, it has been suggested that training is most extensive only in establishments which operate in complex market environments (Rowden & Conine, 2005; Sahinidis & Bouris, 2008).

Teachers in Ghana Education Service (GES) require constant training in order to develop their competencies to function effectively in the classroom. This will require the managers of education to vote resources to achieve this goal. Self-development or professional development (PD) is an essential ingredient needed by all teachers, and that can be achieved through training and development.

Training and development is a function of human resource management concerned with organisational activity aimed at bettering the performance of individuals and groups in organisational arena (Armstrong, 2001). Lynton and Pareek (1990) described training as a well-organised opportunities for participants to acquire necessary understanding and skills, however, separated the whole training process under pre-training, training and post-training phases. They further indicated that taken teachers through these processes of training will make them complete professionals, hence enhanced skills.

Addah (2015), observed that teachers like other professional staff require professional development (PD) programmes to get themselves abreast with the ever
The changing nature of education in the 21\textsuperscript{st} century requires constant skills improvement, development and highly motivated teachers who can participate in the fast changing trends of communication flows, teaching and student learning (GES, 2012). Ghana Education Service (GES) require highly resourced teachers who can move with the current changing trends. Existing and emerging organisations such as Ghana Health Service, GES etc. need to institutionalise staff training and development if they are to move with the ever changing trends in professional competencies. It was observed that in-service training and development programmes are inadequate or rarely organised for teachers to develop their skills and competences to move with current changing trends.

New teaching methods, lesson notes preparation and classroom management strategies just to mention a few are some of the in-service training programmes teachers can benefit from. Upon nosing around (observing and interacting), some teachers in most of the schools in Chiana, it was realised that teachers were not given adequate training to develop themselves and function very well in the classroom. Data collected from KNWD
directorate showed that 24% of teachers in basic schools are untrained. The researcher’s interaction with the district training officer showed that the untrained teachers were not given the requisite training before engaging them in the classroom. Also, it is a fact that untrained teachers come to the classroom with no or small amount of training as far as lessons preparation, methods of teaching, classroom management and other training areas are concerned (GES, 2012). They either receive little guidance from their head teachers or start teaching just like that.

Newly trained teachers who are supposed to receive orientation training to get them acquainted to their new environment usually have little of that sort. Teachers who have left the training college or school for a long time also need to be updated with new skills of teaching and classroom management strategies for them to function well as instructors. Rowden and Conine (2005) indicated that, there is limited research on human resource development in small and midsized organisations. According to these authors, most people believe that small businesses do little, if any, in the development of their workers.

The issues above raised a red flag that there is a problem with in-service training and development programmes for teachers in Chiana in the KNWD. Hence this research study examined the effects of in-service training programmes on selected basic school teachers’ performance in Chiana in the KNWD.

1.3 **Main objective**

To examine the effects of in-service training programmes on selected basic school teachers’ performance in Chiana in the KNWD.
1.3.1 **Objectives**

1. To examine the various in-service training programmes available to teachers in Chiana.

2. To investigate how knowledge and skills acquired from in-service training programmes affect teacher performance in Chiana.

3. To determine any performance difference between pre-training and development and post-training and development of teachers in Chiana.

1.4 **Research Questions**

1. What in-service training programmes are available to teachers in Chiana?

2. How does the knowledge and skills acquired from in-service training affect teacher performance?

3. What performance difference will exist between pre-training and development and post-training and development?

1.5 **Significance of the Study**

Employees in an organisation need to be trained regularly to develop new skills and function well as staff of that organization (Aguinis & Kraiger, 2009). Teachers in Chiana need regular training on-the-job to develop them professionally. This will equip them with the requisite skills of teaching to maximised students’ performance, classroom management skills, and lessons planning, use the computer to perform simple tasks and
completion of school Base Assessment (SBA). This will help them function well as teachers and to be abreast with the fast changing trends of our educational system.

Training-related changes should result in improved job performance and other positive changes, for example, acquisition of new skills (Hill & Lent 2006, Satterfield & Hughes, 2007). Reassuringly, Arthur, Tubré, Paul and Edens, (2003) conducted a meta-analysis of 1152 effect sizes from 165 sources and ascertained that in comparison with no-training or pre-training states, training had an overall positive effect on job-related behaviors or performance (mean effect size or d = 0.62).

The research study is also relevant for it has looked at training programmes that will build teachers technical skills. The world has now become a computerised one. Today most organisational activities are performed using the computer. Some teachers are still naive when it comes to the use of the computer to perform tasks. Teachers need computer skills to be able to prepare their lessons and deliver them, process their student’s Continuous Assessment (CA) and even search through the internet for information. Benefits of training are also documented for technical skills. For example, Davis and Yi (2004) conducted two experiments with nearly 300 participants using behavior-modeling training and were able to improve computer skills substantially. Although behavior-modeling training has a rich history of success (e.g., Decker & Nathan 1985, Robertson 1990), a unique aspect of this research was that training was found to affect changes in worker skills through a change in trainees’ knowledge structures or mental models.

It is further relevant to consider other people who will undergo research work in similar areas of this research study. A successful research study will serve as a reference to other researchers to improve upon their work for better development.
This study will serve as a huge benefit to Ghana Education Service (GES) as an organisation and Non-Governmental Organisations (NGOs). The study was conducted with teachers in Chiana in KNWD as the research participants of the study. The participants have gone through a lot of activities which had to do with training for the development of their human resource capabilities. Also, some NGOs have special interest in education. NGOs like Campaign for Female Education (CAMFED) United Nations Educational Scientific and Cultural Organisation (UNESCO), United Nations International Children Education Fund (UNICEF) and others are into education. When the research study is completed successfully, it would be made available to these organisations and appropriate recommendations suggested to them to help get teachers in the KNWD abreast with time by organising in-service training programmes for them on regular basis.

This study seeks to edge teachers to take up training and development programmes in workshops, seminars and conferences. This will build their human resource capabilities. The study will further inform stakeholders in Ghana Education Service, interest groups and NGOs about the relevance of in-service training to teachers. The findings and recommendations of the study may be used by teachers, heads, NGOs and other interested groups in education and there will be a positive attitude towards in-service training and development.

1.5 **Limitations**

The study used questionnaire, interview guide and documents/records as data collection instruments. Data obtained from these instruments might not be entirely the true reflection of what really exist about in-service training in the district. This is because, the
instruments sought to elicit information about respondents’ opinion and understanding of
the issues raised and this sometimes might vary from the actual picture.

Secondly, the study was carried out in some selected schools in Chiana. Therefore,
any generalisations of the findings can only be made with caution.

However, having accepted these limitations, the findings of the study can still be
used to throw more light on aspects of teacher in-service training programmes in the GES.

1.6 Delimitations

The study was restricted to five selected basic schools in Chiana. This was due to a
number of factors. Chiana community is too wide and has a large number of schools and
population of teachers. All these teachers cannot be reached within the short period for this
study. This research study did not look at teachers’ general performance, but the effects of
in-service training programmes and how such programmes affect their teaching and
students’ learning.
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section looked at available related literature on the research study. The study brought to bear empirical issues that have to do with the issue under study, effects of in-service training and development programmes on basic school teachers in Chiana in the KNWD. The relevant literature came from publications like articles, journals, books, reports, newspapers, the internet and research works by other researchers. This was done to drive home the meaning of the main concept; in-training and how it helps develop teachers on the job especially teachers in the KNWD.

This part of the study has been divided into two, the theoretical framework and empirical review which has six thematic areas that answered the research questions posed. These areas include: Teacher education (preparation), definition of terms (training, development and in-service training), the concept ‘training and development’, relevance of in-training to teachers, training programmes for teachers, teacher in-service training and student academic performance.

2.2 Empirical Review

2.2.1 Teacher Education (Preparation)

Teacher preparation is a programme of professional course work that develops the skills needed for serving in the classroom and will lead to certification. This includes
Teacher preparation is a programme of professional course work (including directed teaching) which develops the skills needed for serving in the classroom (California State Polytechnic University, 2003). This includes course work in areas such as teaching methodologies, curriculum development, and classroom management.

There are many different views of what the knowledge base for pre-service teachers should be, based on research, there are some commonalities found in the kinds of experiences and knowledge pre-service teachers need to become effective teachers. Ball and Cohen (1999) define four major areas of learning for pre-service teachers, these authors emphasized that these areas are important in the preparation of teachers. The areas identified include:

1. Teachers need to know their subject matter in depth. Knowing subject matter and being able to use it is at the heart of teaching all students (Shulman, 1987). Schulman further explained that, this idea is pedagogical content knowledge, that is, understanding how to teach the subject matter in a variety of ways, because the teacher knows and understands the connections and meanings that exist within their subject, is the most important skill for an educator.

2. In conjunction with pedagogical content knowledge, a teacher needs to understand their audience, the students. This understanding goes beyond the notion of, “Well, I was a child once, therefore, I understand children.” Knowing that children learn
in a variety of ways, knowing how to engage children in the subject matter, knowing the depth at which students can grasp challenging concepts through critical thinking, is a critical skill for a teacher.

3. An expansion of understanding about children is also needed for a teacher to understand the diversity that exists within a classroom and how that diversity affects students’ learning and experiences. Thus, teachers can design learning experiences well suited to all students.

4. Finally, teachers need to expand their views of learning. How students learn and understanding the most effective ways for meeting the needs of student learning, as well as having a firm grasp of multiple ways to engage learners, is also a vital skill for effective educators.

According to Darling-Hammond, (2000) there are six features that make for a high quality teacher preparation programme. These are as follows:

5. Common, clear vision of good teaching that is apparent in all coursework and clinical experiences.

6. A curriculum grounded in substantial knowledge of child and adolescent development, learning theory, cognition, motivation, and subject matter pedagogy, taught in the context of practice;

7. Extended connected clinical experiences (at least 30 weeks) which are carefully chosen to support the ideas and practices presented in simultaneous, closely interwoven coursework.
8. Well-defined standards of practice and performance that are used to guide and evaluate coursework and clinical work.

9. Strong relationships, common knowledge, and shared beliefs among school- and university-based faculty.

10. Extensive use of case study methods, teacher research, performance assessments, and portfolio evaluation to ensure that learning is applied to real problems of practice that ensures authentic assessment.

According to Darling-Hammond (2000), effective teacher preparation should go beyond knowing subject matter, pedagogic and child development, he believes it should include research by teachers. As this would broaden the knowledge base of the teacher to be more effective in the classroom, consequently improving students’ academic performance.

Tom (1997) argued that the best way for teacher education programme to become and/or remain effective is to evaluate its current status, on an ongoing basis. He further states that due to the elaborate and varied nature of the aims and goals of education, teacher education should be structured to be responsive and dynamic. In the writer’s view, unless teacher educators continually renew their programmes through collective reconsideration of current practice, these programs will not be valid after some time.

2.2.2 Teacher Preparation in Ghana.

Teacher preparation started in Ghana in the 19th century, specifically in 1848 at the Akropong training college in the Eastern Region (Pecku, 1998). In view of the new
challenge and emerging issues confronting teacher education, it has undergone several reviews (MOE, 2007). In the most current reviewed teacher education policy document, areas reviewed include:

1. Access to teacher education and training

2. The curriculum

   3. Certification and licensing of teachers

   4. Administration in basic teacher education institutions


According to the Ministry of Education (MOEYS, 2004), the recruitment and admission of candidates are done from those qualified in terms of entry requirement. Furthermore, teacher education under the current policy document is considered a lifelong process and to this end the programmes in teacher education defines as pre-service and continuing in-service should be viewed as part of one process ((MOEYS, 2004)). Therefore, teacher education in the form of pre-service and in-service should be considered as a continuum. The overall teacher education programme structure consists of three main components, namely:

1. A three-year pre-service Diploma in Basic Education, the first two years of which shall be spent on the campuses of the college of education after which the trainees will be posted to schools to continue their studies, as they practice teaching by using distance learning methods. This is the IN-IN-OUT scheme.

2. A programme for continuing education of teachers to upgrade their knowledge and skills through short courses, seminars and workshops.
3. Programmes for serving teachers to upgrade their qualification. This comprises first, a two year in service programme to upgrade certificated teachers with Diploma qualification leading to a Bachelor of Education (B. ED) Degree (MOEYS, 2004).

The basic principle underlying the nature of the curriculum is to prepare teachers who are capable of facilitating learning of pupils (MOEYS, 2004). Thus, the curriculum shall be learner-cantered, in this case the learner being the basic school pupil. The curriculum in sum is to ensure that teacher trainees can achieve the competencies desired for effective teaching at the basic levels. The training of competent teachers is considered to be the most persistent and compelling need in education since no system of education can rise above the quality of its teachers. In other words, the quality of teachers in terms of their training and awareness will determine the quality of instructions and invariably the success of the programme (Oyewumi & Adediran, 2001).

2.2.3 Objectives of Teacher Education

Most professional programmes are structured to meet clearly set goals. Teaching as a profession, has a set of goals to achieve. For instance, Tamakloe (1997) stated that the objectives of teacher education can be put into three broad areas namely:

1. Cognitive development and acquisition of skills

2. The development and the ability to examine, identify educational and teaching problems and to solve them satisfactorily
3. And the production of mature teachers capable of contributing to the creation of significant and creative personal and inter-group relationship.

Pecku (1998) agreed to a large extent with Tamakloe (1997), but is of the view that teacher education must now move away from undue emphasis ‘on theory to pedagogy which transmits adequate teaching skills to enable teachers deal effectively with the real classroom experiences’ (p.69). In the view of Pecku (1998) and Tamakloe (1997), teacher education should be more practical than theory. However, for any form of training to succeed there is the need to strike a balance between theory and practice. Increasingly, traditional teacher education programmes in schools or colleges of education have been subjected to a number of strong criticisms (Pecku, 1998).

According to Mead (2007), in Education Commission of the States, the criticisms include:

1. Too many graduates are poorly equipped to teach.

2. Programmes focus too much on "soft" pedagogical knowledge at the expense of subject-matter depth knowledge.

3. Programmes fail to prepare graduates to teach to student performance standards.

4. Programmes do not provide adequate real-world, practical experience.

5. Programmes are not sufficiently responsive to the needs of non-traditional teacher candidates, especially minorities and mid-career adults.

Similarly, Goodlad (1990) states that a systematic study of teacher education left little doubt that major problems confront faculties of education and highlighted the need for
radical reform in teacher preparation. Tyson (1994) after a review of the problem in teacher education identified by different author, points out that these problem associated with teacher education have changed little over the last forty years, but that work done and the education that supports it will also be affected by the pace of change and by the emergence of additional players.

Within Ghana, Quaigrain (1999) argues that most beginning teachers are seen as woefully unprepared for the complex and demanding task of the classroom, pre-service teacher education has been regarded as pathetically weak and beginning teachers are found wanting (and desperate) in their initial experience. The key to quality education is the quality of the teacher and key to improving the teaching and learning processes in schools is the professional development of the teacher (Kankam, 1999). Kankam highlights the importance of the need for a lifelong educational process (training) that keeps pace with continuous changes taking place. With these he said will help teachers to deal with the changing conditions in schools and classroom situations to make school environment conducive for the pupil. In the view of Kankam, Teacher Education can no longer end with initial entry into the profession. Similarly, Wideen, (1987 p.13) argued that, ‘even the best of pre-service teacher education cannot equip one for lifelong standing. Whether one thinks in term of simply maintain existing programmes or introducing new ones, it is inconceivable to assume that our initial preparation, what-ever it may have been, was adequate. Continues growth and development have always been talked about in the past as necessary for teachers. But in the light of an expanded knowledge base and continuing nature of changes that is occurring in society, the need for continue professional growth among teachers takes on a critical new importance’.
Research has shown that teacher’s classroom practice is more than a function of the content of teacher education programme (Knowles, 1992; Wideen, Mayer-Smith & Moon, 1998). It is possible to argue that as a result of the need to address the apparent inadequacies in staff training, both at the initial and post qualification level that other alternatives and complimentary approaches such as in-service training, staff development and a broad range of training opportunities available within the service emerged as a means of keeping teachers updated about methodological issues and good practice (Wideen et al., 1998).

2.3 Definition and Meaning of key concepts

2.3.1 Training

Once the employee is selected and inducted, he or she must be trained to better fit into the job and the organisation. Training is a vital activity next only to staffing (DeCenzo & Robbins 1989).

DeCenzo and Robbins (1989:240) describe training as "a learning experience in that it seeks a relatively permanent change in an individual that will improve his or her ability to perform on the job", they define training "as a process of improving the knowledge, skill and attitude of employees to achieve organisational objectives. It is only through a systematic programme of training that necessary professional knowledge is imparted, skills developed and attitudes attuned to work.

Armstrong (2001) says that, training is systematic development of the knowledge, skills and attitudes required by an individual to perform adequately a given task or job.
The term ‘training’ indicates the process involved in improving the aptitudes, skills and abilities of the employees to perform specific jobs. Training helps in updating old talents and developing new ones. Successful candidates placed on the jobs need training to perform their duties effectively (Aswathappa, 2000).

For the purpose of this study, the researcher agrees with the definitions by the scholars. This is because; the study examines the effects of training programmes on teachers’ development and job performance. When teachers undergo training on the job they will gain knowledge, develop skills and abilities and that will help them perform their job effectively.

2.3.2 In-Service Training: Concept and Meaning of In-Service Training

Teaching is a dynamic activity. As society and human behaviour undergo changes so must new ideas and methods constantly evolve to respond to the complex nature, needs and responses of students and equip them for their responsibilities and, hence in-service training for teachers is very necessary (OECD) (2000).

The terms in-service training and professional development are often used interchangeably, but have slightly different meanings. According to the Organisation for Economic Cooperation and Development (OECD) (2000), professional development signifies any activity that develops an individual’s skills, knowledge, expertise and other characteristics as a teacher. These include personal study and reflection as well as formal courses. In-service education and training refers more specifically to identifiable learning activities in which practicing teachers participate. The widespread use of the term
professional development when referring to training activities reflects the fact that most teachers see themselves as members of a profession. Like all members of professions, teachers need to be involved in a process of learning and reflection to improve their professional practice (Aitken, 2000).

2.3.3 **Definitions of In-Service Training**

In-service training is the process of acquiring specific skills to perform a job better (Jucious, 1963). On the other hand, Dahama, (1979) was of the view that in-service training helps people to become qualified and proficient in doing their jobs. Usually an organisation facilitates the employees' learning through in-service training so that their modified behaviour contributes to the attainment of the organisation's goals and objectives. Van Dorsal (1962) defined in-service training as the process of teaching, informing, or educating people so that:

1. They may become as well qualified as possible to do their job, and,
2. They become qualified to perform in positions of greater difficulty and responsibility.

In-service training is a process of staff development for the purpose of improving the performance of an incumbent holding a position with assigned job responsibilities. It promotes the professional growth of individuals. "It is a programme designed to strengthen the competencies of staff while they are on the job" (Malone, 1984:209). This writer further explains that In-service training is a problem-centred, learner-oriented, and time-bound series of activities which provide the opportunity to develop a sense of purpose, broaden perception of the clientele.
Farrant (1982) defines In-service Education as a lifelong process in which the teacher is constantly learning and adapting to new challenges in his/her job. Much of this training, according to him, is self-directed and is carried out by reading books and articles on education, by discussing with colleagues and supervisor’s matters concerning teaching by attending courses and conferences on education.

According to Jarvis (1990), In-service education is continuing education given to employees during the course of their working-lives; the venue to him does not matter. The most important thing in in-service training is that it is normally conducted by employing agencies within the organisation itself without recourse to formal education.

Another definition published in a UNESCO (1981) document states that “In-service training is training designed for teachers who are already in professional practice and which they receive in the context of or during periods of varying length when their normal duties are suspended” (p.1).

Morrant (1981) said that, in service is taken to include those activities and courses in which a serving teacher may participate for the purpose of extending his professional knowledge, interest or skills. Preparation for a degree, diploma or other qualification subsequent to initial training is included within this definition (p.97).

Morrant states that there is little doubt that there is a distinction between education and training, though the difference is not important. Training is concerned with the acquisition of skills and techniques using standardised procedures and sequences. In contrast, in-service education is bound up with the motion of bringing about teacher’s professional, academic and personal development through the provision of whole series of
study experiences and activities of which training should be related as but one aspect. He continues that, it is probably safer to employ the phrase, “In-service education” which by implication is inclusive of its training.

In the same vein, Flippo, (1971) differentiated between education and training, locating these at the two ends of a continuum of personnel development ranging from a general education to specific training. While training is concerned with those activities which are designed to improve human performance on the job that employees are at present doing or are being hired to do, education is concerned with increasing general knowledge and understanding of the total environment. Education is the development of the human mind, and it increases the powers of observation, analysis, integration, understanding, decision making, and adjustment to new situations, and increase capacity to gain knowledge and mastery of techniques. Education or training as the case may be will be used interchangeably; Flippo argues these two may not be the same as clarified.

From the definitions above, in-service education and training is intended to support and assist the professional development that teachers ought to experience throughout their working lives. In-service in whatever form could be said to have an ultimate goal of making the worker, whether trained or untrained a better person who should perform better than before.

2.3.4 Development

According to Masadeh (2012), development is a long-term process designed to enhance potential and effectiveness. It is also defined as the growth or realisation of a
person’s ability, through learning, often from planned study and experience. Development can encompass a wide range of activities, including coaching and more formal educational commitments and experiences, and is generally used to encompass a wider scope than ‘learning’ or ‘training’ which may, in fact, be included in the concept of development (Gilmore & Williams, 2007) in Chartered Institute of Personnel and Development (CIPD) 2007 document.

Armstrong (2001) says development is any learning activity, directed towards future needs rather than present needs, and which is concerned more with career growth than immediate performance. Malhotra and Schuler (2005) viewed that, development means preparing an employee for a future, but fairly well-defined job at a higher level, but training supplies the skills, knowledge, and attitudes needed by individuals or groups to improve their abilities to perform their present jobs. Development is part of human resource management that describes the organisation strategy for managing the process. Outcomes of development may be long lasting but may diminish over time (Malhotra & Schuler, 2005).

2.3.5 **Training and Development**

Training has been defined in various ways, including the following: A planned process to modify attitude, knowledge or skill behaviour through a learning experience to achieve effective performance in any activity or range of activities. Its purpose in the work situation is to develop the abilities of the individual and to satisfy current and future manpower needs of the organisation’ (Manpower Service, 1981: 62).
Employee Development Programmes are designed to meet specific objectives, which contribute to both employee and organisational effectiveness (Rao & Rao, 2009). There are several steps in the process of management development. These include reviewing organisational objectives, evaluating the organisation’s current management resources, determining individual needs, designing and implementing development programmes and evaluating the effectiveness of these programmes and measuring the impact of training on participant’s quality of work life (Rao & Rao, 2009). In a simple way, it can be denoted as per the following formula.


Though the terms, "training and "development" are sometimes used synonymously, they have different meanings and scopes. Training is a short term process utilising a systematic and organised procedure by which the operative employees acquire the technical knowledge and skill for doing a specific job (Armstrong, 2001). Armstrong further referred to training and development as a technical and mechanical operations. It is designed for non-managers for doing a specific job, to meet the present need. The initiative for training comes from the management.

Development, on the other hand, is a long term educational process utilising a systematic and organised procedure by which managerial personnel get conceptual and theoretical knowledge (Armstrong, 2001). It is designed for the overall development of managers to meet their long term requirements. The initiative for development comes from the individual himself (Flippo, 1971).
Wills (1994) argues against such a definition, both because attitudes are notoriously difficult to quantify, and because training alone, he argues, in European Scientific Journal May edition vol. 8, insufficient to bring about major long-term changes in attitude. Instead, he defines training as ‘the transfer of defined and measurable knowledge or skills’. Hare, McLeod and King (1996: 25) state that training is ‘any activity or course, either formal or informal (e.g. on-the-job) which has helped you to acquire the knowledge and skills to do your job.’ Ideally, training is best supplemented with practical, hands-on experience (Hughey & Mussnug, 1997). As Overman (1994: 62) observes, ‘what people hear they forget, what they see they remember, what they understand is what they put hands on’. Likewise, (Hughey & Mussnug, 1997: 53) note that ‘most employees simply do not learn very well when they are ‘talked to’. They need to be more actively involved in the learning experience.’ Education, on the other hand, is usually more broadly defined as a more general, less specialised or hands-on approach to enhancing knowledge. The Manpower Services Commission (1981), which was superseded by the now-defunct Training Commission (U.K.), defined education as an activity that aims at developing the knowledge, skills, moral values and understanding required in all aspects of life rather than knowledge and skill relating to only a limited field of activity. According to Quatey (1970), training improves a person’s skill at a task, helps in social, intellectual and mental development of an employee, which is very essential in facilitating not only the level of productivity but also the development of personnel in any organization. Similarly, Yoder (1970) believes that, training and development in today’s employment setting is far more appropriate than training alone since human resources can exert their full potentials only when the learning process goes for beyond the simple routine. Hesseling (1971) describes...
training as a sequence of experiences or opportunities designed to modify behaviour in order to attain a stated objective.

Kane (1986) states that if the training and development function is to be effective in the future, it will need to move beyond its concern with techniques and traditional roles. He describes the strategic approaches that the organisation can take to training and development, and suggests that the choice of approach should be based on an analysis of the organisation’s needs, management and staff attitudes and beliefs, and the level of resources that can be committed. This more strategic viewpoint should be of use in assessing current efforts as well as when planning for the future.

Commenting on the influences of training, Noe and Schmitt (1986) think that motivational and environmental influences of training effectiveness have received little attention. He explained further that most of the training activities and the influences of trainees’ characteristics on training effectiveness have focused on the level of ability necessary to learn programme content.

This analysis integrates important motivational and situational factors from organisational behaviour theory and research into a model which describes how trainees' attributes and attitudes may influence the effectiveness of training. Adeniyi (1995) also asserts that, staff training and development is a work activity that can make a very significant contribution to the overall effectiveness and profitability of an organisation. Training and development aim at developing competences such as technical, human, conceptual and managerial for the furtherance of individual and organisational growth (Oribabor, 2000; Olaniyan & Ojo, 2008).
According to Seyler, Holton, Bates, Burnett and Carvalh (1998), the continuous changing scenario of business world, training is an effective measure used by employers to supplement employees’ knowledge, skills and behaviour. The process of training and development is a continuous one. The need to perform one’s job efficiently and the need to know how to lead others are sufficient reasons for training and development and the desire to meet organisations objectives of higher productivity, makes it absolutely compulsory (Akinpeju, 1999; Isyaku, 2000). According to Tan, Hall and Boyce (2003), companies are making huge investment on training programmes for their employees to prepare them for future needs. The researchers and practitioners have constantly emphasised on the importance of training due to its role and investment.

Stavrou, Brewster and Charalambous (2004) are of the view that, the main goals of training are to provide, obtain and improve the necessary skills in order to help organisations achieve their goals and create competitive advantage by adding value to their key resources – i.e. managers. Also, training objectives tell the trainee what is expected out of him at the end of the training programme. Training objectives are of great significance from a number of stakeholder perspectives; Trainer, trainee, designer, evaluator (Karthik, 2012). Kalaiselvan and Naachimuthu (2011) proposed strategic (Lower training cost and higher business benefits), payback (Higher training cost and higher business benefits), think (Lower training cost and lower business benefits) and drop (Higher training cost and higher business benefits) as training cost and business benefits.

Commenting on the usefulness of training programmes, de Zarobe and Lasagabaster (2010) are of the view that the value of training programmes is possible only when the trainee is able to practice the theoretical aspects learned in training programme
in actual work environment. They highlighted the use of role playing, cases, simulation, mediated exercises, and computer based learning to provide exposure to a current and relevant body of knowledge and real world situations.

2.3.5 **Effects of In-Service Training on Employees (Teachers)**

Human resource is very important and the backbone of every organisation and it is also the main resource of the organization. Organisations invest huge amounts on the human resource capital because the performance of human resource will ultimately increase the performance of the organization (Armstrong, 2001). Per Armstrong’s assertion, GES as a big organisation with a large number of teachers need to develop them through training especially those in service. But sometimes this is not the case, likely because of the perceived huge cost involved.

According to Aitken (2000), in-service teacher training has a central role to play in developing teachers' skills and capabilities. The relationship between in-service training and students’ achievement is evidence showing, that effective in-service training can enhance teacher performance and this in turn will bring about improvements in students’ achievement aims at imparting the fundamentals of teachers’ education with a view to qualify the trainee for the immediate employment in a school or to provide the basis for ‘Specialization’ in different subjects. Teachers cannot be expected to do all this on their own. They need support and a certain environment for that purpose (Bansal, 2009).

Therefore, an ideal training shall become part of a company-wide strategy and it must be linked to business goals and organisational performance (Tyson and Fell, 1986; Hendry & Pettigrew, 1990). Also, the following scholars as cited in global journals
discussed the relevance of training to both employee and organisational performance. Performance is a major multidimensional construct aimed to achieve results and has a strong link to strategic goals of an organisation (Mwita, 2000).

He further explained that performance is the key element to achieve the goals of the organisation so to performance increases the effectiveness and efficiency of the organisation which is helpful for the achievement of the organisational goals. But the question arises that how an employee can work more effectively and efficiently to increase the growth and the productivity of an organisation (Abbas, & Yaqoob, 2009). There are many factors which improves the work of the employee such as flexible scheduling, training etc. (Abbas and Yaqoob, 2009).

It is very necessary for the organization to design the training very carefully (Armstrong 2000), the design of the training should be according to the needs of the employees (Ginsberg, 1997). Organisations that develop a good training according to the needs of the employees as well as to the organization, always get good results (Partlow, 1996; Tihanyi., Ellstrand, Daily & Dalton, 2000; Boudreau, Boswell & Judge, 2001). Training design plays a very vital role in the employee as well as organisational performance. A bad training design is nothing but the loss of time and money (Tsaur & Lin, 2004). On the job training helps employees to get the knowledge of their job in a better way (Deming, 1982).

It is good that organisations give their employees on the job training so that their employees learnt in a practical way (Baum & Devine, 2007). Delivery style is a very important part of Training and Development (Carlos & Braga, 1995). Employees are very conscious about the delivery style (Armstrong, 2000). If someone is not delivering the
training in an impressive style and he is not capturing the attention of the audience it means he is wasting the time (Griffin & Neal, 2000). It is very necessary for a trainer to engage the audience during the training session (Seaman & Eves, 2006).

Delivery style means so much in the Training and Development process.

It is very difficult for an employee to perform well at the job place without any pre-training (Garavan, 1997). Trained employees perform well as compared to untrained employees (Partlow, 1996; Tihanyi, Ellstrand, Daily & Dalton 2000; Boudreau et al, 2001). It is very necessary for any organisation to give its employees training to get overall goals of the organisation in a better way (Flynn, Schroeder & Sakakibara, 1995; Kaynak, 2003). Training and development increase the overall performance of the organization (Shepard & Carlson, 2003). Although it is costly to give training to the employees but in the long run it gives back more than it took (Flynn, et al, 1995; Kaynak, 2003). Every organisation should develop its employees according to the need of that time so that they could compete with their competitors (Carlos & Braga, 1995).

Training is not a luxury but a necessity. It is a kind of investment. Flippo (1971:197) opines that "no organisation has a choice of whether to train or not; the only choice is that of method. No one is a perfect fit at the time of hiring. Training is necessary to bridge the gap between what they are and what the job demands. In the absence of a systematic and planned training, employees learn their job by trial and error method or by observation (Flippo, 1971). Flippo further indicated that, these methods consume more time and energy, thereby increasing the cost of training. Even then, there is no guarantee that the employee will learn the best method of doing the job. In order to have effective training at reduced cost, planned training is a must.
According to Taimni (1976), existing employees also require orientation training to avoid becoming obsolescent; to make use of new technology; to operate new machinery; to adjust with the new environment and to take up new jobs and responsibilities.

Training not only increases productivity through increase in the knowledge and skill of the teachers, but also enhances his self-confidence, brings respect to the employee from others and reduces the rate of errors (Taimni, 1976).

Taimni (1976:203) explains the objects of training of cooperative employees. "The purpose of cooperative employees' training and development is to make available professionally competent managerial and other personnel with appropriate knowledge and skills and abilities to a cooperative system, so that it can function in an effective manner.

Teachers as classroom managers need to be trained; this is relevant because training and development programmes will equip them with appropriate knowledge, skills and abilities to manage their classrooms with great competence.

2.3.6. In-Service Training Programmes for Teachers

According to Malone (1984), in-service training can be broadly classified into five types, which are; induction or orientation training, foundation training, on-the-job training, refresher or maintenance training, and career development training. All these training types are very necessary for the proper development of staff throughout their service life.

For the purpose of this study which is concentrating on teachers already in the classroom, it would look at three of the training types outlined by Malone (1984).
2.2.6.1 **Career or Development Training**

This type of in-service training is designed to upgrade the knowledge, skills, and ability of employees to help them assume greater responsibility in higher positions. The training is arranged departmentally for successful workers, at all levels. Training is a circular process that begins with needs identification and after a number of steps ends with evaluation of the training activity. A change or deficiency in any step of the training process affects the whole system, and therefore it is important for a trainer to have a clear understanding about all phases and steps of the training process. In the broadest view, there are three phases of a training process: planning, implementation, and evaluation.

Adentwi (2002) citing Greenland, surveyed in-service training programmes for teachers in English speaking African countries and found out four main types of in-service training programmes. The first type is in-service training programmes for unqualified teachers. The second type is in-service training programme for upgraders. This was designed to move pupil-teachers who have been given some form of training to higher grades. A third type was in-service training for new roles. It is intended for already qualified teachers retrained to serve as trainer of trainers or given specialised areas of training in areas of school life. The last type is curriculum related in-service training designed to introduce teachers to innovations taking place in the curriculum of schools or to help implement educational reforms.

Albert (1977) further says that generally speaking, the system – wide in-service programme is for individual information which ranges from general cultural growth to specific how-to-do-it in a teaching situation. In most successful in-service programmes, it
was found that by providing teachers what they want brings a security, which will allow a base for these changes.

Adentwi (2002) says that in-service education and training programmes are usually supplementary to the initial training that the teacher has received at college. This according to Adentwi is to keep the teacher abreast with new ideas, new ways of doing things and changes taking place on the educational front.

From the definitions, in-service education and training is intended to support and assist the professional development that teachers ought to experience throughout their working lives. It includes virtually any experience to which teacher voluntarily or involuntarily may be exposed to since all experience is good experience.

Advocating school based in-service education and training, Kankam, (1999) believes that the planning, implementation and evaluation when done at the school level will provide an effective and efficient means for teachers to learn. He comments that, if professional developments were school–focused, then the process of identifying needs would be easier and in-service programmes could be more closely matched to school needs and barriers to change would disappear as teachers would be dynamic. He further states that school-based in-service training encourages commitment on the part of the teacher. School-based in-service will link activities directly to teacher’s needs as well as enhance pupils learning outcomes. He concludes that school-focused in-service training will lead to staff development activities in schools which will make teachers adopt positive attitude to the teaching profession as they will now have the opportunity to initiate their own activities to suit school situations, thereby rending in-service training job-oriented. Black, Harvey, Hayden and Thompson, (2004) concurred with Kankam’s view on the
choice of school based in-service education and training explaining that from the cost point of view, it is efficient for the trainer/lecturers/workshops to be brought to the school. The programme is then available to all the staff and may be held at a time convenient to them. This allows for the content of the course to be in context by both the resource person and the teacher. Black et al emphasized that school base staff development programmes will focus on the teachers’ interest and needs.

2.3.6.2 On-The-Job Training

This is regularly scheduled training, such as fortnightly training provided by the superior officer or the subject-matter specialists to the subordinate staff (Arun, 2012). This training is generally a problem or technology oriented and may include formal presentations, informal discussion, and opportunities to try out new skills and knowledge in the field (Arun, 2012). The superior officer, administrator, or subject-matter specialist of each department must play a role in providing on-the-job training to the staff while conducting day-to-day normal activities.

2.3.6.3 Maintenance or Refresher Training

According to Van Dersal (1962) this training is offered to update and maintain the specialised subject-matter knowledge of the teacher. Also, refresher training keeps the specialists, administrators, subject-matter officers, extension supervisors, and frontline workers updated and enables them to add to the knowledge and skills they have already. Maintenance or refresher training usually deals with new information and new methods, as well as review of older materials. This type of training is needed both to keep employees
at the peak of their production and to prevent them from getting into a rut (Van Dersal, 1962).

Some of the training activities and programmes (content) under the general training programmes for teachers are discussed below.

2.3.6.4 School Based Assessment

According to Organisation for Economic Co-operation and Development (OECD) (2005), School-based assessment (SBA) is a form of formative assessment involving feedbacks and appraisals to students based on their school-based projects; it enables students to identify and improve on their areas of weakness and teachers to adjust their teaching strategies.

School-based assessment (SBA) is an assessment which is embedded in the teaching and learning process. It has a number of important characteristics which distinguish it from other forms of assessment (OECD) (2005).

1. It involves the teacher from the beginning to the end: from planning the assessment programme, to identifying and/or developing appropriate assessment tasks right through to making the assessment judgments.

2. It allows for the collection of a number of samples of student performance over a period of time.

3. It can be adapted and modified by the teacher to match the teaching and learning goals of the particular class and students being assessed.
4. It is carried out in ordinary classrooms.

5. It is conducted by the students’ own teacher.

6. It involves students more actively in the assessment process, especially if self and/or peer assessment is used in conjunction with teacher assessment.

7. It allows the teacher to give immediate and constructive feedback to students.

8. It stimulates continuous evaluation and adjustment of the teaching and learning programme.

9. It complements other forms of assessment, including external examinations.

In many educational systems, such as those of Australia, Canada, the UK and Finland, SBA is used extensively or exclusively to provide information about student achievement (Davison, 2007). In Hong Kong, SBA has been a part of the public examinations system since 1978, when it was first introduced into the Hong Kong ‘A’ Level Examination (HKALE), examination for Chemistry so that there could be an assessment of laboratory work. By 2006, school based assessment had been implemented in 13 ‘A’ Level subjects and 13 Certificate of Education subjects, including English language. SBA became a core component of the Hong Kong Certificate of Education Examination (HKCEE) in English Language in 2005-07, and was then revised and extended for the Hong Kong Diploma of Secondary Education (HKDSE) (Davison, 2007). SBA will be progressively incorporated into all 24 subjects.

Assessment is a powerful educational tool. It is used to monitor the quality of the school system, evaluate education policies and programmes, make important instructional
and placement decisions about students, and certify students’ learning achievement. In the words of MacGaw (2006), as cited by Newhouse (2012), assessment helps students to see their own progress, enables teachers to monitor their students and themselves and (assessment) expresses what the educational systems consider to be important. He cautioned however that, assessment can be counter-productive when stakes are high; driving attention to only the narrow and measurable and ignoring the important but unmeasurable. These shortcomings underlie the importance which member countries of the West African Examinations Council (WAEC) attach to school-based assessment (continuous assessment) which, it is believed, addresses these weaknesses and risks in assessment (Newhouse, 2012).

School-based assessment is a classroom strategy implemented by teachers to ascertain the knowledge, understanding and skills attained by pupils (Hallinger, 2003) in Educational Quarterly.

In a study conducted by (Bello & Tijani, 2003), which tried to ascertain the level of knowledge of teachers in continuous assessment(CA) and its use, their views along those of the administrators’ were sought on different key issues relating to CA. The results were presented in sub-sections.

Knowledge in Assessment

Under knowledge the following areas were looked at;

Reasons for Conducting Class Tests

Use of Various Assessment Types/Areas of Assessment
Training in Test Development

(A) Pre-Service and In-Service Training in Assessment

The teachers were required to indicate whether they had had any form of training in assessment at the pre-service training or during service. With this they realised that, Majority of teachers (75% in Ghana, 56% in Nigeria and 76% in Gambia) had had training in assessment during their pre-service years, while 44.5%, 30% and 45.2% in Ghana, Nigeria and Gambia respectively, stated that they had participated in in-service training programmes on assessment during service (Bello & Tijani, 2003). Such in-service training programmes were however alleged to have had very short duration, ranging from one hour to one week. Only a handful of respondents (9.6% of teachers in Ghana) indicated training periods exceeding one week. The in-service training programmes were organised either by the various Ministries of Education, the Ghana Education Service in Ghana and the WAEC (Bello & Tijani, 2003).

From the definitions of SBA and the study conducted by Bello and Tijani (2003), it is realised that SBA is an integral part of the teacher and forms wide percentage of the teachers’ role in academic performance. What do teachers do in the assessment of their students? Assessment of a child starts from the day the child enters school and that forms part of the child’s entire academic performance (Bello & Tijani, 2003).
From the study, less training is offered teachers when it comes to SBA in the three West African countries. The story is not different in the KNWD. School-Based assessment is not just writing a class test or giving students’ assignments, but entails a lot as indicated in the study. The training programmes that were organized were done within a short duration, ranging from one day to one week. Teachers need to be well trained to be conversant with SBA and use it effectively for students’ performance in class is very important.

2.3.6.5 Classroom Management

This is a term used by teachers to describe the process of ensuring that classroom lessons run smoothly despite disruptive behaviour by students. The term may also imply the prevention of disruptive behaviour.

Classroom management refers to the wide variety of skills and techniques that teachers use to keep students organised, orderly, focused, attentive, on task, and academically productive during a class. When classroom-management strategies are executed effectively, teachers minimise the behaviors that impede learning for both individual students and groups of students, while maximising the behaviors that facilitate or enhance learning. Generally speaking, effective teachers tend to display strong classroom-management skills, while the hallmark of the inexperienced or less effective teacher is a disorderly classroom filled with students who are not working or paying attention (Abbott, 2014).
Several scholars have diverse opinions about classroom management; all of the things that a teacher does to organise students, space, time, and materials so that student learning can take place (Ogden, Wong & Wong, 2001). A set of techniques and skills that allow a teacher to control students effectively in order to create a positive learning environment for all students (Sternberg & Williams, 2010).

According to Sadovink, Cookson and Semel (2006), it is important for every individual to know what works for him in the classroom, in order to accomplish all is set out to be accomplished. As an educator, it is believed that all problems have a solution and there is often a way; and it should be a creative way, to find it. The philosophy of pragmatism comes closely in line with that believe. Sadovink et al (2006) believed that learning happens all the time; in the classroom, students gain knowledge when they ask questions, solve problems, and participate in education. It is believed by them that learning should be hands on and students should be able to experience it with all senses. The philosophy is rooted in from the field of education; Family and Consumer Science. Students in the classroom should not only listen to what is taught, but they should also have the opportunity to physically perform it through the hands on activities the course offer (Sadovink et al, 2006).

Also, instead of hearing a lecture on a subject they get to participate in the learning experience of that subject, every teacher should believe that is the best way for students to truly learn, because all students have the potential to learn. Students with special needs in particular, will be the most beneficial to their learning experience (Sadovink et al, 2006). With this kind of comfort with students they will be successful at both the Middle School and High School levels. It is further indicated that, the teacher should be there to lead the
classroom in learning that involve the students, and promote question asking as well as creative experimentation.

All learners, no matter the age, or ability level, should engage in the classroom activities that will take place, and at the same time, be provoked by the teacher, and each other to ask questions and gain further knowledge and understanding (Sadovink et al, 2006).

Sternberg and Williams (2010) indicated that, all educators have certain teaching skills that they are proud of. One of the skills found to be admirable in other teachers is the talent to overlap. Overlapping is the ability to supervise several activities at once; being able to teach, discipline and time a lesson all at once for example (Sternberg & Williams, 2010). As a teacher you should be willing to work towards mastering the art of overlapping in the classroom. Teachers should always be working hard to meet their learner’s needs, even if that means doing more than a couple of different things at one time (Sternberg & Williams, 2010). Sternberg and Williams (2010) believe that discipline should take place in the classroom first. Students are responsible at every age, and it is the duty of the teacher to guide them. Discipline, should not be confused with punishment; it should instead look at more like instructional guidance (Sternberg and Williams, 2010).

Chamberlain and Cummings (2002) indicate that students should realize that their misbehavior is having an effect on other learners in the classroom and that this is unacceptable. Learning environment should be comfortable for all learners. Using gentle guidance will ensure this level of comfort in the classroom with respect to school policy. Also, the best way to engage learners is to set expectations and know the students can meet them, no matter what grade they are in. Finding what students need may be simpler...
in a High School setting because the students may be able to give more ideas about what they need. In contrast the teacher has to be more prone to asking what the students need in a Middle School setting (Chamberlain and Cummings, 2002).

According to Chamberlain and Cummings (2002), the key thing is to ensure the classroom students meet the teacher’s expectations and that is Classroom Management. The teacher’s classroom management should reflect a set of techniques and skills that will allow a teacher to control students effectively so as to create a positive learning environment for all of them. Sternberg and Williams (2010) said that good classroom management will attribute to a positive atmosphere of learning. Deciding what is most important to teach students has always been the concern. In order to determine what is worth the student’s time and what would be worthwhile for them to learn is number one goal (Sternberg and Williams, 2010). As students are ever changing, the teacher’s curriculum should be as well. Taking a step back to look at how student’s needs change, and developing the curriculum around those needs. The teacher’s philosophy of teaching should be one that stands behind and hope to mold and develop further as he goes along (Sternberg and Williams, 2010). In sum the teacher hopes to create a learning environment that allows students to engage in a manner that follows his philosophy on teaching.

A 1997 poll revealed that 58 percent of PK-12 teachers said that behavior that disrupted instruction occurred “most of the time or fairly often (Langdon, 1997).

A 2003 survey of teachers conducted by Farkas, Johnson & Duffett (2003) found that nearly half indicated that quite a large number of new teachers need a lot more training on effective ways to handle students who are discipline problems. In 2012, over 40% of surveyed new teachers reported feeling either not at all prepared or only somewhat
prepared to handle a range of classroom management or discipline situations (Coggshall, Bivona & Reschly, 2012).

In a 2013 survey, classroom management was the top problem identified by Bishop & Verleger (2013). In this report, they delve deeper into the practices of actual programmes to better understand the specifics of preparation in classroom management. The findings will shed light on why too many new teachers, by their own account or that of their supervisors, are entering schools ill-equipped to move beyond behavioral. From the various articles and scholar’s views, classroom management entails a lot. Classroom management should not be seen as punishing students to comport themselves in the classroom for learning to take place. Discipline is usually seen by most of us as punishment. Discipline is an integral part of managing a classroom, when teachers are able to comport themselves, as well as comporting and comforting students to be calm and ever ready for class work to go on, then there is discipline. Classroom management should be seen as a strategic process which aims at ensuring that classroom lessons are taken smoothly regardless of disruptive activities by students. Classroom management also involves the teacher carefully selecting teaching methods and strategies to arouse students learning during lessons (The New Teacher Project. (2013). According to Ogden, Wong and Wong (2001), classroom management involves all of the things that a teacher does to organise students, space, time, and materials so that student learning can take place.

Ogden, Wong and Wong (2001) indicated that, classroom management can be as a very important area, hence whether trained teacher or untrained teacher, both groups need continual training on classroom management. It is further indicated that, an unmanaged classroom does not see effective teaching and learning.
2.3.6.6 Teaching Methods

Teaching method refers to the general principles, pedagogy and management strategies adopted for classroom setting, subject area and school mission statement. Cruikshank, Bainer and Metcalf (1999) outlined so many methods of teaching and learning. Among these methods are;

Simulation game - Students play a specially designed, competitive game that mirrors some aspect of life. For example, they might play the Ghetto Game to find out about the problems and pressures that ghetto dwellers face and to sense how difficult it is to improve one’s lot in life. Another commercially available simulation game is Gold Rush (life and adventure in a frontier mining camp). Many simulation games, such as Sim City, are automated.

Role playing- Learners take on the role of another person or character to see what it would be like to be that person or character. Thus, a student could play the role of an imaginary student no one likes or a news reporter.

Problem- A general teaching method and organisation of curriculum and knowledge where students work purposefully toward a solution, synthesis or cause. Often called problem-based learning.

Field observation, fieldwork, field trip- Observations made or work carried on in a natural setting. Students visit the local museum of natural history to see displays about dinosaurs, or they begin and operate a small business to learn about production and marketing.
Discovery or inquiry- Discovery learning is used when students are encouraged to derive their own understanding or meaning for something. For example, Students are asked to find out what insulation acts as the best barrier for cold or hot environments. Experiments that are not teacher demonstrations are part of discovery learning.

Demonstration- A teaching method based predominantly on the modeling of knowledge and skills. A form of presentation whereby the teacher or learners show how something works or operates, or how something is done. For example, a teacher could demonstrate how to use a thesaurus, how to operate a power drill, how to scan an image, or what happens when oil is spilled on water as when an oil tanker leaks. Following that, students practice under teacher supervision. Finally, independent practice is done to the point of proficiency.

Case study- A detailed analysis is made of some specific, usually compelling event or series of related events so that learners will better understand its nature and what might be done about it. For example, learners in a technology lab might investigate the wear and tear of skate boarding on public works. Another class might look at cases of digital technologies and privacy.

Activity- a general teaching method (e.g., problem solving, design challenge, field trips, and role playing) based on planned, purposeful involvement of students.

Diego (2013) said education, like almost every other area of our society, has evolved in leaps and bounds in recent years. Traditional teaching techniques, based mainly on a teacher explaining a topic and students taking notes, may still be useful on occasion, but
education today revolves more around encouraging the student to awaken their curiosity and desire to learn.

A number of different teaching techniques have emerged due to this change in education. Many of these teaching techniques are not actually new however! The use of technology in the classroom has simply given education a new lease of life allowing us to approach old ideas in new ways. He suggested six methods or teaching techniques on examtime Blog that one should know.

**Flipped Classroom (Inverting your class):**

The Flipped Classroom Model basically involves encouraging students to prepare for the lesson before class. Thus, the class becomes a dynamic environment in which students elaborate on what they have already studied. Students prepare a topic at home so that the class the next day can be devoted to answering any questions they have about the topic. This allows students to go beyond their normal boundaries and explore their natural curiosity.

**Design Thinking (Case Method):**

This technique is based on resolving real-life cases through group analysis, brainstorming, innovation and creative ideas. Although “Design Thinking” is a structured method, in practice it can be quite messy as some cases may have no possible solution.

However, the Case Method prepares students for the real world and arouses their curiosity, analytical skills and creativity.
Long (2012) an advocate of Design Thinking, created The Design Thinking School as part of his “No Tosh” consulting group. No Tosh harnesses the creative practices of some of the best media and tech companies in the world to coach educator’s methods to implement the concept.

**Self-learning:**

Curiosity is the main driver of learning. As a basic principle of learning, it makes little sense to force students to memorize large reams of text that they will either begrudgingly recall or instantly forget. The key is to let students focus on exploring an area which interests them and learn about it for themselves (Diego, 2013).

A perfect example of a teaching technique based on self-learning is outlined by Mitra (2003) as cited by Fardoun and Alghazzawi (2014) at a workshop on interaction Design in Educational Environments. In a series of experiments in New Delhi, South Africa and Italy, the educational researcher Mitra (2003) gave children self-supervised access to the web. The results obtained could revolutionise how we think about teaching. The children, who until then did not even know what the internet was, were capable of training themselves in multiple subjects with unexpected ease.

A common technique for exploring self-learning is the use of Mind Maps. Teachers can create a central node on a Mind Map and allow students the freedom to expand and develop ideas. For example, if the focus is the Human Body, some students may create Mind Maps on the organs, Bones or Diseases that affect the human body. Later the students would be evaluated according to the Mind Maps they have created and could
collaborate with each other to improve each other’s Mind Maps and come to a more comprehensive understanding of the Human Body.

**Gamification:**

Learning through the use of games is a method that has already been explored by some teachers, especially in elementary and pre-school education. By using games, students learn without even realising. Therefore, learning through play or ‘gamification’ is a learning technique that can be very effective at any age. It is also a very useful technique to keep students motivated.

The teacher should design projects that are appropriate for their students, taking into account their age and knowledge, while making them attractive enough to provide extra motivation. One idea may be to encourage students to create quizzes online on a certain topic. Students can challenge their peers to test themselves and see who gets a higher score. In this way, students can enjoy the competition with peers while also having fun and learning.

**Social Media:**

A variant of the previous section is to utilise social media in the classroom. Students today are always connected to their social network and so will need little motivation to get them engaged with social media in the classroom. The ways you can use this method of teaching are quite varied as there are hundreds of social networks and possibilities. A good example is the initiative carried out by the Brazilian Academy of Languages "Red Ballon", which encouraged students to review the tweets of their favorite artists and
correct grammatical errors that they committed in an effort to improve their English language skills Diego (2013).

**Free Online Learning Tools:**

There is an array of free online learning tools available which teachers can use to encourage engagement participation and a sense of fun into the classroom. Teachers can create an interactive and dynamic classroom environment using, for example, online quizzes to test student’s knowledge. He suggested that, students should be encouraged to sign up to ExamTime so they can create a Group and invite each student to become a member. This means you can share study resources directly with each student online and even apply the Flipped Classroom Model to your method of teaching.

The methods and techniques of teaching and learning by the scholars, Cruikshank et al (1999) and Diego (2013) have some technicalities involved and teachers may face challenges using them. That is if teachers even know some of the methods put up. Teachers therefore need to be trained on methods and techniques of teaching and learning, so that they can use the methods effectively.

2.3.6.7 **Basic Computer Skills and Usage (ICT)**

Through no fault of their own, most teachers are not ready to teach about computer or use a computer in teaching because they received their education. Now they are finding the need to have computer literacy as part of their jobs. According to Goldfine, (1982) in the Association for Computer Machinery, teachers should:

1. Be able to read and write a simple programme.
2. Have experience using education software and documentation.

3. Have a working knowledge of computer terminology.

4. Be able to discuss the history of computers.

5. Be able to discuss the moral or human impact issues. (Taylor, Powell & Hamblen, 1980)

With federal support decreasing, the funding responsibility for training teachers falls primarily on state and local levels, and at present, states differ in their degree of commitment. According to a survey conducted by (Laughon & Philpott, 1981) in Electronic Learning, identifies Minnesota as a leader among the states, because it is committed to providing in-service training for teachers.

As we speak today, there are teachers in the system that cannot basically manipulate or use the computer to carry out simple tasks. The world has turned to a computerised one and we need not to perform tasks manually any longer.

Information Communication Technology has been part of the Basic Education curriculum and now a core subject in the SHS; hence teachers need some form of training on it. This is to help them handle students well and also, to use the computer to do educational documentation (Laughon & Philpott, 1981).

2.3.7 The Relationship Between Teacher In-service Training and Performance

It is generally believed that the teacher quality and competence has an effect on the academic performance of students (GES, 2012). As part of GES’ mission statement, it
aims at raising the quality of teaching and learning for effective outcomes. The only way to achieve this is to create confidence and competency in teachers and these qualities can only be achieved when teachers receive the needed training. The outcome of this will reflect in the students’ performance (GES, 2012).

For the purpose of this study, the review looked at in-service professional development, and informal training acquired through on-the-job experience acquired by teachers. According to the American Federation Teacher report, a survey conducted by Stiggins (2002), as we begin the 21st century, well-prepared, highly qualified teachers are essential if we are to ensure that all students achieve the high standards necessary for them to lead fulfilling lives and become productive citizens. In today’s competitive marketplace, it is increasingly difficult to attract and retain the best teachers; to accomplish this; we must guarantee a salary commensurate with their education, experience and the challenging and complex tasks they perform. Yes, it is true that we all work to earn our daily bread so more money in our pockets we become happier and put in our best, but I will disagree with them a bit. How can we get highly qualified teachers? And how do we continue to have them as highly qualified teachers? A teacher who is confident and has competence to deliver well is happier than one who has lot of money and cannot deliver. Teachers that are highly qualified and to continue to be, need regular in-service training on the job. Highly qualified and competent teaching reflects in students' performance.

According to Government of New Zealand (2000), in-service training is an ongoing process that goes on continuously throughout the educational life of a teacher. As one does not finish learning with graduation, likewise the teacher’s training goes on
improving with the passage of time by gaining experience and study throughout the lifespan of a teacher. It is a means to achieve educational change that will persist.

In-service education and training refers to all those activities that contribute to professional growth and qualifications of an employee e.g. reading educational generals, participating workshops, seminars, conferences and visits to educational institutions that give the employee a sense of security and a feeling of self-confidence while discharging his routine duties in the school. It is a continuing education of teachers and other educational workers leading to the improvement of their professional competence. With the rapid increase in human knowledge new approaches, new methods of teaching, and new avenues for the teachers are being introduced. If a teacher fails to keep himself in touch with these developments he is proving himself as inefficient and ineffective. In order to achieve this end, it is necessary that a great many opportunities of in-service education should be provided for teachers.

2.2 Theoretical Framework

According to theory ask.com (2014), theory is a scientific explanation for observed phenomena that can be used to accurately predict the outcome of a given situation. Proof of a theory lies in experimental verification. Researchers use theories as a tool to guide them in their observations and to generate new information (Santrock, 1998). In view of this, this study was based on the Changed Theory of in-service training.

Theories on in-service education and training are predicated on four main paradigms, the growth, change, problem solving and the defective. The growth paradigm
is predicated on the fact that no matter the extent of the teacher’s knowledge there is always something new to know about teaching. Thus, the essence of updating teacher’s knowledge is not necessarily to correct personal inadequacies on the part of the teacher, but rather to seek greater fulfillment as a practitioner on the field (Garuba, 2004).

The growth approach, is more relevant to teaching and education for teachers as continuous education is predicated on proven need for the teachers’ knowledge to be adopted because, however comprehensive the pre-service training received by the teacher, such training is bound to suffer from deficiency occasioned by demands of social change thus, there is always the need for the teacher’s knowledge and skills to be brushed up.

The change paradigm is also predicated on the fact that society is dynamic, knowledge, method, approaches are changing, and INSETS as viewed by this approach is designed to equip teachers with new skill required for coping with emerging trends and demands of teaching.

The defective paradigm is based on the premise that no matter the efficiency of the pre-service or initial training teachers receive, there will necessarily be areas of inadequacies (NFME 1998). Based on that, in-service training is described as a type of education that aimed at remedying the deficiencies in every aspect of human existence (Anyanwu, Omole & Akintayo, 1998). Reacting to that position, Garuba (2004) indicates that the major problem with this deficiency approach to in-service education is that though, the possibility of having some missing links in the pre-service training received by the teacher could be there, the fact still remains that however adequate pre-service training is, its continued relevance can still be called to question, especially in the face of changing social needs and demands of living in the modern world of technological advancement.
Hence, the need for update of teachers’ knowledge and currency even if pre-service training is adjudged comprehensive.

The problem solving paradigm of in-service education and training is based on the premise that the educational system is bounded to experience difficulties/problems in approaches to teaching and learning and so in-service activities are designed to deal with these difficulties that arise accessional. Even though the four paradigms each fits various bases for in-service training, the study was conducted on the change theory of in-service education.

2.2.1 Example of Some Theories on In-Service Training

As stated by (Becher, 1989), various writers view in-service training based on their philosophical background. Eraut (1993) locates in-service activities as arising from change paradigm and problem solving paradigm. He argues that the change- paradigm is based on the assumption that every educational system should change with the culture, economic and technological change in the society for schools to keep abreast with the changing demands of the time. The author further contrasts the change paradigm with the problem solving paradigm and argues that because education is an inherently difficult and complex process, problems will inevitably arise in individual schools and classrooms which can best be diagnosed by teachers who are mostly concerned since they know the students and context sufficiently well. He concludes that effective change will only occur in the classroom if teachers who are concerned are involved through the process of in-service training.
Jackson (1972) also contrasts two in-service training activities, the ‘defect approach’ and ‘the growth approach’. He argues that the defect approach is based upon the assumption that teachers are deficient in their training, subject matter and educational development, as such in-service activities are directed towards equipping teachers with specific skills. Conversely, the growth-paradigm is based on the assumption that teaching is complex and has a lot of multifaceted activities about which there is more to learn and the main source of knowledge about teaching is real experience in the classroom backed by reflection. The implication of this is that teachers need constant development in order to keep abreast with changing needs in learning.

2.3 Summary of Literature Review

Literature review examined first, the empirical issues related to the study. Teacher education in general was looked at and then narrowed down to Ghana’s teacher preparation. Teacher preparation according to the Government of California (2006), is a programme of professional course work that develops the skills needed for serving in the classroom and will lead to certification. This includes course work in areas such as teaching methodologies, curriculum development, classroom management, and student or intern teaching fieldwork. According to Peku (1998), teacher preparation started in Ghana in the 19th century (1848) at Akropong Training College in Eastern Region. Due to new challenges and issues emerging, teacher education has undergone several reviews (MOE, 2007).
According to Tamakloe (1997), most professional programmes are designed to meet set goals. Teaching as a profession has set goals to achieve. Tamakloe (1997) indicated that these goals can be put into three broad areas, which include:

1. Cognitive development and acquisition of skills

2. The development and the ability to examine, identify educational and teaching problems and to solve them satisfactorily

3. And the production of mature teachers capable of contributing to the creation of significant and creative personal and inter-group relationship.

Also, definition and meaning of terms were highlighted. The term ‘training’ indicates the process involved in improving the aptitudes, skills and abilities of the employees to perform specific jobs (Aswathappa, 2000). Furthermore, training helps in updating old talents and developing new ones. Successful candidates placed on the job need training to perform their duties effectively.

Teaching is a dynamic activity. As society and human behaviour undergo changes so must new ideas and methods constantly evolve to respond to the complex nature, needs and responses of students and to equip them for their responsibilities and, hence in-service training for teachers is very necessary (OECD) (2000).

According to Gansberghe (2003), development is a long-term process designed to enhance potential and effectiveness. It is also defined as the growth or realisation of a person’s ability, through learning, often from planned study and experience.
On the review of the effects of in-service training programmes for teachers, Aitken (2000) indicated that in-service teacher training has a central role to play in developing teachers’ skills and capabilities. The relationship between in-service training and students’ achievement is evidence showing, that effective in-service training can enhance teacher performance and this will in turn bring about improvements in students’ achievement. It is aims at imparting the fundamentals of teachers’ education with a view to qualify the trainee for the immediate employment in a school or to provide the basis for ‘Specialization’ in different subjects.

The literature on training programmes considered some training programmes for teachers and the content in the training programmes organized for teachers. Malone (1984) classified in-service training into five broad types (induction or orientation, career or development, on-the-job, maintenance or refresher and foundation trainings). The contents under the general training types that were looked at include;

SBA, classroom management, teaching methods and basic computer skills and usage (ICT).

Literature on the relationship between teacher in-service training and performance, it is generally believed that the teacher quality and competence has an effect on the academic performance of students (GES, 2012). As part of GES’ mission statement, it aims at raising the quality of teaching and learning for effective outcomes. The only way to achieve this is to create confidence and competency in teachers and these qualities can only be achieved when teachers receive the needed in-service training. The outcome of this will reflect in the students’ performance (GES,2012).
The second part of the literature review indicated the theory on which the study was based on, the study was on the change theory. Researchers use theories as a tool to guide them in their observations and to generate new information (Santrock, 1998). There are four main in-service training theories (growth, change, problem solving and the defective paradigms), but the change paradigm was most suitable hence its adopted.

In conclusion, Ghana as a nation saw a lot of activities on teacher preparation since 1848 and a number of educational reviews from colonial era till now. Several policies like Free Compulsory Universal Basic Education (FCUBE), Free Textbooks, Free School Uniforms, Cluster and School Based In-service Training, Free SHS, were introduced to have quality educated citizens that will result in economic empowerment and meaningful growth. However, all that can be achieved when the quality of the teacher is dramatically improved, and this can be achieved through teacher in-service training.
3.0 Introduction

The methodology describes the methods, procedures and the approach the study used in collecting data. The population covered, sampling technique that was employed which helped the researcher obtained a sample size which represented the entire population and on which generalisation was made. The instruments used for data collection, sources of data collected and how data were analysed was considered here.

3.1 Research Design

This is a plan or a guide which gives direction to the researcher as to how the study should be conducted. Burns and Grove (2010) define a research design as a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings. Descriptive design gives a picture of a situation. It has characteristics which portray the picture of the situation (Asamoah-Gyimah & Duodu, 2007). Also, this design may be either qualitative or quantitative, and this involves questions and answers describing a situation.

Hence a research design can be seen as steps to follow considering the time, place and how to approach a problem and arrive at dependable solutions to it. The research design adopted was a descriptive survey which examined the effects of in-service training programmes on teachers’ performance in selected public basic schools in Chiana in the
KNWD. The study problem was tackled hand in hand with the participants and drove home the importance of in-service training programmes.

However, there exist limitations of the descriptive design. The descriptive design is susceptible to distortions through the introduction of biases in the measuring instruments among others. Another weakness associated with the design is that it may be hard for participants to recall information or to tell the truth about a controversial question and as such give ‘careless’ responses that are sometimes at variance with the more serious opinions that are expressed as actual decision (Asamoah-Gyimah & Duodu, 2007). Since the study is intended to collect data from members of a population in order to determine current status of the population with respect to one or more variables, the descriptive method was suitable, hence it was adopted.

Mixed method approach was used to conduct the study. According to Johnson, Onwueguzic and Tuner (2007), mixed methods research approach focuses on the following:

- Research questions that call for real-life contextual understandings, multi-level perspectives, and cultural influences.
- Employing rigorous quantitative research assessing magnitude and frequency of constructs and rigorous qualitative research exploring the meaning and understanding of constructs.
- Utilizing multiple methods (e.g., intervention trials and in-depth interviews).
- Intentionally integrating or combining these methods to draw on the strengths of each.
- Framing the investigation within philosophical and theoretical positions.
There are several types of mixed methods, for example concurrent triangulation mixed method, embedded mixed method, explanatory sequential mixed method and exploratory sequential mixed method. The study used these methods to collect and manage data. According to Creswell and Clark (2007), concurrent mixed method data collection strategies are employed to validate one form of data with the other form, to transform the data for comparison, or to address different types of questions to arrive at the same conclusion. Concurrent Triangulation characterized by two or more methods used to confirm, cross-validate, or corroborate findings within a study. The questionnaire was issued to participants to collect quantitative data and the interviews were also running concurrently to compare the responses at the end of the data collection.

The explanatory method is a two phase mixed method. The overall purpose of this method is qualitative data helps explain or build upon initial quantitative results (Creswell & Clark, 2007).

According to Creswell and Clark (2007), the embedded design is a mixed methods design in which one data set provides a supportive, secondary role in a study based primarily on the other data. The premises of this design are that a single data set is not sufficient, that different questions need to be answered, and that each type of question requires different types of data. Researchers use this design when they need to include qualitative or quantitative data to answer a research question within a largely quantitative or qualitative study. This design is particularly useful when a researcher needs to embed a qualitative component within a quantitative design (Creswell & Clark, 2007).

According to Greene, Caracelli & Graham, (1989), exploratory design, the intent of the two-phase exploratory design is that the results of the first method (qualitative)
can help develop or inform the second method (quantitative). This design is based on the premise that an exploration is needed for one of several reasons: Measures or instruments are not available, the variables are unknown, or there is no guiding framework or theory. Because this design begins qualitatively, it is best suited for exploring a phenomenon (Creswell & Clark, 2003).

The documents/records were in a sequence with the questionnaire and interviews. Sequential mixed methods data collection strategies involve collecting data in an iterative process whereby the data collected in one phase contribute to the data collected in the next (Creswell & Clark, 2007). After obtaining data from questionnaire and interviews, the scrutiny of documents/records on training programmes organised then followed to augment the information obtained in the first set of data collection.

The mixed method was employed, using both quantitative and qualitative approaches. It is a systematic integration of quantitative and qualitative methods in a single study for purposes of obtaining a fuller picture and deeper understanding of a phenomenon (Yin, 2006).

According to Gay, Mills & Airasian, (2009), quantitative method is known as the collection and analysis of numerical data to describe current conditions, investigate relations; and explain, predict, and study cause-effect phenomena of interest. Quantitative approach does not give detailed description of phenomena as compare to qualitative approach. The reason for choosing the quantitative method was the desire to generalise the results of the study. Additionally, it complements the weaknesses inherent in qualitative method.

The study also used qualitative approach to gather data by interviewing respondents and examining documents/records. This allows the researcher to have the feel
of the natural environment and interact with the respondents. The qualitative approach allows the researcher to take detailed information from respondents since they are allowed to express their opinions (non-numerical data) on the problem as it really occurred in their environment as compared to quantitative approach (Inkoom and Bello, 2015).

3.1.1 Reasons for Adopting mixed method approach

The research problem was suitable for a mixed method approach. Only one method, qualitative or quantitative by itself was not adequate to develop multi-perspective and a complex understanding about the study. The mixed method approach allowed the use of multiple instruments.

A mixed method is useful to capture the best of both quantitative and qualitative approaches (Creswell, 2009).

The mixed method approach was used because the study contextualised the information to have a broad-based discussion since it includes quantitative and qualitative information about teacher in-service training for professional development. Additionally, it allows triangulation which provides detailed examination of collected data (Clark, 2007).

In conclusion, when the quantitative phase is followed by the qualitative phase, the intent may help to cross validate participants’ responses. In other words, complement each other’s weaknesses identified (Clark, 2010).
3.2.1 Population and Sampling Technique

3.2.2 Research Population

A research population is a group of elements or cases, it could be individuals, objects or events, that conform to specific criteria and to which a researcher intends to generalise the results of the research. Population is defined by Vishnevsky and Beanlands (2004) as the entire aggregation of cases that meet a specified set of criteria. Parahoo, Barr and McCaughan (1997) also indicated that population is the total number of units from which data can be collected. A research population is also known as a well-defined collection of individuals or objects known to have similar characteristics. All individuals or objects within a population usually have a common, binding characteristic or trait. The population of the study comprised of teachers in Chiana and officers from the district education directorate. The criteria used to select the population for this study were simple and included the following steps;

1. All persons selected were teachers.
2. All were teachers in the Basic Schools in Chiana east and central circuits Except the four officers selected.
3. The population was accessible to the researcher.

Table 3.1 below gives the total number of schools and the number of teachers in each school, comprising the population of the study.
Table: 3.1 Number of Schools and Teachers in the Study Area (17 schools)

<table>
<thead>
<tr>
<th>Name of school</th>
<th>No. of Teachers</th>
<th>Total</th>
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<tr>
<td></td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>Ayagetam Primary</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Yidania Primary</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Gwenia JHS</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Gwenia Primary</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Christ the King JHS</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Kalvio Primary</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Nyannia Primary</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Abulu Primary</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Yidania JHS</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Abulu JHS</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Kalvio JHS</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Chiana JHS</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Christ the King Primary</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Chiana Primary</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Katiu-Saa Primary</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Katiu-Saa JHS</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Ayagetam JHS</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>95</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: District Education Office- KNWD

3.3 Sample and Sample Size

Brink, Van der Walt, and Van Robbert (2006) viewed that, sample is a subset of a population selected to participate in a study, it is a fraction of the whole, selected to participate in the research study. The sampled came as a result of the researcher’s inability to involve all the members of the population. This was because of limited resources (time, money, personnel, energy, and equipment) available to the researcher to reach all members of the population. The sample was taken from the population and the study was conducted on the individuals from the entire population. Results obtained were used to generalise issues base on the population. For this study, fifty-five (55) participants were selected from the population.
3.4 Sampling Technique

The study employed simple random sampling to select five (5) public basic schools out of seventeen (17) basic schools in the Chiana east and central circuits. According to Asamoah-Gyaimah and Duodu (2007), a sample size of 10% - 30% of the entire population size is sufficient for generalisation purposes. Cohen, Manion and Morrison, (2007) explained that, in simple random sampling, each member of the population under study has an equal chance of being selected and the probability of a member of the population being selected is unaffected by the selection of other members of the population, that is each selection is entirely independent of the next. They further explained that the method involves selecting at random from a list of the population (a sampling frame) the required number of subjects for the sample. The study randomly selected five (5) schools from the seventeen (17) schools using the lottery approach. ‘Yes’ and ‘No’ were written on pieces of papers, put in a bowl and reshuffled. The pieces of papers had five ‘Yes’ written on them and the rest were ‘No’. Schools were allowed to select one after the other without looking in the bowl and without replacement until all the papers were picked. Those schools who picked ‘Yes’ were selected. This was done to give each school an equal chance of being selected.

Afterwards, census sampling technique was used to involve all teachers in the selected schools. Kothari (2004) explained that the sampling technique involves all the population in a study. This technique enabled the study to have a broader consultation with participants and the presumption is that when all items are covered, accuracy is achieved. The difficulty however, is the fact that it consumes time, money and energy.
Table: 3.2 Schools selected and number of teachers in those schools

<table>
<thead>
<tr>
<th>Name of school</th>
<th>Number of teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiana JHS</td>
<td>10</td>
</tr>
<tr>
<td>Christ the King JHS</td>
<td>12</td>
</tr>
<tr>
<td>Gwenia JHS</td>
<td>11</td>
</tr>
<tr>
<td>Ayagdetam Primary</td>
<td>09</td>
</tr>
<tr>
<td>Yidania Primary</td>
<td>09</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51</strong></td>
</tr>
</tbody>
</table>

**Source:** District Education Office- KNWD

However, one (1) training officer, one (1) deputy director in charge of human resource from the district education office-KNWD and two (2) teachers who work with CAMFED Ghana in the education office were purposively selected and interviewed. Burns and Grove (2001:376) define purposive sampling as “judgmental sampling that makes the conscious selection by the researcher of certain subjects or elements to include in the study”. In all, a total of fifty-five (55) participants were involved for the study.

Table 3.3: Schools of Respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Response</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School currently teaching</td>
<td>Chiana JHS</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>Christ the King JHS</td>
<td>11</td>
<td>22.0</td>
</tr>
<tr>
<td>School currently teaching</td>
<td>Gwenia JHS</td>
<td>11</td>
<td>22.0</td>
</tr>
<tr>
<td></td>
<td>Yidania Primary</td>
<td>9</td>
<td>18.0</td>
</tr>
<tr>
<td></td>
<td>Ayagitam Primary</td>
<td>9</td>
<td>18.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Fieldwork, 2016
Five schools (5) were selected for the study and fifty-one (51) participants were in those schools. Christ the King JHS was issued with twelve (12) questionnaires and they returned eleven (11) representing 22.0% of the total questionnaires returned. Chiana JHS respondents were given ten (10) and they returned all representing 20.0%. Gwenia JHS took eleven (11) and they returned all representing 22.0% of the total questionnaires returned. Yidania Primary got 9 questionnaires and returned all representing 18.0% and Ayagetam Primary School respondents were issued with nine (9), also all were returned representing 18.0% of the total questionnaire returned.

3.5 Research Instruments

Data is the information researchers obtain on the subjects of their research study. This study, used questionnaire, interviews and documents/records. According to Parahoo (2014), a research instrument is a tool used to collect data. An instrument is a tool designed to measure knowledge attitude and skills.

3.5.1 Questionnaire

Questionnaire is a series of questions in a written form that are posed by the researcher in the view of gathering data. Polit and Hungler (1997:466) viewed that a questionnaire is “a method of gathering information from respondents about attitudes, knowledge, beliefs and feelings”. The study used both closed ended and open ended questions to help keep the questionnaire to a reasonable length and also, to give respondents the freedom to express themselves into detail. (Polit & Hungler 1997).
questionnaire was designed in two parts, the first part contained demographic questions which is also section A. The second part is made up of five sections which contain questions that sought answers from participants that addressed the research questions.

Questionnaire was used in study for the fact that it permits a wide coverage for a minimum expense both in money and effort. It affords not only wider geographical area, but also reaches individuals who are normally difficult to contact (Fraenkel & Wallen, 2009). Also, the questionnaire did not require any identification of participants, hence elicited more candid and objective replies. Furthermore, questionnaire was used because it gives room for respondents to check their information.

However, it is noted that questionnaire may be misinterpreted due to the differential meaning of words associated with differences in socio-economic and cultural status and, the non-return issue of questionnaire by participants. This measure was adopted because it agrees with Dampson and Mensah (2014) affirmation that quantitative research design employs the use of traditional mathematics and statistical means to measure results conclusively.

3.5.2 Interviews

As a research method, interview is a conversation carried out with the aim of obtaining certain information (Cohen & Manion, 1989). It is designed to gather valid and reliable information through the responses of the interviewee to a planned sequence of questions. The interview is a commonly used technique in qualitative research. It is used
to gather data and to develop hypotheses through communication (Cohen & Manion, 1989).

The study employed structured interview which operated on a schedule. In a structured interview, the interviewer operates on the basis of an interview schedule (Cohen and Manion, 1989). Cohen and Manion further indicated that interviews enable the respondents to express themselves, their feelings, likes and dislikes, and their belief. Lynas (2001) indicated that the investigator has the option to probe further and the act of probing ensures that issues that are misunderstood are cleared up and rapport is achieved and cooperation encouraged. The study sought to further obtain information about the training programmes given to teachers in the district, hence the need to interview the four (4) officers.

Yin (1994) describes qualitative study as empirical inquiry that investigates a contemporary phenomenon within its real-life context. For this reason, the structured interview and documents/records were used to collect qualitative data from teachers. The results obtained from these instruments were critically examined and re-examined before conclusions were drawn on them. The reason is to avoid prejudice and biasness.

### 3.5.3 Documents/Records

Document analysis is a systematic procedure for reviewing or evaluating documents—both printed and electronic (computer-based and Internet-transmitted) material. Like other analytical methods in qualitative research, document analysis requires that data be examined and interpreted in order to elicit meaning, gain understanding, and develop
empirical knowledge (Strauss and Corbin, 2008; Rapley, 2007). Documents contain text
(words) and images that have been recorded without a researcher’s intervention. For the
purposes of this discussion, other mute or trace evidence, such as cultural artifacts,
were not included. Bowen (2009) cited Atkinson, Coffey and Delamont (2001) that
documents are ‘social facts’, which are produced, shared, and used in socially organised
manner.

Document or documentary analysis is a social research method and is an important
research tool in its own right and is an invaluable part of most schemes of triangulation
(Patton, 2001). Patton further referred to the various procedures involved in analysing and
interpreting data generated from the examination of documents/records relevant to a
particular study. The study employed this instrument in order to further confirm and
validate the information obtained from the questionnaire and interviews.

3.6 Pre -Testing of Instruments

The pre-testing was carried out to clear any ambiguities in the instruments and to
predict the responses trend. The pre-testing was done in the Kasena Nankana Municipal
(KNM). Fifteen questionnaires were issued to teachers in Navrongo, ten (10) were
completed and returned. Two (2) senior teachers from the education directorate were also
interviewed. The KNM was used for the pre-testing because it has similar features of the
study area. Also, to prevent giving participants fore-knowledge about what was required in
the actual study (Kusi, 2012). Few corrections were made on both questionnaire and
interview guide before the actual collection of data.
3.6.1 Triangulation of Instruments

According to Mathison (1988), triangulation is typically a strategy (test) for improving the validity and reliability of research instruments or evaluation of findings. He elaborates this by saying: Triangulation has raised an important methodological issue in naturalistic and qualitative approaches to evaluation [in order to] control bias and establishing valid propositions because traditional scientific techniques are incompatible with this alternate epistemology. Patton (2001) advocates the use of triangulation by stating triangulation strengthens in a study by combining methods. The study employed triangulation by using three different instruments to examine the effects of in-service training programmes on teachers’ performance. Also, it was used to ensure that the research study measures what it interns to, and to further ensured consistency. In view of these, the study therefore used varied instruments for obtaining data from respondents.

3.7 Data Collection Procedure

Introductory letter from the Education Faculty of the University for Development Studies was obtained (see appendix A). This letter was used to obtained permission from GES-KNWD to collect the data for the study. The researcher then went to the respondents in the field and data collection process started.

The data collection process was carried out in three different phases. The questionnaires were administered in five selected schools on 15th June, 2016 as the first phase. Respondents were given ten working days to respond to the questions. The purpose
of the questionnaire was explained to respondents after the researcher personally distributed them to the respondents. The researcher went back to pick the completed questionnaires after the ten days, out of fifty-one (51) questionnaires issued, fifty (50) of them were completed and returned given a response rate of 98%.

While the questionnaires were with the respondents, the interviews were also being carried out as the second phase of data collection. Three different days were used for the interviews, day one was an interview with the training officer of GES-KNWD, day two was an interview with the human resource director of GES-KNWD and the last day, two GES officers working with CAMFED were interviewed. All interviews were done in their offices.

The last phase of the data collection was the scrutiny of documents/records. The training file with the training officer was examined. The kind of training programmes, category of teachers the trainings were given to, how the programmes were organised, the aim(s) of organising such programmes, how the programmes were designed, whether follow-ups were made to assess the impact of the programmes organised, among other things were looked at. This was done with the help of the training officer and the deputy director in charge of human resource. The documents of CAMFED were also scrutinised under the same areas above.

3.8 Data Analysis Procedures

Data analysis means to organise, provide structure and elicit meaning. Analysis of qualitative data is an active and interactive process (Vishnevsky & Beanlands, 2004). Data analysis commenced after conducting the first interview. The data from the study was both quantitative and qualitative and as such, the need to process and analyse.
data was quantitative and descriptive statistics (percentages and frequency tables) was used through the Statistical Product for Service Solutions (SPSS) version 20. The Data obtained from questionnaire was organised into sections as on the questionnaire. Headings were also generated as variables which answered the various research questions. The essence was to put the data in contextual form to enable the study answer the research questions (Ihenacho, 2005). This data passed through a lot of processes like data management (coding, editing and checking data, preparing data manually and handling missing data) and finally, it was organised and presented.

Data obtained from the interviews which were qualitative in nature was transcribed word-for-word by listening to audio recordings from a Samsung Galaxy Pocket android phone (see appendix C) and analysed manually. Relevant information from the interviews featured in the discussion of results. Data obtained from documents/records was also qualitative and was analysed manually and the information was used to back the data obtained from both questionnaire and interviews.

3.9 Ethical Consideration

Ethics in educational research are those issues that are related to how educational researchers conduct themselves and consequences of these on the people who participate in their research (Kusi, 2012). Ethical considerations in this study were; permission to collect data, informed consent, confidentiality and anonymity.
3.9.1 Permission to Collect Data

Letter of introduction was obtained from the department of education, UDS, Tamale (see appendix A). This letter was used to obtain permission from the District Director of Education KNWD. This was done to facilitate the smooth collection of data without going contrary to ethical rules as Kusi (2012) cited Creswell (2005), it is unethical to enter into an organisation or social groups to collect data without permission from the ‘gate-keepers’ of the organisation.

3.9.2 Informed Consent

Participants were informed about the purpose of the study. The questionnaires that were distributed had introduction and in that the purpose of the study was clearly stated. Also, the interviews conducted, the interviewees were first informed and days were set aside for the interviews with them. Before the conduction of the interviews, the purpose of the study was still stated.

3.9.3 Confidentiality and Anonymity

The researcher ensured that information obtained from participants was treated well, so that it does not get to the public domain. On the questionnaire, names were not included so that even the researcher would not know who answered what.
4.0 Introduction

This chapter is about presentation of results and discussion of results. The presentation and discussion was done considering the research questions that were posed to guide the study. Data collected from the three instruments namely; Questionnaire, interviews and documents/records were presented and discussed. Research questions that were formulated are;

1. What in-service training programmes are available to teachers in Chiana?
2. How does the knowledge and skills acquired from in-service training affect teacher performance?
3. What performance difference will exist between pre-training and development and post-training and development?

4.1 Data from Questionnaire

Table 4.1: Age Distribution

<table>
<thead>
<tr>
<th>Variable</th>
<th>Response</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>20-30</td>
<td>25</td>
<td>50.0</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>23</td>
<td>46.0</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>51-60</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 2016
The results presented in Table 4.1 above indicated that majority of the respondents (25), representing 50.0% fall within the age range of 20-30 years. This is an indication that most of the teachers in Chiana are in their youthful ages. From the questionnaires, respondents within this range are also within the range 1-3 years of teaching in Chiana. The next higher percentage is 46.0, 23 respondents are within the age range 31-40 years. The least age ranges are 41-50 and 51-60 years. They have 2.0% each which is one (1) respondent each.

<table>
<thead>
<tr>
<th>Table 4.2: Gender Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Source: Fieldwork, 2016

Table 4.2 gives the gender distribution of participants. Forty (40) of the respondents are males representing 80.0% and ten (10) of them are females also representing 20.0%. This is an indication that Chiana has very few female teachers. Despite the fact that the 2010 population and housing census indicated that there are more females (50.8%) than males (49.2%) in the district (KNWD). The clear domination of male teachers than female teachers was not a deliberate attempt to discriminate against the female gender in Chiana, but it is evidence that there are more male teachers than female teachers in the study area.
Table 4.3: Professionalism of Respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Response</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionalism</td>
<td>Yes</td>
<td>38</td>
<td>76.0</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>12</td>
<td>24.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 2016

With Table 4.3, it can be seen clearly that an encouraging number, thirty-eight (38) out of fifty (50) teachers representing 76.0% are professional (trained) teachers. Twelve (12) teachers representing 24.0% are still not trained, despite the fact that efforts have been made by the Ministry of Education in collaboration with GES and Teacher Education Division to improve quality of education in Ghana by introducing Untrained Teacher Diploma in Basic Education (UTDBE) in 2007. This was to get all teachers to a professional status and we still have 24% of teachers not trained in just five schools in Chiana.

Table 4.4: Teaching experience in Chiana

<table>
<thead>
<tr>
<th>Variable</th>
<th>Response</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>1-3years</td>
<td>21</td>
<td>42.0</td>
</tr>
<tr>
<td></td>
<td>4 - 6years</td>
<td>19</td>
<td>38.0</td>
</tr>
<tr>
<td></td>
<td>7-10years</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 2016

Table 4.4 gives the range of years the respondents have been teaching in Chiana. Twenty-one (21) respondents representing 42.0% have been teaching in Chiana from 1 - 3
years. Considering the questionnaires issued, the item (question) sought whether participants have attended INSETs/workshops before, this is the group that answered ‘not at all’ or have never attended one before and very few participations. Nineteen (19) of the respondents representing 38.0% have been teaching in Chiana for the past 4 - 6 years. Ten (10) teachers participating in the study have been teaching in Chiana for 7 - 10 years given a percentage of 20.0.

**Research question 1: What in-service training programmes are available to teachers in Chiana?**

A number of items in the questionnaire addressed this research question. These questions sought to address the issue of in-service education and training programmes that were available to teachers in the study area. The following items were considered:

- Knowledge about INSET
- Participation in INSETs
- Frequency of INSETs organised
- Frequency of attendance
- Organising institution
- INSETs attended by teachers in Chiana
- ICT training attended
- Areas of ICT in INSETs
Table 4.5: Knowledge of INSET

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>46</td>
<td>92.0</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>8.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 2016

Table 4.5 above contains responses of respondents about their knowledge of INSETs. Out of fifty (50) respondents, forty-six (46) of them answered yes indicating that they have heard and know about INSETs. This number represents 92.0% of the total number of respondents. Four of them representing 8.0% answered no meaning they have never heard of INSET before neither talking of attending one. Looking at the percentage of respondents who have knowledge about INSET, that is the majority (92.0%). Some of the respondents actually defined and explained what INSETs are. For instance, one participant defined INSET as an educational programme designed to help teachers in service improve upon their professional competencies. This definition is in conformity with the definition in a document published by UNESCO (1981), which states that “In-service training is designed for teachers who are already in professional practice and which they receive in the context of or during periods of varying length when their normal duties are suspended” (p.1).

Another respondent defined in-service training as a kind of training given to teachers to update them in their teaching and learning processes. Also, one said, it is a form of training on the job aimed at sharpening and updating skills of teachers and it is organised when the need arises.
Also, during the interview with the GES training officer, he indicated that, he is aware of INSETs and that, there are numerous INSETs that are supposed to be given to teachers. The reason is, to update the quality of the teachers and then to get them abreast with new educational policies that may be existing. ‘Also for they themselves to understand the job and who they are as professional teachers’. These indicate that majority of them really has knowledge about INSETs.

The next item is participation in INSETs, this sought to find out whether participants have been attending INSETs or not. Table 4.6 below gives the results of that item.

| Table 4.6: Participation in INSETs |
|-------------------------------|------------------|------------------|
| **Variable**                  | **Frequency**    | **percentage (%)** |
| Yes                           | 42               | 84.0             |
| No                            | 8                | 16.0             |
| Total                         | 50               | 100.0            |

Source: Fieldwork, 2016

From table 4.6 above, forty-two (42) respondents representing 84.0% said ‘Yes’ indicating that, they have participated in INSET(s). Eight (8) of them representing 16.0% said no, they have never participated in any INSET. Also, during the interviews with the two officers working with CAMFED, they indicated that, they only organise trainings for CAMFED beneficiary schools where there are only two teacher mentors in each school. For example, one interviewee said ‘we having been doing so, but only to our CAMFED beneficiary schools’. This was when the interviewer sought to know whether CAMFED organises trainings for teacher in KNWD.
Considering the number of teachers who have not attended any training before and the information from the interviews, it contravenes the INSET policy by Ministry of Education which is to be implemented by GES. The policy which is, Pre-tertiary Teacher Professional Development and Management (PTPDM) which dwells on the 2008 Education Act. The vision of this policy in Ghana is to prepare teachers to enable them function effectively in the basic and second cycle schools in Ghana and to develop and nurture them to become reflective and proficient practitioners capable of providing quality education for all Ghanaian children. In view of this, if we still have teachers in the study area who have never attended any training, then the aims of this policy may not be achieved.

Aitken (2000) said, in-service teacher training has a central part to play in developing teachers' skills and capabilities. The relationship between in-service training and student achievement is evidence showing, that effective in-service training can enhance teacher performance and this in turn will bring about improvements in students’ achievement. These teachers may lack a lot, because they have not attended any training and that may go a long way to affect student’s academic achievement.

**Table 4.7: Frequency of programmes organised**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year</td>
<td>11</td>
<td>22.0</td>
</tr>
<tr>
<td>Twice a year</td>
<td>9</td>
<td>18.0</td>
</tr>
<tr>
<td>Thrice a year</td>
<td>13</td>
<td>26.0</td>
</tr>
<tr>
<td>Four Times and more</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td>Missing systems</td>
<td>7</td>
<td>14.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork: 2016
Table 4.7 above gives the distribution of the frequency at which INSETs are organised in the district for teachers. Participants were required to provide the number of times trainings are organised in a year in the district. Eleven (11) of the respondents representing 22.0% said, to the best of their knowledge, programmes are organised once a year. This was confirmed when the deputy director in charge of human resource said during the interview with him, that ‘We organise these things when the need arises, but normally, the beginning of the academic year’. This was revealed during an interview with the officer by the researcher. He further indicated that, the programmes organised are induction courses for newly trained teachers and newly appointed head teachers. Thirteen (13) respondents given 26.0% said, in a year trainings are organised three times, this is the highest percentage and during an interview with the training officer, who indicated that, trainings are organised at any time, once funds are available. That most of the funding is by NGOs, so they do not have exact determined period where INSETs come, but at least 3 - 4 INSETs in a term. Nine (9) respondents representing 18.0% said trainings are organised twice a year. Ten (10) of them said trainings are organised four times and more in a year giving a percentage 20.0. Also, 7 of the respondents stayed neutral and left that portion vacant giving 14.0% as missing systems.
Table 4.8: Frequency of attendance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once</td>
<td>21</td>
<td>42.0</td>
</tr>
<tr>
<td>Twice</td>
<td>11</td>
<td>22.0</td>
</tr>
<tr>
<td>Thrice</td>
<td>6</td>
<td>12.0</td>
</tr>
<tr>
<td>Four times</td>
<td>3</td>
<td>6.0</td>
</tr>
<tr>
<td>Five Times</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td>None</td>
<td>2</td>
<td>4.0</td>
</tr>
<tr>
<td>Missing Systems</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork: 2016

Table 4.8 above shows the rate at which participants attend training programmes. Out of fifty (50) responses, twenty-one (21) of them representing 42.0% have participated in INSET only once in their teaching experience in Chiana. During the interview with the deputy director, human resource, it was indicated that, trainings are organised at the beginning of the academic year. Also, those who have attended training twice are eleven (11) representing 22.0%. Six (6) have participated in training three times giving a percentage of 12.0%. For four times, three (3) have responded given 6.0%. One (1) responded for five times and above representing 2.0%. Two (2) said they have attended none given a percentage of 4.0 and the missing systems are six (6), representing 12.0%. 
Considering the results in table 4.8 above, it is clear that teachers receive little training which is not enough for their professional development and competency as classroom managers. Again, this contravenes the INSET policy in Ghana.

As Knoke and Kalleberg (1994) suggested direct evidence about organisational training practices based on representative samples of diverse employing organisations is almost non-existent. Furthermore, several authors have suggested that training is most extensive only in establishments which operate in complex market environments (Rowden & Conine, 2005; Sahinidis & Bouris, 2008).

Table 4.9: Organising Institutions

<table>
<thead>
<tr>
<th>Institution</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GES</td>
<td>18</td>
<td>36.0</td>
</tr>
<tr>
<td>The school</td>
<td>4</td>
<td>8.0</td>
</tr>
<tr>
<td>JICA</td>
<td>2</td>
<td>4.0</td>
</tr>
<tr>
<td>CAMFED</td>
<td>3</td>
<td>6.0</td>
</tr>
<tr>
<td>RLG</td>
<td>5</td>
<td>10.0</td>
</tr>
<tr>
<td>USAID</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td>Others</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td>Missing system</td>
<td>7</td>
<td>14.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 2016

Table 4.9 above gives the distribution of the organising bodies that organise training for teachers in the district. From the table, a conclusion can be drawn that most of the programmes are organised by GES. This has a frequency of 18 responses representing
36.0%. During the interviews, the training officer made mention that, NGOs come in to fund training programmes. He mentioned NGOs like World Vision, afrikids, USAID, CAMFED and others that support the trainings, so GES has the highest frequency and percentage because they are the organising body, but NGOs do most of the funding. Two of the respondents said they have taken part in training organised by JICA given a percentage of 4.0. The schools sometimes organise some form of training for teachers, so four respondents said they have ever been trained by the school. This gives a percentage of 8.0. CAMFED is an NGO which gives training to teachers, so three (3) respondents representing 6.0% said they have been trained by CAMFED before. Five (5) respondents representing 10.0% said they have received training from RLG. RLG is an Information Technology (IT) company and it gives ICT training to teachers. One respondent has received in-service training from USAID given a percentage of 2.0.

Apart from the organisations mentioned above, there are others that also give training to teachers in the district. The other organisations mention by respondents were UNICEF, Edmat, World vision, Link, sports federation, they also represent 20.0%. The missing systems are seven (7) representing 14.0%.

Table 4.10: Content in INSETs attended by teachers in Chiana

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methodology</td>
<td>23</td>
<td>46.0</td>
</tr>
<tr>
<td>ICT</td>
<td>6</td>
<td>12.0</td>
</tr>
<tr>
<td>Assessment</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td>Classroom management</td>
<td>2</td>
<td>4.0</td>
</tr>
<tr>
<td>Health</td>
<td>2</td>
<td>4.0</td>
</tr>
</tbody>
</table>

www.udsspace.uds.edu.gh
From the table 4.10, twenty (23) of the respondents representing 46.0% have attended methodology training. The training officer during the interview indicated that, INSET training was organised for English teachers because literature book was introduced and to be part of BECE. Though this is the highest percentage, it is inadequate. This is because; every teacher needs to be abreast with the fast changing needs of education. Each and every day new methods and strategies keep emerging, therefore teachers also need training to move with time and also, to improve students’ academic performance. From literature review, Diego (2013) said education, like almost every other area of our society, has evolved in leaps and bounds in recent years. Traditional teaching techniques, based mainly on a teacher explaining a topic and students taking notes, may still be useful on occasion, but education today revolves more around encouraging the student to awaken their curiosity and desire to learn (Diego, 2013).

Also, a number of different teaching techniques have emerged due to this change in education. Many of these teaching techniques are not actually new however! The use of technology in the classroom has simply given education a new lease of life allowing us to approach old ideas in new ways (Taylor, Powell and Hamblen, 1980).

Six of the respondents representing only 12.0% have attended ICT training. According
to Taylor, Powell and Hamblen (1980) in the Association for computer Machinery report, teachers should:

1. Be able to read and write a simple programme.
2. Have experience using education software and documentation.
3. Have a working knowledge of computer terminology.
4. Be able to discuss the moral or human impact issues.
5. Be able to discuss the history of computers.

Going by their suggestions, the ICT training is woefully inadequate, even the number of teachers who were trained was too small considering the total number of respondents. Further enquiries by the researcher revealed that greater percentage of the trainings on ICT were on computer basics and very few on Microsoft word suit (Word, Excel, PowerPoint Publisher) and the Internet.

Out of the fifty (50) respondents, only one attended training on assessment which represents 2.0%. Although, during pre-service training teachers receive some training on assessment, that may not be enough for them to be able to assess children properly and adequately during in-service. The Organisation for Economic Co-operation and Development (OECD) (2005), outlined some important characteristics of SBA:

1. It involves the teacher from the beginning to the end; from planning the assessment programme, to identifying and/or developing appropriate assessment tasks right through to making the assessment judgments.

2. It allows for the collection of a number of samples of student performance over a
period of time.

3. It can be adapted and modified by the teacher to match the teaching and learning goals of the particular class and students being assessed.

4. It is carried out in ordinary classrooms.

5. It is conducted by the students' own teacher.

6. It involves students more actively in the assessment process, especially if self and/or peer assessment is used in conjunction with teacher assessment.

7. It allows the teacher to give immediate and constructive feedback to students.

Taking these guidelines to assess students, the teacher needs a lot of training on the job to be able to do so.

Bello and Tijani (2003) indicated that SBA is an integral part of the teacher and forms wide percentage of the teachers’ role in academic performance. What do teachers do in the assessment of their students? Assessment of a child starts from the day the child enters school and that forms part of the child’s entire academic performance. From the study conducted by Bello and Tijani (2003), less training is offered teachers when it comes to SBA in the three West African countries. The story is not different in the KNWD. School-Based assessment is not just writing a class test or giving student’s assignments, but entails a lot as indicated in the study. The training programmes that were organised were done within a short duration, ranging from one day to one week. Teachers need to be well trained to be conversant with SBA and use it effectively for students’ performance in class.
On classroom management, two (2) out of the total number of respondents representing 4.0% attended in-service training. Again on the area of classroom management, teachers in Chiana are seriously lacking training. Abbott (2014) said generally speaking, effective teachers tend to display strong classroom-management skills, while the hallmark of the inexperienced or less effective teacher is a disorderly classroom filled with students who are not working or paying attention. If teachers are to have the experiences Abbott is talking about, it should be through training on classroom management. Two (2) of the participants said they have attended health workshops. These represent 4.0% of the total respondents. The health programmes they attended were First Aid and Wash workshops. The Wash training has to do with what is called ‘hand washing with soap and running water’. This is very important in our schools, when teachers are trained on it they can guide the children to wash their hands properly after visiting the toilet and other dirt related activities. This will help them stay away from diseases.

Apart from the available training programmes captured by the researcher, respondents brought some other areas. Five respondents representing 10.0% talked about in-service programmes like sports federation workshop, which equips teachers with knowledge to handle sporting activities very well as part of co-curricular activities. Also, respondents talked about register closing and records keeping as in-service trainings they participated. Awareness creation workshop was mentioned. Creating awareness of teachers about disabilities in their classrooms and how to handle such children, creating awareness about Self-Centre Learners that is strategies to strengthen students’ on learning skills (Nilson, 2013). Respondents further mentioned School Performance Improvement Plan (SPIP) workshop. Nine of the respondents answered ‘None’ representing 18.0%.
These respondents are some of those who earlier on indicated that they have never participated in any INSET. Finally, two participants left that question unanswered given a percentage of 4.0 and that make up the missing systems.

**Research question 2: How does the knowledge and skills acquired from in-service training affect teacher performance?**

Five (5) items in the questionnaire were used to address this research question, these items are;

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>12</td>
<td>24.0</td>
</tr>
<tr>
<td>No</td>
<td>35</td>
<td>70.0</td>
</tr>
<tr>
<td>Missing systems</td>
<td>3</td>
<td>6.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Source: Fieldwork, 2016*

From table 4.11 above, participants were asked whether the INSETs available to them and those they have attended were enough for their professional development. Twelve (12) of them said ‘Yes’ representing 24.0% and thirty-five (35) said ‘No’ also representing 70.0%. Three (3) respondents did not answer given a percentage of 6.0 as missing systems. A follow up question gave a variety of issues from respondents, which
include, thirty-one (31) of them representing 62.0% said if they have adequate training, they will develop their professional competencies. Confirming this, Aitken (2000) said, in-service teacher training has a key role to play in developing teachers' skills and capabilities. On-the-job training helps employees to get the knowledge of their job in a better way (Deming, 1982). Eight (8) of the respondents representing 16.0% said if they get adequate training, it will enable them prepare and use teaching and learning materials (TLMs) appropriately in their lessons. One (1) of them representing 2.0% said training will help in preparation of lesson plans. On classroom management, one (1) representing 2.0% said adequate training will help. Three (3) of the respondents representing 6.0% said adequate training is needed to induct teachers on new job areas and also to usher in newly trained teachers into the teaching profession. Six (6) respondents left the question unanswered given 12.0% as missing systems.

**Table 4.12: Should all teachers attend INSETs?**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>49</td>
<td>98.0</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: Fieldwork, 2016*

From table 4.12, out of fifty (50) respondents, forty-nine (49) of them representing 98.0% said all teachers in the classroom should have the opportunity to attend INSETs. Only one (1) of them representing 2.0% did not see the need for all teachers to attend INSETs. The results in table 4.12 is a clear indication that respondents are very much aware that in-service training programmes are needed to always get them updated with the
ever changing needs of the teaching and learning processes. Farrant (1982) defines In-service Education as a lifelong process in which the teacher is constantly learning and adapting to new challenges in his/her job. Kankam (1999) said the key to quality education is the quality of the teacher and key to improving the teaching and learning processes in schools is the professional development of the teacher. Kankam highlights the importance of the need for a lifelong educational process (training) that keeps pace with continuous changes taking place. With these, Kankam (1999) indicated will help teachers to deal with the changing conditions in schools and classroom situations to make school environment conducive for the pupil.

During the interview with the district training officer, it was revealed that, through training, teachers are updated; they have acquired the skills and knowledge to be able to teach effectively. He further indicated that, teachers are abreast with new fundamentals and with that, they can do effective work. Hence all teachers need training all the time.

**Table 4.13: Impact of INSETs on students’ performance.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>39</td>
<td>78.0</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>6.0</td>
</tr>
<tr>
<td>Missing systems</td>
<td>8</td>
<td>16.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: Fieldwork, 2016*

This item sought to know from respondents whether INSETs for teachers have any impact on students’ performance or not. Thirty-nine (39) of the respondents answered
'Yes' representing 78.0%; this is a confirmation that when teachers receive in-service training on regular basis they perform well which in turn has positive impact on students’ performance. Confirming this, Sitggin (2002) said, as we begin the 21st century, well-prepared, highly qualified teachers are essential if we are to ensure that all students achieve the high standards necessary for them to lead fulfilling lives and become productive citizens. Three (3) respondents said ‘No’ representing 6.0%; there is no impact of INSETs on the teacher leading to students performing well. Eight (8) of them did not respond to the item given 16.0% as missing systems.

**Table 4.14: Impact of INSETs on classroom management.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective teaching methods and the use of TLMs</td>
<td>23</td>
<td>46.0</td>
</tr>
<tr>
<td>Class control</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td>Classroom setting</td>
<td>4</td>
<td>8.0</td>
</tr>
<tr>
<td>Teacher-student relationship</td>
<td>5</td>
<td>10.0</td>
</tr>
<tr>
<td>Missing systems</td>
<td>8</td>
<td>16.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: Fieldwork, 2016*

The item what impact is INSETs having on classroom management? on the questionnaire was used to fine out the impact of in-service training programmes on teachers’ classroom management skills in Chiana. From the table 4.14 above, Twenty-three (23) respondents representing 46.0% said they have been able to use TLMs and teaching methods effectively to manage their classrooms. Ten (10) of
them representing 20.0% indicated that they have control of their classrooms as a result of training. Four (4) respondents said as a result of training they have been able to set their classrooms (classroom setting) well for effective teaching and learning. Also, five (5) of them representing 10.0% indicated that they have a good teacher-student relationship in class which aids students to learn. Eight (8) respondents did not answer that item given 16.0% as missing systems.

Abbott (2014) indicated that, effective teachers tend to display strong classroom-management skills, while the hallmark of the inexperienced or less effective teacher is a disorderly classroom filled with students who are not working or paying attention. Considering Abbott’s assertion, the results are not encouraging; all teachers need training on the areas under classroom management for effective teaching and learning.

Table 4.15: Impact of INSETs on assessment

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>37</td>
<td>74.0</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>10.0</td>
</tr>
<tr>
<td>Missing systems</td>
<td>8</td>
<td>16.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 2016

With table 4.15, teachers were required to indicate whether the training programmes they have attended helped them in assessing their students. Thirty-seven (37) of them representing 74.0% said yes they have been able to assess their students because of the training they received. Five (5) said no representing 10.0%
and eight (8) did not answer the item giving a percentage of 16.0. A followed-up question to the item indicated that, 46.0% of the respondents use formative assessment to assess their students, 4.0% use summative assessment. For behavioral observation, eight respondents indicated that they use it. Sixteen (16) respondents left the item unanswered giving a percentage of 32.0. Although those who said yes have the highest percentage (74.0), they have indicated that enough time was not given for the training on School Base Assessment.

In a study by Bello and Tijani (2003), Majority of teachers (75% in Ghana, 56% in Nigeria and 76% in Gambia) had training in assessment during their pre-service years, while 44.5%, 30% and 45.2% in Ghana, Nigeria and Gambia respectively, stated that they had participated in in-service training programmes on assessment during service. Such in-service training programmes were however alleged to have had very short duration, ranging from one hour to one week. Only a handful of respondents (9.6% of teachers in Ghana) indicated training periods exceeding one week. The in-service training programmes were organised either by the various Ministries of Education, the GES in Ghana and the West Africa Examination Council (WAEC).

From the definitions of SBA and the study conducted by Bello and Tijani (2003), it is realised that, SBA is an integral part of the teacher and forms wide percentage of the teachers’ role in academic performance. What do teachers do in the assessment of their students? Assessment of a child starts from the day the child enters school and that forms part of the child’s entire academic performance.

**Research question 3: What performance difference will exist between pre-**
The third research question have three (3) items taken from the questionnaire and used to address it, the items are discussed below:

**Table 4.16: Impact of INSETs after Training**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>39</td>
<td>79.0</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>8.0</td>
</tr>
<tr>
<td>Missing systems</td>
<td>8</td>
<td>16.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: Fieldwork, 2016*

From the table 4.16 above, thirty-nine (39) respondents representing 78.0% said ‘Yes’ indicating that they had new experiences after training. During the interview with the training officer, he indicated that, ‘when someone has been given information about something, the next time you go to the person, you really find out that the person would have made some improvement.’ Three (3) responses representing 6.0% said ‘No’ indicating that there was no new experience after training and eight (8) respondents stayed neutral giving a percentage of 16.0. as missing systems.

A followed-up question also indicated that, 48.0% of the respondents said they gained new methods of teaching. 18.0% said they have improved upon their
classroom management strategies. 8.0% of them have had effective assessment skills and 4.0% have improved their ICT skills. Also, the missing systems are represented by 22.0%.

The ICT skills training is the poorest among all the experiences gained. As Taylor, Powell, & Hamblen (1980) indicated earlier on in the Association for Computer Machinery about teachers’ knowledge in ICT, if teachers in Chiana in this computerised era still live poorly in terms of ICT skills, then it is pathetic. Hence GES and other interested organisations need to step up the game by organising ICT training on regular basis for teachers in Chiana and KNWD at large.

**Table 4.17: Has your style of teaching changed?**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>40</td>
<td>80.0</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>8.0</td>
</tr>
<tr>
<td>Missing systems</td>
<td>6</td>
<td>12.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Source: Fieldwork, 2016**

Teachers who received training change their approach to teaching, because training is supposed to impact knowledge and skills to result in changed behaviour. This item sought to fine out the change in behaviour after respondents have undergone training.

Trained employees perform well as compared to untrained employees (Partlow, 1996; Tihanyi, Ellstrand, Daily & Dalton 2000; Boudreau et al, 2001).
From the table above, forty (40) of them said yes, representing 80.0% indicated that they have changed their approach to teaching after training. Four (4) of them said there is no change in teaching approach after training and six (6) did not answer the item giving a percentage of 12.0 as missing systems.

According to Government of New Zealand (2000), in-service training is an ongoing process that goes on continuously throughout the educational life of a teacher. As one does not finish learning with graduation, likewise the teacher’s training goes on improving with the passage of time by gaining experience and study through-out the life span of a teacher. It is a means to achieve educational change that will persist. With the rapid increase in human knowledge new approaches, new methods of teaching, and new avenues for the teachers are being introduced. If a teacher fails to keep himself in touch with these developments, he is proving himself as inefficient and ineffective. In order to achieve this end, it is necessary that a great many opportunities of in-service education should be provided for teachers. It is now incumbent on GES and other interested organisations to organise regular training programmes for all teachers so that their approach to teaching will change and that will also reflect in student’s performance.
A followed-up question to the item revealed that, 60.0% of the respondents use multi method approach in their teaching after they have received training, 10.0% of them now use the activity method instead of the’ chalk and talk method’ of teaching (Cruinshank, Bainer & Metcalf, 1999). 8.0% of the respondents also use the question and answer method and then 4.0% and 2.0% of them use brainstorming and role-play methods respectively. From the statistics above, the percentage that use the multi-method though a higher percentage, more still need to be done in that respect. Cruikshank et al (1999), outlined so many methods of teaching and learning in the literature review, so if teachers are trained in that, and they adopt and combine these methods in their teaching, students will perform well academically.

**Table 4.18: Application of knowledge gained**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>42</td>
<td>84.0</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>4.0</td>
</tr>
<tr>
<td>Missing systems</td>
<td>6</td>
<td>12.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork, 2016

As table 4.18 shows, forty-two (42) respondents representing 84.0% indicated that they have attended training and have always tried to apply the knowledge gained. Two of them said they do not apply any knowledge and that represents 4.0%. For missing systems, six (6) of the respondents did not respond to the item giving 12.0% as missing systems.
Table 4.19: General comments and suggestions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should be organised on regular bases</td>
<td>26</td>
<td>52.0</td>
</tr>
<tr>
<td>Organised on subject areas</td>
<td>2</td>
<td>4.0</td>
</tr>
<tr>
<td>Organised for all teachers</td>
<td>7</td>
<td>14.0</td>
</tr>
<tr>
<td>Competent resource persons</td>
<td>2</td>
<td>4.0</td>
</tr>
<tr>
<td>Participants motivation</td>
<td>2</td>
<td>4.0</td>
</tr>
<tr>
<td>Decentralise training programmes</td>
<td>6</td>
<td>12.0</td>
</tr>
<tr>
<td>Needs assessment</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td>Missing system</td>
<td>4</td>
<td>8.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Source: Fieldwork, 2016**

The concluding part of the questionnaire is an item which looked at comments and suggestions from respondents as to how INSETs/workshops should be organised for teachers in the classroom to develop them professionally. From table 4.19, twenty-six (26) respondents representing 52.0% suggested that training programmes should be organised regularly for them. Examples of what participants said on that:

1. I suggest that the in-service training should be organised on regular basis to enable teachers to be effective and sufficiently knowledgeable in all fields (Responses from fieldwork, 2016).
2. INSETs should be organised at least thrice a year to equip teachers in pupils’ handling, discipline, instructional time management, lesson preparation and presentation (Responses from fieldwork, 2016).

3. I suggest that each holiday period teachers should be allowed to attend INSETs organised by GES and developmental partners in education (Responses from fieldwork, 2016).

Also, seven (7) respondents representing 14.0% indicated that INSETs should be organised for all teachers. Examples of what some of them said include;

1. External workshops or INSETs should be opened to all teachers.
2. All teachers should be allowed to take part in INSETs/workshops whenever it is organised.
3. INSETs should be organised for all categories of teachers periodically to keep them up-to-date. (Responses from fieldwork, 2016).

It is very important that all teachers in the classroom receive training whiles on the job, especially the primary classroom teacher. This is because they are classroom teachers and also teach the younger ones (pupils), hence they all need training to be able to handle these pupils well. Also, all teachers need INSETs because continues learning develop them professionally and get them competent enough to function well in the classroom.

Six (6) of the respondents representing 12.0% said training programmes should be decentralised, brought to their door step. When this is done, it will be easier for all teachers to benefit without leaving the classrooms empty. Some of the excepts from respondents include;
1. INSETs should be organised at the school level (School Base INSETs) (SBI) and at the circuit level (Circuit Based INSETs) (CBI).

2. Training should be organised at the circuit level and in batches so that the classrooms are not left empty.

3. INSETs organised by GES and other bodies should be decentralised, that is zones/circuits (Responses from fieldwork, 2016).

Those six (6) respondents further indicated that the first thing to consider is the teachers’ interest, which areas does the teacher needs training on?

On the issue of organising INSETs and workshops on subject areas, two (2) respondents representing 4.0% said when trainings are to be organised, the individual disciplines (subject areas) should be taking into consideration. Mostly, workshops or trainings are organised for the three core subjects (Mathematics, English Language and Science) to the detriment of the other subjects. When consideration is taken on all subject areas it will give all teachers the opportunity to benefit from the trainings organised.

For any training to end successfully and for participants to maximize knowledge and skills to have a change in behaviour, the resource person(s) should be competent enough. The resource personnel should be well versed and knowledgeable in the content that is been given to participants. Some scholars indicated that, employees are very conscious about the delivery style (Armstrong, 2000). If someone is not delivering the training in an impressive style and he is not capturing the attention of the audience it means he is wasting the time (Griffin & Neal, 2000). It is very necessary for a trainer to engage the audience during the training session (Seaman & Eves 2006). In this regard two (2)
respondents representing 4.0% indicated that resource person(s) should be competent enough to make the training process very lovely. Examples of their indications include;

1. It should be organised by professionals (resource personnel) than leaving it in the hands of only teachers in the schools where only one teacher does all the training always.

2. I think even the resource persons should always undergo special training for these programmes and the required materials should also be provided (Responses from fieldwork, 2016).

Two (2) respondents representing 4.0% think motivation on the part of participants in a training programme is key, hence they said,

1. There should always be enough motivation packages, for example, certificates and transportation fares for participants after workshops.

2. Motivation should be available to encourage teachers to patronise INSETs and workshops (Responses from fieldwork, 2016).

Last but not least with the comment and suggestions, one (1) respondent representing 2.0% of the total respondents raised a very important issue, that before INSETs, investigations should always be conducted to identify the areas that need attention.

This is seen by the researcher as very important because there is the need assessment is carried out to ascertain what participants actually need to be trained on. It will be bad on the part of any trainer or an organisation to simply start any training programme without considering the needs of employees and the organisation. According to OECD (2009), conducting training needs assessment is an essential first step in the planning of an effective training programme. Training needs assessment usually focuses on current and desired skills, knowledge and attitudes of the trainees. However, before specifying the
training needs on an individual and organisational level, it may be necessary to carry out broader initial information gathering on the capacities of the organisation and its environment. Analysing the current capacities, strengths, and weaknesses of each, the needs assessment is able to provide a solid base of information which can direct the focus of the training needs assessment. It is common to focus only on the weaknesses and gaps in capacity. However, by also identifying strengths and opportunities of the organisation, its employees, and environment, a more informed decision can be made on how training can strengthen capacity or if other approaches would be more effective. Also, (Ginsberg, 1997) indicated that the design of the training should be according to the needs of the employees. Hence needs assessment is very important in training, if participants are to benefit from the training. I must state that the information source on the suggestions and comments comes from the researchers’ fieldwork, (2016).

4.2 Documents/Records Evaluation

With the documents/records review, the researcher looked at the training file at the training officer’s office at the GES directorate, CAMFED activity file was also looked at. The activity file contained the training programmes CAMFED organised for its teacher mentors.

With the GES, the review was done with the help of the training officer and the deputy director in charge of human resource. The review was done considering the following areas;

1. The kind of training programmes given to teachers.
2. How often are the programmes organised for teachers in the district.
3. The category of teachers the trainings were given to.
4. What was the duration of the training programmes?

5. Were there follow ups to assess the impact of the training programmes given?

The training file in the office of the training officer contained some training programmes, induction or orientation programmes for newly trained teachers who have just joined the service from the Teacher Training Colleges, so that they get well acquainted with their new environments. The induction training was also given to newly appointed head teachers so that they can adapt themselves to the new tasks ahead of them. Some training was also given on methodology and how to prepare lesson notes and TLMs for effective teaching. For example, there was a training programmes organised for some basic school teachers which has to do with a literature book introduced, and going to be part of the BECE. Also, there was a letter in the file talking about ICT training given by an Information and Technology (IT) company called RLG.

For the induction training, it was organised yearly, at the beginning of the academic year. The methodology, preparation of lessons and use of TLMs, trainings came at any time there were funds. The training on the Literature book was in June, 2016, that was in the third term of the academic year (2015/1016).

The few training programmes seen were given to basic school teachers, the newly trained teachers as well as some other teachers teaching Mathematics, English Language and Science in the basic schools.

These programmes were designed to take few days. The orientations were done in a day ranging from 3-5 hours during which facilitators deliver whatever information available to participants. It was the methodology and lesson preparation and use of TLMs that lasted up to 3-5 days.
For follow ups or monitoring; after training to assess the impact of the training programmes, there was a yearly programme which involves the circuit supervisors, deputy directors in charge of supervision and human resource, going round sometimes to do monitoring and supervision. Evaluation check list which would have evaluated the training programmes was not found by the researcher.s

From the CAMFED activity file, the type of training programmes that were available include; guidance and counseling and induction training. These programmes were given to teachers yearly especially the induction training. There were four of the guidance training programmes in the 2015/16 academic year. The trainings by CAMFED Ghana were given to teacher mentors in some selected schools which they call beneficiary schools. The teachers that also take care of the girls in those schools are called the teacher mentors.

These programmes were scheduled to last for 2-3 days and 3-5 hours each day. For impact assessment, it is the GES District Education Committee (DEC) that monitors the CAMFED training programmes. This is because those who work with CAMFED are part of the GES DEC as well. There was also no evaluation check list seen by the researcher which would have evaluated their training programmes.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The concluding chapter of this study looks at the overview of the research topic, the methodology used and summary of key findings interpretation with special reference to literature and its relevance as against current educational practices in our schools. The conclusions made are from the findings that are stated, and recommendations are also made.

5.1 Summary

This study examined the effects of in-service training programmes on basic school teachers’ performance in Chiana in the KNWD. The design used for the study was a descriptive survey. The study sampled a total of fifty-five (55) respondents, fifty-one (51) teachers in five basic schools in Chiana, one training officer from GES, one deputy director in charge of human resource from GES and two (2) CAMFED workers also from GES. The research instruments used were: Questionnaire, interview and documents/records. The questionnaire was administered to the fifty-one (51) teachers and the four (4) officers were interviewed. Documents/Records concerning trainings organised by both GES and CAMFED were looked at. This was done in line with the research questions formulated in chapter one of this study.

With regard to the data collected from respondents, the study came gathered the following findings;
1. Teachers are aware of In-service Education and Training (INSET) programmes as well as the relevance that go with the INSET programmes.

Ninety-two percent (92%) of the total respondents indicated that, they have knowledge about INSETs and all the four officers interviewed equally indicated their awareness of INSETs. Also, most of the participants defined INSET which is in line with scholar’s definitions. For example, one participant defined INSET as educational programme designed to help teachers in service improve upon their professional competencies.

2. Teachers attend INSETs/workshops on methodology, School Base Assessment (SBA) Classroom management and ICT occasionally in Chiana. Out of fifty (50) respondents, thirty-nine of them representing 78% indicated that they have attended various INSET programmes.

3. Teachers perform better after training than the time they have not received in-service training. Forty (40) respondents representing 80% of the total respondents indicated that they have changed their approach to teaching after receiving training.

4. INSETs are not organised regularly for teachers in Chiana.

Forty-three (43) respondents representing 86% indicated that programmes are organised ranging from once a year to four times a year and out of that only ten of them representing 20% had the opportunity to attend such programmes three to five times in a year.

During the study’s field work, some issues came up, though the number of respondents who talked about these issues was not numbers that would have given a good representation of the total respondents, the researcher is of the view that the issues raised are very important. These issues include;
INSETs have not been made available to all teachers in Chiana. Sixteen percent (16.0%) of the respondents indicated that they have never participated in any INSET in Chiana. Also, during the interviews with the two GES officers working with CAMFED, they indicated that CAMFED only give training to their teacher mentors not to all teachers.

INSETs are not decentralised. Six (6) respondents representing 12.0% indicated that training programmes were not given to them at their door step. One of them said training programmes should be decentralised so that they do not always leave the classrooms empty to attend training programmes. Training programmes can be organised at the school level or at the circuit level rather than given trainings at a central point, the district capital where teachers will have to travel from far places to attend. When this happens teachers will leave classrooms vacant for a number of days to honour these programmes.

Teachers do not receive enough motivation to participate in INSETs. the researcher thinks participants should be motivated to participate actively. In an article published on www.PersonnelToday.com indicated that motivation is a process by which the behaviour of an individual is influenced towards a desired outcome.

Needs assessment usually not conducted properly before trainings are designed. Though, only one (1) respondent indicated that needs assessment is important, the researcher sides with that because needs assessment should be carried out to know the needs of participants before giving the training. Aguinis and Kraiger (2009) indicated that conducting a thorough needs assessment before training is designed and delivered helps set appropriate goals for training and ensure that trainees are ready to participate.
However, there continues to be little theoretical or empirical work on needs assessment (Kraiger 2003).

5.2 Conclusion

Based on the findings of the study, a conclusion can be drawn that basic school teachers are aware and have an appreciation of the relevance of INSETs. They appreciate the fact that, when they attend INSETs, knowledge and skills are attained for professional development and competency.

Also, based on the findings of this study, a conclusion can be made on the regularity of the organisation of training programmes for teachers. Though it was found out that, teachers occasionally attend INSETs, they are not enough and not on regular basis. From the general comments and suggestions by respondents, 52.0% suggested that regular training should be organised for teachers so that they will develop professionally and be competent enough in handling students. Even the few ones that were organised, not all teachers had the opportunity to attend.

Teachers perform comparatively well after training than the time they had not received in-service training. Hence in-service training is very relevant to the classroom teacher if student academic performance is important.

Most of the training programmes were not decentralised; hence all teachers could not get the opportunity to be part. Also, instructional time is destructed when trainings are not decentralised. When decentralised, all subject areas will benefit from the training programmes.
Finally, the researcher wishes to state that the objectives set for the study have been achieved.

5.3 Recommendations

The recommendations below are made based on the findings of this study and when they are implemented, will go a long way to develop teachers’ competencies as classroom managers. This will be translated into students’ academic performance and achievements in Chiana, KNWD and Ghana at large.

The education directorate-KNWD and other developmental partners like the district assembly, school management committee, parents and NGOs should collaborate and design a comprehensive INSET programme which in it should have series of activities for all teachers in the district. The activities can be carried out during holidays so that all teachers would have the opportunity to attend a good number of the training programmes in a year.

The programme, School Base and Cluster base INSETs in GES which was introduced in 2005 was established to provide in-service training to basic school teachers to develop them professionally. It is therefore the researcher’s recommendation that Ministry of Education and GES should collaborate with local government and NGOs interested in education to source funds and materials for the smooth running of these programmes at the school level especially in the KNWD.
Teachers should be encouraged and funded by GES, KNWD education directorate to carry out school-base or classroom research to help them be abreast with classroom issues and help in students’ learning.

Needs assessment should be conducted by GES, KNWD to know the areas teachers need training on. This should be done so that the right content is given to teachers in INSETs.
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Appendix A

Introduction Letter from Faculty of Education- UDS

From: Graduate Coordinator (FoE)  
To: whom it concerns  
Date: 11th May, 2016

Subject: Letter of Introduction

The bearer of this letter, Ronald Diwoma Banki is a student embarking on a research exercise as part of his/her work in fulfillment of the requirements for his/her degree in the University for Development Studies (UDS). He/she is doing the thesis on the topic: RELEVANCE OF IN SERVICE TRAINING: A CASE STUDY OF FIVE PUBLIC SCHOOLS IN CHIANA IN THE KASSENA NANKANA WEST DISTRICT. Information gathered is for this purpose although findings may be used for future research.

Please, I would be grateful for your support and cooperation.

Thank you.

Sincerely,

Rev. Fr. Dr. Thomas Asante
(Graduate Programs Coordinator, FoE)

[Signature]

UDS Visitor Center
P. O. Box 1359
Tamale, Ghana

www.udsspace.uds.edu.gh
Appendix B

Questionnaire for Teachers in Five Basic Schools in Chiana.

Introduction

My name is Ronald Diwora Banki (0200605726), I am an M. Phil. student of the University for Development Studies, Tamale. I am conducting a study on the topic ‘the effects of in-service training programmes on selected basic schools in Chiana in the Kassena Nankana West District. This is for the award of Masters of Philosophy (M. Phil.) in Training and Development.

This study is for academic purposes only. All responses will be given the necessary confidentiality. Please, provide appropriate responses for the questions in this questionnaire. **Section A: Demographic Data (Tick appropriately)**

Indicate your age.

- 20 – 30 years [ ]
- 31 – 40 years [ ]
- 41 – 50 years [ ]
- 51 – 60 years [ ]

Sex

- Male [ ]
- Female [ ]

1. Which school do you teach? -

2. Are you a professional teacher? [ ] Yes [ ] No

3. How long have you been teaching in Chiana?

- 1 – 3 years [ ]
- 4 – 6 years [ ]
- 7 – 10 years [ ]

**Section B: In- service education and training (INSET).**

1. Have you heard of in-service education and training (INSET) before?

- Yes [ ]
- No [ ]
2. If yes, can you briefly state what it is?

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3. Have you ever attended any INSET programme or workshop?

   Yes [ ]  No [ ]

4. If yes, who or which organisation organised the programme?

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5. How frequent or regular are such programmes organised for teachers at the school level?

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6. How frequent have you had the opportunity to attend INSET programme or workshop?

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7. Do you think the INSETs or workshops you have attended are enough for your continuing professional development and competency as a teacher?

   Yes [ ]  No [ ]

8. Can you give reason(s) for your answer? -----------------------------------------------------------------------------------------------

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9. Do you think all teachers in the classroom, whether trained or untrained, new or old need in-service training? Yes [ ]  No [ ]

10. Can you give reason(s) for answer

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Section C: Available in-service training programmes for teachers?

1. What are some of the INSET programmes or workshops available to teachers in School Base INSET (SBI) or Cluster Base INSET (CBI)?

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2. What are some of the daily activities that a teacher undertakes to ensure effective teaching and learning in the classroom?

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3. Do you think you need training in those areas? Yes [ ]  No [ ]

4. If yes why? 

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5. Have you attended any training on ICT?
   Yes [ ]     No [ ]

6. What areas of technology (ICT) form part of the INSET/workshops you have attended?
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Section D: Relevance of in-service training.

7. The in-service training programmes/workshops you have attended, have they changed your attitude towards teaching and learning?
   Yes [ ]     No [ ]

8. If no, can you give reason(s)?
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9. The training programmes/workshops you have attended, have they developed you to function well as a teacher in the classroom?
   Yes [ ]     No [ ]

10. Can you give reason(s) for your answer?  --------------------------------------------------
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11. How have you been able to manage your classroom as a result of the training or workshops you have attended? 

12. Did the in-service training/workshops attended help you in the assessment of your students? 
   Yes [ ] No [ ]
   Can you give reason(s) for your answer? 

13. Has your style of teaching changed? 
   Yes [ ] No [ ]
   Can you mention some of the strategies you now use in your teaching? 

14. How have you benefited from the INSET/ workshops attended as a teacher?
Section E: Teacher training and students’ performance.

1. Have you been applying the knowledge and skills gained at the in-service training/workshops in your teaching and other classroom activities?  
   Yes [ ] No [ ]

2. If yes, what is the change?  
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3. Have the in-service trainings/workshops attended contributed to students’ academic achievements?  
   Yes [ ] No [ ]

4. If yes, what could be the reason?  
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Section F: Pre-training and post-training

1. Do you think the in-service/workshops you have attended are important to you?  
   Yes [ ] No [ ]

2. Can you give reason(s) for your answer?  
   -----------------------------------------------------------------------------------------------
3. Have you acquired new experiences after undergoing training as compare to the time you have not been trained? Yes [  ] No [  ]

4. If yes, what are some of the new experiences acquired?

General comment(s)/recommendations

How do you think INSET/workshops should be organised for teachers in the classroom to develop them professionally? 

Thank you for your time and contributions. May God bless you!
Appendix C:

Appendix C (1) Interview with the GES Training Officer (KNWD)

Question 1: Sir, how long have you been here as the training officer in the district?

Answer: Yea actually in the district, I have two roles that I play, I was in the district as the culture co-coordinator and for some few time the training officer also went for further studies and I took over from him to be acting as the district training officer. Not quite a long time, but approximately about two months.

Question 2: Sir, are you aware of In-service Education and Training (INSET) which GES is to organised for teachers?

Answer: There are numerous INSETs that are supposed to be given to teachers. The reason is, to update the quality of the teachers and then to abreast them with new educational policies that may be existing. Also, for they themselves to understand the job and whom they are as a professional teacher, so we have had a numerous of them.

Question 3: Have you been organising INSETs for your teachers in the district?

Answer: Yes, so many times, we have just ended a programme last week, INSETs training for a category of teachers that is on English. There has been a book introduced for Literature for the BECE, so we had to call the teachers concerned of English and give them that training. There have been other INSETs we have given to teachers, Kindergarten to Primary three teachers reading improvement, so there are a number of them, but for now the few to be mentioning.
We still have some to even do; we have an INSET which am just trying to organise for teachers and head teachers on the new educational policies which we call Pre-Tertiary Teacher Professional Development and Management that has to do with the new trends of the teacher profession, and so we are organising the training for beginning teachers (BT), teachers who have just join the service and then for the head teachers. So in some weeks’ time we may be organising that INSET again. So for INSETS it is something we do all the time when the need arises.

Question 4: Please sir, how are the training programmes funded?

Answer: Most at time these training programmes have been funded by the NGOs. Usually they will call the facilitators and train them, that is, what we call trainer of trainers. They will have to go and do about a week somewhere, probably Tamale or any of the regions and when they come back there will be funds made available for them at the district accounts to sponsor and finance the programme. The trainers only need to come, mobilise the teams especially the people concerned, put everything in place, have a fixed day, prepare a budget and then prepare a memo raised for the funds which the NGO might have put down for the programme, one participants will be carted for, within the number of days the training has to take place. So the funding come from NGOs that are in partnership with GES.

Question 5: Sir, can you mention some of the NGOs?

Answer: We have World Vision, we have Afrikids, we also have USAID, and we have other NGOs like CAMFED and other things.
Question 6: Sir, what are some of the programmes you do encounter in organising INSET programmes?

Answer: Actually, actually, there is nothing that will be happening without at least a problem, challenges, so the challenges sometimes is the organisation itself. Sometimes the NGOs will propose a time frame for that. Sometimes it goes into our educational agenda and so we have to sit down and look at a convenient time that can be able to get the activity on. Secondly, there have been a lot of complains even from participants, because sometimes we do not satisfy them despite the fact that they are going to benefit from a training. We usually encounter problems with regards to finance; people thought they are coming to have enough money, so there are a lot of issues.

Question 7: How regular do you organise workshops or INSETs for your teachers?

Answer: INSETs come at any time like I said early, a Non-Governmental Organisation sits somewhere and thinks they want to do this through a proposal somewhere. If they are able to acquire funds they think they want to implement it, they call people and train and when they come back they don’t sit down, so we do not have exactly determined period where INSET programmes come, but at least we could have 3-4 INSETs within a term.

Question 8: Sir, what INSET programmes do you organise for the teachers?

Answer: The programmes on INSETs are always based on improving teaching and learning in the district to raise good performances, so all the INSETs are based on learning.

Question 9: Sir, so how have these training programmes help students’ learning and achievement?
Answer: Oh a lot because now when teachers are updated, they have acquired the skills and knowledge to be able to teach effectively. They are abreast with new fundamentals and with that they can do effective work, and when effective work is done, certain times you can see it through the performances. You will realise that the performances will improve especially at the basic level when they write the BEC exams.

Question 10: Do you follow up to assess the impact of the training programmes or workshops?

Answer: Exactly, exactly, when we organise an INSET we had to go to the field to monitor and evaluate it, so most occasionally we go in for monitoring and evaluation to see the improvement of the programme in the school base. Sometimes we have to send reports; there are documents we have to put in place so that whoever wants to see whether programme has taken off, so there is always a bit of evidence we have to show.

Question 11: Sir, during your follow ups, do you think teachers who attended your programmes perform better than those who have not?

Answer: Yes, certainly, when somebody have been given more information about something, the next time you go to the person, you really find out that the person would have made some improvement. There are still some too, probably if they will go back and will not be very serious with what they have learnt, so we still enforce everybody to work effectively. We are not always satisfied that once they are trained they are doing their best. We still monitor to motivate them to put in more effort. You know everybody need encouragement and assure that whatever they learned, they put in place, but we are not still satisfied.
Appendix C (2) Interview with the GES Deputy Director (Human Resource)

Question 1: Sir, how long have you been here as the human resource director?

Answer: I am approximately two years.

Question 2: Sir, are you aware of INSET which GES is supposed to organise for teachers?

Answer: Yes, am aware.

Question 3: Sir, have you been organising such trainings for your teachers?

Answer: Yes, I do.

Question 4: How is the organisation done sir?

Answer: Normally I collaborate with the training officer towards the preparation of INSETs for newly trained teachers and newly appointed head teachers.

Question 5: Sir, how do you fund the training programmes?

Answer: Normally, we have the GES fund some of these In-service trainings and then some NGOs. We place proposals for such trainings and they do assist us.

Question 6: Sir, do you encounter problems in organising these trainings or workshops?

Answer: Yes, in every activity you conduct there is the need to encounter few thieving problems, but we do overcome them.

Question 7: How regular do you organise INSETs or workshops for your teachers?

Answer: We do organise these things when the need arises, but normally the beginning of the academic year.
Question 8: Sir, what are some of the programmes you organise for the teachers in the district?

Answer: Some of the programmes involve induction courses for newly trained teachers and newly appointed head teachers in the district. Sometimes too, the conditions of services, most of them are, even though they learnt about these things in the Training Colleges, there is the need to have additional information for them to guide them work effectively.

Question 9: Do you think the training programmes help students’ learning and achievement?

Answer: Yes, it does a lot, because the teachers are guided as to how to handle these kids back in the schools.

Question 10: Sir, do you follow up to assess the impact of the training programmes or workshops you organise for your teachers?

Answer: Yes, we do, first we have circuit supervisors (CSs) who go round, we give them guidelines as to what to look for and then assess the students to see whether there is a marked improvement in their performance. Then from time to time the frontline goes together with Deputy Director in charge of supervision to assess what the CSs, head teachers and teachers are doing in the field.
Appendix C (3) Interview with CAMFED Worker at the GES, in charge of Girl Child Education

Question 1: Please madam, how long have you been working with CAMFED Ghana?

Answer: I have been working with CAMFED Ghana for the past three years.

Question 2: CAMFED Ghana is an NGO which is into education especially girl child education, have you heard of INSET as a policy?

Answer: Yes, I heard of it.

Question 3: Have you been organising INSETs or workshops for your teachers in the district?

Answer: We have been doing so, but only to CAMFED beneficiary schools.

Question 4: How do you normally organise the training programmes?

Answer: When CAMFED gives us the opportunity to organise INSET for our teachers, we normally write letters to the various beneficiary schools inviting them for the training and then a date will be schedule for the training and that will be only the teacher mentors in every beneficiary school, so we invite them for the training.

Question 5: So it means you only train your mentors?

Answer: Yes.

Question 6: The training does not extend to other teachers?

Answer: We only train the teacher mentors.
Question 7: Madam how is the funding done, is it solely CAMFED or other organisations come in to help?

Answer: To my best notice, is CAMFED who normally sponsor everything.

Question 8: Madam, what are some of the training programmes you normally organise for the teacher mentors?

Answer: We train them on guidance and counseling to take care of the girls in the schools, and then we also train them on proposal writings to write proposals for support in their various schools.

Question 9: Madam, do you think the training programmes you give to the teacher mentors help students, especially girls in their learning and academic achievement?

Answer: Yes, because now we have seen that our dropout rate has reduced through the counseling the teachers give to the students. It has helped them to be in school till they complete, and then apart from that, they have written proposals and most of the schools, when we go there you see that they have something that CAMFED have supported them, toilets and then urinals in the beneficiary schools.

Question 10: Madam, do you follow up to assess the impact of the training programmes and workshops that CAMFED organize for the teacher mentors.

Answer: We make follow ups, the District Education Committee (DEC) makes follow ups to the various schools to monitor the activities that they are doing.
Appendix C (4) Interview with CAMFED Worker at the GES (Officer in Charge of Basic Education)

Question 1: Please madam, how long have you been working with CAMFED Ghana?

Answer: For the past three years.

Question 2: CAMFED Ghana is an NGO which is into education, especially girl child education, have you heard of INSET as a policy in GES?

Answer: Yes, I heard of it.

Question 3: Have you been organising INSETs or workshops for your teachers in this district?

Answer: Yes, we do, we do organise some courses for them especially CAMFED beneficiary schools. They always give us funds to organise workshops for their teachers that is the teacher mentors.

Question 4: Your training is not organised for all teachers in the beneficiary schools, but the teacher mentors?

Answer: Yes, only the teacher mentors who are directly connected to the beneficiary schools.

Question 5: Madam, how do you normally organise the training programmes?

Answer: These programmes are always organised when CAMFED see the need for teacher mentors to be given some training, may be what activities they have to carry out in
the school to support the girls, so they always give us the funds and they even give the areas in which to train the teachers.

Question 6: So that means the funding is always by CAMFED Ghana?

Answer: Yes

Question 7: No other organisation comes in to help?

Answer: No, but on the part of other NGOs like Afrikids and World Vision also come in. But they also train teachers in the basic schools. Some train Day Care teachers on reading and other aspects.

Question 8: What are some of the training programmes you normally give to the teacher mentors?

Answer: The teacher mentors, like orientation, if we have new teacher mentors, and you know as teachers some go and some come in, so we give them orientation on CAMFED activities. We also give them training on how to help the beneficiaries in their learning activities. Even at times we give them some training on, like examiners so that they will know how to teach the final years to pass their exams.

Question 9: Madam, do you think the training programmes you give to teachers especially your mentors, help students learning and achievement? We think so, because as they go back they also try to put on their best so that, you know all is gearing towards the girl child, so as teachers, when we train them they also try to put on their best to help those beneficiary girls to be able to coop-up with their studies, so it helps the teachers in their teaching.
Question 10: Apart from the training you give to teacher mentors, do you provide some materials like TLMs reference materials and other things which may go a long way to help students learning and academic achievement?

Answer: Yes, because CAMFED in particular, we give schools textbooks, even on special subjects like the home Economics we provide them with equipment, so that at least they have something which will help them do effective teaching and learning.

Question 11: Madam, after your training or any material given to the beneficiary schools, do you follow up to assess the training as well as how the materials are been put to use?

Answer: We do follow ups because with CAMFED, we have a whole group like the DEC, so each person has a role. So we have the monitoring group who always go to monitor the activities of CAMFED within the DEC in the district. So we do monitoring and supervision, and then the CAMFED workers also do follow ups to see how things are going on. So we do follow ups and monitoring.