

UNIVERSITY OF CAPE COAST

TEACHER TRAINEES' PERCEPTION OF THEIR COMPETENCE: A STUDY OF
SELECTED SEVENTH DAY ADVENTIST TEACHER TRAINING COLLEGE
TRAINEES, ASOKORE, GHANA

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TRAINEES, ASOKORE, GHANA

BY

BETTY ADUHENE-CHINBUAH

Dissertation submitted to the Institute of Education of the Faculty of Education, University
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Education Degree in Educational Management

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DECLARATION

Candidate's Declaration

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

Candidate's Signature:..... Date:.....

Name: Betty Aduhene-Chinbuah

Supervisor's Declaration

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

Supervisor's Signature:..... Date:.....

Name: Prof. F.K. Amedahe

ABSTRACT

Ghana like all nations needs useful and good quality education that will help in the country's development. This can only be done when teachers are well equipped and competent enough to teach. Teacher competence is therefore very much necessary for the development of education.

The study was, therefore, designed to find out teacher trainees' perception of their competence. This was to find out how prepared they were after their initial training to teach.

The researcher reviewed related literature on the topic, using mainly the library. Questionnaire was the instrument used in collecting data. One set of questionnaire was designed and administered to teacher trainees who had completed their one year teaching practice under mentorship. Random sampling procedure was used to select a sample that comprised 80 teacher trainees. The data obtained were analyzed using descriptive statistics.

The main findings were that: (a) Teacher trainees saw themselves as competent after going through the new programme which is the in-in-out programme at the teacher training college. And (b) the development of the teacher must be done in a holistic way, which should include an appropriate balance of general education, academic specialization as well as professional studies.

Among the recommendations made were that, during the period of mentorship more subject matter content should be taught at the study cycle meetings. On-campus teaching practice must be effectively done in all subjects.

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DEDICATION

This work is dedicated to:

My dear father and mother, Mr. and Mrs. D. O. Bampo, my brother and sisters. my husband, Augustus, as well as my children, Sonny and Jeannette Aduhene-Chinbuah.

TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
CHAPTER	
1 INTRODUCTION	1
Background to the Study	1
Statement of the Problem	4
Purpose of the Study	6
Research Questions	7
Significance of the Study	7
Delimitations of the Study	8
Definitions of Terms	9
Organization of the Study	9
2 REVIEW OF RELATED LITERATURE	10
The Concept of Competency	10
Teacher Competency	11
Teacher Education	16
The Teacher Training Curriculum	22
Teacher Training Curriculum in Ghana	24

The New Curriculum for Teacher Training (The Teacher Training Curriculum Policy)	26
Subject Matter	29
Mathematics	29
Comparison of Teacher Training Mathematics and the Primary School Syllabus	31
Methodology of Teaching Mathematics	32
Competencies to be Developed in the Student Teacher	34
English Language	35
Comparing the Primary School English Syllabus and the Teacher Training College English Syllabus	36
Competencies to be Developed in English by the Teacher Trainee	37
Methodology of the English Syllabus	38
Mentoring	39
Summary	41
3 RESEACH METHODOLOGY	43
Research Design	43
Population	43
Sample and Sampling Methods	44
Instrument	45
Validity of the Instrument	46

LIST OF TABLES

Table	Page
1 Structure of Teacher Education in Ghana	19
2 A Diagrammatic Representation of the In-In-Out Programme	28
3 Data on Student's Perception of their Competencies in their Professional Areas	49
4 Data on Perceived Competencies Developed in Mathematics by the Trainees for their Teaching	52
5 Data on Perceived Competencies Developed in English by the Teacher Trainees for their Teaching	53
6 Data on Frequency of Use of Mathematics and English Teaching Methods	55
7 Data on Training Useful in Helping to Develop Teacher Competency	58
8 Data on Trainees' Perception on how their Teaching Practice Help to Improve their Competencies	60
9 Data on Trainees' Perception on Skills Needed in Teaching	62
10 Data on Teacher Trainees' Perception of their Preparedness to Teach	63
11 Data on how Teacher Trainees' Perceived the Usefulness of their Mentors	65
12 Data on how the Teacher Trainees' Perceived the Effect of the Presence of their Mentors during Teaching Practice	67
13 Data on Teacher Trainees' Perceive Ability to Use Classroom Teaching Practice Skills	69
14 Data on Teacher Trainees' Ability to Teach Subject Matter or Content in Mathematics	71
15 Data on Teacher Trainees' Ability to Teach Subject Matter Content in English	72

16	Data on what Teacher Trainees' were Made to Teach during their Teaching Practice and what they were Taught at College in English and Mathematics	74
17	Data on the Relationship between what was Taught at College and what was Taught at the Basic Levels in Mathematics	76
18	Data on the Relationship between what was Taught at College and what was Taught at the Basic Level in English	77
19	Data on Teacher Trainees' View on Content Area to be Emphasized at the Training College in the Teaching of Mathematics and English	79

CHAPTER ONE

INTRODUCTION

Background of the Study

Economic systems have become global in scope and the information and skills to participate fully in them have become more complex. The scope of imparting skills necessary and sufficient for citizens to participate fully in social and economic development has also widened. In response to this, the Government of Ghana has in its national framework for socio-economic development, made education the pivot of its development plan in nationwide long – term initiative to expand, strengthen, and make more relevant, its basic education system. The teacher factor is thus an important fact to note since without the correct and effective calibre of teachers the wheel of education can never be moved to success.

No country can ignore the teacher in its attempt to reform socio-economic and political institutions. It can be said that the quality and level of education a country has, determine her level of development. The world is technologically advancing and is also becoming globalised; there is the need, therefore, to be part of this global village. There is, consequently, the need for proper training of the younger generation to enable them to fit into these new changes. The training of these young ones depends on the teacher.

Countries are putting more emphasis on their education and Ghana, as a country, is no exception. The country has gone through series of educational

reforms. The provisions of these reforms, it must be noted, cannot be achieved without the teacher.

After years of practice teachers at the basic level are blamed for not being competent and not having the requisite skills to enable them teach effectively. To help check this problem, the type of teachers produced to teach at the basic level has to be looked at. There is the need to look at what goes into teacher training.

In order to raise competencies of the teacher in Ghana, a new curriculum has been developed for teacher training. This is to help in developing the teacher holistically. As the world changes, the training of teachers must change to reflect the changing needs of the country. The new teacher must be well equipped with current information that will meet the changing needs of the country and the individual being taught. As the country advances technologically, it has become imperative on the teacher to possess skills that will help the learner acquire the knowledge base and skills he/she needs to be able to understand and use the new technologies. The question of what constitutes teacher training must be examined. Since teachers are responsible for educating the individual, they must have knowledge as well as skills with which this knowledge could be transferred to their learners.

It must be emphasized that the provision of good teachers and improvement in competencies are very necessary to help improve pupil achievement. As such, the training of teachers must be thorough. This means teachers must be given adequate knowledge on subject matter and methodology in various disciplines they handle. In effect, their competencies must be developed. One of the basic challenges facing teacher education may

be persuading some students that there is much more to be learned in becoming a teacher. Over the years, the curriculum for teachers has laid emphasis on education as a discipline in which students are taught the various methods of teaching.

The teacher must have adequate information or knowledge on the subject he or she will be teaching after training. The effectiveness of teacher education has been a major concern to government. As stated by Kyriacou (1995) “a central task of teacher training is to foster the development of teachers who are able to reflect critically and evaluate their own teaching” (p.1). This has led to the drawing of a new curriculum for the teacher training colleges. The curriculum aims at bringing new changes that will help improve the system. With the new curriculum, in the first year of training, emphasis is laid on subject matter. The student is taught only the content of the subjects he/she will be teaching in the primary and junior secondary schools. This is to help the student teacher acquire more knowledge in these subjects. The first year is also seen as a ‘top up’ of the senior secondary school work. In effect, content is made solid because without information or knowledge on subject matter, there can be no meaningful teaching no matter how skilled a person is in his/her methodology. The second year of training deals with equipping the student with professional training. The student teacher is taught methods of teaching and other professional competencies. The student is made to practise these through micro – teaching, where he/she is helped to integrate the content and methodology he/she has learnt. In the final year, which is the third year, student teachers are sent out into the field, they are attached to schools where they do practice teaching for about seven months. This is where they are

required to integrate content and methodology to teach. They are also mentored in professional development

Statement of the Problem

In recent times, governments have called on teachers and educational planners to take a second look at the type of education being offered to their citizens. There has been the institution of teachers' awards at various levels of education to boost teachers' performance and help motivate them. Others have called for the implementation of sanctions against teachers who do not perform well. Most people think that the new curriculum drawn under the new educational reform has contributed to this. Others only look at it from the performance of teachers. Those who blame teachers think academically weak students enter the training colleges. Some students enter these institutions after they failed to make the grade to the tertiary institutions. Thus, there are those who think that teachers are not given enough training to make these students competent. To this effect, then, the competency of teachers being trained must be examined.

In looking at teacher competency, some people are of the view that, teaching skills are inborn, that is, good and competent teachers are born with their skills. Others also think that these skills can be learnt or acquired through training.

To produce competent teachers, several ways or methods could be used among which are:

- (a) People who want to enter into the teaching profession must be made to teach in the field for one year. After one year those who still have

interest in the profession as well as those who are able to satisfy the set standard must then be admitted into the colleges to be trained.

- (b) People who have obtained their diploma and degree certificates in subjects being offered at the basic level should be allowed to train as teachers. This will ensure that teachers with knowledge in subject matter are given professional training to become teachers.

However, the Teacher Education Division of the Ghana Education Service (GES) came out with another modality. A new curriculum has been drawn to give the student teacher a thorough training. The curriculum emphasizes the professional training of the teacher. The new curriculum has been drawn to cover three years.

In the first year, students are only taught subject – matter content of the subjects they will be teaching at the basic level. At the end of the year, an examination known as the first year promotion examination is written in all subjects. When a student fails in four subjects out of ten he/she has written he/she is withdrawn. A student is asked to rewrite if he/she fails in less than four subjects. This is because one cannot teach effectively without knowledge in subject matter content.

In the second year, students are then taught the methodology in the various subjects as well as methods of teaching and other professional skills. At the end of the second year an examination is also written. Those who fail are made to repeat their class.

In the final year, students are given field experience. They do ‘teaching practice’ for about two terms after which they go back to campus. They are then examined in curriculum studies. The question then is: do students who go

through this new approach of teacher training see themselves as competent teachers?

Purpose of the Study

The purpose of this study is to examine student teachers' perception of their training with respect to:

1. Their perception of the effectiveness of their teacher education programme over three years with regard to subject-matter competency.
2. Determining the effectiveness of the new curriculum introduced in teacher training colleges that seeks to develop teachers to become competent (in their entirety)
3. Finding out if the methodology and subject matter content taught in the first and second years are enough to help them teach effectively.
4. Finding out if the field experience given in the form of off-campus practice teaching helped them to improve upon their competency.
5. Finding out if teacher trainees are able to apply the methodology and other professional skills taught in their teaching and in their classroom practices.
6. Establishing the usefulness of equipping the student teacher with adequate knowledge of subject matter content as well as professional skills before practice teaching.

Research Questions

Questions that were used to guide the study include the following:

1. To what extent do students who go through the new curriculum where emphasis is laid on subject matter content and professional areas perceive themselves as competent after teaching practice?
2. To what extent is the new curriculum introduced in the Teacher Training Colleges effective in developing the teacher in his/her entirety?
3. Are the methodology and subject matter taught in the first and second year enough to enable the teacher trainee teach effectively?
4. To what extent did the period of practice teaching help improve the teaching competence in the teacher trainee?
5. How far can it be said that students were able to practise what they have been taught in subject matter and professional area?
6. Was the knowledge of subject matter content and professional skills given before practice teaching useful?

Significance of the Study

The study is useful, in that in trying to bring out products of education that will be useful and suitable for the needs of the society and areas in which they are found, the teacher factor cannot be ignored. The question of how the teacher is trained and what constitutes teacher competence is then raised to find out how well teachers feel prepared before they are sent out to teach.

The significance of the studies lies in the fact that:

1. The findings of this study are useful to curriculum developers for teacher training as a foundation in their planning of other curricula. They will be able to identify areas of the curricula that need strengthening whether in the area of professional training or in the areas of subject matter content.
2. It will help mentors (teachers) understand the needs of the mentees and help them in the field since those needs have been identified and stated.
3. In-service coordinators / trainers can use it as a foundation in planning in- service programmes because the study identifies areas where emphasis is needed.

Delimitation of the Study

The study covered only Seventh Day Adventist Teacher Training College, Asokore, Koforidua (SDA). Findings may not apply to all colleges. It must be noted that all teacher training colleges follow the same curriculum. However, there are two programmes at the training colleges; Programmes A and B. Programme A trains teachers for the Primary School while Programme B trains teachers for the Junior Secondary Schools. The Seventh Day Adventist Teacher Training College (SDA) offers Programme A.

The study examined students' perception. It did not look at the public view, or tutors' and planners' view. The study sought to find out how those for

which the curriculum was planned see it in terms of their gains and losses. Students' perception may differ from that of tutors and planners.

Definition of Terms

1. Professional area: It implies all the methodology taught in education as a discipline, classroom practices and the methodology of the various subjects taught at college.
2. Subject Matter: it refers to knowledge or content of the various subjects taught at college such as Mathematics, English and Social Studies.
3. Mentee: It refers to student teachers who are sent out for field experience. In this work it refers to the third year students who go out to teach for two terms.

Organization of the Study

The study consists of five chapters. The second chapter looks at the literature review. In chapter three instruments, methodology for collection of data and procedures followed in analyzing data are presented.

The main focus for chapter four is the presentation of the results and their discussions, Major findings as well as conclusions and recommendation are presented in chapter five.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The quality of education depends on the teacher, so every effort must be made to develop a teacher who has all the qualities and skills needed to help bring about the desired results in education. All over the world, what the training of teachers must entail has been of much interest. It has been realized that the curriculum and method of teacher training vary from one country to another, but no matter the difference, reference is always made to professional training and subject matter.

The chapter discusses what the training of teachers entails as well as perceptions of some people on teacher training. The chapter explores the following areas.

1. The concept of competency and teacher competency
2. Teacher education
3. The curriculum of teacher training colleges
4. Subject matter at training colleges
5. Professional areas
6. Mentoring
7. Studies related to teacher education

The Concept of Competency

The Chambers Dictionary (1997) looks at competency as efficiency, ability, and capacity. Competency means being sufficiently good or skilled or

efficient. It, therefore, leaves no doubt as to why most educational researchers and writers in their attempts to define a competent teacher use the word efficient. Perrot (1990) looks at competency of the teacher as effective teaching.

Ryan (1960) came out with some observable indicators of effective teaching. Through observational studies he identified three main factors and defined the positive and negative poles of these factors as follows:

1. Warm and understanding (positive pole) versus unplanned and slipshod (negative pole)
2. Organized and businesslike (positive pole) versus dull and routine (negative pole)
3. Stimulating and imaginative (Positive pole) versus dull and routine (negative pole)

He further stated that teachers rated nearer the positive poles of each factor are considered as more 'effective' than teachers rated nearer the negative poles.

Melton (1994) looks at competency as that which relates specifically to expected performance in the place of work. He defines it as that which is adequate, suitable, sufficient, legally qualified, admissible and capable for the purpose. In sum, it can be said that competency refers to adequate preparation of teachers to teach and to effect change in pupils.

Teacher Competency

In the opinion of Perrot (1990) good teaching cannot be defined because it is perceived as being so complex and creative and defies analysis.

Yet she states that educators usually find it relatively easy to list the characteristics of a good teacher. She further says that this is in spite of the fact that educators may differ about the relative importance of these characteristics to be included in such a list.

Flanders and his Associates (1970) observe that teachers who use the indirect style of teaching are competent. They observe two contrasting styles of teaching; the direct and the indirect. They point out that students taught by teachers who use the indirect style perform better. They claim that teachers who ask questions accept pupils' feelings, acknowledge pupils' ideas and praise and encourage pupils do perform better than teachers who just present lessons without asking questions.

Rosenshine and Fraust (1973) also identify five teacher characteristics consistently associated with gains in pupils. These are: the teacher being businesslike and task oriented; the teacher being clear when presenting instructional content; the teacher using a variety of instructional materials and procedures and the teacher providing opportunities for pupils to learn the instructional content. This work sought to see if teacher trainees were able to practice the five characteristics associated with gains in pupils as well as find out if they see these factors as a mark of competency.

According to Perrot (1990) teacher competency can also be measured in terms of pupils' performance. Perrot stressed the fact that the competent teacher is the one who is able to demonstrate the ability to bring about intended learning goals. The two critical dimensions of effective teaching are "intent" and "achievement". The researcher sought to find out if student

teachers see these words “intent” and achievement” as indicators of good performance.

Nacino-Brown, Oke and Brown (1990) list some factors that can best describe an effective teacher. They look at the personal characteristics of an effective teacher. According to them, teachers are taught to be effective or competent if they show sympathy and kindness, helpfulness, patience, a pleasing personal appearance and manner; emotional stability and self-control among others. Competent teachers must therefore, show professional characteristics, which include these. The study sought to find out if teacher trainees see these qualities in themselves.

Darling-Hammond and Youngs (2002) assert that verbal ability and subject matter knowledge are the most important components of teachers’ effectiveness. They affirm that there is an important connection between a teacher’s verbal and cognitive abilities and achievement. This study sought to find out what teacher trainees experienced on the field to find out if they determine this connection between teachers’ cognitive and verbal abilities and students’ achievement.

Kyriacou (1995) indicates that effective teaching is essentially concerned with how best to bring the desired pupil learning by some educational activity. He also brings to light the number of different ways effective teaching has been approached and looked at. Kyriacou (1995) further points out that since the 1960’s research on effective teaching has focused fairly and squarely on activities in the classroom and in the interaction between teacher and pupil. As a result, in thinking about competent teaching we can distinguish between three classes of variables.

- a) The context variable: This refers to all those characteristics of the context of the learning activity, which is usually classroom-based. These have some bearing on the success of the learning activity. Such traits are seen in teacher characteristics like age and experience and class characteristics like size of the class and social mix. It is also seen in subjects' characteristics in terms of subject matter level of difficulty. They could also be seen in school characteristics, for example, ethos and facilities, community characteristics like affluence, population density and geographical location; as well as characteristics of occasion, for example, time of the day, and preceding lesson.
- b) The process variable refers to all characteristics of teacher and pupil behaviour and of the learning task and activities which take place in the classroom which may have a bearing on the success of the learning activity. Some of the process variables include teacher's enthusiasm, clarity of use of questions as well as use of praise and criticism among others.
- c) The product variable includes all those educational outcomes which are desired by teachers and which have formed the basis of either their planning of the learning activities and of objectives or criteria which can be used to consider and monitor effectiveness.

Farrant (1971) points out that since the efficiency of a class is the measure of its teacher, to be a competent teacher, there are some points to be followed as guidelines. These points are: the teacher must be methodical; the teacher must organize all routine matters and be prepared as well as be energetic and enthusiastic. Stones (1994) indicates that teaching is effective as

long as the prescribed content of a curriculum is delivered. Competent teachers, he says, use pedagogical principles as a frame work to guide and evaluate their own practice.

Deku (2000) defines teacher competency as possessing and demonstrating the required knowledge, skills and abilities for teaching. He notes also that competency is the “ability to do”. This is because the Ghanaian teacher is basically expected to exhibit competencies such as skills in lesson presentation, skills in class management and class control as well as exhibit good personal and professional qualities.

Olger and Garner (1996) say teacher competency is the skills, knowledge and understanding that are required to ensure that teaching is effective for the full range of pupils taught by that teacher. Teachers are, therefore, expected to employ them (the skills) using a flexible responsive set of higher order strategies that may bring the desired outcomes. Teacher competency therefore becomes an indispensable factor for the successful teaching and learning process.

Melton (1994) describes teacher competency as the teacher knowing what is to be taught; knowing how to teach as well as being capable of dealing with a group of problems that involves knowing children, adolescents and adults. In brief, the teacher must have a broad viewpoint of his/her position as a teacher. It can further be noted that the quality of a teacher’s practices does not depend on discrete skills that they possess but rather the way those skills are applied. Brophy and Good (1986) and Richardson (1968) conclude that teachers’ beliefs and interpretations of classroom practices relate to levels of quality of effectiveness.

According to Perrot (1990) teaching skills and competency can be acquired through three stages. She terms the first stage as cognitive one. At this stage the trainee needs to study and observe the skill, know the purpose of using it and how it will benefit teaching. A concept of the skill is formed here.

The second stage is practice. The trainee will have to achieve mastery and flexible use of the skills. This is done through micro-teaching where the teacher is allowed to practise specific teaching skills under controlled conditions. In this case, the controlled conditions involve a short practice period.

The third stage, Perrot (1990) states, is to obtain knowledge of results or feedback, which involves evaluation. This can take the form of a supervisor's comment after lesson is over.

Teacher Education

Teacher education and development in Ghana has seen many changes and modifications since its inception in the nineteenth century. Every government or ruling agent has added, subtracted or modified it in a way. Every education policy has mentioned the strengthening of teacher education source.

One can say that the history of teacher education in Ghana is a chequered one. Teacher education has always been based on ad-hoc programmes to meet emergency situations and the needs of the education system. The needs of basic education have changed over time; teachers have been required to undertake more institutional training to upgrade their knowledge and competencies. The government has, therefore, built up a

teaching corps comprising different categories of teachers. There is a Certificate 'A' programme which trains people for the basic school. There is also the two-year specialist and three year diploma holders who are trained in special subject areas like Home Science, Physical Education, Music, Art among others. The specialist courses have been abolished, there are graduate teachers who are normally trained at the universities. There are two categories; those with professional training and those without the required training in teaching. The later are considered as non-professional graduate teachers. These categories teach in the second cycle schools.

In 1930 the four year teacher training course was established to train middle school leavers to teach in primary and middle schools. This type of training attracted middle school leavers with best qualifications. Teaching as a profession was highly respected then.

The teacher's Certificate 'B' programme was also introduced in 1937 to help the government meet the increasing demand for more teachers at the primary level due to expansion. This was a two-year programme that led to the award of a Certificate 'B'.

As a way of upgrading the Post-B, Certificate 'A' was introduced in 1951. This was part of the accelerated development plan. This consisted of a two-year programme for certificate 'B' holders, which enabled them to upgrade to a post 'B' Certificate 'A' after a period of teaching experience in the classroom.

As secondary education expanded, a new two-year programme was established in 1950 for secondary school leavers to train them to teach in

middle and secondary schools. Graduates of this programme were awarded Certificate 'A'.

In 1952, two programmes, the two – year specialist and the three – year diploma were introduced. These turned out teachers trained in specialized subject areas. The two – year programme covered specialization in Home Science, Physical Education, Music and Art.

This was later upgraded to a three – year diploma course to embrace more subject areas such as English and Mathematics. This programme was opened to Certificate 'A' teachers who already had some classroom experience.

All programmes described above have been phased out. We now have the three year post – secondary teacher training programme leading to the award of Post – Secondary 3 years Teachers Certificate 'A'. This new programme was introduced in 1978. The main objective of the programme is professional competence of teachers. At present, there are 41 teacher training colleges in Ghana, three of which are private. These colleges prepare teachers for both primary and junior secondary school levels.

In 1993, the education commission on teacher education recommended the setting up of only two levels of teacher education, which are; four year straight degree programme for graduates from Senior Secondary School; and a 2 year post diploma degree programme for practicing teachers.

Table 1

Structure of Teacher Education in Ghana

LEVEL	DURATION OF COURSE	ENTRY LEVEL	CERTIFICATE AWARDED	LEVEL OF TEACHING AFTER CERTIFICATE
Post Secondary Level	3 Years	Completion of Secondary School	Post Secondary Certificate	Primary and Junior Secondary
Higher Education (Non Graduate Level)	3 Years	Completion of Post Secondary And Having Taught For 3 Years	Diploma Certificate	Either Post Secondary Teacher Training or Senior Secondary
Higher Education (Under Graduate Level)	3 Years or 2 Years For Diploma, B.Ed Diploma, B.Ed	Holding Diploma Certificate or Senior Secondary Leaving Certificate	B.Ed Degree	Either Post Secondary Teaching or Senior Secondary
Higher Education (Post Graduate Level)	1 Year	Holder of Graduate Degree E/G/B.SC, B.A	Post Graduate Certificate in Education	Senior Secondary School or Teacher Training

In 1998, Awuku submitted an executive summary of proposals on teacher education policy in which a number of issues were addressed, among which are:

1. The nature of the overall teacher education programme structure. It states that the structure of the programme will comprise a three-year pre-service training leading to a diploma in basic education; a two year in-service diploma in basic education for serving certificated teachers and two-year post-bachelor of education (B.Ed) degree in basic

education. A fourth component is a programme of continuing teacher development to update the knowledge and skills of teachers. The advantage, Awuku notes are that, the structure of teacher education programme that has been proposed will permit clear linkages to be established between non-degree programmes. Teacher education he says would become a continuous process and career-long activity
Awuku, (1998)

2. On competencies to be achieved by teacher-trainees, he enumerates a number of them among that the trainee should:
 - (a) Demonstrate evidence of broad education that will enable him/her function purposefully and effectively as a citizen within his/her society and contribute to society's developmental aspirations.
 - (b) Understand and show appreciation for the development and nature of learners at the basic level.
 - (c) Demonstrate by his/her avert behaviour, the acquisition of a positive self-concept and sensitivity to the self-concept of others.
 - (d) Show an understanding and appreciation of the function of education (particularly primary education) in our culture and how changes can be effected by education.
 - (e) Indicate by his/her performance in selected activities an understanding of the skills in implementing learning as a process through which behaviour can be changed.
 - (f) Show that he/she is capable of using evaluative techniques and materials in such ways as to encourage the children with whom he/she works to learn and enhance their growth in meaningful ways.

Awuku further reiterates that “the problem solving” technique must be used to enable the trainee to learn for himself / herself. Application in learning, he says, must be encouraged. (The executive summary of proposals on teacher education policy, January 19981)

In teaching subject knowledge he suggests that the content of knowledge should be based on the content of the syllabuses of the basic school and this must be integrated with methodology.

Touching on the management of the third year programme, Awuku says that the trainees will be posted to their sponsoring districts to teach. Schools, he points out, will be selected carefully for the year-long internship programme so that trainees can be supported and properly supervised with support from mentoring and distance learning materials.

Awuku, in summary, reiterates a new mode of assessment of teacher trainees. He says assessment must be designated as performance based. Academic achievement will be emphasized. Teaching competence will form the basis of assessment. The tutor will play a leading role here since emphasis will be on in-course continuous assessment, with the awarding institution controlling it using moderators. All year groups will write an end-of- year examination. At the moment, all examinations for the three-year groups are externally moderated by the Institute of Education, University of Cape Coast (UCC).

The proposal for the certification of teachers indicates that certification of teacher trainees is to be done in two phases. After the initial training, trainees would be given a provisional teachers license which will enable them to teach for two years, and this completes the first phase. The second phase

will cover another probationary period of two years. The teacher's work will be supervised and assessed. A team from National Steering Committee (NASCOTE) will recommend the teacher to be issued with a professional teacher's certificate (PTC).

The Teacher Training Curriculum

According to Farrant (1971) teacher training is essentially a period of orientation of thought and outlook on education. He says teacher trainees should be helped to see this period as a means to their end instead of an end in themselves.

In fact, there can be no generalization of the teacher training curriculum. The training of teachers is done and viewed differently by different people from different countries. In Ghana teacher education has seen many changes.

Morrison and McIntyre (1976) point out that generalization about teacher education curricula is made difficult by the absence of systematic evidence on either the content or the organization of the course currently provided by colleges and department of education (p. 62). However, Morrison and McIntyre (1976) further indicate that as in most colleges, college of education courses are organized in terms of a distinction between 'professional studies' which is usually the responsibility of an education department and "academic" or "main subject" studies.

According to Holmes et al. (1963), the training of teachers must be based on the objectives of teachers training. As they claim the strength of any educational system must depend upon the quality of its teachers because the

value of children is determined by teachers. Holmes et al. further suggest that there is the need to provide teachers with the possible training, which will ensure them a status and esteem commensurate with the importance and responsibility of their work. The objectives of teacher training as Holmes et al. say is to produce teachers who will not only be classroom teachers but at the same time researchers and experimenters. This they point out will affect the curricula for teacher training. On the other hand, they stress that methods of teaching are to be learnt not through inculcated theories but by enlightened observations and experience in practice schools attached to the normal school. This assumption means that it is during practicum that student teachers will acquire methods and skills of teaching.

In discussing what goes into teacher training, Holmes et al. (1963) point out that Soviet Pedagogical Institutes have developed in training colleges, a profound interest in professional subjects. They also say that in English the basic subjects are principles of education, psychology, history of education, and methods of teaching. The American institutions, they assert, also represent a similar concept of the professional content of teacher training courses. They claim that some institutions emphasize professional subjects while others emphasize subject matter. Holmes et al. accept and state that, “the possession of a body of information – subject matter is regarded as a prerequisite of good teaching”.

Farrant (1971) affirms that teaching methods, which are the feature of education, have altered. He, however, points out that there is no value in having efficient techniques if what you are teaching is worthless. He stresses the importance of knowledge of subject matter.

Farrant (1971) adds that teacher trainees must be allowed to try the teaching methods to help them develop as experience brings greater confidence.

Nacino-Brown et al. (1990) look at teacher training in Nigeria as the specialization in particular subject areas and also the study of education itself in some depth as well as having special training in the field, in the form of teaching practice.

Looking at the above views, some common factors are mentioned in almost all the views and assertions. These are subject matter and professional skills, including teaching practice.

Teacher Training Curriculum in Ghana

In Ghana the training of teachers has seen a lot of changes. The curriculum has always been changing at one point or the other to enable the Ghana Education Service meet its manpower needs. Unfortunately, when policies are being formulated on education usually, no mention is made of teacher training nor what should constitute teacher training. This is confirmed by Akwesi (2002) when he says that “often no mention is given to teachers and teacher education, when in fact, the quality of an educational system is largely dependent upon the quality of her teachers” (p.1).

According to Akwesi (2002) the teacher trainee must be given more than knowledge and facts. He stresses that teacher trainees should be equipped with skills to help them develop the ‘affective domain’ of individual pupils. He suggests that there is the need to prepare teachers who are competent to teach both the content of the school curriculum and develop the children’s

characters and their personalities. Akwesi affirms that, “a teacher needs an appropriate balance of general education, academic specialization and professional studies” (p. 3).

These facts then make it clear that in training a teacher, there is the need to equip him/her with professional skills as well as knowledge in content subject matter.

According to Antwi (1992), colleges have provided and still provide initial training for teachers in basic school as well as the lower forms of the second cycle institutions. Antwi asserts that the teacher training curriculum includes education as a subject comprising methods, principles, psychology and student teaching practice. These are also included in the present curriculum of the teacher training colleges. Teacher trainees are taught education as a subject.

In considering teaching as a profession, every teacher as Antwi (1992) states, should be concerned with the professional competence. He bases this on three areas of study. Firstly, the prospective teacher should acquire knowledge of the culture of the society and the polity of the people as these relate to the educational enterprise. Secondly, prospective teachers are required to understand the process of human growth and development, that mental, emotional and physical behaviour of learners, psychology of learning, adjustment, motivation and personality. Thirdly, they should engage in direct experience that are planned to facilitate their induction into their first job. These experiences he states should include observation and participation in student teaching, internship, competence in methods of teaching and the use of instructional materials, appropriate to the age levels of the learners.

The New Curriculum for Teacher Training

In 1999/2000 a policy decision was made to adopt an IN-IN-OUT mode of initial training to replace the three year full time “in” programme. The rationale behind this scheme is that the training process should relate theory to practice. The professional area, the policy insists, must be strengthened.

The curriculum policy for pre-service teacher training is summarized as follows:

- 1) It is intended that the basic teacher qualification be upgraded to diploma level.
- 2) The pre-service programme is on the basis of two years college – the IN-IN-OUT system. Teacher trainees will be supported by mentors and will also be provided with distance learning materials during the ‘OUT’ programme;
- 3) Theory and academic components of the curriculum are appropriately balanced with practice and professional competence, so that methodology and practice are given emphasis;
- 4) Teachers will also receive training in the identification of children with special needs and techniques to absorb them into mainstream education where possible;
- 5) Assessment will emphasize the process and development of teaching skills;
- 6) Certification is in two phases. The first phase is the award of a provisional teacher’s license after completing the pre-service programme, followed by a probationary period lasting up to 2 years. The second phase is the award

of the teacher's certificate and registration as a certificated teacher, after a probationary period of satisfactory performance.

- 7) Linkages between teacher training colleges and awarding universities will be strengthened to ensure better articulation of the programme.

The policy and strategic plans for the education sector also state in the objectives and principles of teacher preparation and motivation policy that the provision of good teachers and the improvement of the competence of serving teachers' are central to improving pupils' achievement. The underlying principle is to provide teachers with better knowledge and skills together with better incentives to use their knowledge and skill for the benefit of children, through the creation of an accessible integrated teacher education and training. The curriculum of teacher education should, therefore, be critically examined vis-à-vis the curriculum policy for basic schools where the trained teacher will operate.

The first year is devoted to foundation academic study, aimed at building upon and consolidating the academic knowledge background of student teachers. Indeed, it is a top-up of the senior secondary school work. This is in response to the argument that most trainees possess weak subject background knowledge. This undermines their ability to teach effectively.

It must, however, be noted that, the subjects studied in the first year are those being offered at the basic level. Holmes et al stress the need for the curriculum to comprehend all the branches of instruction acquired by law in primary school. The first year also serves as another selection for teacher training on their practicum. First year students do attachment, observation and work practice during the long vacation period.

Table 2

A Diagrammatic Representation of the

“In-In-Out” Mode		
In Curriculum	In Curriculum	Out (Under Development)
Curriculum development		
i) Foundation academic learning courses (subject content reflecting knowledge) classroom teaching.	i) Curriculum studies and methodology (CMS) in all subject areas.	i) Distance materials
ii) Education studies	ii) Education Studies	ii) Mentoring training
iii) School attachment at the end of 1 st year.	iii) On – campus teaching practice	(introduction to education course)
	iv) Classroom – based project work	
Assessment		
i) First year promotional examination based on foundation academic	i) External Exam in CSM	i) Final external Examination of Classroom-Based Teaching Experience
ii) Continuous Assessment (CSM)	ii) Mentors and selected college tutors assessment of teaching	
iii) Project Work Assessment	experience.	

In year two, more emphasis is laid on curriculum integrated with methodology. This is to help forge closer links between pedagogic knowledge

and strategies for teaching the various subjects in primary and junior secondary school. Trainees are also taken through on – campus teaching practice. Student teachers in the second year in Programme ‘A’ colleges are required to learn and be examined in six subjects. Five out of the six subjects are compulsory, usually called “core” subjects. They include Mathematics, Science, English, Social Studies and Education. Besides, these “core’ subjects they are to choose two additional subjects. These subjects, referred to as “electives”, include Religious and Moral Education., Music and Dance, Agricultural Science, Ghanaian Language and Physical Education. Programme (B) colleges also specialize in various subjects.

The third year training is to be spent outside, in the field. Student teachers do out of campus teaching practice for two academic terms. Mentors in the field mentor them and some college tutors also act as link tutors. They also embark on their project work, essentially, action – research, which is classroom based.

Subject Matter

Subject matter is defined as the matter treated in a book or subject. It is mostly referred to as the content of a subject. Teacher trainees in Ghana at the training colleges study a lot of subjects, but for the purposes of this work the researcher will limit herself to Mathematics and English Language. This is to enable the researcher look more closely at these subjects.

Mathematics

Mathematics, as stated by the Curriculum Research and Development Division (CRDD) (2000), is a medium of communication that must relate to the child's own environment through appropriate experience in the development of the relevant concepts.

Mathematics, the CRDD asserts, should aim at helping the individual achieve mastery of fundamental Mathematical concepts and facts at different rates. Student teachers as part of their training are taught the curriculum of Mathematics at the basic level.

Under the content or knowledge acquisition, the CRDD suggests content be selected to help the child develop the language and mathematics necessary to understand his/her immediate environment and the real world.

On concept acquisition, the CRDD further says that concepts can be effectively achieved when teachers create learning situations and provide as much guide in knowledge and understanding of mathematics as possible through their own activities.

Kalejaiye (1990) also says that the objective of mathematics at the basic level is to provide the child with the necessary basic skills in numeracy and to expose him/her to ways of applying these skills to his/her problems. Kalejaiye (1990) indicates further that, the child should be able to acquire basic manipulative skills useful in ordinary life; he/she should be able to think logically. The child at the basic level, he says, should be introduced to the basic concepts of spatial relationship, basic record keeping and all aspects of accounts. Kalejaiye (1990) notes also that these objectives are worthwhile and provide basis for instructional objectives specified in the national mathematics curriculum. Mathematics according to Paling (1986) is used to find answers to

questions and problems which arise in everyday life and in trade and professions.

Comparison of Teacher Training Mathematics and the Primary School

Mathematics Syllabus

The mathematics course description at the teacher training college is given as comprising the teaching of basic concepts in mathematics, teaching place values and algorithms on operations, developing ideas about shape and space, measurement of length, capacity, mass/weight, area, time and angles, teaching of fractions, collecting and handling data.

The primary school syllabus also states that, children should be introduced to mathematics rather than arithmetic. Mathematics should be related to the child's own environment through the appropriate experiences in the development of the relevant concept. The individual should be helped to solve mathematical problems and achieve mastery of fundamental mathematical concepts and facts at different rates.

On objectives, both specific and general, the teacher identifies the topics in the lower primary mathematics and develops strategies, processes and methods to teach the basic concepts in mathematics. Student teachers were to use their acquired skills in planning activities for pupils to carry out the various operations on number. Teacher trainees were to develop strategies that will enable pupils develop ideas about shapes and measurement, develop steps and instruments for teaching measurement and identify strategies for teaching fractions as well as organizing useful activities for pupils to collect and handle data.

The objectives of the Primary School syllabus also state that pupils will be able to use mathematics in their daily affairs by recognizing these situations that require mathematical solutions and the appropriate techniques for solving them. The child is to be helped to develop basic ideas of sets, relations and numbers. For example, he/she is to understand the basic operations of addition, subtraction, multiplication and division and to be able to carry out computations involving these operations.

Another objective is to develop the basic physical and geometrical ideas and relationship about shapes. That is to acquire the basic knowledge of length, mass, time, temperature and their measurement as well as to understand the concepts of area, volume and capacity, distance, speed, direction and location.

Comparing the objectives of these two syllabi, it can be seen that the training college syllabus is geared towards helping to achieve the objectives of the primary school syllabus. The training college syllabus is based on the primary school syllabus. Specific topics, which must be treated in the primary school like fractions, numbers and mass, are also treated in the teacher training syllabus. Whether trainees were able to teach these topics effectively in their classrooms during the practice or not period was found out in this research.

Methodology of Teaching Mathematics

On methods to be used in teaching mathematics, the child must be helped by the teacher through the creation of learning situations and the provision of guided opportunities for the child to acquire as much knowledge

and understanding of mathematics as possible through his/her own activities. This suggests that activity methods should be used.

Other methods like questioning and demonstrations can be used. Basically, the syllabus states that the child should be helped to learn to compare, classify, analyze, look for patterns, spot relationships and come to his own conclusions. From the syllabus, it came to light that in the development of concepts, children can be motivated and their interest aroused and maintained through the following activities: play, structured experience, and practice.

The teacher trainee is taken through the methodology of the subject. These include demonstrations questioning and inquiry approach. Looking at the methodology of mathematics, Burns (1990) describes five guiding principles that help for planning lessons. These are:

1. Each lesson is to be a problem solving experience for pupils. Here, the child is required to think and reason.
2. The lesson should deal with important mathematics concepts for the children to get the opportunity to develop and extend their understanding of mathematics.
3. Children are given the chance to talk to the teacher and with each other.
4. Children are given physical materials to use to help make mathematics concepts real and concrete rather than abstract.
5. Classes are organized into small groups that work together co – operatively to maximize children’s opportunities to verbalize their

thoughts, clarify their ideas, get reactions from others and listen to others' points of view.

In Burns' (1990) opinion, the teaching of mathematics in the primary school must give substantial attention to concepts and skills from all stands – number, measurement, geometry, patterns and functions, statistics and probability and logic.

Burns (1990) says again that mathematical rules and procedures should not be taught in isolation but in the context of problem solving situations. Touching on the role of the teacher in the teaching of mathematics, she stresses that the teacher must direct instruction, lead lessons, prompt responses and pose questions to the class. Teachers, she says, must emphasize the need to work through problems and not merely getting correct answers.

Competencies to be Developed in the Student Teacher

The teacher training mathematics syllabus gives a summary of the competencies to be developed in the training of the teacher. These competencies are given under each concept to be taught. The teacher trainee must be able to:

1. Plan activities for pupils to develop number concepts.
2. Identify processes involved in basic number operations.
3. Identify the teaching and learning materials to introduce pupils to place value.
4. Prepare and use the relevant teaching learning materials to teach place value.

5. Plan activities for pupils to teach place value and algorithms on the various operations.
6. Prepare and assemble shapes for pupils to use.
7. Recognize the various 2 D and 3 D Shapes.
8. Explain steps, prepare and identify the use of instruments among others (CRDD, 2000).

The study aimed to find out if trainees saw these competencies in themselves before their practice and also whether they perceived themselves as having acquired these competencies.

English Language

The purpose of learning English Language is acquiring the skills, knowledge and attitudes to become an empowered reader, writer, speaker and listener. English as the official language of Ghana is taught in all schools and at every level. The aim of teaching English in the primary school as stated by the CRDD (2000) is to enable pupils complete their basic education. It should also provide training in English, to be used as a tool for higher education. The language is also to help the young ones become proficient in English.

According to Medwell et al. (2001) the national curriculum for England aims at making all children able to read and write a full range of texts. They should not only learn to decode and encode written English, but also to be critical about what they read so that they can identify the stance of the author and the intended effects on the reader.

Medwell et al. (2001) point out that the English curriculum for teacher trainees has been divided into three sections. Section one deals with the

pedagogical knowledge and understanding required by trainees to secure children's progress in English. Section two deals with effective teaching and assessment methods and Section three deals with trainees' knowledge and understanding of English. Competencies to be developed by these approaches will be discussed later in this section.

Comparing the Primary School English Syllabus and the Teacher Training College English Syllabus

The aim of the primary school syllabus is to provide opportunities for learning and using of English to enable pupils complete their basic education. Another aim is to provide training in the use of English as a tool for higher education.

On the aims, the teacher training college English syllabus spells out some objectives to be achieved in year one. These include trainees to be able to (a) consolidate their knowledge in English acquired at the senior secondary school level, (b) broaden their language base as a pre- requisite for their academic work in the college and (c) gain exposure to teaching techniques relevant to language work at the basic level. The syllabus for year two is to help trainees acquire the various techniques in teaching English. This involves the learning of some appropriate methods like role-play, dialogue and drama / play, among others. Trainees should be able to explain, design and use their own controlled composition activities or techniques.

Concepts to be developed in the primary school syllabus are put under divisions. For example, there is oral work, which include language items, conversations, speech practices and there is also reading, writing and

composition. Under language items, concepts like commands, statements, and questions are to be taught.

The teacher training college English syllabus also looks at the same topics. Conversation, writing and composition are all included in the syllabus. These are not only looked at in isolation, but also techniques with which they would be taught are indicated.

Competencies to be Developed in English by the Teacher Trainee

The syllabus aims at equipping the teacher trainee with some competencies after he/she has gone through the contents. Among some of the competencies to be developed are:

1. Identifying the role of conversation as a language development activity.
2. Explaining the meaning of controlled writing and its importance in the development of writing.
3. Explaining the meaning of controlled writing and its importance in the development of writing.
4. Stating and explaining importance of structure as a tool for language development.
5. Development awareness of the importance of meaning in the language process.
6. Identifying and explaining the stages in the presentation of vocabulary.

Medwell et al. (2001) also list some competencies that must be developed by the teacher trainees. They are:

1. Understanding the development and progression in pupils' reading, writing, speaking and listening.
2. Knowing the importance of progression from implicit knowledge about language to explicit reflection on language.
3. Having knowledge about the importance of text, sentence and word levels of language skills and the relationship between them.
4. Extending pupils understanding of structure of written and spoken language.
5. Knowing the need for explicit and systematic teaching of reading, writing, speaking and listening.
6. Development of pupils' enthusiasm.

From what has been said above, the English syllabus of the teacher training college has been drawn to fit into primary school syllabus. The researcher found out whether the content or subject matter the student teachers were given under these topics was perceived as enough subject matter or not for them to teach effectively.

Methodology of English Syllabus

According to the primary school syllabus, Teachers using the syllabus are urged to teach English and to reduce to a minimum translation into the indigenous language. The syllabus indicated again that the translation should be avoided. It however, indicates that the successful use of the syllabus depends greatly on the classroom teacher who will apply its principles.

The training college teaching syllabus lists a range of methods and techniques to be used by the trainee to teach the subject. For example, the

syllabus lists some appropriate activities for teaching conversation at the upper primary. They include role- play, dialogue, drama/play riddle, debates and interviews.

The teacher trainee is taken through some activities he/she and the learners should follow. The researcher attempted to determine if these methods were useful in their teaching.

Mentoring

Currently in the teacher training colleges, the third year is used for mentoring. The trainees are sent out to the field to do two terms practicum under the supervision of the permanent classroom teacher and head of the school.

The teacher trainees as mentees are mentored by mentors and link tutors who are their college tutors. A lot of questions have been raised on this new form of practice teaching. This is a total deviation from the twelve weeks teaching practice that was done previously. The researcher sought to find out how effective this has been on the development of competencies of the trainees.

French (1996) points out that the establishment of a mentoring relationship can be blocked by independence, insecurity, fear of rejection, or too high or low expectations. Helping includes asking for help, not the need for help; and giving back to helper. She affirms that asking for help is a crucial element in forming a person-to- person mentoring relationship. This study was guided by these findings.

Myint (1999) conducted a study on Japanese beginning teachers' perceptions of their preparation and professional development. He examined the perceptions of first, second and third year Japanese beginning teachers about their initial preparation into primary and secondary teaching.

Myint (1999) concluded his research by highlighting two points relevant for initial education for teachers in Japan. First, in respect of developing knowledge, skills and attitudes for teaching at both primary and secondary levels, teachers are rated in the professional education by the university as very low, except in regard for "teachers' professional attitudes". Myint (1999) points out that there is the need, therefore, to reform the traditional initial teacher education approach and to improve the content of the courses, methods and assessment procedures of the teacher education programmes. Myint (1999) reiterates the need to move teacher education towards partnership bases. He points out that the initial education in Japan is very theory based. The student's teaching period is very short. Myint (1999) suggests that there must be collaboration between teacher training institutions and schools in improving initial training to enable prospective teachers to be able to meet changes in school and the society when they become teachers.

The teachers in Myint (1999) study also believed that the extent to which they as teachers developed knowledge and skills at the end of initial training was very low. He, however, says that initial training is an important factor that influenced primary and secondary beginning teacher's perceptions of their initial preparation for the development of certain skills, such as subject matter knowledge concept, basic teaching techniques, class management and the use of teaching aids.

Beginning teachers also perceived that they developed skills in “understanding students”, “student management and relationship with home and community through their work as teachers”. On experience level, beginning teachers’ perception varied. Perceptions of their current knowledge, skills and attitudes were higher, but compared to first year teachers, second and third year teachers’ perceptions were higher, but they perceived their level of knowledge, skills and attitudes for teaching to be at a similar level. The researcher made use of these pieces of information to guide her in planning and preparing her questionnaire.

In her study on new teachers reflecting on their training quality and adequate school involvement, Newton (1994), used a survey focused on different components of the training course, among which are curriculum studies, professional studies (general skills, educational issues and professional practice) and school – based work. In all cases, students were to indicate how well they considered the course had prepared them.

On curriculum studies many of the new teachers stated that the breadth and balance of curriculum experience provided them with confidence to try things with the children. Regarding professional preparation, Newton states that “majority of the ex-students considered themselves to have been of value and felt well prepared and the expertise and support of the tutor was noted” (p. 193). Newton (1994) affirms in this study that there was satisfaction with the school – based elements of the programme.

Summary

The reviewed literature above reveals that to develop a competent teacher trainee, the curriculum must be enriched with the appropriate subject matter and training in professional skills which should include teaching practice and mentoring, where applicable. The problem, therefore, was to determine specifically how students perceive their competency after they have gone through the teacher-training programme.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter describes the methods and procedures followed by the researcher in carrying out the study. It is organized under the following sub-sections: Research design, the population, research instrument, validity of the instrument, the sample and sampling method, data collection procedure and procedure for data analysis.

Research Design

A descriptive sample survey was employed. Data were collected from a sample of 80 teacher trainees who had gone through their initial training out of a larger population of 155. According to Cohen and Manion, (1998) surveys are generally used to gather data at a particular time with the intention of describing the nature of the existing conditions or determining the relationship that exist between events. The survey research design is also recommended by Babbie (1990) for the purpose of generalizing from a sample to a population so that inferences can be made about some characteristics, attitudes or behaviour of the population. Another reason why the researcher used this design is that results of survey research are easily understood.

Population

The study covered all final year students at SDA Training College who had gone through the first and second year courses and had also done out-of-campus teaching practice for at least two terms. The reason for using this group is that they had the chance of going through the new programme, which is the In-In-Out programme. With the new programme, teacher trainees stay on campus for two years for academic work and the third year, which is the last year, they move out to rural towns to do one year teaching practice. It then implies that this group of teacher trainees had the chance to practise what had been taught in the classroom on the field.

Another reason for using this target group was the fact that the researcher was familiar with the area where the students did their practicum. She visited them, held discussions with them as well as supervised their teaching on some occasions. The population, which comprised both male and female, was 155.

Sample and Sampling Technique

The whole population was not used. Teacher trainees were randomly selected from each of the five stations where they did their teaching. This was to help the researcher generalize the findings to the total group since conditions at the various stations may differ slightly if not more. In all twenty females and sixty males were used. Their average age was twenty-two years.

In doing the random sampling, the researcher met the trainees in groups according to their stations and for each station randomly selected four females

and twenty males from each station since all teacher trainees had a chance of being selected, the researcher after grouping them, cut pieces of paper and wrote on each piece either 'Yes' or 'No'. In the female group there were only four 'Yes' for each group and for the males there were only sixteen 'Yes'. Trainees were then asked to pick. Those who picked 'Yes' were selected and used for the study.

Instrument

A questionnaire was designed to measure how final year teacher trainees perceived the preparation they receive for teaching and to allow them to self-evaluate the knowledge, skills and attitudes for teaching they had developed during their three-year training on campus and in the field, that is during their mentorship. The questionnaire was developed by the researcher. The items were based on the research questions. The researcher adopted the Likert scale type for some parts of the questionnaire. It is known that the Likert scale is usually used to measure attitudes, but the researcher modified hers to be able to use it to measure perception. To ensure content validity and correctness, the researcher's supervisor studied it and helped to change and correct some portions of the questionnaire. The researcher used both open-ended and close-ended questions as well. All students were given the same questionnaire regardless of their stations. The questionnaire was based on the following:

1. The effectiveness of the teacher education programme to the teacher trainee.
2. Challenges the trainees encountered on the field.

3. What the trainees perceive as competency.
4. Application of methodology/professional skills in the classroom.
5. Relating subject matter taught at college to subject matter in the primary school in the areas of Mathematics and English.
6. Usefulness of subject matter and professional skills taught at college to their teaching.
7. Field experience in teaching and classroom management.
8. Changes students perceive should be made regarding their training.

A copy of the questionnaire can be found in the Appendix. To ensure reliability, the study was conducted during the period after teaching practice when the students had come to campus for the final examination.

Validity of the Instrument

In order to ensure validity of the instrument, a pilot test was conducted on ten teacher trainees doing their teaching at Mount Mary Training College who also went through the in-in-out programme and were teaching at Koforidua. They also followed programme A as teacher trainees at S.D.A. The pilot test was to help detect and forestall any imminent problems of clarity or otherwise of the instrument. The respondents for the pilot test were able to answer the questions with very little guidance. This assured the researcher that there was no ambiguity in the questionnaire. As has already been indicated, the researcher's supervisor checked the questionnaire, made suggestions and corrections to ensure content validity.

Method of Data Collection

The instrument was administered by the researcher herself. Eighty final year students were targeted in the study. Data collection was carried out in June 2003. Teacher trainees had come back to college after their teaching practice, they were thus put into two groups of forty in each group. The questionnaire was administered once to each group. At the beginning of each session, the researcher explained to the respondent what needed to be done. Respondents were allowed to do individual work.

Data Analysis

Data were analysed using descriptive statistic and presented in percentages and frequencies. The analysis was represented in a tabular form. Data was organised under different headings according to the issues investigated. Recommendations were based on the findings of the research.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents and describes data under the different research questions that were formulated to guide the study.

Research Question One

To what extent do students who go through the new curriculum where emphasis is laid on subject matter content and professional areas perceive themselves as competent after teaching practice?

Teacher competency cannot be defined; however, there are characteristics that are commonly used to determine a good teacher. Even though educators differ about the relative importance of these characteristics they rarely disagree on the characteristics to be included in the list. The researcher therefore used some of these characteristics as indicators to find out how teacher trainees viewed their competencies regarding their academic and professional training. Table 3 shows the responses teacher trainees gave on their competencies.

Table 3

Students' Perception on their Competencies in their Professional Areas

Statement	RESPONSES				
	Strongly agree	Agree	Disagree	Strongly disagree	No response
I am warm and understanding	(27%) 20	(62%) 51	(6%) 5	-	(5%) 4
I am stimulating and imaginative when teaching	(25%) 20	(40%) 32	(10%) 16	-	(15%) 12
I am sensitive to pupils' feelings	(31%) 25	(66%) 53	(2%) 2	-	-
I ask questions	(66%) 53	(34%) 27	-	-	-
I accept pupils' ideas when teaching.	(27%) 20	(62%) 51	(6%) 5	-	(5%) 4
I am task oriented and businesslike when teaching.	(25%) 20	(58%) 48	(14%) 10	-	(3%) 2
I am able to use instructional materials well	(55%) 44	(41%) 33	(4%) 3	-	-
I use variety of teaching methods when delivering lessons	(55%) 44	(42%) 34	(3%) 2	-	-
I see myself as competent when pupils are able to do exercises given them after teaching	(59%) 47	(37%) 30	(4%) 3	-	-
I exhibit good personality by showing sympathy, kindness, helpfulness and patience to pupils	(48%) 38	(47%) 36	(5%) 4	-	-

It could be observed from Table 3 that 27% strongly agree, 62% agree that they see themselves as warm and understanding. Another 25% strongly agree and 40% agreed that they are imaginative when teaching.

On teacher's sensibility to pupil's feelings, 66% agreed with 31% strongly agreeing that they were sensitive to pupil's feelings. Sixty-six percent of respondents strongly agreed while 34% agreed that they asked questions when teaching.

The data also revealed that trainees accepted pupil's ideas when teaching. With this, 62% agreed while 27% strongly agreed. The data also revealed that 25% strongly agreed, 58% agreed and 14% also disagreed that they are task oriented and businesslike when teaching. The data further revealed that 55% strongly agreed, 41% agreed and 4% disagreed that they are able to present instructional materials (content) clearly when teaching.

On the use of a variety of teaching methods when delivering a lesson, the data made it clear that 55% strongly agreed, 42% agreed with only 3% disagreeing to the fact. Information on data indicates that most of the trainees see themselves as competent when pupils are able to do exercises given them after teaching. To this, 59% of respondents strongly agreed. Only 4% disagreed. Again data indicated that majority of respondents said that they exhibit good personality, showing sympathy, kindness, helpfulness, patience to pupils, 48% strongly agreed, 47% agreed 5% disagreed, while 4% strongly disagreed to this point. From the data presented under research question one, the impression created is that majority of the teacher trainees who have gone through the new curriculum perceive themselves as competent.

The findings confirmed that teacher trainees showed competence in their professional areas. They were able to manage their classes as well as teach for their students to understand.

Research Question Two

To what extent is the subject matter content and professional skills given in the second year enough to equip the teacher trainee well for his career?

The teacher should be prepared to be competent to teach both the content of the school curriculum and develop the children's characters and their personalities. That is why Akwesi (2002) says that the teacher needs an appropriate balance of general education, academic specialization and professional studies.

Research question 2 sought to find out teacher trainees' perception on how the new curriculum was able to effectively develop their competencies.

Perceived Competencies Developed in Mathematics and English

The researcher wanted to find out whether the subject matter knowledge given trainees at college is enough to make them competent to teach. Mathematics and English were the subjects used for the research. The teacher training syllabus enumerates competencies to be developed by the teacher trainee before he/she can effectively teach the subjects. Tables 6 and 7 present data on how the teacher trainees saw these competencies and whether they were able to acquire them.

Table 4
Perceived Competencies Developed in Mathematics by the Teacher
Trainees

Competencies	RESPONSES				
	Very well	Well	Fairly well	Not sure	No response
1. Planning activities that will help develop number concepts	(39%) 26	(56%) 45	(4%) 3	-	(2%) 1
2. Identifying the teaching / learning material to use	(63%) 52	(34%) 27	-	-	(3%) 2
3. Preparing and assembling teaching / learning material for lesson	(75%) 60	(20%) 16	(4%) 3	-	(1%) 1
4. Identifying the process involved in basic number operation.	(37%) 30	(45%) 36	(8%) 6	(4%) 3	(6%) 4

Data presented on Table 4 reveal the following. In Mathematics most respondents indicated that they were able to plan activities that will help develop Number Concept. Thirty-nine percent of respondents said they were able to do it well. Only 4% indicated they were able to do it fairly well with 2% giving no response. Sixty-three percent made it clear that they were able to identify the teaching and learning material to use very well, 34% revealed that they were able to do it well and 3% gave no response to this. A majority of 75% of the 80 respondents made it clear that they prepared and assembled teaching and learning material for lesson very well, 20% said they did it well, 4% said they were able to do it fairly well while 1% gave no response. On being able to identify the process involved in basic number operation, 37% of respondents said they were able to do it very well, 8% indicated that they were

able to do it fairly well. 4% of the respondents were not sure while 6% gave no response. It was evident that teacher trainees were able to develop some competencies in mathematics.

Table 5
Perceived Competencies Developed in English by the Teacher
Trainees for their Teaching

Competencies	RESPONSES				
	Very well	Well	Fairly well	Not sure	No response
1.Understanding the development and progression in pupils' reading	(45%) 36	(35%) 28	(10%) 8	(4%) 3	(6%) 4
Understanding the development and progression in pupils' writing	(38%) 30	(54%) 44	(6%) 4	-	(2%) 2
Understanding the development and progression in pupils' speech	(31%) 25	(39%) 31	(23%) 18	(4%) 3	(3%) 2
Knowing the importance of text sentence and word levels of language skills and relations between them	(32%) 26	(34%) 27	(22%) 18	-	(12%) 10
Extending pupils' understanding of structure of written and spoken language	(17%) 14	(46%) 37	(31%) 25	(1%) 1	(4%) 3
Developing pupils' Enthusiasm	(48%) 38	(34%) 27	(13%) 11	(1%) 1	(4%) 3

Data collected on trainees' competences in English revealed that 45% of respondents said they were able to understand the development and

progression in pupils' reading very well, 35% indicated that they understood it very well, 10% said they understood it fairly well, 4% were not sure with 6% giving no response. Thirty-eight of respondents said they understand the development and progression in pupils writing very well. Fifty-four percent understood it well, 6% indicated that they understood it fairly well with 2% not giving any response. Data in Table 5 also show that on understanding the development and progression in pupils' communication, 31% and 39% said they understood it very well and well respectively, 23% of the respondents understood it fairly well, 4% indicated that they were not sure with 3% not giving any response. Many respondents made it clear that on the average, they know the importance of text sentences and word levels of language skills and relationship between them. Thirty-two percent said they know it very well, 34% said they know it well, 22% said they know it fairly while 12% gave no response.

On extending pupils understanding of structure of written and spoken language, 17% said they were able to do it very well, 46% said they were able to do it well, while 31% stated that they can do it fairly well. Again 1% of respondents were not sure with 4% not giving any response.

Most respondents said they were able to develop pupils' enthusiasm. Forty-eight percent attested to the fact that they were able to do it very well, 34% of the respondents said they could do it well, 1% was not sure and no response from 4%. It can be said that a greater majority of respondents had their competencies in English language developed.

Methods Used in Teaching Mathematics and English

The syllabi for teaching mathematics and English at the Training College do not only specify topics and competencies to be developed, they also suggest techniques to be used in teaching the subjects. Table 6 shows the frequency of how teacher trainees used various methods and techniques.

Table 6

Frequency of Use of Mathematics and English Teaching Methods

RESPONSES				
Methods	Very often	Quite often	Often	Seldom
Mathematics				
Demonstration	(32%) 26	(30%) 24	(34%) 7	(4%) 3
Questioning	(68%) 54	(21%) 17	(10%) 8	(1%) 1
Inquiry Approach	(4%) 3	(35%) 28	(14%) 11	(42%) 33
The play method	(18%) 14	(24%) 19	(18%) 14	(35%) 28
Games	(24%) 19	(20%) 16	(32%) 16	(18%) 14
English				
Role play	(30%) 24	(35%) 28	(15%) 12	(20%) 16
Dialogue	(25%) 20	(41%) 33	(25%) 20	(7%) 5
Drama	(6%) 4	(15%) 12	(25%) 20	(48%) 38
Riddles	(6%) 4	(21%) 17	(42%) 34	(28%) 21
Debates	(1%) 3	(11%) 9	(20%) 16	(65%) 52
Interview	(3%) 2	(24%) 19	(42%) 34	(25%) 20

On methods used in the teaching of Mathematics, 32% of respondents said that they used demonstration very often, 30% said they used it quite often, 34% stated that they used it often while 4% seldom used it. Most respondents used questioning with 68% using it very often, 21% used it quite often, 10% used it often with 1% seldom using it.

On the inquiry approach, the data made it clear only 4% used it very often, 35% used it quite often, and 14% used it often. Forty-two percent of the respondents made it clear that they seldom used it with 4% giving no response. The data further revealed that the play method of teaching was not so popular with the trainees. Only 18% of respondents indicated that they used it very often whereas 35% said they seldom used it with 4% giving no response.

Data showed that games were also used in the teaching of Mathematics with 24% using it very often. Twenty percent of the respondents used it quite often, 32% used it often with 18% of respondents saying they seldom used it. Seven percent gave no response.

In English, it became clear that majority of respondents used the role-play method. Analysis show that 30% of respondent used the method very often, 35% used it quite often, 15% used it often, 20% seldom used it while 3% gave no response. Dialogue as a method of teaching was often used with 25% of respondents using it very often, 41% using it quite often, and another 25% using it often. Seven percent seldom used it, with no response from 1%.

Data in Table 6 indicate that Drama was seldom used. Only 6% of respondents said that they used drama very often, 15% said they used it quite often, 25% used it often. However 48% made it clear that they seldom used it with 6% not giving any response. On the use of riddles, only 6% said they

used it very often. 21% said they used it quite often, 42% used it with 28% seldom using it. Three percent of the respondents gave no response. As a method of teaching, debate was not much used. Only 1% used it very often, 11% used it quite often with as many as 65% of the respondents seldom using it. Interviews were used very often by 3% of the respondents. Twenty-four percent used it quite often, 42% used it often, with 25% seldom using it.

Research Question Three

What Other Methods could be used to Improve Competency in Teaching in Teachers?

Teacher training courses are organized with a distinction between “professional studies” which is done by the education department and academic or main subject studies. Teacher training also includes teaching practice where teacher trainees practice what they have been taught. To develop competency, Awuku (1998) reiterates that the problem solving method should be used in training the teacher since it will enable the teacher trainee to learn for himself/herself. In their final year the students are made to identify a problem with regards to their teaching and learning in the classroom situation. They are then supposed to study the situation and remedy it using the appropriate strategy and materials. However teacher trainees were asked if they saw the need to include other methods of teaching. Table 7 shows the responses teacher trainees gave on perceived usefulness of other methods that can be used to train teachers.

Table 7

Data on Training Useful in Helping to Develop Teacher Competency

Method of training	RESPONSES				
	Very useful	Quite useful	Useful	Not useful	No response
Observation lessons (students to observe lessons in Practice schools)	(76%) 61	(21%) 11	(3%) 2	-	-
Team teaching	(60%) 48	(20%) 15	(13%) 10	(7%) 5	-
Apprenticeship	(40%) 32	(28%) 22	(14%) 11	(18%) 14	-

Data in table 8 appraised the methods that can help bring out competencies in teacher trainers revealed that, 76% of respondents saw observation lesson as a very useful way of bringing out teacher competencies, 21% saw it as quite useful, and 31% saw it as useful. On the use of apprenticeship, 39% said it was very useful while 28% and 13% held the view that it is quite useful and useful respectively. Eighteen percent however saw it as not useful.

Respondents however suggested other methods like Teaching and Study Cycle, Microteaching and the inquiry methods as other methods that can be used to bring out competencies in teachers. It can thus be concluded that other methods of teaching that can be used in the training of teachers must be looked at.

Research Question Four

How do Teacher Trainees Perceive the Period of Teaching Practice or Field Experience?

Teacher trainees are made to spend their final year on the field to do their teaching practice. This is where they are made to practice the methods and skills taught them in the first two years

The researcher found out how trainees perceived the period of their teaching practice. The data are presented in Table 8.

Table 8 reveals that 75% of respondents saw the period of teaching practice as very much useful it helped them to gain more understanding in Mathematics concepts taught at college. Only 4% of respondents indicated that they did not gain any understanding in English language and some concepts taught at college from teaching practice. Seventy-six percent and 20% of teacher trainees indicated that the period of teaching helped them to gain more understanding in English language and some concepts taught at college. Again, only 4% of respondents said they did not acquire new professional skills during their teaching practice. Ten percent said they did not acquire skills. However, 76% said this was not true indicating that they acquired new professional skills during their teaching practice. Ten percent of respondents were undecided. Seventy-seven percent of respondents made it clear from the data that the period of teaching helped them very much to improve upon the teaching skills taught them at college. Twenty three percent said it helped them much. One can conclude that much was gained from the teaching practice in terms of concept and professional skill.

Table 8

Trainees' Perceptions on how their Teaching Practice Helped to Improve their Competencies.

Statements	RESPONSES			
	Very much	Much	Not at all	Undecided
1. The period of teaching practice helped me to gain more understanding in mathematics taught at college.	(75%) 60	(20%) 20	-	-
2. The period of teaching practice helped me to gain more understanding English Language and some concepts taught at college.	(76%) 61	(20%) 16	(4%) 3	-
3. I did not acquire any new professional skills during my teaching practice.	(4%) 3	(10%) 8	(76%) 61	(10%) 8
4. The period of teaching practice helped me at school	(77%) 61	(23%) 19	-	-

Skill in Teaching

The out-programme where teacher trainees practice skills taught at college is important. During their second year in training the methodology of teaching the various subjects are taught. During on-campus teaching practice, these skills are practiced before teacher trainees are sent out to practice. Table 9 represents teacher trainees' views on the skills they need in teaching.

Data in Table 9 reveal that more than 42% of respondents said they had all the skills they needed to teach. On the other hand, 34% said they did not have all the skills that they needed to teach. Thirteen percent of respondents were undecided. On the item on whether respondents had knowledge about the skills but had to practise them over a period of time to be able to use them well, 38% of respondents said it was very true with 45% saying it was true. Fourteen percent were not sure and 13% were undecided. More than 68% of respondents said they required new skills. Twenty percent said it was true while 44% said it was not true. Seven percent of respondents were undecided.

Trainees' Preparedness to Teach

The essence of the study was to find out how teacher trainees viewed their competencies and their preparedness to teach. After looking at how they viewed the subject matter and skills given them, the researcher wanted to find out whether they felt prepared to teach. Table 10 shows the responses teacher trainees gave on their preparedness to teach at the beginning of their teaching practice.

Table 9

Teacher Trainees' Perception on the Skills they Needed in Teaching

Statements	RESPONSES				
	Very true	True	Not True	Undecided	No response
1. I have all the Skill needed to teach.	(11%) 8	(42%) 32	(34%) 27	(13%) 10	-
2. I had knowledge about the skills but I had to practice them over a period of time to be able to use them well	(38%) 30	(45%) 36	(14%) 11	(13%) 109	-
3. I require new skills	(20%) 16	(68%) 55	(10%) 8	(3%) 2	-
4. There was a vast difference between what was taught in class at college and what was needed in the field	(8%) 6	(41%) 34	(44%) 35	(7%) 6	-

Table 10

Teacher Trainees Perception on their Preparedness to Teach			
Items	Yes	No	No response
1. Did you feel prepared to teach the first time in the classroom?	(42%) 36	(58%) 46	-
2. If yes, why?	<ul style="list-style-type: none"> • I had had an on-campus teaching school • I had taught before • I was taught how to teach from school • I had the necessary teaching material 		
3. If no, why?	<ul style="list-style-type: none"> • It was my first time of teaching a class of a huge number of pupils • I found it difficult to introduce the lesson • The classroom situation was not familiar • The presence of the mentor made me uncomfortable • It was my first time I felt uneasy. I was tense • I felt I was not competent enough to stand before pupils and teach them • The environment was new • I lacked confidence • I did not know how to start 		

Table 10 reveals that 58% of respondents did not feel prepared for teaching the first time they entered the classroom. Forty-two percent stated

clearly that they felt prepared. Those who felt prepared to teach were of this view because they had had on-campus teaching practice and had been taught how to teach. Other respondents said they felt prepared because they had the necessary teaching materials whilst others indicated that they had taught before.

However, it was revealed that some respondents felt uneasy because it was their first time of teaching in a real classroom situation. To some, the classroom situation was unfamiliar; the environment was new. It is also clear from table 10 that the presence of the mentor made some respondents uncomfortable. Forty six percent of respondents said that they did not know how to start their lesson. However, it must be noted that this was teacher trainees' feelings at the beginning of their mentorship. This goes to prove what Antwi (1992) said concerning teaching as a profession. He enumerated three areas of study, the third being engaging trainees in direct experience that is planned to facilitate their induction into the first job which is teaching practice. These experiences Antwi (1992) stated should include observation and participation in student teaching, internship, competence in methods of teaching and the use of instructional materials, appropriate to the age levels of learners.

Mentorship

Teacher trainees under the new programme do their third year out of campus where they go into mentoring for about two terms. Table 11 presents how teacher trainees viewed their mentors and the help they received from them.

Table 11

Teacher Trainees Perceived Usefulness of the Presence of their Mentors

Questionnaire items	RESPONSE			
	Yes	No	Sometimes	No response
1. Was the presence of the mentors useful ?	(94%) 75	-	(6%) 4	-
2. What help did you receive from your mentor ?	<ul style="list-style-type: none"> • Mentors assessed and pointed at mistakes, strength and weakness • Mentors encouraged me, gave suggestions, corrected me, and gave constructive criticism. • Mentors supported me • My mentor helped me to acquire more teaching skills, like questioning and motivational skills, how to respond to children's answers • My mentor assisted me in teaching • My mentor helped in procuring teaching, learning materials • My mentor taught me how to close the register • My mentor vetted my lesson notes • My mentor showed me how to do continuous assessment. • My mentor taught me how to use the chalk-board 			

Judging from the data presented in Table 11, a great majority of respondents found the presence of their mentors useful. Respondents said that they received a lot of help from their mentors. Mentors assessed them and pointed out their mistakes, strengths and weakness to them. Respondents were encouraged and supported. Mentors also helped trainees to acquire more skills among other things. This affirms the usefulness of mentorship. These assertions by the teacher trainees is seen in what French (1996) pointed out that asking for help is a crucial element in forming a person-to-person mentoring relationship. Teacher trainees were able to establish this relationship and it went a long way to help them.

Table 12 presents the views of teacher trainees on how the presence of mentors affected their teaching.

It becomes clear from Table 12 that, 94% of respondents said the presence of the mentor was useful. Only 6% indicated that their presence was not useful. On what they received from the mentors, response given was centred on the following. Mentors assessed and discussed lessons with trainees pointing out their strengths and weaknesses to them. Mentors helped mentees to procure teaching learning materials, encouraging them as well as giving them confidence. They also helped mentees to acquire more skills classroom management, how to use the chalkboard, questioning skills and teaching them how to react to pupils answers. Mentees learnt how to open and close register as well as using continuous assessment books. Mentees also assisted in teaching.

Table 12

Teacher Trainees Perceived Effect of the Presence of Mentors during
Teaching Practice

Questionnaire items	RESPONSE				
	Very much	Much	Not at all	Undecided	No response
1. The presence of my mentor gave me assurance	(39%) 31	(49%) 40	(7%) 6	(4%) 3	-
2. Presence of my mentor gave me confidence in teaching	(35%) 28	(54%) 43	(11%) 9	-	-
3. I felt insecure with the presence of my mentor	(11%) 9	(23%) 18	(73%) 58	(4%) 3	-
4. The presence of my mentor always took my independence away	(11%) 8	(13%) 9	(75%) 46	(3%) 2	-
5. I had high expectations from my mentor	(48%) 38	(38%) 27	(10%) 13	(4%) 3	-

Thirty-nine percent of respondents revealed that the presence of their mentors gave them very much assurance, 49% got much assurance from their mentors. Only 7% of respondents indicated that they had no assurance from their mentors. More than 54% of respondents said their mentors gave them confidence in their teaching 35% said mentors gave them very much confidence while only 11% said mentors gave them no confidence.

It must be noted that 73% of respondents feel secured with the presence of their mentors, 11% felt very much insecure with the presence of their mentors while 23% felt secured with 4% undecided. Seventy-five percent of respondents also did not feel threatened saying the presence of their mentors did not in any way take away their independence. Eleven percent however saw the presence of their mentors as threatening. They claimed the presence of their mentors took their independence away and 13% also agreed. Forty-eight percent of respondents also had very much high expectation with a little more than 10% with no expectation, it can be thus said that the presence of the mentors was needed.

Research Question Five

How far can it be said that students were able to practise what was taught them as subject matter and professional skills?

To find out whether what is taught at campus on subject matter and professional skills are practicable and useful, the researcher tried to find out the extent to which teacher trainees were able to practise what has been taught

at college. Tables 13, 14 and 15 give an overview of what teacher trainees perceived to have been able to do on subject matter and professional skills.

Table 13 shows how teacher trainees handled their classroom practices.

Table 13

Teacher Trainees Perceived Ability to Use Classroom Teaching

Practice Skills

PERCENTAGE VIEWS OF RESPONSE					
Questionnaire Items	Very often	Quite often	Often	Seldom	No response
1. Talking while writing on the board (talking to the board)	(3%) 2	(13%) 10	(21%) 17	(59%) 48	(4%) 3
2. Naming pupils before asking questions	(4%) 3	(10%) 8	(20%) 16	(65%) 52	(1%) 1
3. Repeating pupils' answers.	(4%) 3	(10%) 8	(20%) 16	(65%) 52	(1%) 1
4. Depending on particular pupils for class answer (calling only brilliant pupils).	(3%) 2	(8%) 6	(10%) 8	(73%) 58	(6%) 5
5. Using the palm to wipe (clean) the board	-	(8%) 6	(28%) 23	(59%) 48	(4%) 3

It can be shown from the data presented in table 13 that 3% of respondents indicated that they often talk to the board. Thirteen percent did this quite often 21% did it often, 59% seldom did it. Data showed that there was no response from 3% of respondents. Information from data made it clear that only 4% of respondents said they very often named pupils before asking questions, 10% indicated that they did this quite often, 20% did this often and 65% said they seldom did this.

Table 13 also reveals that only 4% of respondents said that they very often repeated students answers, 10% did it quite often, 18% said this was done quite often, 28% said it was done often while 46% said they seldom did this. Seventy three percent of respondents made it clear that they seldom depended on particular pupils for class answers, 8% said they did this quite often, 10% did not often. Six percent gave no response. It is evident from data that only 8% of respondents said they use their palm to wipe the board quite often, 28% said they did it often while a majority of 59% said this was seldom done, 4% did not indicate any response. It thus became clear that most respondents had good classroom practices.

Table 14 present data on how trainees were able to teach and what they did about the problems they encountered in the teaching of Mathematics.

Table 14

Teacher Trainees Perceived Ability to Teach Subject Matter Content in Mathematics

Questionnaire item	Responses from respondents
1. What problems did you encounter in the teaching of mathematics?	<ul style="list-style-type: none"> • Mathematics syllabus and the textbooks do not agree in terms of topics. Some topics in the syllabus are not found in textbook. • Lack of teaching/learning materials like chalkboard, rulers, textbooks among others. • Pupils attitude towards the studying of mathematics • Outmoded textbooks. Some books still have pesewas in them.
2. How did you overcome them?	<ul style="list-style-type: none"> • Using improved materials • Borrowed teaching and learning materials. • Using different methods of teaching • Preparing teaching and learning materials • Encouraging pupils • Doing a lot of practical work

Table 15 present data on how trainees were able to teach and what they did about the problems they encountered in the teaching of English.

Table 15

Teacher Trainees Perceived Ability to Teach Subject Matter Content in English

Questionnaire item	Responses from respondents
1. What problems did you encounter in the teaching of English?	<ul style="list-style-type: none"> • Lack of reference materials for Grammar • Inadequate textbook example reading books. • The inability of pupils to read and write, there was lack of word recognition. • Pupils could not speak or understand the English Language • Lack of teaching/learning materials.
2. How did you overcome them?	<ul style="list-style-type: none"> • Used the phonic and the syllabic method. • Use reading cards • Used sand tray to teach handwriting. • Used gestured games and drills. • Photocopied pages from Textbooks • Borrowed textbooks • Preparing and improvising Teaching/learning materials. • Employed different methods of Teaching • Passages were written on the chalkboard

Most of the problems that trainees encountered in the field in the area of mathematics had to do with problems of the mathematics syllabus not agreeing with the textbooks in terms of topics, lack of teaching/learning materials like chalkboard, rulers, and textbooks. They also had to deal with pupils' negative attitude towards the studying of mathematics and the use of outmoded textbooks.

To overcome these difficulties respondents stated that they had to improvise materials, borrow teaching and learning materials. They also said they employed different methods of teaching as well as prepared a lot of teaching and learning materials. (Tables 14 and 15)

Trainees also said they had to encourage pupils and do a lot of practical work. They did not complain about what was taught them at college. Again lack of instructional materials like reference materials for grammar, were among problems encountered in the teaching of English language. Respondents listed inadequate textbooks and teaching and learning materials. They also stated that pupils were not able to read and write. There was also the problem of word recognition as well as pupils not being able to understand or speak the English Language.

To overcome these problems respondents said they did the following: Helped pupils read, used phonic and syllabic methods of teaching; and used sand trays to teach writing. The respondents said they borrowed textbooks as well as prepared improvised teaching and learning materials. They also employed different methods of teaching and wrote passages on the chalkboard or cardboard. It can be deduced from the data that respondents did not have problems with the subject matter content given at college.

Research Question Six

What are the links between subject matter taught at college and what the students are made to teach during practice?

The study revealed that the teacher training college syllabus is drawn based on the primary school syllabus. Based on research question six Tables 16 and 17 examine the relationship between what is taught as subject matter at college and what is taught in the basic school. Table 16 presents data on the link between what is taught in Mathematics and English at college and what trainees were made to teach during the practice period.

Table 16

What Teacher Trainees were made to Teach during their Teaching Practice and what they were Taught at College in Mathematics and in English

Questionnaire items	Yes	No	No response
1. Was there a link between the Mathematics taught at college and what you were made to teach during your practice?	(87%) 70	(13%) 10	-
2. Was there a link between the English Language content taught at college and what you were made to teach during your practice?	(84%) 67	(16%) 13	-

Table 16 shows that 87% of respondents saw a link between what was taught at college in Mathematics and what they were made to teach and 13% of respondents saw no link. On English language, 84% said they saw a link between what was taught at college and what they were made to teach. Again, 16% saw no link between the two. A review of the syllabuses conducted by the researcher revealed that the teacher training college syllabus looks at the same topics as in the primary school syllabus. The difference is only in the difficulty level. The training college syllabus delves deeper into the topic and talks about the methodology to be used in teaching the topic.

Tables 17 and 18 looked at the similarities and differences between what was taught at college and what was taught at the basic level.

Data in Table 17 and 18 reveal that there were differences as well as similarities between what was taught at the basic level and what was taught in the Teacher Training Colleges. On mathematics, the respondents said that topics treated at college were the same as topics treated at the basic level. They also saw the methods to be used in teaching the content stated in the syllabus the same as the fundamental beings taught at the same level. On how they differ, those respondents who saw marked differences said they differ in terms of difficult levels. They stated that contents at college involve complex calculations; topics at college include methodology and topics at the primary level are easier than those at the college levels.

Table 17

The Relationship between what was Taught at College and what was Taught at the Basic Level in Mathematics

Questionnaire items	Response
1. How were the mathematics taught at college and what you were made to teach related?	<ul style="list-style-type: none"> • topics treated at were the same as topics taught at the basic level • Syllabus is the same the difficulty level varied (fundamentals were taught at the basic level). • Method to use in teaching and objectives were the same • Content were the same.
2. How did the mathematics taught at college differ from what you were made to teach?	<ul style="list-style-type: none"> • Content at college involves complex calculation e.g. 3 set problems. • Topics at the primary levels are easier than those taught at college • Topics at college included methods.

Table 18

Relationship between what was Taught at College and what was Taught at the Basic Level in English

Questionnaire item	Response
1. How was the English language taught at College related to what you were made to teach?	<ul style="list-style-type: none"> • Topics were the same • Content were the same • Methods of teaching were the same and followed the same format.
2. How did the English language taught at the College differ from what you were made to teach	<ul style="list-style-type: none"> • Content were the same • Content was at a much higher level. The difficulty level was high • There are differences in evaluation and core points • More topics are treated at college the primary level.

Respondents had this to say for English language; on how related what was taught at college and what was taught at the basic level were, respondents said Topics, Contents and Methods of teaching were the same. Those who said there was a difference stated that the content was not the same, the difficult level of content was much higher at the college level and more topics

were also treated at the college level. They also saw differences between Evaluation and Core Points.

Table 19 examines areas that need to be emphasized at the training college in the teaching of Mathematics and English. The researcher wanted to find out if other methods could be used to bring out efficiency in the teaching of these subjects.

Data from Table 19 make it clear that respondents felt the need for certain areas to be strengthened in their training. Respondents listed the areas to be strengthened in Mathematics and English. In Mathematics the areas include Fraction, Addition, Subtraction, Line, among others. Reasons given for why these areas needed to be emphasized are that some of these are broad for example; Line segment; Ray and Line.

Discussion of Findings

The data revealed that teacher trainees saw themselves as competent after being allowed to teach children and learners for that long period. Teaching Practice enabled the student trainees to acquaint themselves more to the classroom situation. In the old programme, teacher trainees had only twelve weeks of teaching practice which was done in three parts of four weeks each at different places and levels.

Table 19

Teacher Trainees View on Content Area to be Emphasized in the Teaching of Mathematics and English

Area to be emphasized	Reasons
1. Mathematics: - Fractions Additions and subtraction Line segment, ray, long Algebra	<ul style="list-style-type: none"> • Naming fractions is a problem • They are fundamental topics; they are the basis for teaching • There is no sufficient ways of defining these terms • Teachers even have problems here. It also division and helps children solve problems in daily activities which involve money.
Plane geometry, Probability	<ul style="list-style-type: none"> • Teachers are not able to solve these problems.
Ratio and proportion	<ul style="list-style-type: none"> • It has not been treated well in the syllabus and textbooks. Some techniques are required to ensure their success when being taught.
Areas to be Emphasized	Reasons
2. English language	
Pronunciation Grammar: - Language items, tense, Vocabulary and sentence formation	<ul style="list-style-type: none"> • This will enhance reading • Good foundation for pupils • Grammar is difficult to teach.

With this new programme where a student is allowed to manage classes for a long period, he or she is able to acquire some skills and use them, and also assess himself or herself and the situation. After managing for some time, some level of confidence is gained. From the finding in Table 3, the researcher could see that competencies could be measured by different indicators among which are: the teacher being able to present instructional materials clearly when teaching and when pupils are able to do exercise given them after teaching. This affirms what Perrot (1990) stressed about teacher competency. According to him the competent teacher is the one who is able to demonstrate the ability to bring about the intended learning goals.

One measure of competency is when pupils are able to do exercises given to them after the lesson. It is worth noting that no matter the method used by the teacher, when pupils answer questions correctly and pass their examination, the teacher is seen as competent. The findings in Table 3 indicated this assertion. This goes to affirm what Olger and Garner (1996) said that teacher competency is the skills, knowledge and understanding that are required to ensure that the teacher is effective for the full range of pupils taught by that teacher. In developing teacher competencies, the researcher noted from data collected that the methods used in teaching the teacher counts very much. The questionnaire stated only three methods namely observation lessons, Team teaching and Apprenticeship. However the teacher trainees suggested other methods they view as useful to their training. They suggested study cycle, micro teaching and the inquiry methods. Thus, it can be deduced that other ways of training the teachers must be looked at.

Ideally, practising how to teach begin with observation of lesson taught by tutors and other fully trained teachers. The trainee can then be moved to practise through micro or peer teaching for him to gain some confidence before apprenticeship and other methods. These two methods mentioned above are already part of their training at the college. This therefore affirms what Perrot (1990) said that teaching skills and competency can be acquired in three ways or stages.

On competencies developed, trainees say their teaching practice period was very useful in developing their competencies in teaching. It must be noted that it was during the period of teaching practice that trainees put into practice all that had been taught at school/college. From the findings it became clear that much understanding of concepts taught in Mathematics and English at college were understood when trainees were made to teach them.

During teaching practice, new professional skills were acquired. Trainees come face to face with the real classroom situation. They had to deal with professional skills like controlling and maintaining discipline in the classroom, as well as good classroom practices. Table 12 appraised some classroom teaching practice skills and findings revealed that teacher trainees were able to distribute questions evenly, faced children before talking, and did not repeat children's answers. This is because it is one thing being taught and another thing practising what has been taught. This was testified by most trainees when a majority said they had knowledge about the skills but had to practise them over a period before they were able to use them.

Despite the campus practice done in the second year, most students felt they were not prepared the first time they entered their classes. The reasons

they gave among others are that, they felt uneasy, they did not know how to start their lessons, the classroom situation was unfamiliar and they lacked confidence. This the researcher saw as being the fact that trainees were confronting the real situation for the first time. In college it had been peer teaching. So even though they were allowed to plan and present their lessons, it was not the real pupils they were teaching.

It must be emphasized that these trainees went onto mentorship for a longer period. They received a lot of help from their mentors to deal with the real situation. Most classroom practices were learned from mentors. Teacher trainees learnt how to open, mark and close the register as well as identify learning disabilities

At college a lot of classroom practices/professional skills are taught as well as subject matter. It could be deduced from the findings that most of the students had acquired good classroom practices.

It also came to light from findings collected that trainees were faced with some problems such as lack of logistics for teaching, pupils' attitude towards the teaching of Mathematic and English. This is where the trainees had to employ all the skills taught at school and all other skills from their mentors to contain the situation. They had to find different ways of solving them. Some of the ways were using improved teaching materials, looking for new methods and resources to improve learning and evolving interest in the children which most of them were able to do.

Findings collected confirmed that the Teacher Training College Syllabus is based on the basic school syllabus and that the trainee is prepared and equipped with knowledge needed to teach at the basic level. However the

teacher-training syllabus has more content with high difficulty level since it also does not only provide the trainees with information for the basic level but also information for life.

Nonetheless, the trainees saw some shortcomings. They were not able to teach certain topics well and suggested that those topics should be more emphasized at the college. Some reasons given by teacher trainees were that some of them are fundamental topics and are basic for teaching so they must be stressed; examples of such topics are fractions, additions and subtractions and pronunciation. Trainees also said some of these topics were not treated well in their textbooks so tutors must teach them well at college.

Some trainees were made to practise in villages. It was noted that getting access to textbooks other than those supplied by the school was a problem.

It can then be said that competences can only be acquired through practice. One also practices what has been taught. Then in developing competences in the teacher, the approach should be looked at in a holistic way from the beginning of training to the end. The trainee begins this by acquiring information and knowledge. He/she is then asked to practise it and is then given the real situation to practise.

Without information in content they could not teach and without professional skills they could not have taught. It therefore becomes evident that in developing competency, the subject matter/contents as well as the professional skills are necessary. On subject matter the data revealed that what was given to trainees as subject matter in English and Mathematics is the same as that for primary /basic school. However the trainees pointed out that more knowledge on subject matter content in English and Mathematics should be

given before they are sent out to teach. This the researcher saw as no exaggeration because content is giving in the first year. In the second year, the student trainee is introduced to the various methods needed in teaching the various subjects. Not much content is giving here. As a result they are not able to fully cover the basic school syllabus before they are sent out to teach. This leaves the students to do a lot of research in the field before they can teach effectively. It is revealed that the two years at college and one year on the field leave them with inadequate subject matter content. This can clearly be seen in the statement made by Darling-Hammond and Youngs (2002) which indicates that there is evidence of the importance of subject knowledge to teaching. This is because students who are taught by a teacher with bachelors or masters degree in mathematics perform better and hence higher gains in achievement in this area. Inding also revealed that teacher trainees perceived that they develop skills in 'understanding students' school management through their work as practicing teachers and most on campus. Thus teaching practice and mentorship is very necessary in the development of skills related to subject teaching and class management.

One can safely say and conclude that the above findings confirm the previous researches on teacher training that the training of the teachers must be holistic and involve both theory and practice.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this chapter a summary of the study as well as conclusion and recommendations are given.

Summary

The study was to examine teacher trainees' perception on their training. The researcher's observation of the trend of the development and technological advancement in the country revealed that education which is the steering wheel of development must be looked at. This cannot be effectively done without looking at the 'teacher factor'.

Teacher training, the researcher observed, has gone through a lot of changes even though the foundation and the basics remain the same. Teacher training includes both the theory and practice.

The theory aspect looks at giving the trainee an educational foundation in studies like psychology of education, sociology of education, principles and methods of teaching, development of education as well as the methodology of teaching the various subjects among others. Practice also is done in the form of teaching practice.

However the new education policy in vision 2020 brought about the introduction of the new programme termed in-in-out where students stay on

campus for two years doing academic work and one year out of campus for teaching practice.

The study therefore sought to find out how student teachers who have gone through the new programme of teacher education which is termed the in-in-out programme perceive themselves as competent enough to teach and equip the up and coming generation with all the information and skills they need.

To arrive at a logical conclusion a descriptive survey was used to collect data. Data were collected from a sample in a larger population to describe the perception of teacher trainees on their competencies in teaching. This was done through the administration of questionnaire. There was only one stage of data collection. Structured questions were used to seek the opinion of teacher trainees about their perceptions of their competencies, whether they view their training as adequate. Data collected from respondents were analyzed using descriptive statistics under the six research questions used for the study. The data were presented in frequencies and percentages in a table form to facilitate understanding.

The main findings that emanated from the study were:

1. Student trainees see themselves as competent after being allowed to teach for two terms. Most students agreed that much skills and knowledge had been taught at college but they had to practise these skills on the field before gaining confidence in using them. This really goes to affirm what Farrant (1971) said that teacher trainees must be allowed to try the teaching methods to help them develop their competencies as experience brings confidence. One cannot but agree

with Nacino-Brown et al (1990) regarding development of competencies through practice. They reiterated that the trainee teacher after spending time in particular subject areas and the study of education itself, will need special training in the field in the form of teaching practice. The findings of the research showed that trainees had to practise what was given them in the classroom before they gained a level of confidence. This makes them feel competent enough to teach.

2. Competencies are measured by different indicators. Findings under research question one proved that there is no one measure for competencies. Perrott (1990) also holds the same view when she points out that good teaching cannot be defined since it is so complex and creative and so defies analysis. Yet in her work she states that “Education finds it relatively easy to list the characteristics of a good teacher”. Ryan et al (1960) came out with indicators to measure competencies. Flanders (1970) also talks about two contrasting styles, namely the direct and the indirect styles. He used these two styles to rate teachers. He said that teachers who use the indirect style perform better. They tend to ask questions, accept pupils’ feelings, accept pupils’ ideas, praise and encourage pupils. The researcher found out that in trying to evaluate findings on how teacher trainees saw themselves, she had to employ different kinds of indicators and characteristics of good teaching as stated by Kyriacou (1995) to arrive at a better judgment. Teacher trainees, it came to light evaluate

themselves along these indicators. It can thus be said and confirmed that there is no one measure for competency.

3. It also came to light in trying to address research question three on methods that could be used to improve teacher competency that, other methods of teaching such as the teaching and study cycle as well as the inquiry method could be used to bring out competencies in teachers.
4. It became evident that the development of the teacher must be done in a holistic way. Akwesi (2002) affirms this when he stated that “a teacher needs an appropriate balance of general education, academic specialization and professional studies”. However what Akwasi did not state was the practical aspect of the training. This was done by Antwi (1995). He points out that the teacher trainee must engage in direct experience that is planned to facilitate their induction into their job. These experiences must include observation and participation in student teaching and internship. It must be emphasized that students at the end of the training could manage school assembly, do follow up to pupils home to help them overcome some of their problems.
5. Findings emanating from research question four revealed that, teacher trainees had been introduced to the various methods of teaching and other professional skills, but they had to practise them in order to gain competence. This brought to light the fact that teaching practice and mentorship is an important aspect in teacher training. This was affirmed by Moretz (1994) when in his qualitative study of mentoring as it relates to continuous professional development, he says that

mentoring has an impact on teacher's continuous professional development. This is because the teacher's need of guidance and assistance at all stages of career development is very necessary. Mentoring is also a good way of helping teacher trainees to acquire good classroom practices.

6. In addressing research question six, it became evident that the teacher training college syllabus is based on the primary school syllabus. The teacher training college syllabus however operates at a different level; it goes deeper to treat topics. A study of Mathematics and English syllabus of both the teacher training college and the basic syllabus revealed this. However the teacher training college syllabus includes the teaching of Methodology and Concepts and techniques to be developed by the teacher in order to teach these topics at the basic level. Teacher trainees did not however find the topics as strange or new. The problem encountered was that some topics were not treated into detail and that gave them problems in handling them.
7. Research question two brought to light that in developing competency in the teacher trainee, the subject matter/content knowledge as well as the professional skills are necessary and must be treated well. Both the Mathematics and the English syllabus state the competencies needed to be developed in the teacher to be able to teach. Mathematics syllabus at the teacher training college gives the techniques to be used to teach the topics for example in teaching plain shapes. The trainee is required to use discussion, sorting and tracing. These are intended to develop in

the trainee not only knowledge in the subject matter but professional competency as well.

Conclusions

The research was aimed at finding out how teacher trainees for whom the new educational programme was drawn saw themselves in terms of competencies developed and readiness to teach. The main findings of the research were that; teacher trainees saw themselves as competent to teach and the new programme which is the in-in-out programme where teacher trainees are made to go out for one year teaching practice enabled them to develop competencies and skills needed for their career. It can be finally concluded that Teacher Trainers who have gone through the three-year academic and professional training saw themselves as competent to teach.

Recommendations

In the light of the study, the following recommendations are hereby made to help improve the development of competencies in teacher trainees.

1. Most respondents said that the syllabus of the teacher training college and that of the basic school are the same. The only difference is the difficulty level. However most of them agree that some areas of the content should be strengthened both in English and Mathematics since they were not able to teach certain topics well. The researcher therefore recommends that a lot of emphasis should be placed on subject content. More text books as well as effective teaching learning aids

should be employed to bring out good understanding of the subjects they are going to teach.

2. Data on the study revealed that the last year is spent out of campus without academic work, however trainees form study cycles to discuss topics on methodology of the various subjects. In the light of this, the researcher recommends that topics on subject matter content where trainees have problems should be taught during the period of the study cycles meetings.
3. The researcher also recommends that on-campus teaching practice must be stressed and done effectively in all subjects. Tutors of the various subjects should precede on-campus teaching practice with observation lessons in real classroom environments using the Demonstration school attached to the college.

REFERENCES

- Akwesi, C. (2002). "The Future of Initial Teaching Education, Challenges and Prospects of the Teacher in the 21st Century". Keynote address to the Ghana National Association of Teacher Training College Tutors (GHATCOT).
- Antwi, M. K. (1992). *Education, Society and Development in Ghana*. Accra-North: Unimax Publishers Limited.
- Awuku, A. K. (1998). An Executive Summary of Proposals on Teacher Education Policy.
- Babbie E. R. (1973) *Survey Research Methods*, Belmont, C A: Wadsworth.
- Brophy, J. E. & Good, J. L. (1986). "Teaching behaviour and student achievement in M.C.". Wiltshire: Redwood Press Limited.
- Burns, M. (1990). A collection of mathematics lessons for the primary classroom. Wiltshire: Redwood Press Limited.
- Chambers (1997). *The Chambers Dictionary*. England: Chambers Harrap Publishers.
- Cohen L. & Manion L. (1998) *Research Methods in Education*. London [U. A.]; Routledge.
- Curriculum Research and Development Division, English Syllabus for Primary Schools. (2000), Accra.
- Curriculum Research and Development Division, Mathematics Syllabus for Primary Schools. (2000), Accra.

- Darling-Hammond L. and Youngs P. (2002) Defining “Highly Qualified Teachers” What Does “Scientifically Based Research” Actually Tell Us? Research News And Comment. Educational Policy Archives.
- Deku, P. (2000). Teacher competency in handling children with special needs in the regular schools in Ghana: A case study of Hohoe District. Masters Thesis. Unpublished, U. C. C.
- English Syllabus for Teacher Training College, Year 2, Curriculum Studies integrated with methodology (2003). Teacher Education Division.
- Farrant, J. S. (1971). *Principles and Practice of Education*. London: Longman Group Limited.
- Flanders, N. A. (1970). *Analyzing Teaching Behaviour*. Reading. Mass: Addison-Wesley Pub. com
- French, K. L. (1996). “The Mentee’s Perspective: Understanding Mentoring Relationship through Narrative”. (A dissertation abstract, PhD) The Fielding Institute.
- Holmes, B., Bereday, F. & Lauwerys, J. A. (1963). *Education and Training of Teachers*. Published in *Teachers and Teaching Essays in Comparative Education*. London: Corx and Wyman Ltd.
- Jordan, R. & Powell S. (1995). Skill without Understanding: A Critique of Competency Based Model of Teacher Education in Relation to Special Needs. *British Journal of Special Education*.
- Kalejaiye, A. O. (1990). *Teaching Primary Mathematics*. Ikeja: Longman Nigeria Limited.
- Kyriacou, C. (1995). *Effective Teaching in Schools*. Cheltenham: Stantly Thornes Publishers Ltd.

- Medwell, I. J. Wary, D. Minns, H. Griffiths, V. & Ciatres, E. (2001).
Primary English Teaching Theory and Practices. Exeter: Learning
 Matters Ltd.
- Melton, R. F. (1994). Competences in Perspective. *Education Research* Vol.
 36, No.3.
- Moretz, K. E. (1994). A Qualitative Study of Mentoring and Related to
 Continuous Professional Development (Dissertation abstract Ed.D)
 University of Arkansas.
- Morrison, A. & McIntyre, D. (1976). *Teachers and Teaching*. Manchester:
 The Philips Park Press.
- Myint, M. (1999). Japanese beginning teachers' perceptions of their
 preparation and professional development. *Journal of Education for
 Teaching*. Vol.25. pp. 17-29, April 1999.
- Nacino-Brown, R., Oke, F. E. & Brown, D.P. (1990). *Curriculum and
 Instruction. An Introduction to Methods of Teaching*. London:
 Macmillan Ltd.
- Nash, J. A. (1997). High School Teachers' Beliefs, Attitudes and Behaviours
 Regarding their Practice and Perceived Impacts on Student
 Performance.' (Dissertation Abstract PhD) University of Michigan.
- Newton, A. (1994). New teachers' reflection on their training quality and
 adequate school involvement. *Journal of Staff Development*. Fall 2002
 (Vol. 23, No. 4).
- Olger, M. & Garner (1996). "Professional Development to Meet Special
 Educational Needs". *British Journal of Special Education*.

- Paling, D. (1986). *Teaching Mathematics in Primary School*. Oxford: Oxford University Press.
- Perrot, E. (1990). *Effective Teaching: A Practical Guide to Improve your Teaching*. Singapore: Longman Singapore Publishers Ltd.
- Protherough, R., Atkinson J. & Fawcett J. (1989). *The Effective Teaching of English*. Harlow: Longman Group U.K. Ltd.
- Reid, I., Constable, H. & Griffith, R. (1994). *Teacher Education Reform: Current Research*. London: Paul Chapman Publishing Ltd.
- Richardson J. A. S. (1968) ‘ The Content of Three-Year Courses in the Principles of Education’ Education for Teaching. No. 76.
- Rosenshine, B. & Fraust, A. F. (1973). Research on Teacher Performance Criteria, in Smith, B. O. (ed) *Research in Teacher Education: A Symposium*. Prentice-Hall, Englewood Cliffs, New Jersey.
- Ryan, D. (1960). *Characteristics of Teachers*. American Council on Education. Washington D. C.
- Stones, E. (1994). *Quality Teaching a Sample of Cases*. New York: Routledge.

APPENDIX
UNIVERSITY OF CAPE COAST
INSTITUTE OF EDUCATION
QUESTIONNAIRE FOR STUDENTS IN THE THIRD YEAR

Dear Student,

The purpose of this study is to find out your perception on your competencies in subject matter (English and Mathematics) and professional skills. The results of the study will help curriculum developers for Teacher Training Colleges and the Education Service to improve upon the training of teachers. Kindly respond to the best of your knowledge. Your responses will be kept confidential.

Thanks for your co-operation.

Betty Aduhene – Chinbuah (Mrs.)

PERSONAL DATA

1. SEX: Male Female
2. YEAR

3. STATION PRACTICED

- Suhyen
- School of Practice.....
- Kwabeng
- School of Practice.....
- Sekyere
- School of Practice.....
- Moseaso
- School of Practice.....

ITEM	STATEMENT	RESPONSE				
		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	DON'T WRITE HERE
4	I am warm and understanding when teaching.					
5	I am stimulating and imaginative when teaching.					
6	I am sensitive to pupils' feelings.					
7	I ask questions when teaching.					
8	I accept pupil's ideas when teaching.					
9	I am task oriented and business like when teaching.					
10	I am able to present instructional material (content) clearly when teaching.					
	I use a variety of teaching methods					

11	when delivering a lesson.					
12	I use a variety of instructional materials in my lessons.					
13	I see myself as competent when pupils are able to do exercises given them after teaching					
14	I exhibit good personality by showing sympathy, kindness, helpfulness and patience to pupils.					

- Asamang

SECTION A

To what extent do you agree to each of the following statements? Please indicate your response by checking (✓) in the appropriate box.

SECTION B

How would you agree or disagree to the following statements on subject matter content.

Please check (✓) your response in the appropriate box.

ITEM	STATEMENT	RESPONSE				
		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	DON'T WRITE HERE
15	The content on Mathematics is the same for the primary school and the Teacher Training College.					
	More knowledge on contents/ subject					

16	matter in Mathematics should be given before students are sent out to teach.					
17	Tutor comments during Microteaching are useful to teacher-trainees.					
18	I felt my knowledge in Maths content is inadequate.					

A. MATHEMATICS

B. ENGLISH

ITEM	STATEMENT	RESPONSE				
		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	DON'T WRITE HERE
19	The content on English is the same for the primary school and the Teacher Training College.					
20	More knowledge on content/subject matter in Mathematics should be given before students are sent out to teach.					
21	Tutor comments during Microteaching are useful to teacher-Trainees.					
22	I felt my knowledge in English (content) is inadequate.					

23. What problems did you encounter in the teaching of Mathematics?

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24. How did you overcome them?

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25. What problems did you encounter in the teaching of English?

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26. How did you overcome them?

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ITEM	COMPETENCIES	RESPONSE				
		VERY WELL	WELL	FAIRLY	NOT SURE	DON'T WRITE HERE
27	MATHEMATICS Planning Activities that will help pupils develop					

	number concepts.					
28	Identifying the teaching learning materials to teach.					
29	Preparing and Assembling Teaching Learning Materials for your lessons.					
30	Identifying the process involved in basic number operations.					

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Please indicate how well you have developed the following competencies by checking (✓) the appropriate box.

ITEM	COMPETENCIES	RESPONSE				
		VERY WELL	WELL	FAIRLY	NOT SURE	DON'T WRITE HERE
31	ENGLISH Understanding the development and progression in pupils writing Understanding and procession in pupils reading Understanding the development and procession in pupils speaking.					
32						
33						

34	Knowing the importance of text, sentence and word levels of language skills and relations between them.					
35	Extending pupils understanding of structure of written and spoken language.					
36	Developing enthusiasm.					

SECTION C

How often do you exhibit the following practice?

ITEM	PRACTICES	RESPONSE				
		VERY OFTEN	QUITE OFTEN	OFTEN	SELDOM	DON'T WRITE HERE
37	Talking while writing on the board (Talking to the board)					
38	Naming pupils before asking questions.					

39	Repeating pupils answer.					
40	Depending on particular pupils for class answers (calling only the brilliant pupils)					
41	Using the palm to wipe (clean) the board.					

Please indicate your response by checking (✓) the appropriate box.

ITEM	METHODS	RESPONSE				
		VERY OFTEN	QUITE OFTEN	OFTEN	SELDOM	DON'T WRITE HERE
42	Demonstration					
43	Questioning					

44	Inquiry Approach					
45	The Play Method					
46	Games					

How often did you use the following Methods in teaching Mathematics? Please indicate your response by checking (√) the appropriate box.

47. Other Methods? Please State

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.....

.....

.....

How often do you use the underlisted methods in teaching English?

ITEM	METHODS	RESPONSE				
		VERY OFTEN	QUITE OFTEN	OFTEN	SELDOM	DON'T WRITE HERE

48	Role Play					
49	Dialogue					
50	Drama					
51	Riddles					
52	Debates					
53	Interview					

Please indicate your response by checking (✓) the appropriate box.

54. Other methods? Please state

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SECTION B

		RESPONSE
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		VERY OFTEN	QUITE OFTEN	OFTEN	SELDOM	DON'T WRITE HERE
55	I have all the skills I need to teach					
56	I have knowledge about the skill but I had to practise them over a period of time to be able to use them well.					
57	I require new skills.					
58	There was a vast difference between what was taught in class (at college) and what I found in the field.					

How true are the following statements? Please indicate your response by checking (✓) the appropriate box.

59. Did you feel prepared for teaching the first time you entered the classroom?

Yes

No

60. If 'Yes' why?

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61. If 'No' why?

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 62. Was the presence of Mentors useful?

.....

 63. What help did you receive from your Mentor?

.....

 How did the presence of the mentors affect you? Please indicate your response by checking (✓)
 the appropriate box.

ITEM	METHODS	RESPONSE				
		VERY OFTEN	QUITE OFTEN	OFTEN	SELDOM	DON'T WRITE HERE
63	The presence of my Mentor gave me assurance					
65	The presence of my Mentor gave me confidence in my teaching					
66	The presence of my Mentor put fear in me					
67	I felt insecure with the presence of my Mentor.					
68	The presence of my Mentor always took my independence away					
69	I had high expectation from my Mentor					

70. Was there a link between the mathematics content taught at College and what you were made to teach during your practice?

Yes No

If 'Yes' how are they related?

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.....
.....

If 'No' how do they differ?

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.....

71. Was there a link between the English Language content taught at College and what you were made to teach during your practice?

Yes No

If 'Yes' how are they related?

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If 'No' how do they differ?

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72. Which content areas in Mathematics do you think must be emphasized in your teaching?

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73. Give reasons

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74. Which content areas in English do you think must be emphasized in your teaching?

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75. Give reasons

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To what extent would you agree with the following statements? Please indicate your response by checking (√) the appropriate box.

ITEM	METHODS	RESPONSE				
		VERY OFTEN	QUITE OFTEN	OFTEN	SELDOM	DON'T WRITE HERE
76	The period of teaching practice helped me to gain more understanding to mathematical concepts taught at college.					
77	The period of teaching practice helped me to gain more understanding to English language and some concepts taught at college.					
78	I did not acquire any new professional skills during my teaching practice/ mentoring					
79	What is given at college as professional skills and subject matter is enough to enable me teach effectively without teaching practice.					
80	The period of teaching practice helped me to improve upon the teaching skills taught me at college.					