DISTANCE EDUCATION FOR TEACHER EDUCATION IN GHANA:

AN INVESTIGATION INTO UNTRAINED TEACHERS'

EXPERIENCES

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Thesis submitted to the University of Sussex, United Kingdom, in partial

fulfillment of the requirements for the degree of Doctor of Education

May, 2015.

I hereby declare that this thesis has not been and will not be submitted in whole or in part to another University for the award of any other degree.

Signature

Acknowledgements

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List of Abbreviations and Acronyms

College of Education	CoE
Colleges of Education	CoEs
Critical Analytical Study	CAS
Department for International Development	DfID
Distance Education	DE
Distance Teacher Education	DTE
Free Compulsory Universal Basic Education	FCUBE
Ghana Education Service	GES
Gross Domestic Product	GDP
Information and Communication Technology	ICT
In-Service Training and Education	INSET
Institute of Education	IoE
Ministry of Education	MoE
Stakeholder	ST
Teacher Education	TE
Teacher Education Division	TED
University of Cape Coast	UCC
Untrained Teacher	UT
Untrained Teacher's Diploma in Basic Education	UTDBE
Untrained Teachers	UTs

UNIVERSITY OF SUSSEX

DOCTOR OF EDUCATION

<u>DISTANCE EDUCATION FOR TEACHER EDUCATION IN GHANA: AN INVESTIGATION INTO UNTRAINED TEACHERS' EXPERIENCES</u>

<u>SUMMARY</u>

Ghana, like many developing countries, has fewer trained, qualified teachers than the number the country needs to realise the Education For All goals of quality education by 2015. The failure of Ghana's teacher education sector to turn out sufficient numbers of qualified trained teachers is as a result of numerous factors including existing Colleges of Education (CoEs) not having enough facilities to train the high number of untrained teachers (UTs) through the traditional campus-based model and difficulty of access to teacher education places. In response to these limitations, the Teacher Education Division, with the support of the CoEs, adopted an alternative pathway for initial teacher preparation known as Untrained Teachers' Diploma in Basic Education (UTDBE) in the latter part of 2004. This model of initial teacher preparation differs from the traditional campus-based model as the training is largely non-residential with limited provision of face-to-face meetings.

After four years of implementation, key stakeholders, notably the top hierarchy of Ghana Education Service and the Ministry of Education, were calling for the extension of the programme by way of admitting another cohort of students. However, it was clear from my perspective as a senior professional involved in Teacher Education and with seven years of professional knowledge and experience in Distance Teacher Education that there was a lack of in-depth, theoretically-informed research into the programme, particularly with respect to the views of UTs themselves.

The study was therefore designed using an in-depth case study approach to discover the views of UT participants on how the UTDBE had influenced their professional development and the quality of their teaching and learning, with a particular interest in the view of six UTs who were the direct beneficiaries of the programme. The research methods

adopted were predominantly qualitative, and included observations and analysis of documents, a series of interviews with selected UTs, including focus groups and one-on-one interviews in which UTs reflected on videos they had taken of their practice.

The findings suggest the potential of the UTDBE as a source for teachers (especially, those in underserved communities and locations) to learn, develop, update their skills and knowledge and improve instructional practices consistent with learner-centred approaches and professional practices. In addition, the opportunity that the UTDBE offers UTs to teach as classroom teachers while completing their professional programmes seems to have given them the chance to at least integrate and relate theoretical knowledge and experiences from CoEs to the practical realities in the classrooms and schools.

However, the data indicated a number of challenges facing the UTDBE programme which undoubtedly affected the extent to which it promoted professional and personal development and learner-centred practices. These included (i) inability of the programme to take advantage of professional learning experiences that might be possible ICTs were introduced (ii) weak district, school and college collaboration (iii) the difficulties and complexities in managing relations between UTs and mentors (iv) tutoring during residential face-to-face meeting devoted to large group lectures (v) the over-loaded nature of course content and the difficulty and loaded nature of the content of some modules (vi) inability of UTs to make maximum use of college facilities (vii) other mechanisms of professional development such as cluster meetings and lesson observation not being used to their full potential (viii) largely non-recognition of the 'wisdom of practice' of UTs and (ix) tensions in expectations between the different communities of practice of the different contexts of training and practice.

The thesis therefore makes an important contribution to our knowledge about the development of alternative forms of teacher education in such contexts.

CHAPTER ONE: Introduction

1.1   Background to the study

Education is widely recognised as central to sustainable social development. It is also universally acknowledged in the vast body of literature as an essential element in the process of national development (UNESCO, 2006; GCE, 2002). It helps individuals to reach their full educational potential by providing skill development in reading, writing and personal life management for life-long learning (Anamuah-Mensah, 2009). Again, it unlocks human potential and helps individuals to better understand the world in which they live, to address the complexity and interconnectedness of problems such as poverty, environmental degradation, population growth, gender inequality, and health. Furthermore, it seeks to empower people to assume responsibility for creating a sustainable future (Tuli & File, 2009).

However, state education systems must confront a large number of issues if they are to realise this ambition for education. With this in mind, the World Education Forum in Dakar in 2000 not only emphasised the need to achieve education for all, but also noticed the need to improve the quality of education. Here, a wide variety of sources (e.g. UNESCO, 2005; Darling-Hammond, 2000; Moore, 2000) have identified the critical role of teachers in the realisation of this dream of quality education.

It should be understood that quality education is linked to teacher quality (Evans, 2010; Darling-Hammond, 2000). In other words, the important roles of the qualities and competencies of a teacher towards quality education cannot be overemphasised. To place

more prominence on the connection between quality education and teacher competencies and qualities, UNESCO (2002) comments that, "Unless we get more teachers, and better teachers, we will not reach the target of making quality education available for all by 2015" (p7). Similarly, increasing the number and quality of teachers is an essential element in the quest to achieve Millennium Development Goals - Universal Primary Education by 2015 (UNESCO, 2006) and Education For All goals adopted at the World Education Forum (Dakar, 2000), "ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality" (ADEA, 2002 p35). Thus, Ghana, being part of this accord, has to achieve it by way of producing enough quality teachers.

Despite the importance of teacher quality as discussed above, UNESCO (2008) notes the high percentage of current teachers who are either professionally untrained or unqualified. This presents a big challenge for the teacher education sector of Ghana where untrained and unqualified teachers currently teaching in the primary schools constitute about 40% teacher population (see Appendix 1). Ghana, since post independence has been battling with this problem of insufficient trained teachers (see section 2.4).

The failure of Ghana's teacher educational systems to turn out sufficient numbers of trained teachers has been as a result of numerous factors, including the scarcity of student places in Colleges of Education (CoEs), difficulties of students gaining access to teacher

education places, and the length of time required for certification (TED, 2008). In response to these challenges, the Teacher Education Division (TED) of the Ghana Education Service (GES) in collaboration with an advisory group and with support from the UK Department for International Development (DfID), conducted an extensive analysis of the teacher education situation in the latter part of 2003. Four main challenges were identified, which were the issues of: (i) teacher attrition (ii) teacher supply (iii) teacher quality, and (iv) access to formal professional training. In order to address these challenges, five strategic objectives were outlined. One of the issues that came out in the form of a recommendation and needed immediate attention was to use an Information and Communication Technology (ICT) enhanced open and distance learning to institutionalise the training of untrained teachers (UTs) who constituted a large chunk of the teacher population.

This recommendation which did not come as "a bolt from the blue" may have been motivated by several complimentary factors. One factor relates to the fact that the use of ICT-enhanced distance education (DE) in the training of teachers has assumed a global dimension and thus has moved from a peripheral form of educational approach and delivery to one that is a central pillar in many countries and institutions' education plans (ADEA, 2002). Similarly, Robinson et al. (2002) have opined that it has been applied to the education of teachers across Africa (South Africa, Nigeria, and Kenya) and has shown to be effective in a number of ways. In the Ghanaian context, although ICT developments were not felt to be realistic (see also section 2.5), the two public teaching universities had started offering some of their undergraduate and graduate programmes

through distance learning, an indication that the concept of DE was gradually making an impact in the country's academic institutions, particularly at the tertiary level.

Correspondingly, UNESCO (2001) had opined that rapidly increasing demands for all levels and forms of education, coupled with governments' limited capacity to expand provision of education through traditional institutions, has led to open and distance education, being seen as an option to address these issues. The World Bank (1990) and UNESCO (1998) recognised the need for teachers in the developing world to be better trained and placed emphasis on in-service rather than pre-service training. Thus, the DE programme was viewed as viable and successful alternative pathways of educational provision in the developing world (ADEA, 2002).

Furthermore, not enough teachers have been produced through the conventional CoEs to meet the scale of the potential demand in Ghana. The introduction of Ghana's educational reform in 1987 has led to reforms in the teacher training colleges in both content and structure. From a three-year full residential training, there has been an introduction of the 'In-In-Out' programme. This has led to teacher trainees spending the third year of their initial training out in a primary school doing practical teaching referred to as internship. The main objective of this strategy was to create more space for the increase in the intake of trainees in the CoEs, which will lead to an increase in the supply of trained teachers needed to meet the objectives of the Free Compulsory Universal Basic Education (MoE, 2012). However, it was realised that in spite of the 'In-In-Out' strategy, it was still not possible to train the number of teachers needed. The traditional CoEs do not have the capacity to train the over 24,000 UTs through the conventional approach to teacher

education (TE) that restricts TE to the largely campus-based model. Thus, if TE in Ghana is to meet its teacher need, then an alternative approach to sustainable teacher development should be adopted (see section 2.5).

The significant policy changes in Ghana's education in general after 2003, and the fundamental changes in the needs and demands of TE in the last seven years meant that by 2015, the minimum qualification required to teach at the primary school would be a teachers' diploma. This placed mammoth pressure on TE in Ghana, which currently through the CoEs prepares new teachers for the basic schools, to consider and give urgent attention to their modes of TE provision. With DE identified as a key mechanism for addressing the challenges mentioned above, all traditional CoEs in Ghana were encouraged to offer some of their programmes through this mode of delivery. Since 2005, TED has embarked on a distance teacher education (DTE) programmme called the Untrained Teachers' Diploma in Basic Education (UTDBE) for serving UTs. This approach to preparing new teachers differs basically from the traditional system where trainee teachers spend a total of three years in training. In the UTDBE, teachers have to spend four years attending periodic training workshops and doing the course work alongside their duties as full time teachers in basic schools.

1.2   The Untrained Teacher in the Research Context

It is appropriate at this point to provide an overview of who an untrained teacher is with particular reference to the Ghanaian context. An untrained teacher (UT) is a man or woman with any of the qualifications described in Appendix 2, who has been appointed to teach at the basic level of education. By the nature of their appointment, they report

directly to their headteachers (and in some cases start to teach the very moment their appointment letter is presented to the headteacher). The headteacher has to orientate and usher such teachers into the profession, since they are not given any formal training by any government institution. By policy, the UT at this point of his/her career takes over the teaching positions in his/her classroom and assumes other leadership roles and responsibilities in the school community for a period of one year (renewable at the end of every academic year). However, on enrolling on the UTDBE programme, the UT is considered largely as a permanent teacher under training and therefore not required to renew his/her appointment annually.

1.3   Statement of the problem

After four years of implementation of the progamme, two important issues had emerged. Currently, some stakeholders, notably the top hierarchy of GES and the Ministry of Education (MOE) are calling for the extension of the programme by way of admitting another cohort of students. Their justification was that one important objective of the programme, i.e. granting access to at least 80% of UTs had been achieved (see Appendix 3). However, at the end of a seminar for District Directors of Education (15th February 2009, Cape Coast, Ghana), concerns were raised about the extent to which the programme had helped improve the quality of teaching in particular and the professional knowledge and practice of UTs in general. The concerns raised are not unexpected in the sense that although TE is to produce effective practicing teachers (UNESCO, 2005; TED, 2004) in the Ghanaian context, public confidence in the training of teachers using alternative and complimentary routes (outside the conventional approach), has never been

strong. Educationists, researchers, practitioners, teachers, and members of the public were aware of a similar programme held between 2000 and 2003 by University of Education of Winneba (UEW) in Ghana to train teachers for kindergarten and primary schools, which had produced largely ill-prepared teachers with deficient professional competency and weakness in practical teaching (see section 6.3).

Within the debates about teacher knowledge and classroom teaching, differences exist about what contributes to improved classroom teaching and learning. For example, while Anamuah-Mensah (2009) and Tattoo (2002) claimed that teachers with improved knowledge provide quality teaching, Omolara (2008), Donovan and Bransford (2005) and Kelchtermans and Ballet (2002a) have all contested this, urging that though a teacher may have improved knowledge and skills, policy issues, school management issues, and school culture could affect quality teaching and learning and professional practice. Interestingly, the key assumption underpinning DTE discourse within the literature, educational reforms in Ghana and the study is that teachers with improved knowledge and skills are able to demonstrate effective teaching skills that ultimately promote learning among pupils.

The practical side of this issue which appears very sensitive to DTE is what Kennedy (1990 p3) has called "the improvement of practice problem". How do the activities of teacher education (through distance) enable teachers to get better at what they do with particular reference to teaching and learning and professional practice? This study therefore seeks to discover from UTs, who are the direct beneficiaries of the programme,

their views on how UTDBE influences their professional development and the quality of their teaching and learning through a series of interviews, observations and analysis of documents. It seeks to detail their views on the contribution of the UTDBE programme, while at the same time revealing the challenges.

I would argue that there are other indicators of interest on this topic, at both personal and professional levels. I joined TED in 2002 as a senior staff, after two years of teaching experience in a College of Education (CoE) where initial teacher preparation was through the conventional approach. Eight out of my eleven years of experience in TE, I have been working closely with staff of CoEs on matters concerning in-service education and training (INSET) and DE. In 2005, I was assigned to the DE department of TED as the person in charge of the development of instructional materials for the regular and UTDBE programmes in the CoEs. This designation made me a routine member of the board that responded to the daily coordination and monitoring of activities concerning the UTDBE programme from the national down to the regional, district and college levels. As an educationist involved in the programme, I felt the need to explore deeper what the gains and challenges have been and also to understand teacher change in the context of in-service teacher education.

In the previous stage of my Doctor of Education degree, I conducted a Critical Analytical Study (CAS) which incorporated an extensive literature review focusing on international trends, practices and outcomes of DTE (see Appendix 5 for a summary of this text). A number of theoretical, methodological and substantive gaps emerged. Key issues which

emerged from my CAS were as follows: Firstly, most of the literature on using DE to improve the knowledge of teachers seemed to provide little evidence on how improved knowledge influences changes in classroom practice and the quality of teaching and learning. This is particularly the case from the perspectives of the trainees themselves. Secondly, there has been little research in a non-Western context (with particular reference to Ghana). This is important as previous research has highlighted significant cultural influences on teaching and learning (Watkins & Biggs, 2001; Stigler & Hiebert, 1999). This research is an attempt to address some of these gaps and to contribute to knowledge and professional practice in these areas.

1.4 Significance of the study

The research aims to support the future development of the UTDBE programme in ways that attend to the perspectives of its main beneficiaries, the UTs. By allowing UTs to critically reflect and share their views on the programme they are involved in, the study acknowledges Daniel's (1996) concern about teachers on DE programmes. According to him, teachers on DE must be encouraged to contribute to decision-making on their career and pursuit of knowledge. By this they will be able to influence administrators and the government as to the benefits of DE (p6). Webb et al. (2004) have also noted that the voices of teachers are largely absent in the discussion of teacher preparation issues and the impact they have on the professional status of teachers. Again, by involving UTs in the research process, I aim: (i) to provide a voice to participants who are historically and contextually hidden and voiceless in the traditional and educational power structures and

existing scholarship and (ii) to support them to reflect on their own practice, with the ultimate purpose of improving their practice.

The uniqueness of this study comes from the fact that these perceptions are looked at from the viewpoint of individual distance learners directly involved in the UTDBE programme. It is important to listen to and understand distance learners' voices and perspectives on UTDBE because of the complex mix of culture, languages and rural factors. In so doing, DTE providers and institutions will get a more balanced picture of what are effective and non effective practices in their DTE programme, courses and administration.

As a doctoral thesis, it aims to make a significant contribution to knowledge in respect of its specific distance learning model of teacher education and teacher change. Finally, the research aims to generate findings that will: (i) provide practical implications for improving teaching and DTE programmes as well as inform policy and practice (ii) be informative for both local and international audiences of colleagues engaged in the work of DTE and (iii) provide a springboard to suggest to programme developers and implementers, critical issues to reflect on as they attempt to consider the extension of the UTDBE programme in Ghana.

1.5   Thesis organisation

This thesis is organised into eight chapters: The introduction represents chapter one. This chapter introduces to my audience the wider rationale and my personal and professional

motivations for the study. Chapter two provides an overview of the context of the study that introduces my audience to the environment in which the study developed. First, a brief look at the country's profile is discussed, followed by the development and implementation of both formal and informal education in Ghana, from the pre-colonial times, colonial times to the present day. The literature on TE and DTE particularly, the background to the UTDBE are all explored in this chapter.

Chapter three reviews the relevant literature for the study. The chapter focuses on topics relevant to the study such as the structure of DTE programmes, DTE curriculum and self learning materials, professional knowledge and practice and the importance of school-based support, instructional approaches and school conditions and teachers' belief and practice.

Chapter four presents a description of the research design, selection of participants, sources of data, data collection procedures, and the method of data analysis employed in the study. The chapter also reflects on the researcher's methodological positioning, constructing a picture of the struggles with this choice and the strengths it eventually offered the researcher in the journey along the study.

Chapters five, six and seven provide analytical descriptions according to the key issues that emerged from the interview data, documentary analysis, field notes and observations. Chapter eight is the final chapter of the study. It concludes the study by providing a summary on all the preceding chapters and addresses the following research questions:

- What are UTs' understandings of teaching, what shapes these understandings and how did this encourage them to engage in the UTDBE?

- What are the aims of the UTDBE programme and how is it constructed?

- What are UTs' perceptions of the UTDBE, including how it has influenced their professional development and teaching?

- What are the implications of the study for the development of the UTDBE programme?

The chapter also looks at the implication of the findings for policy, limitations of the study and suggestions for further research. The final section of this chapter provides an overview of the researcher's contribution to knowledge and personal reflection.

CHAPTER TWO: Situating the context of study

2.1 Introduction

This chapter discusses the path that formal and informal education in Ghana have taken from the period before colonisation, the period of colonisation and the post independence era. The chapter also gives an account of the historical background to TE at the pre-tertiary level in Ghana.

2.2 Brief country profile of Ghana

Ghana is located in West Africa. The country gained independence from Britain on 6th March 1957 and subsequently became a republic on 1st July 1960. It has a population of 24.3 million, and covers over 238,533 sq km (92,098 sq miles) of land (Ghana Statistical Survey, 2012).

Ghana is an English speaking country, and it is bordered on the north by Burkina Faso, on the south by Gulf of Guinea, on the east by Togo and on the west by Cote D'Ivoire. In addition to English which is the official language, 47 local languages are spoken in the country (Manuh et al., 2007).

Figure 2.1: Map of Ghana.

Burkina Faso

Cote D'Ivoire

Togo

Gulf of Guinea

 Source: http://www.ghana.gov.gh
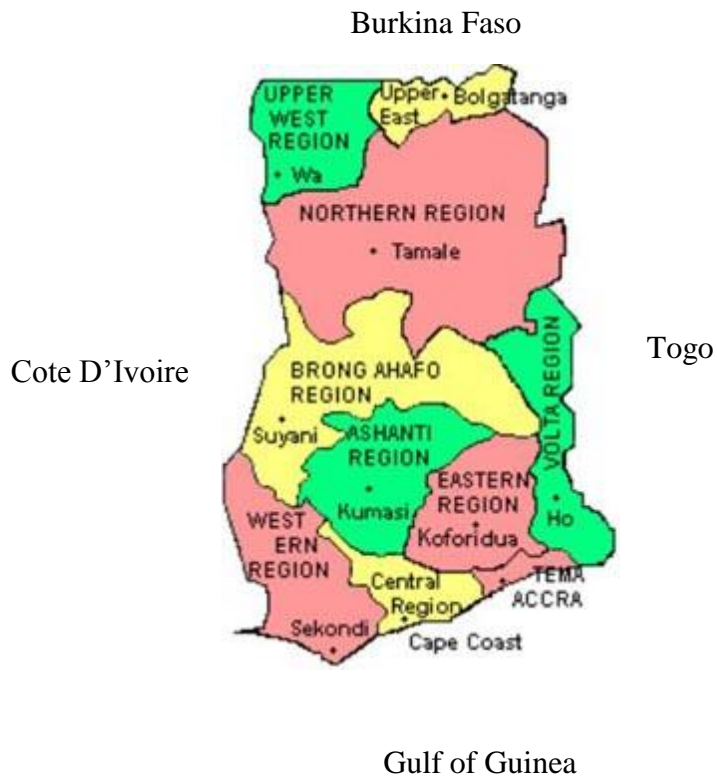
Administratively, Ghana is divided into 10 regions (see Figure 2.1) and 216 districts (MOE, 2012) and these districts receive central government financial support. In line with its decentralisation policy, district assemblies are charged with the implementation of national policies at the district and local levels, to suit local priorities and needs. However, the continued dependence on central government means full autonomy for the districts is yet to be achieved. Thus, they are required to put into practice policies which have been brought to them by the central government.

The political history of the country, especially from independence to 1992, has been characterised by political instability. Within the period, the country experienced four military coups d'état. None of the three democratically elected governments within the stated period served its full term in office. In 1992, the country adopted a democratic form of governance, which meant electing and changing governments through the ballot box. This achievement came on the heels of a successful referendum in April 1992, which ushered in a constitutional democracy, allowing for a multi-party system of governance in the country. Ghana has since 1992 experienced stable democratic governance with power changing from one political party to the other.

Largely, Ghana is an agrarian economy with 38% of its gross domestic product (GDP) coming from agriculture (Akyeampong, 2009; Manuh et al., 2007). At independence, Ghana's economy was export driven, with cocoa, timber and gold being the raw materials leading the export drive. The discovery of major offshore oil reserves in June 2007, and subsequent commencement of production in 2010, has brought along with it high prospects, prediction and hopes that this would be the panacea for the country's economic recovery in all sectors and especially the education sector which is believed to be the engine of growth.

My research focuses on issues related to education in general, and with particular emphasis on TE. As a result, I will turn my attention to briefly discuss the development of education in Ghana, looking at its growth, expansion and reforms, from the pre-colonial era to the present.

2.3   History of educational development, expansion and reforms in Ghana

2.3.1   Pre-colonial period

Ghana (formerly known as Gold Coast) like other African countries, has a rich and respectable historical tradition in its education system. Ghana in the pre-colonial period had a large number of autonomous communities with different political organisations, cultural values and languages. These differences were marked by certain idiosyncratic traits. For example, an individual born in any society grew up and spent most of his/her life in his/her community, which contained a relatively small group of people. Thus, an individual lived in close relationship with both the nuclear and extended families which shared and supported common obligations like culture, economic activities and religion (Manuh et al., 2007; Education in Ghana, 2011).

The main aims of education in these traditional communities were: (i) to preserve the cultural heritage of the immediate and extended families, the community, the tribe and (ii) to adapt growing up members of the new generation to their physical environment and teach them how to control and use it. The responsibility of seeing to the realisation of these aims fell on fathers, mothers and other elders (regarded as teachers if one equates them to present day functions of a teacher) within the community in which the individual lives.

The methods used were informal processes like observing and practicing, listening to oral stories and proverbs. These were used by the "teachers" to transmit knowledge, concepts, skills, ideas, attitudes and patterns of behaviour. Memorisation, imitation and accepting

facts without questioning were the main tools used in educating the child. In most cases training of the child was organised through a kind of an apprenticeship system, where boys and girls took over their fathers' and mothers' tasks and roles respectively (Education in Ghana, 2011; Akyeampong, 2009; Manuh et al., 2007).

2.3.2 Colonial Era

The key drive in the development and expansion of formal education in Ghana was the period of Christian missionary work. Thus, the development and implementation of formal education in Ghana could be linked to the work of Christian Missionaries (for example, the Dutch and the Danes) who realised that in order to spread the word of God effectively they needed well-educated and informed local assistants (Education in Ghana, 2011). Schools that were established operated a curriculum that focused mainly on reading, writing, arithmetic (known as the 3Rs), moral and character training. Moral and character training emphasised attributes like caring, loving, patience, tolerance and good sense of human feeling towards one another.

Although the Christian Missionary and British rule (before independence in 1957) laid a solid foundation for formal education, colonial education was heavily criticised for the following: (i) a small fraction of people of school-going age and willing to go school had access to formal education and (ii) teaching was conducted in the language of the colonial power and (iii) a major stress on liberal arts (Manuh et al., 2007).

It appears noticeable from the discussion on the above literature on pre-colonial and colonial educational developments that both of them imply a strong respect for authority, although they impart different kinds of knowledge and value systems.

2.3.3 Post independence Era - 1957 to present day

A number of educational reforms have taken place between 1957 and 2013. Some of the major reform policies have been the move towards free and compulsory basic education for all children of school-going age in order to eliminate elitism, and privilege in school, society and community and to achieve Millennium Development Goals; the restructuring of the curriculum to meet the changing needs of the country; the change in the structure of the educational system to reduce the number of years spent in pre-university education; and the provision and expansion of educational facilities accessible to all children irrespective of gender or social status and to raise the quality of teaching and learning for effective outcomes (Education in Ghana, 2011; MOE, 2007).

Undoubtedly, the general growth of basic education was inevitably accompanied by a corresponding need for professionally-trained teachers; consequently, the next few paragraphs will be devoted to a brief account of the development of TE at the pre-tertiary level in Ghana.

2.4 Historical Background to Teacher Education in Ghana

As discussed above, formal education in Ghana was started by the missionaries who needed literate and well-educated Ghanaians as local assistants to help in the spread of

the gospel. With this development, the missionaries established institutions to train teachers who could function as both professionally-trained teachers and catechists, and these institutions trained teachers in Ghana up till 1909, when the government opened Accra training college to compliment the efforts of the missionaries. This led to the expansion of teacher training activities in Ghana.

Though the expansion of teacher training facilities offered opportunity to a large number of teachers to receive professional training, thus increasing the supply of trained teachers, it did not solve the problem associated with teacher supply. It is not possible to provide a detailed account of this in the body of the thesis, although a comprehensive overview is provided as Appendix 4. The key points of this can be summarised as follows: Firstly, even when education was aimed at only a subset of the indigenous population, the problem of UTs could be seen to have emerged during the colonial period. Secondly, considerable reforms in initial teacher preparation have taken place since the colonial period. Some of the reforms have been the move towards providing sufficient trained teachers to meet the expected demand at the basic education level in Ghana, improve teacher quality and the desire to achieve universal primary education, later framed by MDGs, as described above. Some key reforms were the establishment of post-middle training, emergency training, post-secondary programmes, modular course and upgrading of post-secondary training institutions to CoEs.

In conclusion, as shown in Appendix 4, TE has made a number of attempts to improve teacher quality and access to professional training of teachers. In addition to the

established institutions for teacher preparation, other alternative pathways were established, some on an ad-hoc basis to prepare teachers.

Consequently, the next section will discuss one of the more significant recent attempts by TE in Ghana to provide professional training to UTs using DE methods. It will provide a brief historical background to the development and the rationale for the UTDBE programme. A full depiction of the UTDBE programme implementation, which is the focus of this study, is discussed in chapter six.

2.5 The Untrained Teachers Diploma in Basic Education (UTDBE) programme

Article 38 of the 1992 constitution of Ghana enjoins the state to provide Free, Compulsory Universal Basic Education (FCUBE) for all children of school-going age. In 1996 the government set out the framework for achieving this mandate. The implementation required the services of a large number of well-trained and qualified teachers particularly in primary pedagogy. In the latter part of 2003, the government of Ghana mandated TED of GES to collaborate with key stakeholders and an advisory group to conduct an extensive analysis of the teacher education situation. Four main challenges were identified. These were the issues of: (i) teacher retention and attrition (ii) teacher supply (iii) teacher quality, and (iv) access to formal professional training (TED, 2004).

In order to address the challenges outlined, five key strategic objectives were identified. Among these were the following:

- To assist UTs to undertake open and flexible ICT-enhanced open and distance learning in-service training,

- To provide equitable opportunities for serving teachers' access to professional in-service training through ICT-enhanced open and distance learning.

The UTDBE programme took off with a model which represented similar conceptual but slight practical departures from previous educational practices as regards initial training of teachers in CoEs. These included the following:

- replacing the previous two-year residential and one-year non-residential training (thus a total of three years for the regular trainees in traditional CoEs) with a four-year non residential training (for UTs),

- giving opportunity to all UTs to enrol regardless of qualification. That is some UTs who were middle school leavers were allowed to enrol as opposed to the requirement of aggregate 24 or better in six subjects by CoEs for the regular programme (see Appendix 2) and

- a shift from traditional training of teachers (which is largely face-to-face) to a type of training which involves more of the learning done by UTs through reading of modules or self-learning materials with a limited provision of residential face-to-face meeting.

A full account of the programme structure and modes of delivery is provided in Chapter six, drawing on documentary analysis, observation data and an interview with a key stakeholder.

2.6   Summary

This chapter has described the general trends in the development of both formal and informal education in Ghana from the pre-colonial, colonial to the post independent era, provided an overview of issues relating to the initial preparation of teachers, attempts to improve teacher quality, quality of teaching and learning and access to professional training by teachers.

With regard to pre-colonial education, methods which took the form of observing and practicing, memorisation, imitation and accepting facts without questioning were used to transmit knowledge, values and skills. Teaching during the colonial era placed eminence on nurturing qualities like caring, loving, patience and understanding (Manuh et al., 2007).

The problem of providing sufficient trained teachers to meet the expected demand at the basic education level in Ghana was shown to have deep historical roots. Consequently, the introduction and implementation of the UTDBE programme reflect the government's expectation of the role it might play in reducing considerably the number of UTs, updating the professional qualification, and improving the knowledge and skills of basic school teachers.

In the next chapter, relevant literature is reviewed as a way of providing an in-depth understanding of the general argument about the importance of teacher education, and the prevalence of distance education for this in Sub-Saharan Africa (SSA).

CHAPTER THREE: Distance education teacher learning and transforming

teachers' knowledge into practice

3.1   Introduction

This chapter reviews a collection of previous research relevant to the study. During my CAS (see Appendix 5), I reviewed a lot of literature on teacher professional development and distance education. Consequently, this chapter provides general argument about the importance of teacher education, and the prevalence of distance education for this in Sub-Saharan Africa (SSA).

Just as practitioners in any other profession, "would be" teachers need to acquire a certain level of personal and professional knowledge to be able to function well in the teaching career (Akyeampong et al., 2010; Stuart et al., 2009; Moon, 2007; Yayli, 2007; UNESCO, 2003). For teachers to obtain this knowledge, they have to undergo an initial professional preparation. Historically, the distance learning mechanism for teacher education has been used extensively in SSA (Murphy et al., 2002). For instance teacher-training courses account for about one-half of all DE courses in Anglophone Africa (Murphy et al., 2002 p14). Thus, DTE has long been used for the professional development of in-service teachers in developing countries, particularly in Sub-Saharan Africa (Burns, 2011).

The key themes that are addressed in this chapter are: DTE modes and models, structure of DTE programmes, DTE curriculum and self-learning materials, professional

knowledge and practice, instructional approaches and school conditions, teachers' belief and practice.

3.2 Distance teacher education for teacher training: modes and models

DTE is a broad approach characterised by a high degree of variations. Such variations include the types of media or technology used (print, radio, computer); the nature of the learning (workshop, seminar, supplement to traditional classroom, levels of support); institutional settings; topics addressed; and levels of interactivity and support (face-to-face, online, blended, none) (Fillip, 2001).

Various models which highlight different approaches to teacher learning have been described diversely by different authors and researchers. UNESCO (2003) has identified a model for teacher learning as socialisation into professional culture. This model emphasises the socialisation processes in professional growth and reinforces the collaborative nature of teacher preparation. It also acknowledges the common goal of supporting teacher trainees in the classroom, the school and the profession. Mattson (2006) illustrates another model called field-based training while Hardman et al. (2011) categorise this field-based training as multi-mode system. This model is viewed as combining distance learning methodologies with face-to-face workshops, seminars and in-school support.

Rogoff et al. (1996) and Moore (2000) also characterise another model for teacher learning as a socially-constructed process. They view this model as one based on the

theory that learning is a community process of transformation and participation in socio-cultural activities. In this view, learning is a collaboratively and socially constructed process, rather than an individual possession; education is an inquiry as learners interact with peers around actions, topics and activities, with the guidance of an instructor/coach. Mulkeen (2010) also acknowledges that in this model, learners are encouraged to create and participate in 'communities of learning' in which the individual learner thinks and solves problems with others engaged in similar tasks. This is facilitated through a range of student support mechanisms including the following: peer support sessions, tutorials/contact sessions, teaching on assignments, support in the workplace (mentoring), email and internet communications.

The theories of community of practice (Wenger, 1998; Lave & Wenger, 1991) and community of learners (Brown & Campione, 1994; Rogoff, 1994), both of which examine professional communities, support the view that teachers on DTE programme learn through social interactions with colleagues and people who possess great skills and expertise and with whom they have ongoing conversations related to shared well-being. Similarly, Forde et al. (2006) support this idea and go further to claim that teachers' learning is enhanced through engagement with other professionals within the community.

These notwithstanding, some researchers have stressed the difficulties and challenges associated with DTE students interactions due to their diverse and complex nature. DTE students are diverse in terms of culture, experience, gender, time in the classroom, geographical location, educational and professional opportunities and levels of commitment to learning (Evans, 2008; Williams, 2006; Webb et al., 2004; Wang & Newlin, 2000). In

the view of Moon & Robinson (2003) the difficulties involved in managing relations and interactions among DTE students, headteachers and mentors are often underestimated. To support this observation, Cochran-Smith & Lytle (1999) argued that a learning community is a considerable source of interpersonal tension.

In practice, tension and differences between and among learning communities cannot be ruled out entirely in any DTE programme (Goulet, et al., 2003; Little, 1990). However, it is expected that members will rather see it as a process of promoting and building awareness. In the view of De Dreu & Weingart (2003) this tension is related to problem solving, and the thoughtful deliberation of very critical feedback and alternate perspectives to enhance the group's communal ideas. In other words, through this relationship, UTs draw on each other's strength as regards ideas to achieve the expected goal and this helps them to find the way more effectively through the complexities of learning through social interactions (McLaughlin & Talbert, 2006; Eraut, 2004).

For UTs, learning to cope with these complexities especially at the school community is integral to their survival, particularly with regard to professional identity (Nguyen, 2008; Wenger, 1998). Tanaka (2012) reporting on the Ghana UTDBE programme makes repeated reference to the importance of UT identity and its positive influence on their professional growth. She proposes the recognition of "all UTs as invaluable professional partners" as imperative to improving teacher motivation and quality and thus educational quality (p436).

Taking account of the discussions above, it does appear that what all these models highlight is that knowledge is acquired through social interaction, and the knowledge acquired in one context (institutions or training centres) is expected to be used practically in another different context (school or school community). Also, it highlights the need for a decentralised system of learner support (Mattson, 2006). The models also suggest a form of connection between a campus-based model and a school-based model (Moon, 2007). Thus, a form of collaboration is envisaged between the college/university/district and the school in which the teacher under training is teaching and both have to exercise a joint responsibility towards the professional development of the teacher.

Distance education programmes have been used in Sub-Saharan Africa (for example, South Africa, Nigeria, Eritrea, Ghana) as a means of (i) reaching more teachers more quickly in geographically difficult areas (ii) keeping serving teachers, especially those in remote areas, in the classroom teaching and without separating them from their work (iii) providing an opportunity for teachers to develop new ways of teaching and learning and therefore crucial in expansion and quality improvement needed in public schools (iv) stimulating interest in education, teaching and learning among teachers and (v) upgrading the knowledge, skills, and qualifications of an existing teaching force. (Stuart et al., 2009; Hannay & Newvine, 2006; Godwin et al., 2005; UNESCO, 2002).

Molloy & Yates (2013) acknowledge that DTE programmes have been utilised in Sub-Saharan Africa as part of the 'fire-brigade' approach to increasing teacher numbers in response to increasing demand for education stemming from the MDGs and EFA goals,

as it has been seen as a method for training a large number of teachers without incurring the costs associated with large-scale increases in college-based training or the cost of replacing unqualified teachers in the classroom while they are being trained. As for economic justifications, Hardman et al. (2011) argue that, "the use of school-based INSET supported by distance learning materials and school clusters has been strongly advocated as a way of closing the gap between theory and practice, and raising the quality of teaching and learning in the region's primary schools" (p671).

Teacher training could be seen as focusing on three areas: content knowledge, pedagogy, and the practice of teaching (Molloy & Yates, 2013; Akyeampong et al., 2010; Mattson, 2006). It is the practice of teaching that poses the greatest difficulty for DTE programmes in Sub-Saharan Africa (Akyeampong et al., 2011; Mattson, 2006; Kunje & Chirembo, 2000). Glennie & Mays (2009) and Mattson (2006) emphasise that decentralised systems of teacher trainee support and assessment for school-based trainees are undoubtedly the weakest aspect of the DE model (p6).

Mattson (2006) cites four problems that contribute to this weakness:

a) Political pressure to go to scale ahead of capacity to support students at the local level

b) A transmission view of education which prioritises mastery of content knowledge and undervalues the importance of practical student support in the classroom.

c) The difficulty of moving from centralised to decentralised support systems.

d) The complexity of managing partnerships with geographically dispersed agents and the demands of new support cadres (p6).

Clearly, with learner school-based support seen as central to the DE experience, Mattson (2006) made an important recommendation that planners of DE should take into consideration. DE programmes should "prioritise learner support as the key ingredient of success and take time to consolidate effective delivery". She advocates that teacher education planners should try to "devolve resources, build capacity and provide incentives to those responsible for support and assessment" (p7).

The review of the above literature on DE for teacher training reflects the following key issues:

- The structure of DTE programmes

- DTE curriculum and self learning materials

- Professional knowledge and practice and the importance of school-based support

- Instructional approaches and school conditions.

These are now discussed in turn below.

3.2.1 The Structure of DTE progammes

Various models of DTE programmes have been implemented in the Sub-Saharan African situation in numerous structures and forms. Research and analysis on using DTE and ICTs to support education can positively influence new investments in educational

reform (Murphy et al. 2002). In their evaluation report on Ghana UTDBE programme, Akyeampong et al. (2010) agree, reporting that:

> untrained teachers would be more appreciative of professional development courses which enabled them to stay in rural areas and study whilst continuing with their classroom teaching, and that an ICT enhanced open and distance learning programme would facilitate this by improving the quality of teachers (p8).

Thus, the importance of DTE and ICTs in education cannot be over emphasised. At the re-launch of the Partnership for Higher Education in Africa (September, 2005), Kofi Annan made the following appeal: "We need to strengthen open universities and distance learning programmes; and we need to ensure that African institutions have access to the latest technologies" (p3). Nevertheless, while technological solutions to the difficulties of interaction between trainees and trainers such as the use of television and videoconferencing (Perraton, 2002) have been utilised in other contexts, the lack of technological infrastructure available to teacher educators and trainees throughout Africa has limited progress in this area. Akyeampong et al. (2010) and Perraton, (2002) report that in a DTE model, over-reliance on print materials has noteworthy drawbacks in terms of its inability to provide dynamic space for reflective professional development and difficulties of interaction between trainees and trainers.

In the Sub-Saharan African context, DTE models generally tend to comprise the following components in differing structures: a face-to-face component, often several intensive workshops spread over a longer period of time; printed distance learning materials; and a period of in-school teaching practice which is (in theory) supervised by support actors (Molloy & Yates, 2013 p3).

Akyeampong et al. (2012) report that in a bid to raise the teaching competencies Ghana recruited and trained 24,000 UTs over a four-year period using the UTDBE programme. This model made use of distance learning combined with residential face-to-face sessions, printed self-learning materials and in-school support. The UTDBE programme integrated its distance learning with three residential face-to-face meetings each year. They described the programme as a combination of CoE tutorials, self-learning materials and trainee support decentralised to all the 175 districts in Ghana. A comment on the success of this programme was that classroom experience, which the UTs had during the interval periods between face-to-face sessions, enabled them to absorb the content learned at CoEs, highlighting the importance of space and reflection on UTs' professional development and practice. Again, this points towards the importance of close integration of DE study materials and classroom practice for reflection.

Perraton (2002) describes the national certification in an education programme offered by the National Teachers Institute in Nigeria as combining printed self-study materials, tutorials, field trips and supervised teaching practice over a four-year period with support decentralised to 220 study centres around the country. Perraton describes the programme as having had a significant numerical impact of teacher supply in Nigeria. No reference is made to the quality of the teachers produced.

Zambia utilized a 'one-plus-one' course for all primary teacher preparations. One year of residential course followed by one year of studying self-instructional printed and audio

materials while teaching under supervision in schools. Murphy et al. (2002) describes the programme as having doubled the number of graduates from Zambian colleges (p15).

Mulkeen (2010) reports that the Gambia's in-service teacher education programme, and Uganda's in-service education programme were similar in that all were managed by CoEs (the Gambia College, School of Education and designated Ugandan primary teacher colleges respectively) and both had a similar structure; residential short courses and printed self-study materials (Mulkeen, 2010). Attrition from these courses was reported to be very high. However, the drop-out and failures from the Ugandan programme reduced considerably over time (Mulkeen 2010).

Uganda through Northern Integrated Teacher Education Project used a DTE model to upgrade serving UTs. The programme integrated its distance learning with two residential courses each year. In addition, there were a twice-monthly tutorials, guidance and support from tutor-counsellors. No comment is made on the quality of the teachers produced (Perraton, 2002).

In his synthesis of the MUSTER project, Lewin (2003) emphasises the necessity of considering the impact that a programme's structure can have on the quality of learning, and so advocates for shorter, alternating, periods of time on and off campus which are more effective, allowing for new information, ideas and skills to be internalised gradually through application and practice; equally, the experiential knowledge gained from attempting to teach can be thought about and refined before the next trial (p16). Thus,

decisions about the structure of DE must be based on pedagogical as well as practical concerns.

The key issues drawn from the discussion on the above literature are: (i) the implementation of DTE programme as regards the mode and model may vary from country to country and even from institution to institution. Countries have different points of reference about initial teacher preparation activity as regards skills, type of knowledge, and professional competence, which reflect on a type of model of DTE. However, it does appear that DTE structure in SSA tends to comprise a face-to-face component, printed learning materials and a period of practical field experiences and (ii) the programme structure seems to constrain the effective use of DE and ICTs in education.

Taking account of the discussions above and the UTDBE training model adopted in the context of this research (see section 6.5), it will be important to explore the limitations of the structure in terms of its impact on UTs learning and classroom practice.

3.2.2. DTE curriculum and self-learning materials

Robinson et al. (2002) provide a set of guidelines for DTE curriculum planners. These include establishing the strongest possible link between distance education programmes and conventional teacher education, ensuring that the programme fits in the national context and wide consultation to ensure the support of stakeholders.

Murphy et al. (2002) also emphasises that a lack of attention to DTE programme curriculum design is constraining the effective use of DE in teacher education in many Sub-Saharan African countries. Many progammes have suffered because they have functioned at too great a distance from the curriculum and rewards system of the conventional education. Lewin (2003) further reports that (i) curricula of many DE training programmes are grossly overloaded indicating that the materials should be streamlined and (ii) distance learning materials tend to prioritise subject content knowledge, the 'what' of teaching, over the 'how' and 'why', providing few opportunities for trainee teachers to reflect on their classroom practice..

In their evaluation report on the UTDBE programme in Ghana, Akyeampong et al. (2010) recommended a reduction in the course content. They found it to be too loaded and even questioned, in some cases, the relevance of some of the content in, for instance, the science modules. They felt some of the materials did not provide enough opportunities for classroom application.

In their MUSTER report on Malawi's MIITEP programme, Kunje et al. (2003) recommended the re-examination of the paper-based materials and assignments given to field-based trainee teachers stating: "School-based assignments and projects should be reconceived to take advantage of linking theory and practice, and focused on core learning outcomes for school-based work. This suggests simplification and reduction in the number of tasks" (p121). Lewin (2003) agrees, reporting that the curricula of many teacher training programmes are "grossly overloaded" indicating that materials should be

streamlined (p15).

Regarding DTE self-learning materials, Janks (2010) stresses that the teaching and learning activities/materials acknowledge learners' existing knowledge and experience, and provide opportunities for guided integration of the new knowledge and skills. In other words, the experience that that many field-based trainees have had, especially if they have served as unqualified teachers prior to entering training, should be valued and that self-learning materials produced should recognize this. In this regard, Shulman (2004) and Moletsane (2003) emphasise the importance of integrating the commitments and values that experienced teachers hold about students and learning with their strategies and practices for enacting those commitments. By learning from such teachers' practice, novices can begin to internalize not only the important theories and conceptions of good teaching, but what it actually looks like in a real classroom. Thus, instead of the university school teacher education "partnership" being one way—the ideas of teacher education moving out into student teachers' field placements is recognized—this makes the "wisdom of practice" a two-way street. Moving teachers and their "wisdom of practice" from the margins to the center of investigations about teaching adds a critical piece that has long been absent from the public debate about standards, from novice teacher preparation and from continuing teacher professional development (Shulman, 2004; Moletsane, 2003).

In this context, Akyeampong et al. (2010) recommend that distance learning materials should capitalise on this experience, providing teachers with opportunities to build on their current experience and knowledge through classroom activities and reflection.

Similarly, Kunje et al. (2003) assert that DE programmes should not simply reproduce the materials and methodologies used in college-based programmes, but instead should be designed specifically with the trainee's context, experience and academic profile in mind (p11).

Lewin (2003) agrees and states that teacher training programmes "seldom recognise the role of relevant experiences, or the different motivation and learning style of adults" (p14). The practical skills and experiences that trainees have is often not valued in in-service education programmes, where emphasis is placed on academic content, which is easier and cheaper to assess from a distance than classroom practice (Mattson, 2006).

The key issues drawn from the discussion on the above literature are: (i) the need to examine the UTDBE curriculum in particular whether it is overloaded and (ii) the need to examine the delivery of the programme and how this attends to the existing experience of the UTs, as well as any issues related to the need for UTs to attend training which is removed from their teaching environments. If the delivery is learner-centred, this might reflect some acknowledgement of their experience, although the construction of the UT as a 'learner' rather than as someone with existing experience could also imply a hierarchy which remains between their knowledge base and that of the teacher trainer. However, certainly if the delivery is 'teacher-centred', then it suggests that UTs' previous experiences are ignored.

3.2.3. Professional knowledge and practice: school-based support

The study of professional learning is conceptualised as consisting of three different facets - the action context, the socio-professional context (McNally et al., 1997) and the supervisory context (Slick, 1998). The action context refers to classrooms (for example, CoEs and universities) in which UTs are introduced to the multifaceted nature of learning-to-teach. In the socio-professional context, untrained teachers' interaction with a variety of agents, including headteachers, trained teachers, fellow UTs, buddies or peers and other personnel in the wider school community contribute to teaching self. In the supervisory context, while UTs engage in continuing interaction with the action context and socio-professional contexts during their practical field experience (after residential face-to-face) they come into contact with their supervisors (college tutors, mentors, headteachers) who are expected to provide school-based support. Mattson (2006) has described the period of practical field experience as very crucial in the sense that, it is about a decentralised system of support to teachers' professional development. A system which in her view is the weakest aspect of the DTE model (see section 3.2).

Many researchers have documented the practical field experiences or practicum experiences of would be teachers on DTE programme and have explored the meaning of their actions, situations and practices and how they make sense of them, especially in the classroom/school/community contexts with the view to bridging the gap between theory and practice (Mohammed, 2006; Brouwer & Kortthagen, 2005; Phillips, 2003; UNESCO, 2003; Hebert & Worthy, 2001). Interestingly, a great deal of the writing that evaluates the school-based support aspect of DE teacher training programmes in Sub-Saharan Africa

cite difficulties or delays in finance mechanisms as barriers to effective implementation. Hardman et al. (2011) make repeated reference to the importance of adequate funding mechanisms for school-based support and cites Mattson (2006) to dispute the notion that school-based mechanisms are a cheaper option than traditional college-based training systems.

Akyeampong et al. (2010) report on the school-support component of the UTDBE in which UTs were expected to receive support during cluster meetings, classroom observation and school visits. They highlight a number of difficulties related to funding as contributing to the ineffectiveness of the whole component. The cost of attendance (transportation from UTs school to the district training centre) and cost of tutors' remuneration which was paid by UTs, were the main deterrent for full participation by UTs during cluster meetings. Lack of funds to fuel the motorbikes of district office personnel and also to purchase basic curriculum materials were responsible for the near collapse of school visits and classroom monitoring respectively.

In Malawi, Kunje et al. (2003) cite difficulties with resource allocation and funding as contributing to ineffectiveness in the MIITEP Malawi programme, "The school-based element of the curriculum was severely handicapped by irregular and inadequate flows of resources for zonal workshops, travel etc. and delays in the development of complementary inputs from MSSSP and elsewhere" (p113). In Lesotho, Malemohang (2011) identifies problems relating to funding mechanisms and channels when she describes the Distance Teacher Education Programme support system as "characterised

with some serious administrative challenges such as lack of transport, which results in late delivery of study materials and irregular school visits" (p2).

Proper advance planning and adequate funding are recognised as essential to the efficient and effective design and implementation of school-based support in DE (Molloy & Yates, 2013). Lewin (2003) proposes that budgets and finance mechanisms for initial teacher education should be directly administered by Ministries and incorporated into centralised Medium Term Expenditure Frameworks. UNESCO (2003) reviews the outcomes of learner support in DTE in a variety of African countries and finds out that, despite some challenges of mentors/headteachers/tutors not having enough time to support teachers on DTE programmes and lack of adequate funding for field support, field experiences have led to dramatic change in their professional role and practice.

Mattson (2006) cites research which shows that "adequate support and effective assessment are achieved through strong partnerships with local agents" promoting decentralised teacher support services such as having a "local support agent responsible for a zone or cluster of schools and/or a mentor within the school guiding and assessing the trainee's practice" (p2). The outcome of a review of field experiences in Eritrea (Mulkeen, 2010) seems to confirm the observation by a number of reviewers/researchers that, to make meaningful changes in would-be teachers' practice and smooth transition in the profession, this requires them to practice under an experienced and knowledgeable supervisor/mentor who can provide a feedback over a period of time. This literature suggests therefore that local mentors and support are essential (Mattson, 2006).

As already indicated by Mattson (2006) decentralisation of support is viewed as key in DTE models of training. However, these local partners/mentors must in turn be supported and trained if they are to provide adequate support to trainee teachers. Moon & Robinson (2003) argue that local partnerships are essential to providing support for UTs' professional development and that within these partnerships all partners need to have a clear understanding of all actors' roles and responsibilities in supporting trainee teachers. Harman et al. (2011) suggest that teacher education cannot be addressed in isolation, but as part of a wider programme of capacity development of other educational actors; "teacher education is part of a broader capacity development strategy that supports all actors in the education system, including, for example, head teachers, district education officers and teacher trainers" (p13).

Akyeampong et al. (2010) in a review of the support component of the Ghana UTDBE programme recognise the difficulties associated with organizing and managing cluster meetings, school visits and classroom observations. They recommend that tutors, headteachers and district office staff should be given continuous training, capacity building and support at least throughout the period of the programme to ensure that all stakeholders involved implement to the 'end' their expected roles and responsibilities. Molloy & Yates (2013) suggest that in order for in-school support to occur at the school level, it requires the presence of a 'critical mass' of qualified, well trained and experienced teachers within a school who are capable of supporting UTs.

Regarding field support for trainees in the Malawian MIITEP programme, Kunje et al.

(2003) suggest better co-ordination between training college staff and locally based Primary Education Advisors (PEAs), describing the current model as "over ambitious and demonstrably ineffective". The report laments the infrequent visits to the classroom describing the little in-class support that does occur as "fragmented, incomplete, and focused solely on assessment [without] a developmental purpose." It recommends reconsideration of the support systems provided by the programme to ensure they are "complemented by support from headteachers who have a responsibility for managing, developing, and appraising all their staff (p18).

The lessons learnt from the above literature are that: (i) where adequate financial and logistical arrangement are in place, field experiences have led to dramatic change in the professional role and practice of teachers (ii) many models of DE do not adequately fund school-based support mechanisms and (iii) adequate support for teachers on DE programme is important and requires strong partnership with local partners with requisite training, knowledge and skills.

Taking account of the discussions above and the UTDBE system of learner support, this research will explore the extent to which (i) the programme structure allowed UTs to draw on a range of different support mechanisms, which included how they draw on their training in the CoEs (ii) UTs were able to draw on support from other members of the teaching community and (iii) the UTDBE design provided support to its UTs and training to its local partners.

3.2.4 Instructional approaches and school conditions

In the view of Darling-Hammond (2000) understanding student teachers' teaching experiences means to examine the dynamics of challenge and support of the students' teaching context (learner-centred or teacher-centred) and the school culture and policies.

Within this concept of teacher-centred practices, instruction is viewed as an activity where information is transmitted to and into the pupil who in this case is the learner (Bonk & Cunningham, 1998; Kember & Gow, 1994). Typical characteristics of teacher-centred practices include more teacher talk and questions than learner talk and questions, drill and practice, recall of factual information and more whole group instruction (Meyer, 2003; Cuban, 1983) and this learning leads to a lecture method (Korthagen et al., 2006).

Learner-centred practices move the spotlight from the teacher and instruction to the learner and learning (McCombs, 1997). In the view of Darling-Hammond (2000) and Wagner & McCombs (1995) instruction based on learner-centred practices presents opportunities for learners to draw on their own experiences, understanding and interpretations of the learning process. Fundamentals of learner-centred practices include the following: learning targets are to be achieved by active collaboration between teacher and learner, (McCombs & Whisler, 1997) learning is a natural and constructive process and learning is most helpful when it is meaningful to the learner in a favourable environment. Additionally, Cuban (1983) categorises observable measures that seem associated with outcomes and expectations of learner-centred practices. For instance,

more or equal learner talk and questions than teacher, and physical arrangements that allow for working together in small groups during instruction.

Within this debate of learner-centred approach or teacher-centred approach, a number of researchers have documented the overwhelming number of benefits created by the use of learner-centred learning methods (Darling-Hammond, 2000; Wanger and McCombs, 1995). For instance, they maintain that learner-centred methods provide opportunity for learners to construct their understandings through their actions and experiences of the world. Also, this provides opportunity for good interpersonal relationships to be established between teacher and students and specific teaching practices (Slonimsky & Brodie, 2006; Iiukena, 1998) and collaboration between learner and teacher (Fulton et al., 2005; Rogoff et al., 1996) which are assurances of teacher effectiveness (Darling-Hammond, 2000; Wagner & McCombs, 1995). Consequently, DE teachers trained with this philosophy are expected to use learner-centred approaches in their classroom teaching after they have returned from campus-based tutorials (Akyeampong et al., 2010).

However, in the view of Akyeampong et al. (2010), Mascolo (2009), Wang & Odell (2002a) and Kulinna & Cothran (2003) a number of reasons could be assigned as to why many distance education teachers in Sub-Saharan Africa do not or are unable to promote this learner-centred method of teaching in their classroom after campus-based training. First, the current distance educational content and structure does not provide many teachers under training any or enough exposure to the learner-centred teaching/learning

techniques. Teachers are exposed to teacher-centred methods by their course tutors. Thus teachers are not experienced enough and therefore do not have the confidence to adopt this approach after initial training. The second impediment lies in the fact that many teachers feel they give up control of the class if they give more responsibility to the students for their learning. When a teacher lectures she/he gets the feeling that the content is being covered and on time. This is particularly problematic if the curriculum is also over-loaded. Third, the question of teacher evaluation is of great concern to many teachers who consider using learner-centred learning techniques. In order for teachers to be properly evaluated, the headteacher must understand the nature of this method and accept it as a teaching paradigm. Thus, the school policy and environment has an important influence in this direction and therefore promoting this approach is often very difficult.

Many commentators have noted in many Sub-Saharan African countries the influence of school tradition, curriculum, policy and culture on the professional practice of teachers under training (Stuart et al., 2009; UNESCO, 2001). Focusing on DE programmes, Kunje & Chirembo (2000) also observe that Malawian teachers' inability to put into practice skills and knowledge acquired in their schools could be attributed to the following: (i) teachers not being effectively supported at their school level by their principals (ii) the rigid nature of the school curriculum, management and policy issues and (iii) the nature of the school culture that demands teachers to approach teaching in a certain way.

Akyeampong et al. (2010) explored the kind of impact teachers trained on UTDBE programme were making in their school. They found out that teachers had difficulty putting into practice ideas and skills exposed to on the programme. They were confronted with a number of issues like resource constraint, uncooperative and autocratic nature of headteachers and no process of consensus building among staff. Similarly, Eraut (2007) has acknowledged that the pressures and demands from school authorities and the complex and busy nature of classrooms provide little time for reflection. In the view of Maynard (2000) and Zeichner (1990) teachers who find themselves in this challenging situation usually slip back to traditional teacher-centred methods to protect their professional identity and status.

It does appear from the above literature that the activities at the training centre (CoEs) and the school culture and conditions can either frustrate or facilitate change in professional practice of teachers. The study will therefore aim to find out the extent to which the activities on UTDBE programme might promote a learner-centred approach to teacher development and if it does how UTs might take this forward in their classroom teaching.

3.3   Teachers' belief and practice

One of Donovan and Bransford's (2005) popular syntheses of established learning principles is that teachers come to the classroom/school with beliefs about how the world works. In the classroom, beginning teachers construct meanings which are a combination of beliefs and knowledge (Mallette et al., 2000) and this knowledge may come from a

variety of sources to include institution, school, classroom and community of teachers (Korthagen et al., 2004; Knowles, 1992). This point has been reinforced by Pajares (1992) who claimed that the beliefs teachers hold influence their perceptions and judgments, which, in turn, affect their behaviour in the classroom, or that understanding the belief structures of teachers and teacher candidates is essential to improving their professional preparation and teaching practices (p307).

Several studies/researchers have commented on teachers on DE's beliefs and the influence they have on their classroom teaching and professional practice (Hardman et al., 2011; Sanger & Osguthorpe, 2010; Mattson, 2006; Robinson & Latchem, 2003; Monk, 1999). Akyeampong et al. (2010) assessed the success of distance learning strategies by evaluating the impact on trainees teaching practices in Ghana. They found out that trainees approached their classroom practices based upon what they know about teaching from their own experience as pupils. In other words, they remained with the beliefs ingrained from their experiences as pupils. The outcome of reviews by Ashraf & Rarieya (2008) that explored the process and impact of engaging teachers in reflective conversations for improving teaching practices and Halai (1998) who also examined how mentoring practices influenced teacher learning, seem to establish a close relationship between teachers' espoused beliefs and practices.

It could be argued, given these findings, that teachers enter initial teacher preparation programmes with some personal beliefs and images about the teaching profession (Sanger & Osguthorpe, 2010; Knowles, 1992). This has links with teachers' emotional, affective, attitudinal and behavioural rudiments, implying that they play a critical and

complex role in influencing a person's thinking and action, including classroom teaching activities (Sanger & Osguthorpe, 2010). It seems relevant therefore for the study to explore the ways in which UTs' classroom teaching and learning practices are shaped by their entering personal beliefs, images and values about the teaching profession.

3.4 Summary

A number of key points and messages highlighted in the literature reviewed include the following: (i) generally, the structure of DTE programmes in SSA tends to comprise a face-to-face component, printed learning materials and a period of practical field experiences. Thus, the programme structure seems to constrain the effective use of DE and ICTs in education (ii) decentralization of learner support is viewed as key in DTE, and adequate support and effectiveness are achieved through partnership with local mentors and adequate funding mechanisms. However, a great deal of writing that evaluates decentralized learner support aspect of DTE in SSA cites difficulties or delay in finance mechanisms, inadequate training and capacity building of local mentors and support to local mentors and UTs as barriers to effective implementation (iii) curriculum of many DTE programmes in SSA is grossly overloaded, and that some of the content does not provide opportunities for classroom application (iv) UTs trained with the philosophy of leaner-centred approach are expected to promote this approach in their classroom teaching. However, a number of reasons could be assigned why DE teachers in SSA do not or are unable to promote this learner-centred method of teaching in their classrooms after campus-based training. These include the following: (a) current DE content and structure does not provide many UTs under training any or enough exposure

to this method of teaching (b) UTs are mostly exposed to teacher-centred methods by their course tutors and (c) school policies and culture demand UTs to approach classroom teaching in a certain way (v) teaching and learning activities/materials should recognize the wisdom of practice of teachers on DTE programmes. Thus, teachers and their wisdom of practice of teachers should be moved from the margins to the centre of investigations about teaching and (vi) teachers enter initial teacher preparation programmes with some personal beliefs and images about the teaching profession. These beliefs which hold influence on teachers' practices, thinking and action both in and out of the classroom environment come from a variety of sources including institution, classroom, and traditional community.

Taking account of the discussions above, the study will explore to find out the extent to which these reflect in the UTDBE situation and the influences it might have had on the professional development and practice of UTs.

In the next chapter, I will develop research questions to explore these issues, and then examine the research methodology, research design, data collection methods and data analysis. The strengths and weaknesses of qualitative and quantitative approaches to research and the reason for the choice of my approach are all discussed.

CHAPTER FOUR: Research methodology, design and methods

4.1 Introduction

This chapter examines my research design and methodology as regards orientation (interpretive), strategy (case study), data collection methods (interviews, classroom teaching and reflection, field notes, field observation and analysis of documents), and procedures and processes of data analysis.

4.2 Orientation of research

Fundamental beliefs about the nature of reality, objectivity and subjectivity have noteworthy implications for the legitimacy and authenticity of the study. Historically, the field of social inquiry first adopted methods used in natural science, which were based on a belief in the existence of universal laws and objectively verifiable truth. This field emphasised the measurement and analysis of causal relationships and performed tests of prediction and control (Denzin & Lincoln, 2005; Lindlof, 1995). At the early part of the 20th century, some researchers challenged such application of natural science to social sciences, which led to the emergence of new direction in social inquiry (Denzin & Lincoln, 2005; Silverman, 2000; Smith, 1984). These epistemological schools of thought, which are sometimes referred to as paradigms, govern the way inquiry is conducted (Denzin & Lincoln, 2005; Kuhn, 1996).

The view that knowledge is hard, objective and tangible belongs to the school of positivism. Research within the postive paradigm intends to determine rules through measurement; thus it is primarily quantititave. On the contrary, research within the

interpretive paradigm, which is fundamentally qualitative, views knowledge as personal, and subjective. Qualitative and quatitative research are not merely different ways of doing things, but different ways of thinking (Joniak, 2005). Researchers differ about the perspective merits of the two approaches because of different views about the nature of knowledge and how knowledge is best acquired. Consequently, "the adoption of one perspective or another should be justified in terms of its potential to address issues whose resolution might contribute to the improvement of students' education" (Cobb, 1994 p18).

The interpretive nature of qualitative research is particularly well suited to the discovery of the meanings events hold for the individual or organisation that experiences them, and the researcher's own interpretation of such meanings (Denzin & Lincoln, 2005; Patton, 1990). I locate my present study within the interpretive paradigm. In approaching this research my position was to understand events and phenomena through the experiences of participants. Westat's (2002) assertion that qualitative researchers feel that there is no single objective social reality, and all knowledge is constructed by observers who are the product of traditions, beliefs and the environment within which they operate, was given a lot of consideration in all my thinking for this study.

From an epistemological point of view, knowledge is created when the researcher and the researched undertake the inquiry. A qualitative enquiry permits the researcher to enter the meaning of worlds of the participants, subjects, or phenomena under study and to participate actively in the creation of meaning (Parker, 1992). These perspectives enabled me to explore some UTs experiences, whilst they reflected, narrated, and described what

they have and perhaps continue to go through in recent past in the context of the UTDBE programme.

My aim was to discover participants' own framework of meanings and the research task is to avoid imposing the researcher's structures and assumptions as far as possible (Britten, 2008 p2). My utmost interest lies primarily with UTs' own understanding of the UTDBE programme, and the extent to which it has promoted quality teaching and learning, a perception I assume is subjectively constructed through individual experiences within a specific context – in this case, the UTDBE.

4.3 Research questions

The aim of the study was to explore the following main research question:

How can distance education contribute to the professional development and practices of the UT in the context of UTDBE programme in Ghana?

This overarching question has been translated into four further questions:

Q1 What are UTs' understandings of teaching, what shapes these understandings and how did this encourage them to engage in the UTDBE?

Q2 What are the aims of the UTDBE programme and how is it constructed?

Q3 What are UTs' perceptions of the UTDBE, including how it has influenced their professional development and teaching?

Q4 What are the implications of the study for the development of the UTDBE programme?

4.4 Research methodology

The aim of the study was to investigate these issues principally from the perspective of UTs. Such an investigation which values participants' own interpretations of his/her world of reality is also connected to how the world is experienced by individual participants and how subjective reality is constructed. Such individual interpretations, in the view of Joniak (2005) are deeply embedded in a rich contextual web. A study that focuses on individual participants' interpretations of the world and places prominence on their understanding of happenings in a context-specific way can best be approached by phenomenological inquiry.

Moustakas (1994) argues that phenomenology "emphasises subjectivity and discovery of the essences of experience" (p45). In a similar epistemic stance of knowledge creation, Joniak (2005) points out that knowledge is not gained through discovery of objective truths, but created through understanding of phenomena within a particular context. Moreover, understanding is not immutable, but rather fluid in nature. Thus phenomenology aims to reveal the essential meaning of an individual's experience from "that person's point of view" (Ray, 1994 p122; Bogdan & Taylor, 1975 p14) The importance of the study is to explore participants' stock of knowledge by focusing on how UTs' make sense of their everyday lives (Bryman, 2001; Creswell, 1998) in the context of UTDBE.

4.5 Research design

Denzin and Lincoln (2005) define a research design as "…a flexible set of guidelines that

connect theoretical paradigms first to strategies of inquiry and second to methods of collecting empirical material" (p22). Apart from knowledge claims engaged in a qualitative inquiry, Creswell (2003) also submits to strategies of inquiry and methods of data collection analysis as important aspects of the research design. With these in mind, multiple means of gathering data such as in-depth interviews, lecture hall tutorial observations, excerpts of a videoed lesson and analysis of documents were employed in order to present a rich description of the phenomena that occurred and also to answer my research questions (see Table 4.1 for relationship between data sources and research questions).

4.5.1 The Case Study

Case study is an analysis of social phenomena specific to time and place (Ragin, 1992b) and social inquiry in general is conducted within a conceptually, geographically or temporary defined field (Cronbach, 1982). Stake (2000) offering insights into case study has emphasised that it is not a methodological choice, but a choice of what is to be studied.

Despite the different ideas about what a case study is, Johansson (2003) explained that what case study researchers might agree on would be that the case study should have a "case" which is the object of the study. The case should be investigated in a context with a multitude of methods (Stake, 1995). This was thought useful in my research design, as my study sought to learn the views of individual participants who have been involved in

the UTDBE (the case study) using a variety of methods which are described in more detail later in this chapter.

Like the different ideas expressed by different researchers on the notion of 'case study", several case study researchers have also identified several types of case studies. For the purpose of this research, I will discuss the types of case studies identified by Stake (2000) since the study fits into one of them. These are the (i) intrinsic case study, (ii) instrumental case study and (iii) collective case study. The intrinsic case study is embarked on in order to understand the particular case in question. The instrumental case study is sought for when examining a particular case in order to gain an insight into a theory. The collective case study is employed when a researcher collectively studies a number of cases in order to investigate a phenomenon, population, or general condition.

In line with Stake's categorisation, my study was an intrinsic case study. In using intrinsic case study for this inquiry, my aim was to get a deeper understanding of how distance education can contribute to the professional development and practices of particular UTs within their own context (Denzin & Lincoln, 2005).

4.5.2 Selecting the case

My own situation as long-term staff member of TED, the division responsible for the implementation and monitoring of the UTDBE programme, and a member of DE unit, the unit within TED charged with the responsibility of the actual day-to-day monitoring of the programme from the national level through to the districts and schools, influenced my decision to take up this study.

While the Government of Ghana after four years of implementation of the UTDBE programme felt it had achieved an important objective of recruiting at least 80% of UTs, and therefore the programme should be continued by possibly enrolling another cohort of students, some educationists still believed that achieving such a target did not necessarily mean improvement in classroom teaching and learning. Thus, for such people quality teaching and learning should be the yardstick for measuring the success of the UTDBE programme. Such debates strengthened and influenced my decision to research into the UTDBE programme.

In considering a project of this nature, I was aware that DTE in Ghana was gradually gaining more prominence during educational planning in the TE sector with the aspiration that it could be a useful instrument for the following:

- Increasing access to professional TE especially for the great numbers of UTs in the underserved districts in Ghana, and
- Improving academic and professional qualification of UTs.

The implementation of UTDBE therefore meant another stage in the quest for an alternative means of providing professional training to would-be teachers. As a relatively new mode of provision, not much research had been done, and therefore to gain an in-depth knowledge, which could ultimately be used to improve the education sector as a whole and also professional practice of DE practitioners, called for a study.

Consequently, UTDBE was chosen as case study for my exploration of views of UTs on the extent to which the UTDBE has influenced the professional practice of beneficiaries. The reasons for this are explained in more detail in the next section.

4.5.3 The role of the researcher

In qualitative research, the researcher is the primary instrument for data collection (Cresswell, 2003). In other words the researcher is also a co-creator of knowledge (Cohen et al., 2007). Throwing more light on the orientation of the researcher towards knowledge creation, Patton (2002) has described it from two perspectives, an insider and an outsider. Bryman (2001) has explained an insider perspective as having personal experience of the society and outsider perspective as a person who has not had a personal experience of a particular society. In line with Bryman's description, the researcher feels he shares the tenets of an insider perspective.

Being familiar with the local culture and customs and having already established a relationship provides the opportunity for the researcher to gain participants easily and to be privy to 'insider' information that would not be trusted to a stranger. Yet being "known" has its shortcomings. Prior knowledge, underlying personal bias and preconceived ideas can render disadvantages to this intimate type of 'insider research' (Rabbitt, 2002 p1).

With these concerns in mind, Cresswell (2003) calls on qualitative researchers to systematically reflect on their biographies, their biases, values and interest and to show

how these could shape the study. A personal reflection on my subjectivity, on how my biography, experiences and interest may have shaped this inquiry and the measures taken to minimise this bias is reported in section 4.9.

4.6 Research methods

Research methods refer to a range of approaches employed in educational research in collecting data (Cohen et al., 2007). According to Denzin and Linclon (2005) it follows the research design phase and it involves the methods of collecting and analyzing data. Consequently, the next section describes the data collection processes.

4.6.1 Sampling

This section explains how the college, UTs and the management stakeholder were chosen for the study, and my purposive approach to sampling.

My own circumstance as a local monitor of the UTDBE programme shaped the methodology of the study. One of the reasons for the choice of a particular training centre in Ghana was that I had worked with some of the tutors in that institution on my local monitoring of UTs during residential face-to-face sessions and as a result I was very familiar with the terrain. Having a good knowledge of this environment meant that I would have easy access to facilities and resources. However, having initiated a project that would rely on people you already know, the importance of ethical conduct came to the fore. I understood the challenge of the dual role as a researcher and "community"

member. I took extensive precautions to ensure that the balance between my professional networks and my researcher role albeit as an "insider" was maintained (see section 4.9).

Another reason for the choice of this centre was the geographical accessibility and mobility from my place of residence. Travelling from my place of residence to and from the centre either with public or private transport was not difficult. Thus accessibility to site was taken into account.

Again, this centre had two cohorts of UTs, and was cosmopolitan in nature. I therefore felt that selecting such a site I could encounter students who have varied experiences as a result of interacting with other UTs coming from outside the region. I judged that this will offer me a rich data which will be most useful for the deepening of my analysis.

As Spradley (1980) emphasises the need to select for the degree of access that potential informants make available, I considered easy access to staff to be a fundamental dynamic in selecting my case college. In principle though permission was sought from the principal of the college, in practice the study conducted involved individuals or staff members other than the principal. Since staff of CoEs especially tutors are autonomous in terms of accepting to or not to grant interviews to a researcher, it would have been a risky venture assuming that permission sought alone meant having a 'green light' to use all resources available. Thus easy access to staff was given key consideration.

Similarly, the choice of UTs/stakeholder was not on random basis but, as appropriate in qualitative research, was based on their potential to contribute and willingness to cooperate with the research process (Stake, 1995). Stake (2000) refers to sampling of "cases within cases" (p440). He illuminates that after sampling of the main case, there are still subsequent choices to make about persons, places and events to observe. He stresses that specific criteria need to be used, and is categorical that these criteria should be based on the opportunity to learn rather than on representation.

Certain criteria were therefore considered in the selection of UTs and the number to be interviewed. In this context, and for convenient reasons as described above, 6 UTs (3 males and 3 females), teaching in different primary schools in a district in the Eastern Region, who had attended at least 5 residential face-to-face sessions, and had had experience from practicing what they have acquired from such sessions in their normal classroom work for at least two years were considered. The number (6) which was purposively decided upon in order to ensure adequate mixture of UTs to be interviewed was also an attempt to create a balance between males and females in the study. All the 6 UTs selected were teaching in primary schools located in the underserved rural communities in the district. This situation was expected as majority of the UTs on the UTDBE programme are teaching in the underserved districts; trained teachers usually do not accept posting to these areas.

Having considered all these criteria in consultation with the senior management figure of the college, a list of 6 UTs were identified. Immediately a meeting was arranged between

them and myself (researcher) the following day between the hours of 6pm and 7pm. Since UTs were at a residential face-to-face session, it was easy assembling them. During this meeting, I briefed them on the nature of the research (see section 4.7 for in-depth discussion) and later discussed the content of the participant information sheet (see Appendix 7). UTs were given a copy of the participant information sheet and asked to take a further look at it. Another meeting was scheduled the following day for UTs to give their final consent. Earlier on this senior management figure at the college was approached in a similar way to agree to an interview about the programme and its context.

All the 6 UTs indicated their interest to take part in the study and therefore signed the consent form to signal their voluntary participation (see Appendix 8). This approval paved the way for the researcher to contact personally the management figure in the sampled district and schools where UTs were teaching to obtain official permission (see Appendix 9 for permission letters sent to district, schools and UTs to undertake research).

4.6.2 Data collection methods

As already described, one of the strengths of case study approach is the use of multiple data collection methods and a variety of data sources on a fit-for purpose basis to answer each question (Merriam, 1988). Consequently, this section offers an explanation of the process of data collection that included interviews (focus group, one-on-one and reflection of a videoed lesson), documentary analysis, and field observation. Table 4.1, shows the research methods used to address each question. The discussion of the

individual research methods is followed by an account of the piloting of the different instruments

Table 4.1: Data collection Matrix

Research Questions	Data Sources
What are UTs' understandings of teaching, what shapes these understandings and how did this encourage them to engage in the UTDBE?	Interviews (focus group)
What are the aims of the UTDBE programme and how is it constructed?	Documentary Analysis, Interviews, Field Observations/Notes
What are UTs' perceptions of the UTDBE, including how it has influenced their professional development and teaching?	Interviews (one-on-one on perception and experiences/video data selection)
What are the implications of the study for the development of the UTDBE?	Data Analysis

4.6.2.1 Interviews

There are several forms of interview along a series of continuum. Interviews may differ in the openness of their purpose and their degree of structure, from structured interview at one end to unstructured interview at the other end, according to the purpose of the interview (Cohen, et al., 2007; Kvale, 1996). Lincoln and Guba (1985) suggest that the structured interview is useful, when the researcher is aware of what he/she does not know and is therefore in a position to frame questions that will supply the required information;

while the unstructured interview is useful when the researcher is not aware of what he/she does not know and must therefore rely on the respondent to tell him/her.

I chose a semi-structured interview or an interview guide approach (Patton, 2002) to my data collection after considering the strengths and weaknesses of each of the types. In the semi-structured interview, topics and issues to be covered are specified in advance; the researcher decides sequence and working of questions in the course of the interview; interviews remain fairly conversational and situational (Cohen, et al., 2007). I describe the pilot of my instrument below. During the subsequent field work, I ensured that the interviews were conversational and interactive by encouraging participants to talk freely, while guiding the conversation towards new topics from time to time. Perhaps the comment made by one UT was indicative of the extent to which the interview environment was conducive:

> This is the first time that I have had an opportunity to tell somebody all my personal feelings, and challenges about the UTDBE (UT4f: 18/08/ 2011).

Interviews can take place with individuals or a group of people. In this study, I conducted both individual and focus group interview. As a way to capture the phenomenon in-depth experiences, I decided to conduct one-on-one interview with UTs and a stakeholder for the following reasons: one-on-one interview will provide opportunity to observe other physical behaviour of respondents that will add more meaning to issues raised, and interviewing could have the advantage of getting a real personal account of experiences, of individual respondents (Cohen et al, 2007). Although one-on-one interviewing has its advantages in educational research, it has also some limitations. A risk in this strategy is that it may put too much pressure on the respondent which may affect the extent of depth

of responses. With this in mind, participants before the interview process were given the opportunity to decide on the day, time, and venue, and during the interview process were encouraged to talk freely.

The focus group interview on the other hand is particularly useful when a group of people have been working together for sometime and/or with a common purpose (Watts & Ebbut, 1987). This was suitable for my situation considering the fact that these UTs have been on the UTDBE programme for the past two years. Again, I conducted focus group interview in order to elicit participants' feelings, attitudes and perceptions about a particular topic through conversations. This resulted in participants' views to be both challenged as well as accepted. Additionally, focus group interview was conducted to obtain general background information about a topic of interest and stimulate new ideas and creative concepts (Puchta & Potter 2004).

4.6.2.2 Collection of documents

Documents may include any written or recorded material produced before the study at hand that constitute a stable source of data and provide wide coverage at relatively low cost (Merriam, 1988). Moreover documents are deemed to be "unobtrusive" (Lincoln & Guba, 1985 p199) because they are typically composed of data collected by another person. As a GES headquarters staff, getting hold of documents on the establishment and implementation of UTDBE was perhaps one of the easiest task so far as this study was concerned. For some of the documents, I had them in my possession. Those I did not have I requested from the appropriate division which I obtained within a matter of hours.

The documents that were collected and reviewed included:

- Implementation plan for ICT-enhanced Open Distance Learning programme for Teacher Education in Ghana – National Framework for Teacher Accreditation and Programme for UTs

- Handbook on UTDBE

- Development of Teacher Education in Ghana

- Status reports on UTDBE from 2005 – 2011

- Evaluation report on UTDBE 2010

Why I focused on in these texts and how they were analysed have been discussed later in section 4.7.3.4.

4.6.2.3 Observation

Merriam (1998) stated that observations provide "some knowledge of the context or provide specific incidents, behaviours, and so on that can be used as reference points for subsequent interviews" (p96). Teaching and learning activities, patterns on classroom interactions between tutors and UTs and among UTs, that take place during residential face-to-face meetings, were observed. I conducted classroom observation for the following reasons: (i) to develop an interview schedule for the stakeholder and (ii) to find out the extent to which classroom interaction and engagement between UTs and tutors promoted professional development of UTs.

4.6.2.4 Trial of instruments (Pilot studies)

To avoid distasteful surprises, De Vaus (cited in Nunes, et al., 2010) warns "Do not take the risk. Pilot first" (p73). This position suggests that the substantial advantage of conducting a pilot study is anticipating the debilities of the research project, namely controlling the adequacy of protocols, methods and instruments (Nunes, et al., 2010). Similarly, Teijlingen and Hundley (2001) offer a list of reasons for conducting pilot studies, amongst which are: developing and testing adequacy of research instruments; assessing the feasibility of a full scale study. Consequently, I carried out an initial trail of my instruments to test for the efficacy of the instruments and my intended research methods.

The initial trial of my instruments was conducted in a CoE in Greater Accra Region, and two primary schools in the Accra Metropolis also in Greater Accra Region (see Appendix 6 for timeline for data collection). The reasons for the choice of a CoE in Greater Accra Region, was that I had worked in that college as a monitor and therefore was very familiar with the terrain, the college was quite close to my office and therefore, I could commute easily on daily basis. Like the choice of a CoE in Greater Accra Region, the two schools in Accra Metropolis were also chosen because of proximity.

Six weeks prior to the conduct of the pilot phase, I visited the administrator of that CoE, district director of education, headteachers and UTs in the two basic schools, to obtain official permission and also to introduce myself, this time in a different capacity. On all these visits, after presenting the official letter, I took the advantage of the courtesy call to

brief these personalities on the conduct of the study, the purpose of the study, the periods that they will be engaged in the conduct of the pilot study, the extent of their involvement and the level of cooperation needed.

The following activities took place during this phase of the study: a focus group interview with 3 UTs, one classroom observation tutorial during residential face-to-face session, an interview with a member of a CoE management, one-on-one interview with 2 UTs on their perception on UTDBE and also on a videoed lesson from UTs classroom teaching. These activities are discussed in-depth later in this section.

Certainly, being familiar with the environment and some of the personalities involved and knowing how this could sometimes be of a disadvantage, I took advantage of the visit to explain my current status as a researcher. This preliminary personal visit was useful, in the sense that it helped to lessen my anxiety about collecting a data in familiar environment and from "familiar" persons, while at the same time offered opportunity to interact with UTs 'break ice', my principal actors of the study.

I spent three days in the CoE conducting the pilot interviews and observing classroom interaction between tutors and UTs. Since UTs were on residential face-to-face session, it was quite easy to get all the sampled UTs for the focus group interview during the first day of my visit. I did two activities in the second day. In the first part of the second day, I observed a classroom interaction between a tutor and UTs. In order to gain some

background and contextual information I also interviewed a management figure who had an in-depth awareness of teacher education practices.

During the focus group interview, all my 3 UTs willingly talked about why they wanted to be a teacher, their views about a good teacher, professional development and practice and why they enrolled on the UTDBE programme. One important issue that came up and therefore necessitated a change in my instruments was to combine the two separate questions on professional development and practice into one. This was because UTs when talking on professional development ended up talking about professional practice and vice versa.

Two weeks after the end of the residential face-to-face, I followed up with a visit to 2 UTs in their schools to interview them on the following: their perception about the UTDBE programme and a videoed lesson from UT's classroom teaching. Two days were spent in each of the UTs school, with the first day devoted to interviewing them on their perception about the UTDBE and the second day dedicated to interviewing them on a their classroom teaching.

On the interview about their perception about UTDBE, the 2 UTs gave a good account of their experiences, highlighting the extent to which the programme has advanced their professional development as well as challenges. This suggested that the instrument related to UTs perception about UTDBE was appropriate and therefore did not need any revision.

My original plan was to monitor class teaching of UTs by me the researcher seated behind the class, listening and putting down my comments for discussion after the end of the lesson. During the initial discussion of this plan with my supervisor, I was advised to allow the UTs to video a lesson (class teaching), and later interview them on the good and challenging aspects of their lesson, using this video as a prompt for the discussion. However coming from a society where the normal approach to monitoring teachers' classroom performance was to have the monitor seated at the back of the class and observe and take notes, I felt it was in good order and therefore went ahead with this approach.

During the lesson observation, I realised that the class was unusually quiet, with very few contributions from pupils. Questions thrown to the class were answered by a group of pupils with majority of them not showing eagerness to attempt to answer any question. This unusually quiet classroom behaviour of the pupils made me to suspect something, and so after the lesson, I managed to talk to some of the pupils to find out about the situation observed. One of the pupils told me in confidence that their teacher had cautioned them that in the presence of any visitor they should not attempt to answer a question if they were not sure of the answer. Any attempt at providing an answer that went wayward, such a pupil would be punished after the visitor had left. With this mind, I realised that I would not have a valid data if I went ahead to use this approach. I therefore decided to use videoed lessons of UTs classroom teaching as a basis for our conversation about their practice rather than be present as an observer myself.

4.7.3 Data Collection Process

This section provides an explanation of the process of data collection (see Appendix 6 for specific dates and types of venues of all data collection processes).

4.7.3.1 Interview with UTs (focus group)

UTs were first interviewed collectively in a focus group to find out the following: why he/she opted for the teaching profession; the image he/she had about the profession; his/her personal beliefs and concepts of good teacher and teaching, and why he/she has decided to pursue a DE programmme (see Appendix 10 for interview schedule).

The residential face-to-face session was in progress, as a result focus group interview with UTs was held on the college campus. Initially, I aimed at conducting the interview in one of the lecture halls which was very much isolated from the rest to ensure privacy and good acoustics. However, about an hour to time of the interview, UTs informed me that a music lecturer was meeting the choir group in that lecture hall, and that we had to relocate. Since the entire lecture halls were being used for evening private studies, we had no option but to use the big dining hall. This made transcription difficult and time consuming as the recordings had to be played several times more than I had anticipated to ensure accuracy of the transcriptions.

Prior to the commencement of all interviews, a verbal explanation of the purpose of the research, introductory letter, guarantee of confidentiality and privacy, parameters of the research and any other participating protocols of the research were given. Since all UTs

agreed to the use of a voice recorder, an audio recording of the entire interview was pursued. The advantage seen was that it offered me a good opportunity to listen carefully and observe facial expressions of UTs and take down notes as a supplement to the recording. In some cases notes were expanded immediately after the end of a session.

Since the interview was conducted in English which is the official language spoken in Ghana, UTs had no difficulty in understanding the contributions made by fellow UTs. UTs engaged in healthy discussion and contributions in the interview that lasted for about 80 minutes. After 30 minutes, the UTs nevertheless showed signs of tiredness. This situation did not come as a surprise to me (the researcher) since UTs ended lectures at 6pm, went for supper around 6.30pm and by 7.15pm, we had started the interview. Obviously they needed some time to rest before the interview. As a result, during the interview process, we had a break of about 3 minutes.

About 8 minutes to the end of the focus group interview, we had power outage on the whole of the college campus and therefore we had to complete this session with a source of light from a torch light. This made it impossible within this period, to observe the physical behaviour of participants, which is also a good source of data.

4.7.3.2 Interview with UTs (one-on-one)

One-on-one interviews were later conducted with UTs in their individual schools (see appendix 6 for specific dates and venues). This interview was in two parts: the first part was an interview on their perception about the UTDBE programme (see Appendix 11 for

interview schedule) and the second part was an interview on a videoed lesson from UTs classroom teaching (see Appendix 12 for interview schedule). The researcher spent 3 days in each school of the 6 UTs. The first day in each school involved interacting with UTs and their respective headteachers, explaining the purpose of the study and other details as indicated in the permission letter/letter of consent/participant information sheet, and handling and using the video camera to shoot and play back.

To better understand in detail how UTDBE programme was perceived by UTs, one-on-one interview which lasted between 45 and 70 minutes was conducted during the second day of the researcher's visit. All the interviews were held in the office of the headteacher to ensure privacy with no external disturbances or influences.

To ensure that the interview process did not disrupt the school's routine activities for example UT class teaching and other professional duties, all interviews took place immediately after the end of the days' session. That was between the hours of 2 and 3 pm. All interviews were recorded using a voice recorder.

As already indicated the third day involved an interview on a videoed lesson from UTs classroom teaching. UTs themselves shot a 30 minute lesson (from the beginning to the end of the lesson) using a video recorder, played back the *video tape and selected excerpts for discussion with the researcher.* In the view of Gallimore and Tharp (1990) change in education must occur by assisting teachers to examine their own teaching and, this can be accomplished in the educational setting by carefully constructing

opportunities for teachers to reflect on their own teaching. Accordingly*, UTs and researcher sat down to discuss the "selected excerpts" from their videoed lesson. This interview* allowed the UT to reflect on the lesson, while at the same time providing an opportunity for the researcher to understand the UT in terms of particular concepts and skills employed. Discussions centred on UTs' own classroom teaching practices and experiences from the lesson taught, with particular reference to how the lesson was approached at the introduction stage, presentation stage and conclusion stage and the extent to which outlined objectives were achieved, the kind of interaction that existed between the UTs and their pupils and how that influenced the teaching and learning process.

4.7.3.3 Interview with management stakeholder (one-on-one)

The interview with the management stakeholder was conducted with the view to provide further insights to the background of the UTDBE. It took place at his office between 9am and 9.40 am, his break period so far as administrative matters were concerned. The stakeholder insisted that we used this period and place, because of convenience, comfort and security. Despite this arrangement, the stakeholder's circumstance as a senior management still impinged upon the smoothness of and the duration of the interview process. For instance two visitors were attended to at separate times, a phone call reminding of an impending meeting. This made the duration of interview process to extend beyond the 30 minutes originally anticipated.

Prior to tuning on the voice recorder, parameters of the research were explained. Questions asked were derived from observational notes from the classroom observation of tutors and UTs' interaction (see Appendix 13 for interview schedule).

4.7.3.4 Collection of documents

A lot of time was spent on reading through and analysing these "heaped" documents. I was very much interested in finding out what the policies on teacher education and distance teacher education, say about teacher professional development, the establishment, development and implementation of UTDBE programme, and the extent to which the UTDBE programmes and practices (by all actors) have lived up to the key guiding principle of promoting teacher professional development (see Chapter 2 and section 6.2).

4.7.3.5 Observation

I observed 4 tutorial sessions in the CoE over a period of 4 days. In each tutorial session, I spent one hour observing the interaction taking place between UTs and their tutors and took notes. Immediately, after the end of a particular day's period, I sat down to read through and expand the notes taken.

I cannot deny the fact that tutors were aware of my presence. Therefore the first 5 minutes of each session saw tutors talking with a little bit of caution and sometimes showing signs of discomfort. However these signs of nervousness disappeared after the first 5 minutes and tutors went along with the normal way of handling their students.

4.7.3.6 Field notes

Field notes provide the opportunity for reflection and self assessment on the part of the researcher, as well as a forum for recording hunches, insights and observation (Huffcutt et al., 2001). Accordingly, field notes were taken to supplement whatever was recorded and or observed during interviews and field observation.

4.7.4 Analytical Strategies

The analysis of the whole data set was conducted following Marshall and Rossman (1999) suggestion as regards managing data generated from a qualitative research. They suggested the following stages as a guide:

- Organising data

- Generating categories, themes and patterns

- Searching for alternative explanations

- Writing report (p152).

4.7.4.1 Analysis of interviews and field notes

The interview transcripts and field notes were the main data of this research. The research questions of the study were employed to construct a predetermined framework to better analyse the large amount of data (Ottesen, 2007a; Joram, 2007a). To uncover themes related to the research question I adopted a "selected reading approach" (Van Manen, 1990 p93) meaning that the data was read and re-read. I asked myself what statements, phrases and words brought into play by participants seemed illuminating about UTs' professional practices and development. In this connection, codes were developed from

the main subjects that emerged while reading the transcripts, and these were categorised according to key words and group of participants.

To be able to identify the source of quotations, interviewees were also given unique codes, reflecting the current status as untrained teacher, sequence in which they were interviewed and sex. For example the first UT interviewed was a female and therefore was assigned "UT1f". The rest of UTs were identified using the following: UT2m, UT3f, UT4f, UT5m, UT6m. The Management figure (male) is referred to as "STm".

4.7.4.2 Documentary analysis

Documentary analysis were done in order obtain a clear picture about how all the actors performed their individual and collective roles and how the established structures of the UTDBE functioned to promote professional development of UTs. The data was therefore analysed according to key indicators such as origins and structure of the UTDBE and support systems.

4.7.4.3 Synthesis and writing up of the study

Platt (1992) has noted that:

> one way, and rhetorically very effective way, of reaching a conclusion and taking
>
> the reader with you that conclusion is to tell the story of how you arrived there
>
> yourself (p29).

Indeed throughout the entire process of describing the study, I have endeavoured to ensure that my interpretations of events and analysis appear trustworthy in terms of the

data they (participants) presented as evidence of my final conclusions. In effect, interpretations are presented in a way that allows readers to see why the research reached a certain conclusion based on the available data (Mehra, 2002) which was collected through various approaches indicated in section 4.6.2.

4.8 Validity and reliability

This section describes how issues of validity and reliability were addressed in this inquiry by embracing constructs of quality assurance from a qualitative paradigm. Validity and reliability are paramount in any research; if a piece of research is invalid, it is valueless. Thus, validity and reliability mean making judgement about the trustworthiness of research processes and its findings (Guba, 1981). Lincoln and Guba (2000) outlined some valuable insights in addressing the issue of validity and reliability in qualitative research. These include the following; credibility, transferability, dependability and confirmability. Based on Lincoln and Guba's (2000) classification, I aimed to maintain the quality of the inquiry described in the sections that follow.

4.8.1 Credibility

Credibility refers to establishing that the results of qualitative research are believable. In this research, credibility was established through rigour of techniques and methods and the credibility of the researcher. To ensure rigour of techniques and methods, a full and detailed description of the research design, methods, fieldwork processes and procedures has been developed in this chapter. As regards the credibility of the research, a full report of my biography, experiences, knowledge, attitudes, values and biases that was brought

to this inquiry has been made. This personal reflection creates an open and honest account that aspires to resonate well with readers (Cresswell, 2003).

4.8.2 Transferability

Transferability answers the question of how research findings can be applied to other contexts or other respondents/participants. However, the goal of qualitative research is not necessarily to generalize to a population, since the inquiry is context based (Stake (2000) and uses purposive sampling. Both Cresswell (2003) and Lincoln and Guba (2000) have suggested that transferability can be achieved by providing thick description, by collecting sufficiently detailed description of data in context and by reporting the data with sufficient detail and precision. In my study, sufficient data was collected from multiple sources referred to in section 4.6.2, data was transcribed and analysed to give thick descriptions of participant's accounts (Morse & Richard, 2002) and care was taken to report on the findings in as much detail as possible to ensure credibility.

4.8.3 Dependability (reliability)

Merriam (1998) has pointed out that in the social sciences the notion of dependability is a problem because human behaviour is not static. To address this dilemma of reliability, Lincoln and Guba (2000) suggesting the use of the term dependability to check whether the results of the study are consistent with the data collection, outlined a number of strategies to include triangulation and peer examination.

Triangulation refers to the use of multiple methods in data collection. In my study, interviews (one-on-one and focus group), observation and analysis of documents were all employed. *Peer examination* refers to the checking of the consistency of the emerging findings with the method of data collection. In this situation, four issues have been addressed. Firstly, several presentations were given at academic meetings and with my supervisor at the University of Sussex School of Education and Social Work. Secondly, full details of the whole research process have been discussed in this chapter. Thirdly, a critical reader to read my thesis to check for coherence, accuracy and consistency between the findings and methods of data collection, was sought. Fourthly, the reports of the study have been shared with my respondents, my employer and sponsor and my supervisors.

4.9 Researcher's statement of subjectivity

As a member of TED and specifically assigned to Distance Education and Module Development Unit, and at least with seven years of professional experience in distance teacher education, I entered this field of study with what I will describe as multiple axes of differences between myself and the participants (this is not to say that in the study I was only a researcher). These differences included the following: considerable academic and professional knowledge and experience of DTE, the researcher's professional rank and academic qualifications.

With this background knowledge and experience, I carried out the research which located me with participants, some of whom have either met me in person or seen me on stage

delivering an address or speech. This gave the participants the confidence to immediately accept my proposal to participate in the research. In other words, my position may have made it difficult for them to refuse to take part. As an insider, I was able to put and direct questions to participants with ease. However, I must admit that during the interview process, there were cases that I gave participants leading questions, apparently with the aim of making them provide a response that tailored a direction. Thus some of the questions were steered towards personal understanding of DTE and teacher professional development.

An important mark of difference between participants and researcher that came into play was professional and academic rank. As a senior member of GES and at the same time pursing a doctorate degree, created a hierarchical power relation between myself (researcher) and the participants. This Collins (2000) refers to as the tensions experienced by any group of less powerful encountering the paradigmatic thought of a more powerful inner community (p287). I was expecting such tensions in the moment to moment interaction between researcher and participants (Bolyan, 2002). To minimise such hierarchical power relations, I personally communicated with participants, letting them know of the research objectives and negotiating day to day time with them, and in some cases had informal discussions with them sometimes over a bottle of soft drink. The idea behind such informal meeting was to 'break the ice' before the actual interview and or observation sessions.

During interviews and field observation, I took notes as a supplement to the recording and observation made, and some of these notes were expanded immediately after the end of these sessions. In the process, I found myself sometimes transcribing, interpreting and producing text and using my personal judgement and experience to frame and reframe sentences which brought about new meanings. However to reduce the high level of subjectivity, issues noted were given back to participants to read and give final approval.

Personal experiences and challenges encountered as a student pursuing a professional doctorate in education by distance came into play during the research process. I became deeply immersed in and empathetic to the views expressed by UTs, especially when they talked about the difficulties involved in submitting assignments, struggling to maintain good academic standing, and battling with ill health. Fascinatingly, these sentiments were expressed by the first UT, I interviewed, and being aware of such feelings, I willfully worked towards them throughout the research process.

4.10 Ethical considerations

The ethical guidelines of the University of Sussex, which highlight inter alia the importance of ensuring that participants provided informed consent, that their confidentiality and privacy were respected, and that they had the right to withdraw from the research at any time were respected throughout the research process. I considered three main ethical dimensions identified by Cohen et al. (2007) namely: (i) informed consent (ii) anonymity and (iii) confidentiality.

On the issue of informed consent to conduct the research, I asked permission from the authorities of the institution that were involved in the research process (see Appendix 8). In addition, permission was also sought from GES to include documents such as policy texts and documents on the establishment of DE for teachers in Ghana. In the case of the UTs and the stakeholder involved in interviews and observations, I shared with them the purposes of the research, provided details of their involvement in the research that I am requesting of them, and what would happen to the data which they would contribute and how this would be reported. I sought respondents' permission to record and transcribe interviews. In this situation, formal and informal channels were employed to make appointment with all participants and to ensure their continuous cooperation and participation.

Thomson et al. (1994 p34) wrote of their concerns that the final product may not be what the narrator had anticipated and could be interpreted as a being of breach of contract, trust and confidence. To avoid such a scenario, participants were given their interview transcripts to read and give final approval of the content. It should be acknowledged that not only is returning transcripts to UTs and the stakeholder considered a good practice on ethical grounds but it also serves as a useful method of checking meaning (Plummer, 2001). After going through the transcripts, UTs made a few comments on the content of what they said, but rather made a lot of comments on the grammatical errors in their spoken English.

I assured all participants of attempts to safeguard their anonymity and confidentiality, while recognisng that in small-scale research, complete anonymity of respondents cannot be guaranteed. However, with respect to respondents' confidentiality, I ensured that they volunteered in confidence to me, rather than indicating their participation in public. Again, I took care in reporting data of a personal nature. Given the limitations on anonymity and confidentiality, I made all efforts to ensure that the research caused respondents no harm. With this in mind, in writing up the thesis, the names of participants were not used instead they were given codes.   Also to demonstrate practically, the ethical measures and reciprocity arrangements for participants to share their views and for protection of individual participants, the draft of the final thesis was given to participants for their comments if any.

Before embarking on the fieldwork for the research, the University of Sussex, Social Sciences Ethics Committee (C-REC) reviewed and approved all data design, collection, analysis, and participation protocols for the research. The study was informed by input from UTs on the UTDBE programme, a senior management staff of a college of education, my supervisors at the University of Sussex and its Social Sciences Ethics Committee (C-REC). These groups of individuals and bodies provided feedback at key stages of the research including commentary on the design, analyses, interpretation of results, and recommendations emerging from the findings. For example at the stage of designing instruments, and pilot testing of instruments, input from these bodies and individuals were very important in shaping better my direction and focus. In addition, the final EdD thesis was subjected to both internal and external academic examinations

including a viva voice regarding the validity of the methodology, the findings and claims to knowledge.

4.11 Summary

This chapter discussed an exposition of the research methodology employed in the study, indicating the main research methods, design and strategies that were used to guide the study. The criteria used for selecting the college and participants, were illuminated after which the way in which the data was collected and analysed was explained. Account of reflexivity of the part of the researcher, ethical considerations and limitations of the study have all been highlighted. In sum, this chapter is a guide to the first phase of the study: the preparation of research proposal, the field work and data analysis.

The findings of the analysis of the official documents, interviews and field observations have been presented in the next three chapters. Chapter five presents UTs' views on teaching and learning and teacher education by distance.

CHAPTER FIVE: Untrained teachers' perceptions of teaching and teacher education by distance

5.1 Introduction

Teachers' perceptions about the teaching profession as a whole and their specific roles both in and out of the classroom contexts are likely to be shaped by their fundamental beliefs and images about the profession (Mattson, 2006; Robinson & Latchem, 2003). Consequently, this chapter investigates the perceptions of UTs to determine their views on and understanding of the teaching profession prior to entering it and the extent to which these encouraged them to enrol on the UTDBE programme.

This chapter begins by discussing UTs' views about teaching, why they decided to enter the teaching profession and their ideas about what constituted a good teacher. The chapter further investigates the various perspectives held by the UTs on the specific reasons for undertaking the UTDBE programme. This chapter, through a focus group interview with 6 UTs which took place at the beginning of a particular residential face-to-face session, will address the following research question: What are UTs' understandings of teaching, what shapes these understandings and how did this encourage them to engage in the UTDBE?

5.2. UTs' views of teaching

This section explores the views of UTs in the following areas: (i) why they want to be teachers (ii) ideas about what constitutes a good teacher and (iii) the extent to which their past experiences influenced their classroom teaching practices.

5.2.1 Why do you want to be a teacher?

UTs' comments fell into three main categories: (i) those who decided to become professional teachers because they viewed teaching as a permanent, secure, sheltered and stable job; (ii) those who viewed the profession as a means to get social recognition and identify with a group (iii) those who reported having entered the profession as a result of personal motivation and encouragement and a strong personal loyalty and dedication to become teachers.

5.2.1.1 Second option but stable work

Comments from UTs suggested that some of them chose to enter the teaching profession because they could not gain admission into a university to take up a course which would have been a preferred choice. This particular UT did not consider teaching as a preferred career option at the point of entering the profession:

> My intention was not to enter the teaching profession. However, when I realised that my results could not …..to enter either the university or any tertiary institution like a polytechnic, I had to settle in this profession for the main reason that in Ghana the only job that people were assured of getting immediate employment after training was the teaching profession (UT3f: 25/07/2011).

The notion that teaching in Ghana offered people a permanent and secured job informed the thinking of this UT and the choice to enter the teaching profession. Even as a UT you could choose to stay in the service without the fear of termination of appointment. This UT elaborated:

> I knew that as a trained teacher my teaching appointed will not be terminated….I loved to teach because immediately after professional training programme, you were given a teachers' registered number and a place to teach and this was followed with your monthly salary, which I think was good (UT5m: 25/07/2011).

The quotations above seem to indicate that these UTs entered the teaching profession based on personal benefits and security of employment. Also, they entered the teaching profession because they perceived no other option but the teaching profession.

5.2.1.2. A means to social recognition

Another UT had the intention to use the teaching profession to gain social recognition. This UT believed that the village community has much respect and regard for teachers. The UT felt being in a gainful employment will enable her acquire certain basic material possessions which were cherished in the community:

> The only job in my village is teaching... you are highly respected if you are a teacher…also as a teacher you are able to acquire certain things like colour TV and Home Theatre (UT1f: 25/07/2011).

The comment seems to suggest that the UT found teaching as personally rewarding at least from the context of gaining social recognition and being in a better position to acquire material property. For this UT, the teaching profession was seen as enhancing one's personal and social status.

5.2.1.3. Personal drive and encouragement

A UT pointed out to her personal drive and encouragement to join the teaching profession. The desire to enter the teaching profession seemed to be generated by the UT's past experience of playing the role of a teacher. This UT remarked:

> I remember teaching my younger sister and brother…. My parents who were teachers themselves were always praising and encouraging me to continuously teach them. I think these two things motivated me to become a teacher (UT4f: 25/07/2011).

Similarly, another UT also linked the personal drive, encouragement and dedication to enter the teaching profession to the past experience as a junior secondary school student:

> In the junior secondary school, I presented a report on behalf of my group. After the presentation my social studies teacher said what I had done was a mark of a good teacher. Ever since I have developed interest in becoming a teacher (UT6m: 25/07/2011).

Overall however, although they reported a range of different perspectives, these UTs' comments seem to be shaped predominantly by their awareness of and desire for different kinds of social, material and economic recognition rather than an interest in teaching.

5.2.2. Ideas about what constitutes a good teacher?

UTs' views of what constitutes a good teacher are classified into three main categories: teacher exposition view and transmission of knowledge, caring and loving teacher and involvement of pupils in the teaching and learning process.

5.2.2.1 Teacher exposition view and transmission of knowledge

Responses classified as teacher exposition view and transmission of knowledge placed great prominence on the teacher explaining concepts, facts, ideas, and values during lesson delivery. A UT recounted that the ability to transmit information was the key to being a successful or a good teacher. In other words, the teacher's knowledge of the subject matter was considered central and that the teacher must be an expert in content delivery:

> Stands in front of his/her class and explains everything to his/her pupils. ….the knowledge level of a teacher should be good enough to answer pupils' questions ….in a mathematics class if you don't tell your pupils that for instance $y + y = 2y$, they will not know (UT5m: 25/07/2011).

In a similar way, a UT established a close link between teachers' ability to transmit knowledge and respect. This UT seemed to have a conception that pupils have respect for teachers who tended to project themselves as having good knowledge of their subject area. From this perspective, teachers were seen largely as an ultimate authority of what counts as an acceptable initiative in classroom teaching:

> A teacher is to impart knowledge. If you have knowledge.. …you give to your pupils and that makes them respect you…….After all pupils come to school to learn what they are told (UT3f: 25/07/2011).

The views expressed by these UTs placed emphasis on teachers as the sole "owners" of knowledge and so it was their responsibility to control the learning situation, explain concepts and skills, and pass on knowledge to pupils. They viewed the teacher as a transmitter of knowledge with pupils not seen as active participants in the learning environment. Thus, the views expressed seem to exhibit some underlying principles of a teacher-centred perspective (Korthagen et al., 2006; Cuban, 1983).

5.2.2.2 Caring and loving teacher

One important description given to a good teacher was one who is caring, loving, has patience and shows a good sense of human feeling towards his/her pupils. These attributes were seen as necessary to ensure that pupils can approach their teachers at any time to discuss their problems. These problems could centre not only on academic issues but also non-academic issues. Caring for pupils and helping them to deal with their own difficulties were also fundamental features in this UT's depictions of her role:

> It is the person who is caring and prepared to help pupils solve both their academic and non-academic problems. As a teacher you have to show them care, love and affection. If pupils fear you they may not be able to tell you their problems……….Pupils can discuss problems in subjects like mathematics and

science if only as a teacher, you show them loving and caring attitude (UT4f: 25/07/2011).

Another UT noted:

> When I was in the primary school, my happiest moments were the periods when we had teachers on internship. These teachers always showed love and compassion, and…. I never absented myself from school during the weeks when these teachers were around (UT5m: 25/07/2011).

The teacher's knowledge and character were considered important aspects of being a good teacher. A UT emphasised that these two attributes should be possessed and used at the same time in the classroom teaching. Thus, an important link was established between a pupil's ability to benefit from classroom teaching and an atmosphere of love, confidence and trust between the teacher and pupil:

> It is the person who has a lot of knowledge and skills in the subject matter being taught and at the same time of a caring and loving nature…..I developed interest in learning and started performing well in mathematics…. the teacher knew the subject very well …he had patience….he would take his time, and encourage you and see to it that you achieve some success (UT1f: 25/07/2011).

These perspectives seem to suggest that this UT saw a close relationship between a teacher's already acquired knowledge and skills and personal attributes and pupils' personal improvement.

5.2.2.3. Involvement of pupils in the teaching and learning process

Another UT believed that a good teacher is the one who involves pupils in the teaching and learning process from the beginning of the lesson through to the end. Such involvement included formation of groups and providing opportunities for pupils to explore and discover for themselves solutions to problems:

> Should allow all pupils to be in groups and learn to come out with their own solution....they have to explore and make conclusions for themselves….. this will

> enable them come up with their own ideas….the role of the teacher is only to guide them (UT3f: 25/07/2011).

Another UT remarked:

> Pupils also have something to discuss or share with other pupils in class. I think a good teacher should involve all pupils in the teaching….….after all pupils come to school with a certain level of knowledge (UT6m: 25/07/2011).

The views expressed in this category placed prominence on classroom teachers as facilitators of learning in the teaching and learning process, the opportunities for pupils to express themselves, explore and suggest solutions to the problem at stake. This view is different from the teacher as a figure of authority. Thus, given the above excerpts, the view seems to imply a learner-centred understanding of pedagogy which aligns with Darling-Hammond (2000) and Wagner & McCombs (1995) characteristics of learner-centred instruction. This contrasts therefore with the emphasis on teacher exposition in the section above and illustrates the diversity of perspectives held by these UTs on such issues.

5.2.3 Past experiences and their influence on classroom teaching

As indicated in section 1.2, UTs were not exposed to training in any form of educational theory or pedagogy by the school administration or experienced teachers in their schools prior to their assumption of duty as "class teachers". By implication, UTs approached classroom teaching drawing upon different forms of prior "teaching" and also "learning" experiences and ideas about teaching.

UTs' previous experiences of either being a pupil, a Sunday school teacher, or an instructor of a cultural group, whether positive or negative, appeared to be influential in

the ways in which they viewed themselves as teachers, and in how they reportedly approached their classroom teaching, and interacted with their pupils in class.

5.2.3.1. Past experiences as pupils

Past experiences as pupils seemed to shape the identities which UTs brought into their "first" school classroom teaching experience. Reflecting on their primary-school days, UTs recounted both the positive and the negative experiences which had marked their lives as school pupils. The quotations are presented below:

> My class 2 teacher's character and teaching approach has made a great influence in the way I do my classroom teaching. This teacher always came to class neatly dressed and with a pleasant smile. The usual comment is ….I am here to see to it that you learn very well and become great leaders…. I can remember the way he approached his teaching. All of us were involved throughout the lesson delivery (UT2m: 25/07/2011).

Another UT seemed to appreciate how their primary school teachers engaged them in a range of activities during classroom teaching:

> The knowledge and skills exhibited by two of my primary school teachers helped me to act the way I do my class teaching. These two teachers were very competent and experienced. I personally admired them for the way they talked to us and brought a number of teaching/learning materials to class (UT1f: 25/07/2011).

While some perspectives illuminated positive school experiences, this particular UT commented on a negative incident during her school days. However since this incident had a negative effect on the learning of certain subjects and classroom performance, her decision was not to allow the pupils to experience a similar incident:

> I will never punish, insult or cane a pupil for not performing well in class assignment or test. I did not like mathematics and never performed well in it especially when I was in the primary school and I can attribute this poor performance and dislike to a bitter experience I had in class 4. Those days the first period on the school timetable was mathematics and the teaching of it was

preceded by mental (reciting multiplication tables). I was not very fast at reciting …….you were caned for the number of times you had an answer wrong. …..you were punished for failing to obtain at least half of questions set in a class test or assignment correct. It was a hell staying in that classroom (UT3f: 25/07/2011).

The sentiments expressed by UTs, whether positive or negative, on their experiences during their primary school were therefore reported as playing a significant role in the way they constructed their uniqueness and the way they reportedly sought to respond to situations as UTs in the classroom learning situation.

5.2.3.2 Past experiences (religious and cultural contexts)

Other reflections suggested the significance of other spaces of instruction involving religious or other cultural contexts:

> My past experience as a Sunday school teacher is my approach to teaching in class. What I do during this period is to involve children actively in the teaching process. Since children cannot sit down for a longer period of time learning or listening, I use a lot of flash cards, pictures and in some cases nice wall paintings to sustain their interest. My main role as a teacher has been to use demonstrations and short play-acting to send my message across to them (UT5m: 25/07/2011).

As a member of a cultural group with particular local traditions, UTs develop a belief system through socialisation that was reported to have shaped their classroom teaching values and perspectives. The view reported by this UT seems to recognise that UTs' classroom practices are informed over many years by many different aspects of their background experiences. Cultural practices and ideas were reportedly to have been imported from the traditional community into the classroom teaching setting:

> I think being a member of "Borboorbor" cultural group has influenced my style of teaching. ….in the group all of us learn how to play, drum and dance in an atmosphere which is relaxed and entertaining. The leader demonstrates how to perform a particular skill and the rest practise after the leader…….One good thing ….. both young and old have respect for each other's views (UT6m: 25/07/2011).

The sentiments expressed among UTs taken collectively, the cultural and religious experiences about teaching that seemed to unfold is an interesting and complex dimension to classroom teaching and learning. What is emerging is that UTs reported that their teaching practices were informed by a wide range of influences, including their own experiences of schooling, but also their experiences of learning in wider contexts, including religious education and within cultural activities. In other words, the UTs' accounts suggested that there were multiple influences which contributed to their 'wisdom of practice', even if before now no formal training has been provided to them as teachers.

5.3 Why enrol on the UTDBE programme?

These UTs expressed a wide range of views about their reasons for enrolling on the UTDBE, most of which were context or school specific. I have analysed these as falling into three main categories: (i) social and professional recognition (ii) teacher as an expert and (iii) upgrading to diploma qualification and job security. These reflect similar themes to those presented above in the section on becoming a teacher.

5.3.1. Social and professional recognition

Comment from this UT suggested that UTs did not feel that they enjoyed recognition as professionals in their different school contexts. The UTs' standing affected his/her teaching, respect of opinion and level of interaction especially among fellow staff members. The lack of respect and recognition affected the personal countenance:

> To be an untrained teacher in my school ..as if I was good for nothing person,…I felt so isolated and wondered if I fitted well into the school environment. I remembered at one staff meeting, my contribution was not respected on the

grounds that I was an unqualified teacher. …if you find yourself in such a situation what will you do? (UT4f: 25/07/2011).

For this UT, acquiring professional teacher status seemed integral to their reasons for joining the programme - without it, they reported not enjoying professional recognition in their working environment. Historically, teacher education in Ghana has shown more respect and professional recognition for professional teacher status, though UTs have always constituted a good percentage of the teaching force (see section 2.4). The main message from the UT's comment seem to suggest that engaging with the UTDBE was particularly important in helping to discern that value of full participation in the community of practice of teachers. This provided them with sense of professional identification (Tanaka, 2012).

5.3.2. Teacher as an expert

Some UTs viewed developing oneself professionally as a step in acquiring the appropriate pedagogical and other related teaching skills needed for classroom practice. A good teacher was associated with a teacher with professional training. In this frame a UT remarked:

> There is the need to train and become a professional teacher. I need to have all the skills needed in teaching; also, I need more knowledge in subjects like mathematics, science and Ghanaian language……. I know I can become a good teacher if only I attend a teacher training college (UT2m: 25/07/2011).

Similarly another UT remarked:

> There were certain topics in mathematics especially calculus and science that I did not understand during my secondary school period. I hope to get experienced tutors in the college to take me through such topics (UT5m: 25/07/2011).

The image "teacher as an expert" could be discerned in the data. The notion that a teacher must be trained professionally in order to acquire the required pedagogical and other skills needed in the teaching arena, and that the teacher training institution is the only place for the acquisition of such skills, appeared to be well established in such views. The UT quotes demonstrate UTs' desires for professional development in terms of teaching skills and subject content knowledge. The quotes also demonstrate an expectation about the level of experience of the programme's tutors, and a concern for contacts with these tutors. It is interesting, therefore, that the UTs here positioned themselves as non-experts. The UT comments above seem to suggest non-recognition of their professional learning in the schools themselves, and any wisdom of practice that they might have acquired through their previous teaching as UTs.

This raises the point about the extent to which (i) tutoring on the programme provided UTs enough space for reflective dialogue with tutors and (ii) pedagogical, classroom strategies and other teaching skills promoted on the programme met UTs' classroom-based pedagogical needs. As I noted earlier, UTs were coming into the programme that seem not to recognize their professional learning and wisdom of practice that they might have acquired through their previous teaching experience as UTs, and also with the assumption that their classroom competencies needed to be and would be improved (see chapter six for in-depth discussion).

5.3.3. Upgrading to diploma qualification and job security

As indicated in section 6.3.2, UTs upon successful completion of the UTDBE programme received a diploma certificate. By implication one is accorded professional teacher status and therefore enjoys all conditions and privileges associated with it. In the same vein, without such a qualification meant a UT could face certain challenges. This UT noted:

> Hmmm! if you know the ordeal that I go through at the beginning of every academic year just to regularise my pupil teaching appointment, you will even advise me to enrol on the UTDBE programme to upgrade myself. …my appointment ends at the end of an academic year, …… I sometimes pay a bribe in order to have my appointment renewed …….to save myself from this trouble I had to join the UTDBE programme (UT2m: 25/07/2011).

From an education policy approach, avoiding annual regularisation of teaching appointment meant enrolling on the UTDBE and developing yourself professionally. The main goal, as reported by UTs, seems to be to avoid the financial cost of having to pay bribe and to remove the need to go through these processes every year. Also, it seems to be purely a question of getting a professional certificate. In other words UTs placed a high value on achieving professional status as an important factor in seeking professional qualification but not necessarily professional development. Implicitly, UTs will have to do something to change their situation to be considered as "equal participants" in the teaching fraternity which will ensure job security and professional identification.

The sentiments expressed seem to show a rather problematic instrumentality in the UTs' motives for joining the UTDBE, and also point to some highly problematic practices in their communities of practice – e.g. the issue of corruption and bribery used in order to secure re-employment.

5.4. Summary

This chapter started by discussing UTs' reasons for becoming teachers. Generally, the reasons for becoming teachers appeared to be shaped predominantly by their awareness of and desire for different kinds of personal, social, material and economic recognition rather than an interest in teaching.

The chapter further examined UTs view on what constitutes a good teacher and their perspectives on how they approached their classroom teaching since they were not exposed to any form of educational theory and or any pedagogy prior to their assumption of duty as class teachers. Views expressed by them suggested two rather contradictory dimensions, namely teacher-centred approaches and learner-centred approaches. From the UTs' accounts, influences on how they sought to teach also seemed to have had both cultural and religious aspects (see Figure 8.1). In other words, their views reflect a mix of influences and teaching orientations, some of which are contradictory.

Finally, the chapter discussed the reasons why UTs enrolled on the UTDBE programme. These were diverse, and while sometimes these indicated some interest in professional development, others were much problematic, and indeed very instrumental. These included (i) UTs look up to the programme mainly as a way of gaining accreditation and thereby improving their status (ii) UTs have some interest in professional development, but often this seems secondary to their concerns about their status (iii) UTs have the interest and desire in acquiring pedagogical and subject knowledge skills (iv) the UTs' status in the contexts in which they teach is highly problematic and leading to corrupt

practices (i.e. bribery) and (v) the UTDBE is viewed by UTs as a source of expert knowledge, in ways that may perhaps not recognise the complexities of professional practice and the kinds of learning that are needed to change professional practice.

In the next chapter, I draw upon documentary analysis of the UTDBE programme, observation data and data from a key stakeholder interview to present the aims, structure and content of UTDBE programme.

CHAPTER SIX: UTDBE programme structure and content

6.1 Introduction

This chapter through documents analysis on the UTDBE programme (see section 4.7.4.2 for the main documents that were analysed), observation and the management stakeholder's interview data will address the following research question: What are the aims of the UTDBE programme and how is it constructed? This chapter builds on the initial depiction of the UTDBE programme and its background provided in chapter two.

6.2 Guiding principles and main objectives

The original idea of the UTDBE programme was to use ICT-enhanced open and distance learning to broaden the scope and experience of professional learning for UTs. Key expectations for the use of ICT-enhanced Open and Distance learning included the following:

- "facilitate expansion of programme delivery, provide more experience of the realities of the classroom and reduce high attrition of newly qualified teachers.

- enhance the quality of the training through application of low-level technology – computers, connectivity and CDROMS, with the CoEs serving as the apex providing training and support to field based support teams and trainees" (TED, 2004 p8).

The TED situational analysis suggested that the UTs would be more appreciative of professional development courses which enable them to stay in rural areas and study

whilst continuing with their classroom teaching, and that an ICT-enhanced open and distance learning programme would facilitate this by improving the quality of teachers and contribute towards their ambition to achieve qualification status. The UTDBE model was based on the assumption that if UTs have access to an accredited in-service programme this would motivate them to remain in the profession and improve the quality of basic education (TED, 2004 p8).

The review of TE state of affairs in 2003 and the support structure and facilities available suggested that it was not possible to apply ICT-enhanced DE approach. For instance: (i) Ghana has limited access to digital technologies (ii) many tutors and teachers lack the skill and training in the use of digital technologies and (iii) Ghana has limited supportive environment with appropriate technical infrastructure (for further discussion, see ICT issues in Ghana in Appendix 5) (TED, 2004 p10).

The UTDBE model had the following as its main objectives:

- assist all serving UTs to have access to professional teacher training and thus substantially reduce the number of UTs which stood over 24,000 (TED, 2004 p4)

- improve the quality of teaching and learning especially in the disadvantaged communities, where most of the untrained teachers were serving (TED, 2004 p4)

- update the knowledge and skills of UTs without necessarily removing them from the classrooms for a longer period of time (TED, 2004 p4).

- "improve teacher quality based on a curriculum that is learner-centred focused" (TED, 2004 p5)

The model seems to suggest a form of connection between campus-based model and a school-based model (Moon, 2007). Thus, it seems to indicate a combination of distance learning methodologies with face-to-face workshops, seminars and in-school support (Mattson, 2006). The strengths and weaknesses of this model are discussed in chapters 7 and 8.

6.3   Capacity-building and sensitisation of major stakeholders

This section draws upon TED (2005) text that describes some of the steps TED took in an attempt to get all major stakeholders across the country to accept and participate fully in the implementation of the programme. It shows that between June and August, 2005, TED organized a two-day capacity-building workshop for CoEs and district coordinators and a one-day sensitisation workshop for all major stakeholders across the entire country. These workshops preceded the full-scale implementation and take-off of the UTDBE programme.

Capacity-building workshops were organised for some key CoEs tutors and some heads of school on the objectives of the programme, their expected role, support for the programme, district and CoEs partnership, and professional development and support of UTs.

The workshops were intended to provide platforms for CoEs and Districts to assess the extent of their preparedness for the take-off of the programme, address envisaged critical issues that could affect the smooth take-off, progress and success of the entire

programme, and expectations for a strong partnership between CoEs and districts (TED, 2005).

Workshops were also held on regional basis for all major stakeholders on the objectives of the programme, commitment of government, and expected roles of all stakeholders. The major stakeholders included regional and district directors of education, organised bodies of teacher associations, educationists and development partners and non-governmental organisations involved in teacher professional development (TED, 2005).

While TED (2005) shows awareness of the importance of such sensitisation and capacity-building workshops, this document does not demonstrate of course what success they might have had and the extent of participation of the various groups.

The decision to use the UTDBE programme to upgrade the qualification of untrained primary school teachers to Diploma status did not go down well with some stakeholders, particularly District Directors of Education, who are the managers of the programme at the District level (TED, 2005, 2006).

Reactions can be attributed in part to the following reasons:

(i) the distance education concept was still relatively new to many people involved in teacher preparation in Ghana. Many found it difficult to picture and accept how any effective teaching and learning on the programme could be achieved especially using print materials only and to a large extent limited provision of residential face-to-face contact between UTs and CoEs tutors.

(ii) UTs were seen as novices with regard to professional practices despite their experience or number of years as classroom teachers, and coupled with the fact that the academic qualifications of some of them were below and in some cases far below the usual requirement for entry into CoEs. The general open access policy where all UTs were to be considered qualified applicants was viewed as allowing less competent UTs to pursue a diploma programme, a programme which hitherto was seen as a preserve of students with good Senior High School (SHS) results but could not gain admission to enter any university to pursue a degree course.

(iii) to some educationists, researchers, practitioners, teachers, and members of the public, a similar programme held between 2000 and 2003 by University of Education, Winneba in Ghana to train teachers for kindergarten and primary schools, produced largely teachers with deficient professional competency, unsatisfactory content knowledge and weakness at practical teaching. Thus, this programme was felt likely to produce similar teachers (TED, 2005).

(iv) some educationalists/academics could not envisage how DE could function well in Ghana considering the distance and geographical barriers that exist between the underserved districts and the training centres.

The above concerns notwithstanding, the government of Ghana through TED in September 2005, launched the UTDBE programme in Phase one regions with an initial enrolment of over 5,000 students (see Appendix 3 for regions and districts constituting phase one regions) (TED, 2005).

6.4 Administrative structure

An administrative structure was established (see Figure 6.4) with the TED as the main organisation at the centre with the overall responsibility of coordinating and monitoring all the programme activities from the national level through the districts to the schools where UTs were teaching. The TED was responsible for seeing to the development and printing of modules used on semester by semester basis by UTs, drawing of semester courses for residential face-to-face meetings.

Figure 6.4: Communication flow among institutions, bodies and UTs linked to the UTDBE programme
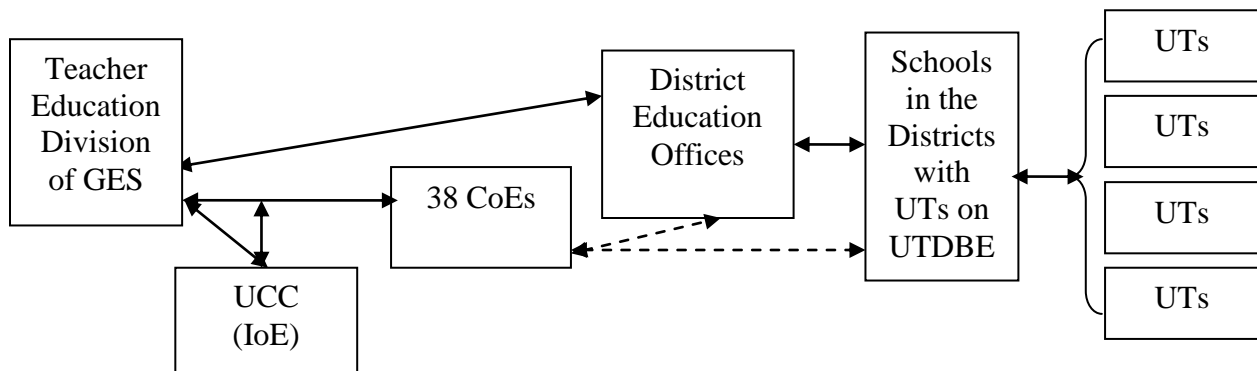
Source: Researcher

6.5 Overall programme structure, content and support system

6.5.1 Structure

UTDBE was a four-year programme, running over a total of 8 semesters with 2 semesters in an academic year. An academic year comprised 10 weeks of residential face-to-face meeting and practical field work. The first semester was made up of 6 weeks of residential face-to-face meetings and the second semester of 4 weeks of residential face-

to-face meetings. These meetings took place during Christmas break, Easter break and long vacation break. 10 courses made up of 6 courses for the first semester and 4 courses for the second semester were mounted in an academic year. In between each residential face-to-face meeting UTs were to be supported on the teaching field by their headteachers (mentors), district coordinators and college tutors to ensure continuous professional practice and development. The programme adopted a roll-out model which was implemented in four phases (see Appendix 3 for estimated enrolment and roll-out model). The structure of the UTDBE seems to suggest a decentralised system of learner support (Mattson, 2006). The strengths and weaknesses of this are discussed in chapters 7 and 8.

6.5.2 Content

The same curriculum and outcome standards approved for pre-service teacher preparation in the CoEs were adopted (TED, 2004) (see Appendix 14 for courses and credit allocation). This seems to suggest a possible link between the UTDBE programme and the conventional teacher education programme (Robinson et al. 2002).

The content of the programme was divided into four sets of courses, namely (i) Core Foundation (ii) Education and Professional Studies (iii) Practical Activities and (iv) General Studies with each set targeting a particular area or domain. The Core Foundation courses consisted of subject content courses offered in the primary school system and were designed to extend and deepen UTs knowledge of the subjects they were already teaching in the primary schools. Education and Professional Studies courses were also intended to groom the UTs in the principles and practice of education as well as

organization and management of learning environments. Practical Activities courses were designed to assist UTs to teach the practical activity subjects. General Studies courses were also intended to broaden the outlook of UTs, to make them abreast of current issues and provide them with modern day communication skills (TED, 2005, 2006). The analysis of the UTDBE curriculum seems to suggest that the training focused on content knowledge, pedagogy and the practice of teaching (Molley & Yates, 2013; Akyeampong et al. 2010; Mattson, 2006). The strengths and weaknesses of the curriculum are discussed in chapters 7 and 8.

6.5.3 Support system

The key support systems of the programme were self instructional modules, residential face-to-face meetings, district and cluster level support and headteacher (mentor) support, and induction.

6.5.3.1 Self-learning materials (modules)

Subject experts from TED, Institute of Education (IoE), University of Cape Coast (UCC) and CoEs planned, designed and wrote the 35 self-learning materials for the whole programme. These printed materials were the predominant instructional tools for the UTDBE programme and were meant to compliment residential face-to-face meetings and assignments. Self-learning materials were intended to be attractive and user friendly and all UTs were to go through the recommended assignments and activities individually and collaboratively with their peers. As I note later (see section 7.2.2.2.2) the infrastructure to support the use of computers for professional learning and development in the CoEs was

minimal. The fact is that in contexts where ICT infrastructure is low, uptake of ICT-enhanced DE approach to TE is unlikely, especially where print technology continues to be relatively simple and fits with a print-based pedagogical culture of teaching and learning (Perraton, 2000).

Some of the self-learning materials specified in each lesson what one should be able to do at the end, provided guidance and instruction, summarised the content and provided a progress test. However, some problems were found in some of the modules. For instance, there are differences in length with a 2-credit science module and mathematics module taking over 500 and 400 pages respectively and a 2-credit ICT module taking 124 pages. In other words some of the self-learning materials were too bulky. Illustrations and pictures are found only in the science, mathematics, ICT and environmental and social studies modules, and even that these pictures were in black and white. There were some technical and typographical errors in the science, mathematics and social studies modules (see appendix 15 for some of the technical and typographical errors found in the mathematics module). In the case of the Ghanaian Language module, the standard of printing was low. In the evaluation report on the self-learning materials, Akyeampong et al. (2010) criticised the overloaded content nature of some, especially in science and mathematics. They felt some of the materials did not provide enough opportunities for classroom application. UTs perception on the strengths and weaknesses of the self-learning materials are discussed in chapters 7 and 8.

6.5.3.2 Residential face-to-face meetings

Residential face-to-face meetings were intended to offer UTs the opportunity to meet and interact with peers and also their course tutors in their respective training institutions. Again, it was intended that UTs will take advantage of the study facilities at the training colleges, for example libraries, and with the support of their tutors revise their studies through the use of course materials and prepare for quizzes, semester examinations and project work.

Tutoring during residential face-to-face sessions was intended to be open about its focus on "learner-centred and constructivist approaches to teaching and learning and teacher development" (TED, 2005 p15). The extent to which tutors approach to tutoring on the programme was learner-centred or otherwise is discussed in chapters 7 and 8.

6.5.3.3 Induction

It was required that all UTs underwent an induction course for 3 days during the first week of the first residential face-to-face meeting held at the beginning of the programme. This course preceded the first residential face-to-face meeting which was held in the CoEs. The purpose of the induction course was to make trainees familiar with the objectives of the programme, the demands of the programme, their study materials, and support services available and how to access them to promote professional growth and their expected role as distance learners and teachers as the same time.

The documents analysed (see section 4.7.4.2 for the main documents that were analysed) show that during the first week of the first residential face-to-face meeting, a 3-day induction course was organized for UTs. However, the documents analysed did not demonstrate the form it took, the extent of participation and what success it might have had. The strengths and weaknesses of the induction course are discussed in chapters 7 and 8.

6.5.3.4 District and cluster support

District coordinators and other experienced professionals were required to team up with college tutors and mentors of UTs to organize meetings at the cluster level for UTs. Such meetings were intended to provide study tutorials for UTs, deal with UTs' problems associated with learning and professional development, as well as UTs' handling of their assignments given to them during residential face-to-face meeting and or receiving marked assignments and feedbacks. Cluster meetings were planned to be held in any convenient location in a district during intervals between residential face-to-face meetings. Also, the district office was supposed to plan a number of school visits to support UTs in their respective schools. The strengths and weaknesses of the district and cluster support are discussed in chapters 7 and 8.

6.5.3.5 Headteacher/Mentor support

It was required that headteachers would be mentors of UTs and provide on-the-job professional guidance and encouragement to UTs with respect to lesson notes preparation, classroom teaching and professional skills and standards development.

The documents analysed (see section 4.7.4.2 for the main documents that were analysed) shows that headteachers were not given any formal training on how to mentor UTs. Nonetheless, a few of them were invited to participate in the capacity-building workshop (see section 6.3) which only provided them with the opportunity to know their expected role and support for the programme.

6.6 Engaging in a partnership

An element in the structure of the UTDBE programme was the CoEs, schools and districts partnership, and as indicated in section 6.3, a workshop which was intended to set the pace for a strong partnership between CoEs, schools and districts in the management of the programme was organised.

Drawing upon documentary analysis (see section 4.7.4.2 for the main documents that were analysed) and a stakeholder interview, the major function of this collaboration appears to have been to ensure that schools, districts and colleges took on the important role of working together to advance the professional development of UTs. According to the ST, schools, districts and CoEs partnership offered a range of possible benefits not only for the UTs under training but also for all institutions and agencies involved:

> The workshop organised for all those involved in the training of UTs provided a framework for all of us to understand our individual roles, responsibilities and actions, the extent of collaboration and the likely benefits expected (STm: 29/07/2011).

The importance of schools, districts and CoE partnership seems to be tied to the opportunities it could provide to all involved in the UTDBE especially tutors in supporting UTs both in and out of the college campus:

> College tutors need to go beyond the textbooks and lecture hall teaching to understand the real environmental situation in which their students practice. … modern day teaching does not confine teaching and learning to content of textbooks but also to the extent to which tutors show concern about and understand what their practising students do when not on campus.. (STm: 29/07/2011).

Reflecting on the potential school-college partnerships have in enhancing UTs' professional development and thereby fostering learning, the ST noted:

> The responsibility of schools, districts and colleges is to see to it that UTs teach according to the standard outlined in the curriculum. UTs' professional practice and development therefore requires a joint effort and coordination. …..If UTs' professional learning and practice is to be linked to basic school improvement, then a strong collaborative school-college arrangement is central (STm: 29/07/2011).

The ST account suggested that although districts, schools and colleges may appear to have similar goals in supporting UTs in any educational delivery and reform, each institution's approach may reveal differing perspectives. The understanding of these differing perspectives which is crucial was seen as a primary means of building a better understanding among all partners:

> One of the district personnel made a comment…college tutors have the big task of providing UTs with the required knowledge and skills needed to perform in the classroom…we at the office cannot teach them what to do…A headteacher also made this comment that college tutors know the current approach to teaching, …we can't add any new thing ….. The idea that colleges are the main organ for the training process was challenged…..at the end of the workshop all of us had a better understanding of our roles (STm: 29/07/2011).

From the management perspective, the workshop appeared to be effective in providing opportunities for the districts, schools and colleges to better understand their individual

institution's specific, collaborative, collective and supportive roles that were to be exhibited in enhancing the professional development of UTs. Comments suggested that opportunity to establish better partnership and discuss common interest were exploited during the period. However, the extent to which districts, schools and colleges showed strong commitment and collaborated in the professional development of UTs are discussed in chapters 7 and 8.

6.7 Summary

This chapter, upon documentary analysis of the UTDBE programme, observation and stakeholder's interview data, discussed the aims, structure and content of the UTDBE programme.

The UTDBE programme aimed at: (i) providing UTs, especially in underserved locations and communities, with accessible professional and quality teacher education and (ii) improving teacher quality based on a curriculum that is learner-centred focused. The programme is made up of two main parts, namely (i) residential face-to-face meetings and (ii) in-school support. Thus, this INSET teacher preparation model suggests a form of connection between campus-based model and school-based model (Moon, 2007). Also, the structure of the UTDBE suggests decentralised systems of student support (Mattson, 2006).

The TED situational analysis suggested that it was not possible to apply ICT-enhanced DE approach model. Thus, printed material was the predominant instructional tool for the

UTDBE programme. The course content which was developed was intended to be in line with the programme philosophy of learner-centredness to teacher development and was divided into four sets of courses, namely core foundation, education and professional studies, practical, and general studies. However, from the documents analysed, it shows that to some extent these texts were not at all learner-centred, but overloaded with content some of which were not of good quality.

A structure to set the pace for a strong partnership between districts, schools and CoEs was established. This was meant to ensure that UTs received continuous support during and after residential face-to-face meetings. However, the documents analysed show that: (i) all the major stakeholders who were supposed to collaborate to support UTs were provided with 'one shot' sensitisation or capacity building workshop and (ii) headteachers who were supposed to mentor UTs were also not provided with any formal training on mentoring.

In the next chapter, I draw principally on UTs interviews data to present their perceptions and experiences of UTDBE.

CHAPTER SEVEN: UTs' perceptions and experiences of UTDBE

7.1 Introduction

This chapter addresses my third research question: What are UTs' perceptions of the UTDBE, including how it has influenced their professional development and teaching? This chapter is in two parts. The first part of the chapter, which draws on data primarily from UTs' one-on-one interviews, was conducted during the interval period between residential face-to-face sessions, when UTs were in their school of practice (see section 6.5). It focuses mainly on UTs' perceptions and experiences of the UTDBE. The second part of this chapter discusses UTs' classroom teaching practices and experiences in a videoed lesson they have taken of their practices (see section 4.7.3.2).

7.2 Perceptions of UTs

The analysis in this part of the chapter is conducted according to the themes that emerged from the data collection: (i) UT participation in induction programme (ii) intervals between residential face-to-face and residential face-to-face meetings (iii) course content (iv) print modules (v) school, college and district partnership and (vi) support systems.

7.2.1 UT participation in Induction programme

As indicated in section 6.5.3.3 UTs underwent an induction programme during the first week of the first residential face-to-face session, and as is usually the issue associated with teacher training institutions, such a programme is meant to expose trainee students to the course content, general academic programmes, facilities and support and

professional practices before, during and after the training. Analysis of UTs' interview data are classified into two main categories: fitting into the CoE community and professional development, status and learning needs.

7.2.1.1 Fitting into the CoE community

Drawing upon UTs' interview, they seem to have experienced a wide range of issues within their induction periods. Learning about the context formed an important part of induction activities. UTs received information about the structure and content, policies and procedures of the UTDBE programme, and UTs' standard of behaviour and discipline. Although their views differed, and were to some extent contradictory, some UTs reported that these activities helped them to better understand the important role of CoE tutors, districts and headteachers in their personal and professional development, the college academic and social facilities at their disposal and how to use these facilities to enhance both their professional and personal growth. One UT stated:

> I have never heard of a semester course structure, grade point average and so on. …The talk by the College Authorities enabled me get the real understanding of the semester programme, personal and professional opportunities available after successful completion of the programme, the expected problems faced by students….and ways of overcoming these problems (UT4f: 18/08/2011).

The same UT commented further:

> I learned more about the whole programme especially after we were shown all the college facilities available and how and when to use them (UT4f: 18/08/2011).

Another UT emphasised that the significant presence of their headteachers and tutors of CoEs, district director and high profile staff of the district education office, among others, and the presentations and interaction between these personalities and UTs, provided a

good ground for them to draw on their teaching experiences and expertise. This comment

suggested that this was primarily a means of gaining more confidence and embracing the

programme:

> The first day that I entered the campus …I felt very much removed from the world…by the end of the induction programme I had gained a high level of confidence…when I met other colleagues and shared experiences, I saw the need to embrace the programme very well…I asked questions after the speeches by my district director and other facilitators ….got new ideas (UT3f: 12/08/2011).

Another important object of induction concerns the collaborative relationship between

UTs and the high profile staff and personalities present. UTs reported themselves in

communities where their experiences, ideas and contributions were readily welcomed.

This affirmed their sense of worth as UTs, as the following comment illustrates:

> The way the tutors, principal and district office staff praised me and gave very positive response to my comments made me realise the worth in me as a teacher…we were asked to talk about our expectations….I expected to acquire more knowledge about learner-centred method of teaching…….I also shared with the whole group some of my challenges, …. some of the high profile persons present asked a lot of questions to get a better understanding about my experiences (UT5m: 23/08/2011).

However, an account indicated dissatisfaction with the induction activity. The induction

programme was critiqued for the excessive emphasis placed on the CoE context and its

community, rather than the communities in which UTs themselves worked. The UT felt

that the induction programme of activities played down on professional learning

opportunities:

> Almost two and half days out of the 3-day programme concentrated on activities on life on college of education campus, academic courses and programmes, policies and practice related to the UTDBE programme, and registration of courses on college campus. …..I was expecting the induction programme to provide us with more opportunities to discuss challenges in our profession (UT1f: 2/08/2011).

7.2.1.2 Professional development, status, learning and needs

Different views were expressed about the extent that the programme supported UTs'
professional development. Some contentment with the induction programme was
connected to the chance it gave UTs to understand the meaning of on-going professional
learning. UTs discussion with district office staff and college tutors on professional
knowledge and practices in and out of school situation, was reported by one as being a
strong spot for UTs to appreciate and understand what continuous professional learning
is:

> A lot of important issues came up… it was during this session that I learned that
> ……professional learning is continuous and that it takes place throughout the
> teaching career of a person….updating my skills   is therefore   continuous
> professional learning (UT1f: 2/08/2011).

Another account also suggested that there were opportunities for UTs to inquire into the
profession, especially areas that affected personal emolument, promotion and
progression. This was helpful in encouraging UTs to stay on the programme, and setting
them in a good frame of mind:

> When I was told that I will be put on a superintendent II grade, the current grade
> of my headteacher……that very moment I said to myself that I would do
> whatever it takes to successfully complete (UT5m: 23/08/2011).

In another instance, it was reported that UTs in small groups were supported to observe
and report on a model video lesson on learner-centred approach to teaching and learning.
This collaborative work was reported to be a good source of professional learning:

> In small groups we watched a video lesson which looked at learner-
> centredness…we noted down both good and weak points. After that we discussed
> all the noted points together and came out with group reports...apart from learning
> through group work, I also found out different ways of presenting lessons using
> the learner-centered approach (UT3f: 12/08/2011).

However, a more critical account indicated that the structure of the induction programme offered UTs limited exposure, interaction and socialisation. Some UTs felt that to be able to socialise properly in a wider community, the individual UT should learn to cope with UTs from different social, cultural or district backgrounds, and this was not possible since the induction was organised on district level basis:

> Because the induction was organised on district basis, there was no opportunity to interact and socialise with UTs from other districts (UT4f: 18/08/2011).

Another had strong concerns about some of the facilitators' attitudes during some of the induction sessions. As shown in the quote below, a UT had experienced problematic comments about their behaviour from facilitators in which negative judgements about their village context were embedded. This UT perceived these comments as revealing a negative sense of their presence and a lack of respect for their status:

> When the facilitator was delivering the session, some UTs sitting at the back of the hall were conversing…………the comment from the facilitator actually killed my spirit…..shouted by saying if this is the behaviour we exhibited in our villages, then we should not do it here, otherwise we shall all fail our final examination……I think the facilitator doesn't respect us (UT6m: 29/08/2011).

Probing further, the same UT commented on the content load of the induction programme:

> Some facilitators could not finish exhausting their session; as a result some important aspects were left out. In some cases too, the facilitators had to rush in order to finish their sessions (UT6m: 29/08/2011).

Another UT reported that some facilitators' approach to delivering their session was not adequately focused. Such facilitators adopted the lecture method, talked from the beginning of their session to the end with little space for questions. The irony of this is that facilitators who were expected to propagate and practice learner-centred methods

adopted teacher-centred methods, which obviously defeats the programme's philosophy of learner-centredness to teacher development. To this UT, this approach produced a sense of isolation:

> I felt bad and isolated sitting in some of the sessions......some facilitators only presented themselves and without any material, talked throughout the whole session…no chance to ask questions (UT2m: 8/08/2011).

Overall, the views expressed by UTs in this category seem to suggest both positive and negative dimensions of this induction programme. In the positive dimension, the induction programme was seen as supporting UTs in a number of ways: (i) learning through social interaction (ii) fitting well into the college of education context and (iii) professional recognition and identity and gaining more confidence.

On the contrary, the content of the induction programme was seen to be too loaded making it impossible for some facilitators to complete their sessions. The use of teacher-centred methods provided no room for UTs to draw on their own experiences. Again, the programme organisation limited the extent of social interaction among UTs from different districts. Also the programme placed a lot of emphasis on activities that UTs were likely to experience at CoEs which demonstrated a lack of concern for the contexts in which UTs were working in.

These contrasting views on the induction programme seem to suggest that some aspects of the induction programme did not meeting the expectations of UTs and that there were deficiencies in the implementation strategy.

7.2.2 Intervals between residential face-to-face and residential face-to-face meetings

As indicated in section 6.5 the UTDBE programme comprised residential face-to-face-sessions and their (UTs) contexts of teaching practice and data collection took place in both contexts.

7.2.2.1. Intervals between residential face-to-face meetings

As indicated in 6.5.1 intervals between residential face-to-face sessions were intended to function as important parts of learning to teaching and linking theory to practice in the school environment. This meant UTs were intended to be supported in their continuous professional practice and development by their headteachers, district coordinators and college tutors.

Analysis from UTs' interview data suggested varied responses according to UTs' experiences. Evidence from a UT's comment suggested that the periods between one residential face-to-face meeting provided them with an opportunity to share their experiences in terms of what they had learnt on the programme with other colleague teachers. Sharing your experiences with other experienced trained teachers and answering questions from them meant learning at the place of work, social participation and also identifying yourself within the community of professional teachers as the following account illustrates:

> Report on what I have learnt… I always enjoy such meetings because apart from interacting with other members of staff, I also learn something new from them. ….staff members who are trained teachers now recognise my potential and they see me as part of them (UT4f: 12/08/2011).

Probing further, the UT established an important link between sharing experiences with colleague teachers to developing a professional and social support system within the school environment:

> Because staff members understand the nature of my programme…..some colleague teachers do provide me with support, especially in lesson notes preparation and teaching of certain topics in science….there is one particular teacher who finds time at least once a week to teach me professional practices and ethics (UT4f: 12/08/2011).

For a UT, the real opportunity to put all theories about teaching and learning learnt at college into practice in the various schools and report back to their lecturers during subsequent face-to-face meetings was their greatest joy:

> My education tutor has always been emphasising during lectures that learning to teach effectively is putting into practice what you have been told and learned during residential face-to-face meeting ….that is what I do when I get back to my school. …it has helped me to find out for example how learner centred approach works in my classroom situation…I report back and discuss with my lecturers any difficulties encountered (UT3f: 12/08/2011).

Another UT's account suggested that by putting into practice knowledge and skills acquired enabled them gain greater insight into educational issues and shaped their views on practice:

> You understand it much better when you put it into practice…… I learnt from one of the mathematics classes that using small group to teach mathematics is the best …..as a result I tried it in my classroom. ….some of the pupils ended up quarrelling among themselves…..I got the understanding that doing group activity goes beyond just putting pupils into groups (UT1f: 2/08/2011).

In another instance, it was reported that the periods during which residential face-to-face sessions were held provided opportunities for UTs to attend to both their academic work and their professional duties without any disruption:

> Always present in school and up to my professional roles and responsibilities….since face-to-face sessions are held when schools are on

vacation, it does not disrupt my work as a classroom teacher and also as a student taking the UTDBE programme (UT5m: 23/08/2011).

However, for a particular UT, the real concern was the difficulty associated with combining studies with normal duty as a classroom teacher and other school-related activities. To such UT working in a school as a full-time teacher made it difficult to exhibit certain quality educational practices like preparing good lesson notes, teaching and learning materials and marking pupils' work adequately and on time:

> I have not been getting enough time to gather materials for teaching, … mark my students' work on time. The pressure from the course is too much, especially combining it with my normal teaching and other school activities like games and sports (UT6m: 29/08/2011).

Probing further, the same UT commented that despite the good intentions and well designed structure of the intervals between residential face-to-face component of the programme meant to offer UTs varying opportunities to expand their practical knowledge and improve upon their instructional skills within a supportive environment, the situation in their schools did not permit the realisation of these intentions. As if headteachers and others who were to support UTs during this period were not sure of their roles or had personal and professional difficulties in assisting them, UTs were left on their own in their classrooms to practise anything that suited them. UTs had difficulty in getting support from appropriate quarters to generate ideas, discuss concerns to initiate and sustain changes:

> Since I enrolled on the programme nobody has ever monitored my classroom teaching or has had ample time to deliberate on ideas as regards my classroom teaching……I continue to teach the way that I think is appropriate (UT6m: 29/08/2011).

Overall, the views expressed by UTs in this category seem to suggest both positive and negative dimensions of their participation. In the positive facet, the periods or intervals

between residential face-to-face were seen as central to the whole UTDBE programme. The period gave UTs a good sense of professional development in both theory and practice. This period had the potential to serve as important time for putting the theory learnt at CoE into practice in their respective schools. The social interaction, ongoing interaction and dialogue among UTs and others during this period suggested that it served as a springboard for further professional recognition of UTs.

The negative comments were more specific to the difficulty associated with combining studies with normal duty as a classroom teacher and other related school activities and inadequate support or monitoring of classroom teaching and activities by "experts". These comments seem to lend support to Eraut's (2004) view on challenges associated with teachers learning in workplace as well as using knowledge acquired in one context (CoE) in a very different content (UTs' classroom).

7.2.2.2 Residential face-to-face meetings

Residential face-to-face meetings were intended to offer UTs the opportunity to meet and interact with peers and course tutors, and with the support of the latter, revise their studies using the course modules (section 6.5.3.2). Data analysis for UTs' interviews is classified into two main categories: (i) tutoring during residential face-to-face and (ii) time-table used during residential face-to-face.

7.2.2.2.1 Tutoring during residential face-to-face

As indicated in section 6.5.3.2 tutoring during residential face-to-face was intended to be open about its spotlight on the concept of learner-centred approach to teaching and learning and teacher professional development. Analysis of UTs' interview data unfolds some interesting dimensions to the whole activity.

Tutoring on the programme was reported as providing significant opportunities for UTs to learn about theories and principles of teaching and learning and the pedagogical way of thinking that underpins different teaching events as the following account by a UT illustrates:

> I now have a good idea about theories of teaching..for example student-centered approach and understanding about when to use a particular teaching approach like role play, brainstorming (UT4f: 18/08/2011).

Commenting further, the UT attached the benefits of tutoring during face-to-face meeting to the chance it gave them as UTs to observe their tutors for new ways of teaching:

> I find it interesting observing tutors teaching and learning about new teaching approaches… It is really nice to see them in the actual action of teaching (UT4f: 18/08/2011).

Gaining new insights into the nature of teaching seemed to have enabled a UT to recognise and challenge some of her actions as regards teaching his own pupils:

> In one of our tutoring sessions we discussed children of different social background and the extent to which it can affect their performance in class….. immediately, I questioned myself why I caned a pupil for not answering a question asked in class (UT2m: 8/08/2011).

Another account suggested that the opportunity to examine the disparities in experiences students bring to class vis-à-vis that of their tutors and the extent to which they came to

agree on a particular issue brought to the fore the importance of learning in a social

context or constructing knowledge jointly with others. A UT noted:

> Sometimes, we disagree with our lecturers on certain issues in class……will spark a lot of arguments and counter arguments…. by the end of the session we come out with a common decision… I always love this because whatever agreement we reach becomes something accepted by all (UT3f: 12/08/2011).

For a UT, the real chance to consolidate whatever knowledge gained after reading

through their modules was during face-to-face tutoring. To this UT, their tutors possessed

the current knowledge and skills in the subject matter and therefore to confirm the

appropriateness of the knowledge gained by reading the modules will undoubtedly

require the nod from their tutors:

> Sometimes you were not even sure whether the sense you make of what you have read is correct…but when your lecturers…..confirm that what you have in mind is correct, you are happy (UT6m: 29/08/2011).

However, for a particular UT, the real concern was that tutoring during face-to-face

meeting was the lecture approach (see also section 7.2.1.2). This UT reported that this

compelled UTs to accept lecturers' views and way of thinking:

> We accept whatever we are told without asking any question (UT5m: 23/08/2011).

The UT continued:

> Tutors come to class and mention child-centred approach as the best method …but they actually do not use that approach when tutoring (UT5m: 23/08/2011).

An important observation which had a negative effect on the professional learning and

practice of UTs was stated by a UT:

> I have two comments…... First, tutors rush in their teaching. They claim that they have few weeks to work…. and so the only way to help us to answer end of

semester examination questions is to rush and complete…... Second, tutors use teaching and learning materials which we can't get in our schools, for example multi-based blocks (UT1f: 2/08/2011).

Generally, the views expressed by UTs in this category seem to suggest both positive and negative dimensions of tutoring practices. In the positive dimension, the opportunity to learn about theories and principles of teaching and learning, and observe their tutors demonstrate ways of teaching was very much appreciated. Also, UTs had the chance to consolidate whatever knowledge they had gained through reading their self learning materials and also to confirm the appropriateness of such knowledge. Constructing knowledge with others could be discerned in the data.

On the contrary, the lecture approach used by some tutors during tutoring came under criticism. From the professional point of view, this approach encouraged learning experiences that were confined largely to the lecture room setting, thus limiting the extent of professional and social interaction among UTs of varied social backgrounds and learning experiences. Similarly, it encouraged UTs to accept tutors views and ways of thinking, perhaps without questioning, a situation which does not encourage professional development. Thus sufficient space and attention was not given to the practical knowledge base of UTs. Evidence from interview data suggested that the community of practice of facilitators still has teacher-centred methods at the heart of its practice, so that learning in this social context conflicted with the aspiration and documentation of the programme.

7.2.2.2.2 Time-table and use of CoE facilities

Analysis of UT and ST interview data suggested a general discontent with residential face-to-face meeting related to the time-table and use of college facilities. For instance, a UT felt there wasn't enough time to use college facilities like the ICT laboratory for practical activity. Being unable to put into practice skills and knowledge modeled to the UT, leaves the UT not adequately skilled to demonstrate and apply these skills when back in their schools:

> By the time we close from lectures, it is too late to have access to the ICT laboratory for practical training or exercises….without any practice to make sure you have understood what you were taught in class, you leave college campus after the end of residential face-to-face meeting back to your school not very good in the skills exposed to (UT5m: 23/08/2011).

Expressing a similar sentiment, a UT strongly expressed the view that experiences at the lecture hall only are not enough to prepare UTs adequately to teach. Getting additional information from other resources like the library helps in getting new ideas about current practices and approaches to teaching:

> I love reading books and materials because you always get new and great ideas from these materials…limit my knowledge to what my lecturer tells me because it is not possible to use the college library (UT3f: 12/08/2011).

The ST explained the difficulties associated with the use of some of the college facilities:

> We have only 30 computers and 1 projector as against 1336 students…..it is not possible to use ICT in the teaching and learning of all courses.....I am aware that what the ICT tutor does is to bring all the students together into the ICT laboratory and use a projector to teach all of them. …as for practical lessons in ICT, I will say that, it is virtually zero. (STm: 29/07/2011).

Overall, the views point to a disappointment in the nature of the time-table used during residential face-to-face meeting and also the use of the colleges' facilities, especially ICT resources. To UTs effective learning could occur if they had enough time and opportunity

to use the college facilities to practise what they have been taught by their tutors during residential face-to-face meetings. The comments expressed in this category seem to suggest that the structure of the residential face-to-face sessions and the nature of the time-table did constrain the kind of exploratory professional learning experiences that might be possible if ICT was introduced to UTs.

7.2.3 Course content of the UTDBE programme

As indicated in section 6.5.2 the course content was made up of core foundation, professional, practical and general studies. These courses were designed to extend and deepen UTs' knowledge of subject areas that they were teaching in the primary schools as well as organization and management of the learning environment. Different views were noticeable about the extent to which the course content supported UTs' professional practice and development.

Analysis of UTs' interviews suggested that the course content was felt by some of this group to be appropriate (although UTs also had more critical comments, as reported below). It improved teachers' professionalism, extended and developed teachers' theoretical knowledge of teaching and learning as this comment seems to suggest. A UT commented:

> Education courses like principles and methods of teaching, the school and society educated me very well about teaching/learning activities, the practical ways of sustaining pupils' interest throughout the period of a lesson, and the theories behind all these principles and practices (UT4f: 18/08/2011).

These UTs reported gaining a deeper understanding of relationships existing between content knowledge and method. This helped them gain expertise in and to apply appropriate skills in the classroom situation as this account illustrates:

> One thing I like about the course content is that each subject has both the content and methodology parts…..you learn how to link theory and practice in the classroom teaching. …you learn using the appropriate practical skills for translating content knowledge into methodology (UT5m: 23/08/2011).

Another account suggested an important link between UTs' professional practice in the schools and some of the course content. This promoted continuous professional practice and facilitated the planning of day-to-day activities of UTs when back in the schools:

> During on-campus teaching practice, we prepare teaching and learning materials and do demonstration teaching. This is similar to what we do in our schools ….helps in constant practice and improvement of our skills (UT2m: 8/08/2011).

For another UT, the importance of the course content could be found in the ways it is related to the reality of teachers' interaction within the broader school-community context as this account illustrates:

> I think what the teacher needs most in his/her teaching career is how to relate very well with the school and members of the community. This relationship is needed for cordiality and proper growth of the school. A lot of the content courses talk about the importance of school and community relationship (UT6m: 29/08/2011).

On the contrary, a particular UT expressed an adverse comment about the course content. This feeling was evident after she had moved to her school to put into practice some of the knowledge acquired. To this UT, some of the course contents targeting the pupils could not be put into use in their schools and for that matter could not serve the intended purpose. The difficulty involved in the use of ICT was again an issue (see section 7.2.2.2.2). A UT commented:

> Do not have electricity in my school. There is not a single computer in my school, but we are taught how to integrate ICT into our teaching and learning and how to

help pupils acquire basic ICT skills……after all you don't have the facilities to practise in your school (UT3f: 12/08/2011).

The overloaded nature of the programme was again an issue, as this UT further added:

There are too many courses and also the course content is too loaded……in one of the mathematics courses, for instance we have 20 broad topics to be covered in 8 weeks…in the case of year one science, it is even more than 25 broad topics also to be covered in 8 weeks (UT3f: 12/08/2011).

Similarly, another UT felt some of the dictates and demands identified in some of the content courses did not conform to what is expected in schools where they teach:

Daily lesson notes preparation taught on the programme is slightly different from how we prepare them in our schools. On the programme we are taught to prepare detailed lesson notes, but on the field, we prepare short and scanty lesson notes (UT1f: 2/08/2011).

It appears that the different views on the nature of the course content are an indication of the different perceptions about the value of it in terms of how it influences their professional development. What appears to be the main issues unfolding are that: (i) due to lack of electricity in schools, UTs have a difficulty integrating ICT into teaching and learning (ii) the course content is too overloaded (iii) some aspects of the course content conflict with the pressures that teachers face in their own classroom contexts and (iv) there is lack of recognition of the kinds of expertise developed in contexts in which teachers were working.

7.2.4 Print-modules used on the programme.

As indicated in section 6.5.3.1 printed materials were the predominant instructional tools for the UTDBE programme and were meant to complement residential face-to-face meetings and assignments. Analysis of UTs' views seems to suggest varied experiences using the printed materials for their professional development.

A UT's comment suggested that the language level used in some of the modules to organise information and for defining and labeling objects and events, self-test items used to find out their personal and professional progress and or consolidate a task and the structure and systemic organisation of facts and concepts were enough to view the modules as appropriate:

> The language level is very appropriate especially in Education, and it has been used very well to represent facts and ideas about concepts….if you take a look at the end of every unit in the modules,…. there are self assessment tests with answers, which I use any time I finish reading, to test my personal progress (UT3f: 12/08/2011).

Another account suggested that the use of the print module provided opportunities for practice with organisation and presentation of information. This enabled UTs to engage with ideas and arguments presented in the module. For this UT, such engagements are attributes of professional learning:

> Sometimes after coming together to read and exchange ideas on the information read or in doing an assignment from the module, you will find us arguing over some ideas not accepted by some members in the group….later we go back to read other chapters to find the answer…. (UT6m: 29/08/2011).

In contrast, a UT commented on the frustration involved in reading a module with a lot of technical terms and mistakes:

> There some mistakes in the modules that makes reading frustrating…. basic algebra there are technical mistakes like angle typed as angel, there is no difference among the alphabet (x), multiplication (x) and variable (x)…..basic science for year one, a lot of arrows on diagrams point to wrong words….sometimes during tutorial sessions, some of the tutors read the modules and make corrections in some of the facts….it makes it difficult to find out the correctness between what we UTs have read and what our tutor taught in class (UT4f: 18/08/2011).

Similarly, a UT commented on the bulky nature of some of the modules which makes it frightening even to pick and read:

> Some of the modules should be reduced in size. ..the size alone makes you feel scared to read. ….you will ask yourself questions like, when will I be able to finish reading this module? (UT5m: 23/08/2011).

Overall, the interview data suggested a number of factors that contributed positively or negatively to UTs professional practice and learning. The appropriate language level in some of the modules, the prepared assignments and suggested answers at the end of a unit and a lesson in the self learning materials seem to have facilitated professional learning and engagement about important tools which they can use in classroom teaching and learning.

However, the bulky nature and the technical mistakes in some of the modules were seen as not helping UTs in comprehending the information in the materials. This comment seems to suggest that there is clearly a need to review the nature of the content, especially mathematics and science.

7.2.5 School, College and district partnership

As indicated in section 6.3, prior to the full-scale implementation of the UTDBE programme, a workshop intended to set the stage for districts, schools and colleges to show strong commitment and collaborate in the professional development of UTs was organised. The analysis in this part is conducted according to the themes that emerged from the data collection: (i) implementation stage of the UTDBE programme and (ii) effectiveness of the school, college and district partnership. Different views were

apparent about the extent that school, college and district partnership support UTs' professional development.

7.2.5.1 Implementation of UTDBE

From my analysis of UTs' and the ST interview data; it seems that UTs felt that school-college partnership had the potential to create the opportunity to be seen as members of a professional community of teachers. Despite the more critical comments that are reported below, all UTs stated that the current arrangement in terms of structure and partnership network between their schools of practice, districts and colleges of education provided a platform for them to be recognised as "trained teachers", and also a stage for improvement in their professional practices. Thus, school-college partnership had a potentially important role to play in UTs school, work lives and roles in their professional recognition, practice and development as this quotation illustrates:

> My college tutor paid a visit to my school and together with my headteacher observed my class teaching. Immediately after the lesson all of us sat down to discuss what happened during the lesson….after my college tutor had left the school, my headteacher remarked that this time I am like a trained teacher….my head sees me as becoming a professionally-trained teacher (UT2m: 08/08/2011).

Another UT linked the development of professional identity to having an environment that promoted interaction among teachers and teacher educators. The interaction among UTs and officials from district offices and colleges of education signified the involvement of UTs in decision making:

> I have been teaching for the past seven years without any form of recognition…I have never had the chance to interact with senior officers in education. …..the day that I will never forget is …..I had a joint meeting with some college of education tutors, district coordinator of UTDBE programme and my headteacher. It was that day that I really felt being part of the teaching profession (UT4f: 18/08/2011).

From a ST account the potential benefit of school-college collaboration appears evident in a number of ways. In addition, to showing people involved in teacher preparation how teachers under training perform especially in the classroom teaching and learning, it also provided a platform to gain insight into specific characteristics and norms of school practices, and the daily routine activities of the different actors/teachers within the school and school community as the ST account illustrates:

> These visits gave me the chance to understand better the activities of UTs in their individual schools, their academic challenges and the extent to which the environment supported them in their day-to-day activities, how UTs socialise with other colleague teachers, pupils and to some extent headteachers. … I also had a good chance to socialize with other members of the school and the community in which the school is situated (STm: 29/07/2011).

The views expressed by some UTs and the ST taken collectively seem to suggest that the potential benefit of school, district and college collaboration goes beyond the UTs to include the tutors, headteachers and district personnel involved in the UTDBE programme. Apart from providing the stage for both UTs and tutors to have an in depth understanding of classroom teaching related issues, it offered some possibilities for close interaction among all those responsible for seeing to the professional development of UTs.

Despite the positive issues mentioned above, comments by UTs in the earlier sections and the sections below seem to suggest that headteachers were not paying any attention to their UTs. Thus, UTs were sometime not supported by their headteachers in their classroom teaching and learning and professional practice. Perhaps the question is what might account for these contradictions between these statements. Here it could be

questioned if the power relations of the interview meant that UTs were seeking to please the researcher and found it easier making positive comments rather than being critical.

7.2.5.2 Effectiveness of school-college partnership

From my analysis of UTs' and the ST interview data, it appears all of them agreed that the nature and the degree of existing relationship between the colleges of education, schools and districts was not strong enough to promote the level of professionalism envisaged. A major concern was the tendency for each institution to operate in isolation, which could bring about a big communication gap. The ST expressed his concern about this:

> We were not able to visit even a tenth of the schools in which our UTs were teaching……and so we actually did not know what was happening there, ……at a point, it appeared colleges of education were only responsible for the tutoring during face-to-face, without any contribution to supporting our students when they went back to their schools (STm: 29/07/2011).

The ST continued:

> Colleges, schools and district partnership encountered numerous challenges related to logistical issues, funding issues, tight tutoring schedule of tutors, and to some extent uncooperative attitude by some heads of schools……some heads of basic schools saw us college tutors as coming to their school to impose our knowledge on them and or change the school culture and policy (STm: 29/07/2011).

A UT made reference to a view expressed by his headteacher which attempted to link poor colleges and schools collaboration to not knowing and understanding what happens at the colleges of education:

> Any time I tell my headteacher that I would be leaving for residential face-to-face meeting he would ask me, what at all are your learning there ...your institution should let me know what you are doing there and how it would benefit the school (UT5m: 23/08/2011).

Another UT critiqued the level of collaboration between colleges and school, and also the

mentor's role in the collaboration process:

> My headteacher made a comment that after they had been given initial orientation
> on their role in providing support to UTs,.. there has not been any follow up
> meeting with the colleges of education and so she didn't know what to do now
> (UT3f: 12/08/2011).

The relevance and quality of the teacher training programme is linked to strong school-

college collaboration. A comment by a UT suggested that the lack of strong school-

college collaboration was a reason for people judging the programme as not of quality in

nature:

> I do not know why after the first visit and meeting between myself and the high
> profile staff from districts, college of education and my headteacher, nothing has
> happened again. I tried to find out from my headteacher and she made a comment
> like, you should rather tell me when your tutors will visit (UT4f: 18/08/2011).

Linking strong school-college collaboration to the trustworthiness of the UTDBE

programme, a UT remarked:

> Sometimes the comments made by your head and other members of the staff
> appear as if the programme is not up to the one taken by students in the regular
> colleges of education. The reason is that nobody from the district or college of
> education visits you (UT) and your school, your head does not seem to know the
> part she has to play, and you as UT also cannot explain why your head is not well
> informed about issues happening (UT3f: 12/08/2011).

Overall, while contradicting many assertions in the previous section, the interview data

suggested that the level of collaboration between schools colleges and district was

problematic, making it difficult for UTs to be supported well in their professional

practices. The ineffectiveness of this collaboration appears to have led to even

headteachers or mentors of UTs doubting the relevance and quality of the UTDBE

programme. Despite the desire to privilege a model of teacher learning that understands

learning to be a collaborative and social process, this seems to have been compromised by a number of issues, similar to those identified in Moon & Robinson (2003) such as the difficulty in managing relations in using a model of teacher learning that highlights learning in a collaborative and social context. A number of challenging issues including logistical, funding and uncooperative attitudes of some headteachers appears to have contributed to the poor collaboration. This comment seems to reflect the challenges associated with decentralised learner support system in DE (Mattson, 2006). The above views, and other reciprocal considerations, as the next section indicates point to some of the major challenges associated with decentralised learner support system in DE.

7.2.6 Support Systems

As indicated in sections 6.5.3., it was intended that UTs would be given professional support throughout the period of their training through cluster meetings, classroom observation and mentoring by their headteachers. Analysis of UTs interview data on support systems have been categorised into two, namely headteacher/mentor support and district and cluster support.

7.2.6.1 Support from Headteacher

Analysis of UTs interview data seems to suggest that generally the headteachers did not support their UTs, and where they supported too the support was inadequate. UTs who had some support from their headteachers suggested that teaching teams were developed in their schools and this formed a strong group in contributing to meeting UTs' needs in

classroom instruction and management of pupils' issues. These are all elements of professional needs:

> My head will assess my lesson notes and teaching and learning materials to be used in teaching…..offer suggestions as to the approach to adopt in teaching, teaching and learning materials to use and the challenges associated …where there is the need to support me with any teaching and learning material, he does so…he joins me when I am doing the actual teaching and follows up with post lesson discussion (UT2m: 8/08/2011).

However, expressing a divergent view, a UT commented that only one form of support was received and even this ended in a rather strained relationship between this UT and the headteacher. To this UT the support that was received was rather a fault-finding mission:

> I think my headteacher comes in to find fault and not to support me…..looks only at the negative side of anything I do whether lesson notes preparation or lesson delivery. ….will not offer any suggestions ..only negative comments (UT4f: 18/08/2011).

7.2.6.2 Support during Cluster meetings

As indicated in section 6.5.1, the period in-between residential face-to-face meetings were seen as critical in the UTs continuous professional learning, practice and development. During this period the district office and CoEs were collectively charged to organise meetings for UTs in specific clusters within their districts of operation, to receive additional tutorial sessions and professional support. All the UTs interviewed indicated that they had only one of such support.

Difficulties encountered by UTs in their classrooms after face-to-face meetings were resolved within a shorter period of time. They did not have to wait till the next face-to-face session:

> You go back to your school… you want to do exactly the way you were trained to do effective teaching. Sometimes, it doesn't work the way you had expected…you get confused and do not know how to approach subsequent lessons…..then you begin to find out the number of weeks left before the next face-to-face will start, so that you can discuss this challenge with your tutor….I was fortunate a cluster meeting was held about 13 days after I had encountered this challenge, …. it did not keep long for these difficulties to be resolved (UT6m: 29/08/2011).

Another account suggested that cluster meetings inspired UTs to come up with better strategies towards their personal studies. A UT account illustrates:

> When you are back to the village, you sometimes forget that you are a student and therefore there is the need to learn. Cluster meetings kept me on my toes …..you meet your colleagues and exchange ideas about the extent of progress with particular reference to learning the modules and doing assignments……if you realise you are behind, that will force you to find means to catch up (UT4f: 18/08/2011).

However, a UT thought otherwise:

> So far I have had only one cluster meeting….tutors came to the cluster meeting without any fixed plan of what to teach. UTs rather come out with their personal and professional challenges for discussion…you will find out that a problem that has already been discussed, another UT brings the same issue for discussion……I see that as a complete waste of time (UT2m: 8/08/2011).

Probing further the same UT said:

> The meeting was characterised by lots of arguments, making the meeting place noisy…. as if all those present wanted their voices to be heard at the same time (UT2m: 8/08/2011).

The views expressed by UTs, taken collectively, seem to suggest that UTs valued the opportunities for further professional learning and practices promised by the support systems. .

However, it appears UTs could not receive any form of or enough continuous support from their headteachers and cluster meetings, indicating the weak support system that

prevailed on the programme. These comments seem to lend support to Mattson's (2006) view that decentralised learner support system is the weakest aspect of DE model in Sub-Saharan Africa.

7.3 Practical teaching: Videoed lesson

One of the key assumptions underpinning the study is that teachers with improved knowledge and skills are able to demonstrate effective teaching skills. To better understand these experiences (as indicated in section 7.1) the second part of this chapter discusses classroom teaching practices and experiences on a videoed lesson, with particular reference to how the lesson was taught (from the beginning to the end) and the kind of interaction that existed between the UTs and their pupils and how that influenced the teaching and learning process. It discusses the actual classroom teaching event of UTs in the light of their beliefs, the school condition and application of knowledge and skills gained on the UTDBE programme.

Analysis of UTs' one-on-one interviews data was developed around these three guiding questions: (i) What did UTs do in the classroom teaching which they saw as promoting learning and the extent that this reflected what they had learnt in the programme? (ii) What did UTs see as gaps between their anticipated plans, aspirations, beliefs and actions? and (iii) What did they discover about the activity which surprised them and what they learned about themselves?

7.3.1 UTs' classroom teaching approaches which they saw as promoting learning

Analysis of UTs interview data on their selection of video data on their teaching and what changes they had made in their practice which they felt had worked well seems to suggest that their priorities were interrelated factors of quality of instructional approaches, classroom interactions, supportive classroom environment, and learning in a social context as responsible for promoting learning. UTs made connections among the above-mentioned factors in their teaching in a bid to promote learning. It does appear that most of what UTs mentioned as what they did to promote classroom learning could be viewed largely from their earlier comments about what constitute a good teacher (see section 5.1.3). However, this does not necessarily mean that they approached this activity with their earlier beliefs about teaching and what constituted a good teacher. It would seem that the UTDBE programme had changed their perspectives, although only sometimes their practices.

As indicated in section 4.7.3.2, UTs recorded, played back videoed tape lessons and selected excerpts which were discussed with the researcher. Using the video as the basis for the interview was felt to be a way to help to ground the UTs' discussion in the realities of their classroom contexts. Their choice of videos which can be seen as an illustration of their professional priorities (see sections 5.2.2.2 and 5.2.2.3) was classified along the following domains: (i) instructional approaches and classroom interaction (ii) supportive environment and (iii) use of instructional time. The gaps illuminated by the discussions of the videos are addressed in section 7.3.2.

7.3.1.1. Instructional approaches and classroom interaction

Analysis of videos UTs selected in these interviews suggested that key among their priorities were creating classroom opportunities for pupils to observe, explore, discover, to express themselves as individuals and groups and to put forward explanations and solutions and to utilise new ideas; these were recognised as very influential in promoting learning among pupils. The interest in teaching abilities which aligns more to learner-centred methods suggests the extent to which these UTs had accepted this teaching style as promoting learning among pupils. Again, it suggests that the UTDBE programme imparts in UTs to teach in ways that could be considered learner-centred. A UT account of their video selection illustrates this:

> Performed the experiment air occupies space. Pupils in groups of 4 were given materials, ….. Each group was given a worksheet to follow and perform the experiment. …..I only acted as a facilitator. ….pupils observed all the processes, looked at and discussed issues …finally came up with a short write up (UT1f: 3/08/2011).

Similarly, another comment from a UT suggested that, actively involving pupils in activities about things in their environment supported acquisition of additional information that went beyond what has been provided in the textbook. To this UT, such a style of teaching promoted interest in learning, acquisition of new knowledge and cooperation among pupils throughout the lesson:

> First pupils went round to observe different plants brought to class by other groups …I did that so that pupils will see natural object so that they would have more interest in learning things in their environment. ….When we started to discuss their observations and facts noted, pupils came up freely with lots of ideas…Pupils worked together and sought additional information that was not provided in the textbook (UT3f: 15/08/2011).

An account suggested that pupils working in groups and among their peers had the opportunity to think critically about their group's practice, learn from other colleagues,

and shared experiences with other colleagues. In order to achieve their groups'

expectations, lines of communication were opened throughout the learning session. This

UT's view suggests that pupils were used as a reference group, an important source of

support in learning or acquisition of knowledge:

> Pupils used appropriate language to explain issues better to their other colleague
> pupils….pupils were attentive in class and generally were eager to learn….some
> pupils moved from their groups to help other group members…During the written
> exercises, pupils showed that they have really understood the lesson (UT4f:
> 19/08/2011).

7.3.1.2. Supportive environment

Analysis of UTs' interview suggested the efforts they felt important to make in

establishing a supportive environment, provided the atmosphere for them to better deliver

the content material and engage pupils' attention throughout the whole of the lesson

period. UTs comments appear to suggest that the interaction among pupils seemed to

have enabled them identify their individual potentials, roles and responsibilities as this

account illustrates:

> I allowed pupils within their groups to identify and apportion among themselves
> certain roles and responsibilities after they have identified their groups
> task…..When I went round the groups, I saw all of them busy and actively
> working on some aspects of the task identified……I was able to teach the topic
> for the day very well without writing a lot on the chalkboard (UT1f: 3/08/2011).

A UT's comment sought to use pupils' relevant prior knowledge of an activity as a

starting point to set a good tone and atmosphere for interaction:

> Initially, I asked pupils to share their experiences and knowledge on the topic at
> stake with their fellow colleagues in groups… ….Pupils were able to link the
> ideas they already had to the topic under discussion..…I talked very little as the
> pupils in groups did all the work with little help from me (UT5m: 24/08/2011).

For a UT, the most satisfying experience was the opportunities provided for pupils to practise with materials that gave immediate knowledge of result. This helped pupils to monitor their own performance as the account illustrates:

> I used some work cards ….more opportunities to practise a particular concept and also provided immediate feedback to the rightness or wrongness of an answer. Pupils continued to search for the right answer by going back to the textbook to read over again and again….pupils had immediate feedback on their results... they were encouraged to continue to search for more information (UT4f: 19/08/2011).

7.3.1.3. Use of instructional time

UTs' interview data showed that one of their key priorities was the amount of quality of instructional time. This is among the variables that determine pupils' classroom engagement. Consequently, the effort a teacher makes towards following the planned schedule of activities by allocating appropriate time for the various stages of classroom instructional activities cannot be overlooked.

A UT's comment suggested that managing instructional time properly and working within the stipulated time was an important stride in eliminating classroom boredom:

> I planned my 30-minute lesson giving activities at the introduction stage 5 minutes, presentation stage 15 and conclusion stage 10 minutes…..I followed the times in carrying out my activities…It improved the flow of classroom activities and pupils were actively involved throughout the lesson (UT4f: 19/08/2011).

Another account suggested that the lesson was presented in an appropriate development sequence:

> I started the lesson by a revision of pupil's relevant previous knowledge, linked it to the new lesson for the day….before I went on the new topic for the day pupils had already formed a good concept about the topic for the day … pupils were able to perform all the activities satisfactorily….I achieved my stated objectives (UT5m: 24/08/2011).

The views expressed by UTs taken collectively seem to suggest a number of important issues that appear to play a greater role in promoting classroom learning. They seem to be concerned that, actively involving pupils in the teaching process stimulated their motivation for learning. Again, from UTs' interview data, guiding pupils to learn through hands-on activities like exploration, investigation and experimentation, social context, small group work and interactive teaching which could be viewed largely as important elements in the practice of learner-centred methods, promoted learning. It appears evident from UTs' interview data that they were attempting to practice teaching and learning approaches they were exposed to on the UTDBE programme (see sections 6.2 and 6.5.3.2 for programme priorities) and at least in their understandings of what good practice might be.

7.3.2. What UTs saw as gaps between their anticipated plans, aspirations, beliefs and actions

UTs played back their videoed tape lesson, reflected on their practice and critiqued the lesson they had filmed. Analysis of UTs' interview data on the videoed tape lesson and what they felt had not worked well were categorised under the following: (i) teacher dominance in classroom teaching (ii) compliance with established school and district policies.

7.3.2.1. Teacher dominance in classroom teaching

UTs' interview data suggested that teacher dominance was high while pupils' involvement was relatively low. From UTs' interview data, despite their intentions to use

learner-centred approaches as indicated above, this diminished as the lesson progressed.

This appears to suggest a conflicting perspective between teacher's knowledge and

classroom practice as the account below illustrates:

> My intention was to use child-centered approach and so I started… by involving
> them, asking questions, allowing them to come with their own ideas… Then along
> the line .. I realized I was lecturing them…..I think for a greater part of the lesson,
> I used lecture method (UT4f: 19/08/2011).

Another comment from a UT suggested that the teacher explained facts without finding

out the extent of pupils' understanding. A strong sense of the teacher's role as

transmitting knowledge to pupils, without perhaps finding out the extent of their

understanding, could be discerned from the data:

> There were a number of mathematical concepts that I had to tell my pupils. I told
> them because I had no other means to let them understand….my pupils are not
> good academically….I did not find out whether they understood the meaning of
> the concepts I explained to them…I feel some of the mathematical concepts the
> only way you can let your pupils have an idea is to tell them (UT2m: 9/08/2011).

Similarly, a UT disclosed that facts were explained to pupils without establishing

possible reasons behind the development of these facts. From this UT's view, the teacher

could be seen as the final authority as to whatever knowledge was deemed appropriate in

the teaching and learning environment:

> I think there were some concepts that though I explained to pupils, I did not
> establish the reasons behind the development of these concepts for better
> understanding by pupils. For example, I explained to them [mathematics lesson]
> that the sum of angles of a triangle is 180^0, but I did not go further to establish the
> underlying reasons….I discussed the concepts like statements of facts (UT5m:
> 24/08/2011).

Overall, the views expressed by UTs seem to suggest that conveying, telling and

transmitting knowledge, concepts, facts and skills to pupils using lecturing, explaining,

giving instructions and talking during classroom teaching without much involvement of

pupils were some of the gaps identified in their approach to classroom presentation. All these could be viewed largely as reflecting the practice of teacher-centred methods.

Given the accounts in sections 7.3.1 and 7.3.2, it appears that though UTs expected the learning environment to be learner-centred throughout the lesson delivery, at a point it became teacher-centred, indicating the complex nature of classroom learning environment. Some of the reasons for these differences in what I will describe as "learner-centred practices" to "teacher-centred approaches" include the fact that UTs do not get enough exposure to the learner-centred practices in their training, especially at CoEs (see section 7.2.2.2). Other reasons are discussed in the sections below.

Taking the discussions above and the comments that seem to suggest that principles of a learner-centred perspective can be embedded within a traditional teacher-centred environment, at least for these UTs particular classroom teaching, it is important for the UTDBE programme to attempt more thorough understandings of their professional teaching and learning contexts.

7.3.2.2. Compliance with established school policies and classroom management

UTs' interview data suggested that school policy and national curriculum policies influenced the depth of coverage of intended objectives set for a particular lesson. For some UTs, their work, including the pace of classroom teaching, number of exercises set for pupils and marked was largely decided by the requirements of the district office and the school administrators. Each term, a teacher was mandated to cover the entire scheme

of work for his/her class. Time, and the number of pupils exercises per week were important indicators closely monitored by headteachers and other district officials.

UTs are also working under a predetermined school curriculum (designed at the national level) and calendar. A combination of pressures therefore requires them to organise the classroom teaching and learning in a manner that will secure completion of required tasks within a specific time frame. The previous paragraphs point a finger at pressures on UTs from headteachers and district officials, while this paragraph points to the dictates of the national curriculum.

UT's inability to achieve fully the objectives set for the lesson was attributed to the school policy on the number of exercises needed to be given to pupils as this account illustrates:

> I could not use all the materials that I had prepared to use in class. I had to stop using it …..in order to give pupils some exercises. …in my school pupils are supposed to be given 20 exercises in mathematics [5 exercises 4 times a week]..I will be queried by the headteacher and circuit supervisor if I am unable to meet this (UT4f: 19/08/2011).

Similarly another UT commented:

> What our school and educational authorities want to see is by way of lesson notes preparation and number of exercises given to your pupils and marked. …..The actual process of teaching is not very important, and therefore you were in a way forced to concentrate on that (UT3f: 15/08/2011).

For a UT, rushing to complete the syllabus appeared to be more important to the school authorities than engaging pupils in meaningful teaching. This suggests a conflict in how UTs want to teach:

> It will be a very big problem if the teaching progress is behind schedule and the intended topics in the syllabus are not finished by the end of the term. Pupils are externally examined by the district at the end of every term and so completing the topics in the syllabus was very important (UT1f: 3/08/2011).

The point of view of another UT seems to justify why lecturing and rote learning were most effective means of classroom teaching. This ensures a speedy completion of the syllabus as the account illustrates:

> Without using the lecture method of teaching, and sometimes rote learning, there was no way that you could complete the topics outlined (UT6m: 30/08/2011).

The views in this category appear to suggest that as much as UTs saw lecturing, transmitting knowledge, explaining concepts, facts and skills to pupils, and teacher classroom dominance as factors that influenced their classroom teaching negatively, school policy on the number of exercises that should be given to pupils and the rush to complete topics to fulfill curriculum requirements were also factors that informed the choice of a particular teaching strategy. This evidence suggests that the school environment does not provide enough opportunities for UTs to apply the theories and methods that they had been taught at CoE and could be in conflict with the wisdom of practice they might have acquired through previous teaching experience.

In general, it seems if the UTDBE programme is successful in setting up aspirations for UTs to teach in a 'learner-centred' way, this is causing the UTs some considerable difficulty in their attempts to develop their teaching practice.

7.3.3 What UTs discovered or learned about themselves

At this point, I expected UTs to tell me more about how they were able to relate their theoretical and practical knowledge gained during residential face-to-face meeting to occurrences in the specific classroom teaching and learning context. However, on the contrary, their comments appeared to be rather located within the framework on the extent to which the videoed lesson promoted independent self-assessment, reflection and practice among UTs. From the professional point of view, UTs' comments suggest that they were able to see at first-hand how theories and skills discussed or learnt on the programme were implemented and modified by practice. Through this, UTs developed new ways of thinking (Stuart et al. 2009; Hannay & Newvine, 2006).

The significant strength of this activity was that UTs were able to assess themselves professionally and personally and decided the next line of action in relation to the lesson taught. A UT account illustrates this:

> There were certain speeches and skills demonstrated which I could not believe I did or said that. For instance at a point in time in the teaching, an interesting contradiction between what I had in mind and what I taught came up. Instead of saying 60 seconds equals 1 minute, I said 100 seconds equals 1 minute. I was thinking about our currency cedis and pesewas. Had it not been the play back of the video I would not have been able to assess myself. I will make the correction in tomorrow's lesson (UT4f: 19/08/2011).

For a UT, the playback of the video allowed them to view their own classroom practice and reflect on other situations in which they were monitored by their headteacher in which a video was not used and the unpleasant situation that unfolded. Using a video in lesson presentation promoted better understanding between UTs and those who monitor them as both could have evidence to fall on even if they disagree on an issue:

> I look back at the lesson taught and the way I presented myself then…there was a situation that my headteacher made a comment about my teaching which I disagreed. I think if we had something to playback, all of us would have understood the issue better (UT1f: 3/08/2011).

Overall, the interview data seems to suggest that the video could be used as a powerful tool in the continuous professional development of teachers. It allowed UTs to develop an in-depth understanding of their classroom teaching strategies and personal assessment practices. In addition, it could be used as a means of resolving potential differences in views between UTs and their monitors.

7.4 Summary

In this chapter, the extent to which the nature, organisational structure and content of the UTDBE programme influenced professional learning, growth and practice of UTs were highlighted. Generally, comments from some UTs suggest that the UTDBE programme has been valued as an object for professional and personal development. Courses and curricula, teaching and learning strategies, learning materials and the extent of communication between learners and tutors and among learners themselves are all components defined in the UTDBE learning system.

Again, comments from UTs seem to suggest the UTDBE programme was viewed as a good source of learning experience, ensured continuity in learning and permitted easy formation of group for professional identity. Also, UTs saw the programme as supporting them to learn through social interaction. UTs made strong statements about the contributions of the UTDBE programme activities. The intervals between residential face-to-face sessions and collaboration between districts, schools and colleges had the

potential of providing UTs with the opportunity to have an in-depth understanding of classroom teaching related issues and close interaction among schools, districts and colleges, which promotes professional recognition, at least from the context of UTs.

However, there remains a number of challenges facing the UTDBE programme which undoubtedly affects the extent to which it promotes professional and personal development. For example, (i) inability of the programme to take advantage of professional learning experiences that might be possible if ICTs were introduced (ii) weak district, school and college collaboration (iii) the difficulties and complexities in managing relations between UTs and mentors (iv) tutoring during residential face-to-face meeting devoted to large group lectures (v) the over-loaded nature of course content and the difficulty and loaded nature of content of some modules (vi) inability of UTs to make maximum use of college facilities (vii) other mechanisms for professional development such as cluster meeting and lesson observation not being used to their full potential (viii) largely non-recognition of the 'wisdom of practice' of UTs, and (ix) tensions in expectations between the different communities of practice of the different contexts of training and practice.

Comments from UTs' interview data suggested that guiding learners to learn through hands-on activities like investigation and experimentation and through active involvement of learners promoted good class harmony. Good classroom management, appropriate use of instructional time and providing an environment that promoted learning in a social context are attributes of effective teaching and learning, which could

also be viewed largely as learner-centred methods. What this suggests is that UTs are attempting to practice strategies that align with both their professional priorities and the philosophy of the UTDBE programme, an indication that their teaching practices had improved, to some extent, as a result of their training.

UTs' inability to promote learner-centred methods but rather concentrate more on teacher-centred methods in their lesson delivery could be attributed to a number of factors including (i) the training programme not providing enough exposure to the use of learner-centred methods and (ii) certain national and school policies and culture promoting the use of teacher-centred methods as well as the content load of the curriculum itself.

The use of video in lesson delivery appears to be an important tool for promoting reflection, dialogue and receiving immediate feedback among UTs. As a form of self-assessment, it gave them the opportunity to plan aspects of lessons that needed further improvement and also resolved possible differences in views between UTs and monitors. What this suggests is that video could be used as a powerful tool in the continuous professional development of teachers.

In the next chapter, key issues emerging from chapters Five, Six and Seven are discussed with the research questions in mind. The chapter further provides final conclusion on the study, limitations of the study and the need for further research, and key implications for policy and practice.

CHAPTER EIGHT: Discussions, conclusions and implications

8.1 Introduction

This chapter reflects on the emerging issues from the data analysis presented in the three previous chapters of the study. The discussion of these emerging issues which is structured around this overarching research question – How can distance education contribute to the professional development and practices of the Untrained Teacher in the context of the UTDBE programme in Ghana? - is directed by the following research questions (see section 4.3):

RQ1 What are UTs' understandings of teaching, what shapes these

understandings and how did this encourage them to engage in the UTDBE?

RQ2 What are the aims of the UTDBE programme and how is it constructed?

RQ3   What are UTs' perceptions of the UTDBE, including how it has influenced

their professional development and teaching?

RQ4 What are the implications of the study for the development of the UTDBE?

Before attempting to provide answers to the research questions indicated above, it will be useful to present a concise overview of the research. Consequently, the next few paragraphs will discuss briefly the intent and rationale of the study, data collection procedures, and data analyses.

This study was to discover from primarily UTs, their views on how UTDBE influences their professional development and the quality of their teaching and learning through

analysis of documents, a series of interviews and observations. It also examined the contribution and challenges of the UTDBE programme. As a teacher educator with at least 7 years of professional experience in supporting 'would be' teachers, I wanted to gain an in-depth understanding of the experiences UTs go through in their quest to develop themselves professionally and gain accreditation as 'qualified teachers'. As an Ed. D student, I believed there are a lot of issues that I could learn from such a study which will support me to reflect on my own practice, with the ultimate purpose of improving my professional practice.

Chapter two has discussed the history of the development of general education, teacher education, and teacher professional development programmes in Ghana, especially at the pre-tertiary level. This chapter further examined the efforts Ghana has made and continues to make in trying to educate sufficient number of trained teachers. In chapter three, I reviewed extensive literature on teacher professional development and distance education. This chapter discussed general arguments about the importance of teacher education and the prevalence of distance education to achieve this in Sub-Saharan Africa and also the problems in the UTDBE programme itself.

Chapter four discussed the research paradigm that led to the epistemological and ontological position of the research, the research strategies, data collection processes and methods, analytical strategy and methodological limitations of the study.

In chapter five, drawing on focus group data (responds to RQ 1), I categorised and discussed the teaching and non-teaching related reasons assigned by UTs on the issue of

why they entered the teaching service. The chapter discussed further the extent to which UTs' interest in teaching is shaped predominantly by their awareness of and desire for different kinds of social and economic recognition rather than an interest in pedagogy. I examined UTs' views on what constitutes good teaching by focusing on these four categories, namely; transmission of knowledge, caring and loving, teachers' knowledge and character and the extent to which that their views reflected learner-centred approach. Furthermore, the chapter discussed how UTs' past experiences as pupils was reported to have influenced their classroom teaching. Finally, how professional, personal and social factors influenced UTs to enrol on the UTDBE programme was also discussed.

Chapter six drew on documentary analysis (responds to RQ 2) and discussed the UTDBE programme with particular emphasis on the overall programme structure, content and support system. Chapter seven drew on one-on-one interview data (responds to RQ 3) and discussed primarily UTs' perceptions on all components of the UTDBE programme and the extent to which these components offered valuable opportunities or otherwise for professional practice, growth and development. The chapter further examined UTs' classroom practices focusing on the extent to which the knowledge, skills and experiences on the UTDBE programme impacted on their classroom teaching. Chapter eight will identify and discuss the overarching themes found from UTs' interviews, the management stakeholder interview, analysis of documents and reports from field observation.

8.2 What are UTs' understandings of teaching, what shapes these understandings and how did this encourage them to engage in the UTDBE?

As discussed in Chapter five UTs view on what constitutes a good teacher and their perspectives on how they approached their classroom teaching generated an interesting and sometimes contradictory mix of understandings of the classroom teaching situation, including tensions that seemed to exist between practicing teacher-centredness and or learner-centredness.

Prior to entering the teaching profession, UTs had their own ideas and beliefs about how "would-be" teachers approached classroom practices. UTs' initial beliefs and ideas about teaching suggest two rather contradictory dimensions, namely, teacher-centredness and learner-centredness. From the teacher-centredness view, UTs during the focus group interview cited a good teacher as one who transmits knowledge and for that matter places great prominence on explaining facts, concepts, ideas, and values during lesson delivery. Good teaching involved transmission of knowledge, ideas and facts to learners by giving out instructions, lecturing and doing more talking and asking questions and also the teacher is seen as the ultimate authority of knowledge. Thus, UTs' views seemed sometimes to imply a teacher-centred understanding of pedagogy aligning to Korthagen et al., (2006) and Cuban's (1983) characteristics of teacher-centred instruction.

On the other hand, another value system which had the hallmarks of learner-centredness was also cited by UTs during the focus group interview. This gave priority to nurturing qualities like caring, loving, patience and understanding and supporting learners and using these qualities to help learners attain their fullest potential. The findings from UTs'

comments on learner-centredness seem to align with some of the key principles of learner-centredness practices outlined by a number of researchers. For instance, instruction based on learner-centred practices presents opportunities for learners to draw on their own experiences, understandings and interpretations of the learning process (Darling-Hammond, 2000; Wagner & McCombs, 1995). In the view of Cuban (1993), fundamentals of learner-centred practices include that learning targets are to be achieved by active collaboration between the teacher and the learner.

It was also clear that all UTs indicated that their personal experience of being pupils was a reference point in making sense of classroom teaching (see section 5.3). This seemed to be an important influence on their views of teaching. So also were belief systems arising from their communities and their traditions, as well was their different religious beliefs. The data therefore suggest that UTs entered the teaching profession with these two rather contradictory belief systems, which reflect aspects of teacher-centredness and learner-centredness. Conceivably, the questions that should be asked are: Which approach should be adopted by UTs in their classroom teaching? At what point are 'learner-centred' or 'teacher-centered' approaches useful? Should UTs be assertive and authoritative at one point and at another point take a facilitator position? Is it too simplistic to be sending a message that 'learner-centred' approaches are always desirable?

Perhaps with this in mind, and as indicated during the focus group interview (see section 5.4), UTs enrolled on the UTDBE programme. UTs viewed developing oneself professionally as the main priority for enrolling on the UTDBE. Without it UTs reported

not enjoying professional recognition in their working environment. In order words, the desire for greater recognition and also job security was an important reason for UTs wanting to participate in the UTDBE programme. UTs, comments again suggested that by developing oneself professionally one could acquire the appropriate pedagogical and other related teaching skills needed for classroom practice.

Considering the discussions in section 8.4, it appears that the influence of UTs' school and cultural environment (whether positive or negative) played an important role in shaping UTs' understandings of professional practice. Again, UTs' comments seem to suggest that CoE training played an important role in shaping their understanding of teaching, facilitating professional practices as indicated in section 8.4. However, it does appear (from UTs' comments) that both the CoE context and UTs' school and cultural environment context did not help UTs in the appropriate adoption of strategies in so far as the use of learner-centred approach or teacher-centred approach is concerned.

Putting all together, these highlight the importance of cultural, religious, institutional, and workplace influences on UTs' perceptions, understandings and professional practices (see Figure 8.1). Stuart et al., (2009) and UNESCO (2001) have all highlighted the importance of certain components in influencing teachers teaching and professional practice. These include: (i) childhood experiences (which in the context of this study involves cultural, religious, past experiences as pupils) (ii) school experience (which in the context of this study involves institutional, school and national policy and culture) and (iii) teaching

experiences (which in the context of this study involves classroom context, school leadership).

Figure 8.1: Main intervening influences on UTs' perceptions

Prior to Enrolling on UTDBE
Traditional cultures
Religious backgrounds
Past experiences as pupils

Enrolling on UTDBE
Institutional (CoEs)
School culture –Field work

Classroom teaching context
School cultures
School leadership
Classroom contexts
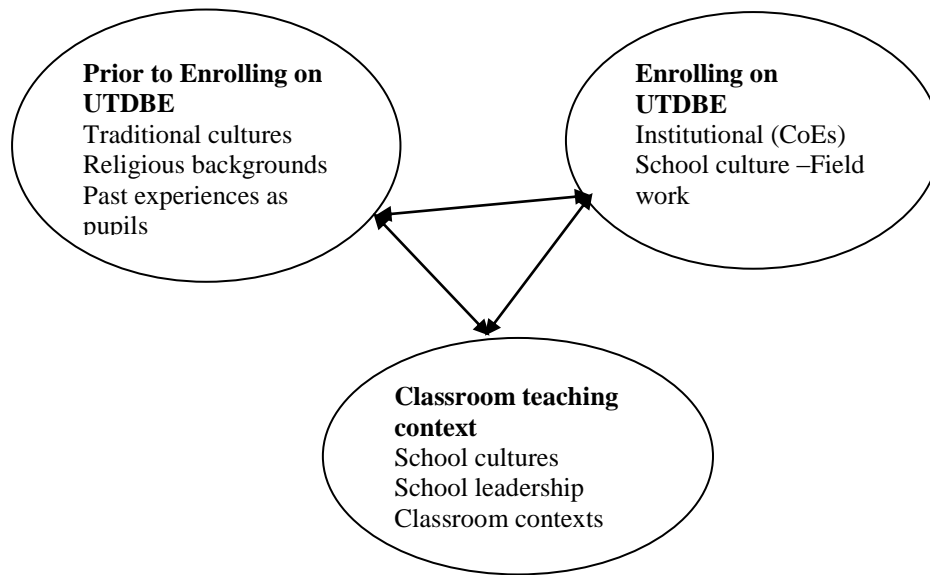
Source: Researcher

In sum, two important issues can be drawn from the discussion, although more in-depth research would be needed to explore how this might differ for different contexts and cultures. Firstly, there is an indication that UTs have contradictory beliefs about teaching and learning which reflect both learner-centredness and teacher-centredness, and which influence their classroom teaching and professional practices. Secondly, the sources of beliefs can be traced from the influences discussed in the previous paragraphs. What appears evident in the study is that there are powerful interconnections among these.

8.3 What are the aims of the UTDBE programme and how is it constructed?

As indicated in section 6.2, the UTDBE programme aimed at providing serving UTs with quality and accessible professional teacher education, updating their knowledge and skills, while they remain in their individual schools and continue with their teaching job. It is a four-year diploma programme, running over two semesters in an academic year and which uses a roll-out model. The journey along this professional development is made up of two main parts, namely (i) residential face-to-face meetings and (ii) interval period between residential face-to-face.

The residential face-to-face meeting organised during the periods when UTs are on vacations aimed at providing opportunity for UTs to interact with their peers and course tutors, share ideas and experiences and discuss challenging and difficult topics in the modules. The practical field work also aimed at providing a platform for UTs to put into practice skills acquired during residential face-to-face sessions. The UTDBE structure seems to suggest a form of connection between the campus-based model and the school-based model (Moon, 2007). Thus, it seems to indicate a combination of distance learning methodologies with face-to-face workshops, seminars and in-school support (Mattson, 2006).

The review of TE state of affairs in 2003, the support structure and facilities available suggested that it was not possible to apply ICT-enhanced DE approach. The lack of infrastructure to support such uses meant that pioneering an ICT-enhanced teacher education programme would have faced numerous challenges.

Evidence gathered from UTs' interview data, ST interview data and analysis of documents suggest that print material was the main instructional tool for the UTDBE programme (see section 8.4 for further discussion on the poor quality nature of some of the text or print materials).

The course content which was developed in line with the programme philosophy of learner-centredness to teacher development is divided into four sets of courses, namely; core foundation courses, education and professional studies courses, practical and general studies. Thus the focus of this curriculum aims at making UTs experience learning in the spirit of the learner-centred focus principle (see section 6.5.3.2). Perhaps the assumption is that UTs trained with this philosophy can promote it in their classroom teaching after they have returned from residential face-to-face meetings. However, as noted in sections 8.2 and 8.4, due to a number of influences and the extent that learner-centred approaches were used during the residential face-to-face sessions. it was also problematic; largely, UTs were not able to promote this philosophy in their classroom teaching.

Evidence gathered from the analysis of document suggests that as a way of ensuring that UTs received continuous support and on the job professional guidance and encouragement during both residential face-to-face meetings and interval periods between residential face-to-face meetings, a structure to set the pace for a strong partnership between districts, schools and CoEs was established. This UTDBE structure suggests a decentralized learner support, which in the view of Mattson (2006) is key to the progress of the DTE programme.

And as indicated in ST interview data, a workshop intended to ensure that districts, schools and CoEs collaborated to advance the professional development of UTs was organised. Evidence gathered from the analysis of document suggested that the partnership was weak and a number of reasons could have accounted for this. For instance, (i) headteachers who were supposed to mentor UTs were not provided with any formal training on mentoring and (ii) major stakeholders who were supposed to collaborate in this partnership to support UTs were provided with 'one shot' sensitisation or capacity building workshop. Other factors that seemed to have played a role in this weak partnership are discussed in section 8.4.7.

8.4 What are UTs' perceptions of the UTDBE, including how it has influenced their professional development and teaching?

This section will examine the dimensions along which UTs viewed the UTDBE programme, the level of satisfaction and the mixed set of emotions expressed. UTs' views are examined along the following: linking theory to practice in a social environment, extending and developing teachers' theoretical knowledge of teaching and learning, conflict between UTs' expectations and CoEs' tutors instruction, self-learning materials as tools for enquiry and independent learning, classroom teaching experience, induction, and district, school and college partnerships.

8.4.1. Practical field work component - linking theory to practice in a social environment

As indicated in section 6.5., the mandated practical field work component of the UTDBE programme aimed at providing opportunities for UTs to acquire practical experience and with the support of mentors/headteachers, and tutors, bridge the gap between theory and practice. Analysis of UTs' data suggests varied responses according to UTs' experiences.

Evidence from some UTs' interview data suggest that the UTDBE has the potential of providing them with opportunities for on-going professional learning in a social context while maintaining a good balance between activities in their schools and CoEs. In other words, the interval period between residential face-to-face sessions has the potential of enabling UTs to continuously acquire professional knowledge without disruption in the performance of their professional duties and to apply this in their classroom teaching/learning theories.

However, some UTs commented on the tensions in expectations between the different communities of practice of the different contexts of training and practice. A case in point was UTs having the difficulty in combining their studies with their normal duties as classroom teacher and other school-related activities, such as the expectations that UTs exhibit quality educational practices like good lesson notes preparation and marking pupils' work adequately and on time. UTs work under a predetermined school and national curriculum that requires them to organise their classroom teaching and learning in a manner that will secure completion of task within a specific time frame (similar tensions are also discussed in sections 8.4.2, 8.4.3, 8.4.5, 8.4.6, and 8.4.7). This evidence

suggests (i) that the practices proposed by the UTDBE are unrealistic, given the pressures of the UTs' school contexts (ii) the school environment does not provide UTs with enough opportunities for them to apply the theories and methods that they may have been taught at CoE and (iii) there is a conflict between what is proposed in the programme, and wisdom of practice of UTs, which has been developed in ways that recognise the demands of their contexts. This finding lends support to Eraut's (2007) view on challenges associated with teachers using knowledge acquired in one context (CoE) in a different context (see sections 8.4.4 and 8.4.5 for further discussion).

8.4.2. Extending and developing teachers' theoretical knowledge of teaching and learning

As indicated in section 6.5.3.2 the focus of the UTDBE programme content aims at making UTs experience learning in a spirit that reflects a learner-centred focus. Analysis of UTs' interview data suggested that while some UTs viewed the course content as appropriate, at least in the context of extending and developing teachers' theoretical knowledge of teaching and learning, some also expressed concerns about some of the dictates and demands of the course content as this did not conform to what was being practised at the school level. A case in point was lesson notes preparation, as what was outlined in the course content appears to differ appreciably from what UTs practised in their schools. UTs complained that they found little relevance of some content material to their work as primary school teachers. This finding resonates with Akyeampong et al. (2010) and Kunje et al.'s (2003) views that some DE materials do not sufficiently recognise the demands of the contexts in which UTs work. It seems important that any

DE programme for teachers must ensure that materials for learning to teach recognises the realities of daily classroom learning if it is to influence school practices in a positive way.

8.4.3. The Value of CoE tutors' instruction: Conflict between UTs' expectations and CoE tutors' practices

As indicated in section 6.5.3.2, it was expected that tutoring on the progamme, especially during residential face-to-face, was to be approached with learner-centred methods in mind. In other words, it was anticipated that tutors would model learner-centred practices and UTs would be actively involved in the tutoring process with the ultimate aim of modelling learner-centred practices, and so help them acquire the needed skills and competences that have direct and practical application in the classrooms and general professional practice in their schools.

Indeed, UTs reported their disappointment with the experience of tutoring that was devoted to large group lectures. Tutors lectured throughout the tutorial session, presented facts, rushed to complete the content, while UTs observed tutors and were passive in the learning process. The opportunities for them to experience learner-centred teaching methods in action were therefore not realized.

Considering the tutors' approach to tutoring as evident in UTs interview data, it is apparent that their style aligned more to teacher-centred methods, and this obviously contradicts the programme philosophy of learner-centredness to teacher development.

Tutors proposed that learner-centredness to teacher development was the "best method" to use in teaching children. However, they only talked about it but they actually did not use that approach when tutoring.

From the interviews with UTs, it was also evident that there was not sufficient space and attention given to the practical knowledge base of UTs. The programme appeared to assume that all the UTs were novices in terms of their knowledge and understanding of teaching. In other words the UTDBE programme structure and content focused on providing UTs with knowledge and did not apply a model that sufficiently engaged critically with what UTs brought in terms of their practical knowledge and experience. This finding lends support to Shulman (2004) and Lewin's (2003) views that the practical skills and experiences that trainees have are often not valued in DTE programmes.

Comments from UTs and ST suggested that during residential face-to-face sessions, tutors adopted a teacher-centred approach and rushed to complete the content, partly because the programme is overloaded with too much content to cover. This finding reflects the opinion of Kunje et al. (2003) and Lewin (2003) that the curricula of many DTE programmes are overloaded.

The views from UTs' interviews highlights a particular problem with the programme's lack of sensitivity to the entry level characteristics of trainees and also the missed opportunity to make professional learning more reflective and practice-based, linking

theory to practice. The attempt to cover as much content material as possible disregards and invalidates the professional capital that these trainees come with.

8.4.4. Self-learning materials: A tool for enquiry and independent learning?

As indicated in section 6.5.3.1, self-learning materials were the predominant instructional tools for the UTDBE programme and were meant to compliment residential face-to-face meetings and assignments. Self-learning materials were intended to be attractive and user friendly. Although some UTs indicated that they accumulated some information from the self-learning materials, the potential for generating in-depth understanding on especially the technical ideas and scientific concepts were largely limited by technical errors, misleading visual information and images, especially in the science and mathematics self learning materials. Some UTs indicated that they found the materials too difficult to understand and some aspects did not provide enough opportunities for classroom application. Evidence gathered from the analysis of document suggests that the self-learning materials were too bulky and overloaded with too much content for UTs to learn, reflect and practice; illustrations and pictures were found only in the science, mathematics, ICT and environmental and social studies modules, and even that these pictures were in black and white.

8.4.5. Classroom teaching experience: A missing link between preach and practice?

Perhaps the important thing that the UTDBE programme hopes to achieve is to support UTs in developing quality classroom teaching and learning. It appears from UTs' comments that positive effects on classroom characteristics were found with respect to

class management, small group activity, interactive teaching and support skills which could be viewed largely as important elements in the practice of learner-centred methods.

However, despite the fact that UTs believed that learner-centred approaches were effective, they did not use these as much as teacher-centred approaches in the classroom teaching situation. The extent to which UTs could apply the learner-centred approach seemed limited by certain factors. Firstly, CoE training orientated UTs more towards the use of teacher-centered approach (see section 8.4.3). Also UTs did not have enough opportunity to practice learner-centred teaching style in CoEs environment to gain enough experience. As indicated in section 7.2.2.2.2, there was not enough time and space for UTs to use CoE facilities like ICT laboratory and resource centres for practical activities. This suggests that UTs do not have enough experience to adopt the learner-centred teaching style in their schools. This finding lends support to earlier work (Akyeampong et al. 2010; Mascolo, 2009; Kulinna & Cothran, 2003) that lack of experience with the learner-centered style can be a factor why teachers do not use this style.

Secondly, the school culture, wider pressures from national policy and headteachers' expectations impacted negatively upon the ways and the extent to which they had wanted to use the learner-centred approach to teaching. Wider policy and curriculum demands seemed important in shaping local instructional practices, so that UTs valued teaching strategies that ensured that formal curriculum and the expected number of class exercises was covered within the stipulated period. These findings are consistent with Eraut's

(2007) observation that the pressure and demands from school authorities and the complex and busy nature of classrooms provides little time for reflection on the part of teachers. Perhaps it is not surprising that UTs reported that they slipped back to "safer" and more traditional teacher-centred approaches.

8.4.6. Induction: mismatch between expectations and the content

As indicated in section 6.5.3.3, UTs underwent an induction programme which was intended to make UTs familiar with the objectives of the programme, the support services available and how to access them for professional growth. Analysis of UTs' interview data suggested that some UTs viewed the activity as having the potential to facilitate on-going professional development with prominence on assistance, exposure and collaboration within a community of professionals.

However, it appears noticeable from some UTs' comments that there are some weaknesses in preparing the UTs for enhanced professional and educational understanding. There was a clear mismatch between UTs' expectation and the content of the induction progamme. With the content of the induction programme focusing mainly on activities at the CoEs with less emphasis on professional and classroom related matters, it raises questions about the effectiveness of the whole programme in promoting all the main objectives indicated in section 6.2. This suggests some deficiencies in the implementation strategy which is likely to lessen the potential positive effect of induction activity on the professional practice for at least some of the UTs.

8.4.7. District, school and college partnership: intentions and reality clash

As indicated in section 6.3.2, a strong partnership was envisaged among the district, college and school for the purpose of supporting UTs during residential face-to-face sessions and interval periods between residential face-to-face sessions. Overall, the UT interview data suggested a very weak collaboration between schools, colleges and districts. Consequently, the essential contribution expected from for instance tutors, headteachers and district office staff across the entire UTDBE programme was not realised. UTs were therefore not supported enough in classroom teaching and learning during the interval periods between residential face-to-face sessions, learning of their modules especially in between the periods of residential face-to-face and professional practice.

A number of challenges were mentioned by UTs and ST as contributing to this weak partnership. These include logistical, funding and uncooperative attitudes of some headteachers, lack of adequate training or capacity building for headteachers, mentors and CoE tutors. This finding reflects the view of Glennie & Mays (2009) and Mattson (2006) that decentralized systems of trainee support is the weakest aspect of the DTE model.

UTs were critical of this weak partnership and associated implications it had on their professional learning and practice. This raises questions about the effectiveness of the partnership model and suggests that the operation of the whole structure should be

reviewed. It seems that the partnership largely failed to establish a learning community characterised by problem solving and professional support from experts.

8.5. Conclusion

Findings from the study provide rich understanding of professional learning experiences that generate insights on teacher education practices which ultimately have important lessons for further development of this (and possibly other) distance teacher education programmes. From a professional standpoint, UTs continue to teach as classroom teachers while pursuing their professional programmes concurrently. This offered them the opportunity to at least attempt to integrate and relate theoretical knowledge and experiences from CoEs to the practical realities of classrooms and schools. What this displays is that it is possible to (i) train and update the skills and knowledge of teachers, especially teachers in traditionally underserved locations, while they carry on with their teaching job and (ii) provide teachers with a structure and a system for continuous professional development and school improvement activities throughout their teaching career.

The voices of UTs in the study point to self-learning materials as important tool to support them largely in their personal and professional learning during residential face-to-face meetings and interval periods between residential face-to-face meetings, but it appears that they found the study materials difficult to understand and in some cases questioned the relevance of the content, especially of mathematics and science. UTs felt that the materials did not provide sufficient opportunities for classroom application.

From the point of view of UTs and ST, the UTDBE curriculum also seemed over-ambitious in what it sought to achieve with the kind of UTs it targets. The modules and tutoring during residential face-to-face meetings came under more criticism than other components of the UTDBE programme. If an important objective of the UTDBE programme was for the modules to provide material for independent, self-learning and reflective practice, it becomes visible from the evidence gathered through UTs' interview and analysis of documents that this has not worked well. A more differentiated curriculum that takes into account UTs' background experiences seems to be required.

The study also witnessed that the residential face-to-face sessions were an important stage for UTs to build more confidence in their learning and to seek further assistance in their learning, but it appears that it had not provided the needed opportunity for critical investigation of ideas and thought about teaching generated through activities in the course modules. However, with UTs spending a lot of time in lecture sessions and being treated as novices who have come to receive information from their course tutors, they are not given opportunity for critical reflection, rehearsal and investigation of ideas about teaching which are ingredients for continuous professional practice and development. Hence the conclusion drawn is that the training philosophy of the UTDBE programme still focuses on teacher-centred approaches instead of learner-centred approaches to teacher professional development. Part of the reason for this seems to be the loaded curriculum and structure of the residential face-to-face meeting.

The district, school and college collaborative model which was expected to organise professional development programmes for the purpose of encouraging UTs to be more critical about their practice, shape their understanding of teaching in facilitating their professional learning and development and identities, experienced both logistical and operational challenges. These served as stumbling blocks for the full realisation of the expected outcomes. The findings which suggest a weak school, college and district partnership has led to a situation where other mechanisms for professional learning and development like cluster meetings, classroom lesson observation and mentoring were not being used to their full potential.

UTs classroom instructional strategy and classroom climate appears to be more aligned to teacher-centredness than learner-centredness, despite the fact that their thinking process suggests that learner-centred approaches are more effective. UTs in the study are not able to adopt the learner-centred approach either because they did not gain enough experience from the initial training at CoE or the school policy or culture promotes teacher-centred approach or there are contexts when teacher-centred practices are helpful and learner-centered practices problematic. Collectively, the above views suggest that the context in which UTs learn, and the nature of knowledge and thinking process of UTs, the training institution's ideology and practices, school culture or policy (where practices are defined by external sources) are the influential actors that shape their thinking process.

An important issue that comes out of the study is the use of video in the classroom teaching as a tool for promoting reflection, dialogue and receiving feedback among UTs.

UTs demonstrated that it gave them the opportunity to experience the unexpected, to do independent assessment of their lessons and to consider aspects that need further improvement. The above views suggest that digital video could be used to encourage teacher reflection and in a more interactive way in UTs' contexts of teaching and professional practice.

Within the study, UTs' accounts provide evidence that the induction programme can be both productive and valuable particularly when the objective of the activity is to support UTs to learn and properly integrate into the CoE environment, to have in-depth knowledge about the UTDBE course structure and content, to become professional inquirers. However, the content of the training did not promote a good balance between CoEs content and structure activities and professional learning practices.

8.6. Implications for policy and practice

The following implications emanate from the findings of the study, and suggest possible guidelines and possibilities to teacher educators keen on accepting the challenge of reconstructing and rebuilding teacher education with the ultimate goal of seeking to support UTs to improve their approaches to classroom teaching and professional practice.

The evidence from UTs and ST interview data and analysis of documents suggest that the learner-centred practices proposed by the UTDBE are unrealistic, given the pressure of UTs' school context. Consequently, the UTDBE programmme should prepare and professionalise UTs in such a way that they may need to move between positions which

are authoritative and more facilitative. Perhaps the adoption of learner–centered approaches has been taken up too uncritically by policy makers.

UTs and tutors need to need to have a deeper understanding of (i) UTs' context. In other words, what enables and constrains teachers in developing appropriate classroom teaching practices and the complexities of classroom teaching. Consequently, the UTDBE programme should provide space to assist tutors and UTs to understand the extent to which interaction and connection among factors like their personal, religious and culture beliefs, prior school experiences, the programme ideology and tutors practices and school culture could direct their classroom practices and (ii) UTs' wisdom of practice. UTs have come unto the UTDBE programme with some background experiences that should be taken into account in what they are required to learn, especially during residential face-to-face sessions. This will require a change in tutors' approach to tutoring UTs, especially during residential face-to-face sessions. This session should focus more on the use of workshops and seminars to explore what UTs are learning and practising from the study materials, and provide space for reflective dialogue with tutors and fellow UTs.

As UTs need opportunity to do self reflection on their classroom lessons, the video based reflective activity in the study could be adapted to become a teacher professional development activity. The use of digital video could be developed within the UDTBE programme itself – i.e. videos of classroom teaching (from different UT contexts) could be discussed during the residential face-to-face sessions. This may have the advantage of

bridging the different communities of practice of the tutors and the UTs - which clearly is problematic at the moment. Perhaps this is also a call on the GES to review approaches to monitoring teachers' classroom teaching and learning in which the monitor sits at the back of the class and takes notes.

CoE facilities like resource centres and libraries should be improved for UTs to have enough opportunity to put into practice whatever skills they have acquired to gain enough experience, receive feedback, see multiple perspective of classroom teaching and learning and perhaps see positive results before leaving for the field work. This may also ensure that the programme produces teachers who are professionally competent. Of course, this is needed to remove the fears expressed by some educationists and other professionals about the onset of the UTDBE programme, that it may produce ill-equipped teachers (see section 6.3.2).

All modules should be reviewed to ensure that they are pitched at levels which take into account trainees' practical knowledge of teaching and link them to theories of teaching and learning; and emphasise the practical knowledge base of teaching for each subject area. Also, to avoid any disparity in knowledge acquisition and presentation which could be a recipe for disaster so far as UTs' classroom presentations, professional growth and development are concerned, the self-learning materials (especially mathematics and science) should be reviewed to ensure that the technical ideas and scientific concepts match theories of teaching and learning. The programme should apply a curriculum framework which links professional standards to the modules.

If the UTDBE programme, and for that matter teacher education, is about supporting UTs in becoming a certain kind of teacher capable of transferring and applying knowledge to classroom situation, developing a holistic view about classroom teaching and learning, and acquiring a great deal of knowledge in order to reach a better understanding of the teaching and learning context, then the relatively weak school, college and district partnership should be strengthened. This should be done with a stronger focus on well structured and institutionalized professional development and training activities for mentors and all stakeholders involved in supporting UTs. Additionally, induction activities should create a good balance between professional and educational understanding.

8.7. Limitations

Most studies about teacher professional development have explored their development over an extended period of one year or more (Piland & Anglin, 1993). This was not the case of the study which to a large extent was time bound both due to my academic schedule and the programme in which the students are involved. Consequently, tracing UTs' professional development and growth over an extended period was not possible.

The data reported in this study embraces not more than one time interview on a relatively small number of UTs' views on classroom teaching practices and experiences on a videoed lesson taught. In order to address this issue, data on UTs' views on the videoed lesson should be constructed through a series of interviews taken over a period of time.

This approach possibly will highlight the differences and similarities in respect of each participant's view and observations made and could further enrich the data collected.

The responses analysed in this current study largely reflect UTs' expectations, directions, and experiences of the UTDBE programme. Thus other equally important stakeholders' views, like headteachers, mentors and qualified teachers were not captured. To provide more insight into the UTDBE programme and the extent to which it has impacted on the professional practice of UTs, further research should consider (i) widening the perspective by counting on the stance of headteachers, mentors and coordinators, along with UTs, (ii) exploring different contexts that UTs' work in and differences associated with different contexts.

8.8. Contribution to knowledge

8.8.1. Contribution to knowledge on distance teacher education from the perspective of UTs

My study expands the current concerns and limited literature on distance teacher education in Ghana. Apart from the fact that the existing literature on distance teacher education reveals acute scarcity of information on the experiences of untrained teachers, the few that are found on shelves have only discussed issues related mostly to cost and academic performance of teachers. Giving the remarkable growth, development and transformation in distance teacher education in Ghana, it is important that the experiences of this work are made known to both local and international audience involved in

distance teacher education to feed into the formulation of effective policies that seek to develop quality teaching and learning and professional practices of teachers.

8.8.2. Significance of methodological choices

The significance of the interpretive stance of the study cannot be over emphasised considering the teacher education context in Ghana, and the continued association of its research with a more positivist stance. By adopting a qualitative approach which privileged observations, document analysis and interviews, the thesis was able to give voice to UTs' views. This is of great importance considering the Ghanaian situation where voices of teachers at the basic level are largely absent in the discussion of teacher preparation matters. In addition, the use of digital video to support UTs' reflections on their own practice and recalling of past memorable events also provided a new form of remarkable experience and feelings about the use of visual data to support development of insights into UTs' perspectives. By adopting a methodology that attends to the lived realities of UTs' teaching contexts, and creates opportunities for critical reflections on their teaching practices, my thesis provides evidence for researchers to understand the potential of this methodological stance and the research methods which were selected. While digital video was used as a research method in this study, the findings also suggest the potential of the use of digital video for teachers' professional development, and for bridging the different communities of the UTs' professional and college environment.

8.8.3. Contribution to policy

The significance of the study lies in the manner it has brought out the experiences, views, difficulties, challenges and practices of UTs on distance teacher education programme, and the extent to which the programme influenced their professional practice. From an insider researcher perspective, UTs' critical reflection and views shared on this study has the potential of influencing policy change in the development, implementation and improvement of further UTDBE programmes. The research could be used as confirmation and justification for policy implementation and improvement on on-going DTE initiatives in Ghana. Additionally, it could be used to change the perception of some educationalists or academics who are skeptical about using DE as an alternative means of initial teacher preparation in Ghana. To such people, this research has unfolded the potential of using the UTDBE programme positively to influence the professional development and practice of teachers.

8.9   Final reflection/thought

Perhaps the main question is, "Am I a better teacher educator because of this study and what lessons have I learned?" The exceptional opportunity of getting "into the heads of UTs" helped me gain an in-depth understanding, approval and appreciation of UTs' tricky journey along their professional development. Also, UTs' reflections and systematic analyses of their experiences and perceptions of the UTDBE programme helped me to see and realise the challenges, fears and struggles UTs may encounter. As I reflect on the personal journey in the study, I have realised that finding appropriate ways

of helping UTs to continue to explore their teaching after participation in the UTDBE is the surest way of unearthing their potential in the teaching profession.

In conclusion, I have realised the essence of what it means to reflect and inquire into one's own professional challenges. I would not have appreciated the extent of the challenges that UTs encountered in the journey along their professional development if I had not pursued my Ed. D journey at the University of Sussex.

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Trained and Untrained Teacher Supply Situation at the Basic Education Level in Ghana – 2012

Region	No of Teachers	Trained Teachers	Untrained Teachers	%Trained	%Untrained
Eastern Region	11257	8379	3004	74.43	26.69
Greater Accra Region	9947	8991	956	90.39	9.61
Northern Region	21768	10520	11348	48.33	52.13
Upper East Region	9318	4483.6	4934.4	48.12	52.96
Upper West Region	9318	4483.6	4934.4	48.12	52.96
Volta Region	8724	6022	2702	69.03	30.97
Ashanti Region	19373	12968	6405	66.94	33.06
Brong Ahafo Region	9785	5180	4605	52.94	47.06
Western Region	9673	4242	5431	43.85	56.15
Central Region	8753	5171	3582	59.08	40.92
Total Number of Teachers	**117916**	**70440**	**47902**	**59.74**	**40.62**

Source: Ghana Ministry of Education, EMIS Data 2012

Qualification levels of Untrained Teachers at the Basic Education level in Ghana

S/N	Qualification	Highest Educational level / School Attended
1	Middle School Leaving Certificate (MSLC)	Completed Grade 10 or 4 years of Post Primary Education
2	Senior High School (SHS)	Completed Senior High School/Education
3	General Certificate of Education - Ordinary Level (O level)	Completed Secondary School/Education (5th Form)
4	General Certificate of Education - Advanced Level (A level)	Completed Secondary Sixth Form School/Education (6th Form)
5	Post Secondary Education/Senior High Education (PSH)	Done any certificate course/programme after Secondary Education

Source: the author.

Coverage and enrolment figures on UTDBE Students according to phases

Phase	Regions in Ghana	Number of Students enrolled	Period for roll out
One	Upper East, Upper West, Northern, One District-Afram plain- in Eastern region	5,201	2005-2009
Two	Ashanti and Brong Ahafo	7,686	2006-2010
Three	Central and Western	7,533	2007-2011
Four	Rest of Eastern Region, Greater Accra and Volta	5,439	2008-2012
	Total number of Students enrolled	**25,859**	

Source: Teacher Education Division, 2011

History of Teacher Education in Ghana
As already discussed in the body of the thesis (see section 2.3) formal education in Ghana was started by the missionaries who needed literate and well-educated Ghanaians as local assistants to help in the spread of the gospel. With this development, the missionaries established three teacher training institutions to train teachers who could function as both professionally trained teachers and catechists and these three institutions trained teachers in Ghana up till 1909, when the government opened Accra training college to compliment the efforts of the missionaries.

The coming together of the government and the missionaries in the training of teachers led to the streamlining of activities in all teacher training institutions. For example the duration of the training programme was reduced from 3 years to 2 years.

Though the expansion of teacher training facilities offered opportunity to a large number of teachers to receive professional training, thus increasing the supply of trained teachers it did not solve the problem associated with teacher supply. Untrained (uncertified) teachers remained the majority in schools as shown in the table below.

The strength of the Ghanaian Teaching Force in 1927

Teacher	Men	Women	Total
Certificated	927	37	1009 (46%)
Uncertificated	1,084	104	1188 (54%)

(Source Hullard, 1957, in Amissah, 2007)

To reverse this trend the government in 1928 began to assist missions to establish more training colleges. This effort led to an increase in facilities in teacher training and by 1930, out of 3000 teachers 2012 were trained and 988 were untrained, a proportion of two to one (TED, 2005). Having achieved appreciable level in teacher training in terms of certificated teachers outnumbering uncertificated teachers, the government felt it expedient to focus its attention on quality of teacher education. Consequently, an education review committee was set up in 1937 to review the structure and content of teacher education with the view to producing more certificated teachers with good content and pedagogical knowledge. The recommendations of the 1937 Education Committee's Report led to the establishment of two-year as well as four-year teacher training colleges in Ghana (Amissah, 2007; TED, 2005).

The establishment of the two-year post middle programme was to reduce the number of years spent in the training of teachers, which will lead to getting more trained teachers in the classroom within the shortest possible time. Middle school candidates, who opted to take the two-year post middle training, leading to teachers certificate 'B', did the initial teacher training course for two years. Upon successful completion, they were posted to teach in the primary schools for a minimum of two years before given further two years of training to qualify for certificate 'A'. On the other hand, Middle school candidates who opted for the four year certificate course spent four years doing the initial teacher training course leading certificate 'A', and upon successful completion were posted to teach in the middle schools. This era also saw the introduction of a 2-year post secondary teacher training course to train teachers for the Middle and Junior Secondary Schools (Ammisah, 2007; TED, 2005).

Although the implementations of the reforms led to an increase in the number of teachers, it did not fully address the imbalance between trained teachers and UTs, which by 1950 stood at 12,000 trained teachers and 10,000 UTs. As a consequence, and in a bid to reduce the number of UTs, the government suspended the four year certificate 'A' training programme for teachers in 1952 and in its place a crash Emergency Teacher Training programme which lasted 6 weeks was introduced to give some orientation to UTs. On completion these teachers were posted to teach in primary schools.

Some of the achievements of the two year post middle programme and the emergency crash programmes included a large number of trained teachers prepared to teach in the remotest part of the country (MOE, 2009; TED, 2009). These achievements led the government to shift its focus from just producing large number of trained teachers to quality of teacher education. Consequently, the government abolished the two-year certificate 'B' programme and the Emergency teacher training programme in 1961 and re-introduced the four year certificate 'A' programme. By 1975, teacher education seemed to have trained a large number of teachers and was on the edge of eliminating UTs in the educational system. Accordingly, the government came out with a policy to close down a number of four year teacher training colleges leaving only 38 colleges to run both certificate 'A' four year and two year post secondary programmes. Certificate 'A' four year programme was finally abolished in 1988 (Ammisah, 2007).

At the time that teacher education thought it was on the edge of eliminating UTs from the system, Ghana experienced a mass exodus of trained teachers in the early 1980s to Nigeria for financial reasons. The situation was so serious that by the end of 1981 nearly 50% of teachers teaching in primary, middle and Junior high schools were untrained (Akyeampong et al., 2007).

As a long term plan for improvement in the quality of teachers and in line with the dictates of the current educational reform which indicates that by 2015, the minimum qualification needed to stay in the teaching profession was a diploma, all the 38 three-

year post secondary teacher training colleges were upgraded to CoEs to award teachers diplomas.

These CoEs now train diploma teachers to teach subjects outlined in the basic school curriculum. However these colleges have not been able to expand their facilities to train more diploma teachers to meet the required number of trained teachers needed in the profession.

Summary of Critical Analytical Study.
Distance Education for Teacher Education:
A critical review of international trends, practices and outcomes with special focus on
Ghana.

Ghana like many developing countries, many of the current teachers are either professionally untrained or academically unqualified. Untrained teachers constituted about 40% of the teacher population in Ghana (TED, 2005) a situation that depicts a gloomy picture. In deed a number of reviewed literatures of Distance Education have indicated that the realisation of quality teacher and learning and for that quality education depended on more and better teachers (UNESCO, 2002 p7; Darling-Hammond, 2000; UNICEF, 1998).

Increasing the number and quality of teachers is an essential element in the quest to achieve Millennium Development Goals - Universal Primary Education by 2015 (UNESCO, 2006) and Education For All goals adopted at the world education forum (Dakar, 2000) (ADEA, 2002 p35). Thus, Ghana, being part of this accord, has to achieve it by way of producing enough quality teachers.

In Ghana some of the rationale for the introduction on DE were (i) to assist all serving UTs (which stood at over 24,000) to have access to professional teacher training (ii) close the gender disparity in enrolment of teachers in the traditional colleges of education, which currently stands at 40% for women and 60% for men (iii) update the skills and knowledge of UTs without necessarily removing them from the classroom for a longer period of time (iv) to improve the quality of teaching and learning especially in the disadvantage communities, where UTs were most UTs were serving (TED, 2009). From the discussions made so far, it could be said that to achieve a more holistic picture about DE within teacher education context, it is important to review it to discover evidence about how it has influenced teacher education especially in Ghana.

The choice of this topic is also an opportunity to learn from developing countries the role of ICT in EFA process. I also aim to inform the programme organizers of distance education for teachers in Ghana about the findings of the review which could be taken into consideration as they attempt to look at the extension of a similar programme taking place in the country.

The review is guided by the following questions:
(i) Why has distance education been used in teacher education in developing countries?
(ii) To what extent can technology be used in teacher education by distance in developing countries?
(iii) How good is distance education for upgrading teachers in developing countries?
(iv) What are the substantive, methodological and theoretical gaps in the literature and what are their implications for further research?

Using DE methods to educate teachers in developing countries

Problems of teacher supply in developing countries

The problem of providing enough trained teachers in developing countries to meet demand has long been recognised in several publications on teacher education, notably by the international Multisite Teacher Education Research (MUSTER) project (1997-2002). In much of the south Asia and sub-Saharan Africa, problems of teacher supply are of three kinds, which threaten the attainment of the (international development) education targets. First, there are shortages of teachers, second, in many but not all countries, female teachers are in a minority in primary schools and third, even where there are enough teachers, too many of them are untrained or undertrained, and the quality of training is often itself inadequate.

Key arguments for using teacher education by distance (discussed along Access and Process, Stuart et al., 2009).
(i) Access to relevant teacher education
(a) Reaching more teachers: Countries have chosen to use DE for teacher education as means of reaching more teachers more quickly in geographically difficult areas (Stuart et al., 2009; Godwin et al., 2005). Countries like South Africa, Brazil, Ghana, Nigeria, and Mongolia are examples of using DE to create access to Teacher Education.
(b) Overcome regional imbalances in access to teacher education programme (for government)
Countries are using DE to overcome regional imbalances in access to teacher education programme (UNESCO, 2002). For example in Ghana, most of the UTs enrolled on the DTE programme are teaching in underserved districts and regions and also marginalised communities.

(c) Keeping serving teachers in the classroom (for employers)
Countries are using DE for Teachers as a means of keeping serving teachers in the classroom teaching at least for the period (years) under training (TED, 2009) and also reducing the number of times in terms of days or weeks in which serving teachers will have to be absent from school (Stuart et al., 2009). Eritrea, Mongolia, Egypt have continually trained teachers through a DE model without separating them from their work (Godwin et al., 2005).

(d) Reduction in attrition rate
Document analysis by Sikwibele (2009) revealed that 278 teachers enrolled in 2002, and out of these 245 managed to proceed to level 4 (final year). This shows an attrition rate of 12% for the 2002 which is far less than the national attrition rate among trained primary school teachers in Bostwana. Similarly in Ghana attrition rate among untrained teachers on Distance Teacher Education programme is about 2%, (TED, 2009) which is also less than the national of 6% (Lewin, 2002).

(e) Supporting teachers to upgrade themselves and or earning promotion

Another element for which DE has been used for teacher education is to support teachers to upgrade themselves, their knowledge and skills (UNESCO, 2002). For countries like Nigeria and Ghana, it is used to train unqualified in-service teachers to qualified teachers status

(f) Opportunities to people who could not gain admission to the regular teacher training programmes

DE for Teachers has been used to give educational opportunities to people who could not gain admission to the regular teacher training programmes due to the poor grades but are still interested in teaching.

(g) Gender disparity

Distance Teacher Education has been used by countries like Ghana and Malawi to reduce the gender gap among teacher trainees. For instance Ghana has used distance education programme to increase women teacher trainees from 38% (which is the case in regular teacher training colleges) to 44.2%. (TED, 2009; Lewin, 2002).

(ii) The process of teaching and learning

Introducing DE gives teachers an opportunity to develop new ways of teaching and learning (Stuart et al., 2009 p142), and is therefore a crucial strategy in view of expansion and quality improvement needed in public schools (Hannay & Newvine, 2006; UNSECO, 2002). For countries like Mongolia, South Africa, Eritrea, Ghana, and Brazil, it is being used to stimulate interest in education, teaching and learning among teachers.

Key arguments against using teacher education by distance (discussed along Access and Process, Stuart et al., 2009)

(i) Access to relevant teacher education

(a) Use of facilities at institutions organising DE

The tremendous growth of DTE has raised questions about how changes in the methods of delivery may be affecting access, particular teachers studying and or working in schools that are found in the remote areas especially in developing countries (Gabriel, 2002). Teachers in such places may not have easy access to libraries, group tutorials, telephones, the internet and other support for their learning (Stuart et al., 2009 p142),

Cost of training of teachers on DE programme

Thus untrained teachers enrolled on DE programme appear to pay more for the same education than students on the regular programmme. In this context the view held by Stuart et al. (2009) that students find themselves paying more for their education if they study by distance (p142) is true in the Ghanaian context.

Using information and communication technologies in DTE in developing countries

Print technology which appears to be the staple of much of DE learning in a number of developing countries (for example Malawi, Nigeria, Sudan, Pakistan). The use of emerging technologies like the computer and the internet which provides two-way communication between tutors and learners are limited to a few developing countries. In the majority of African countries, the concept of DTE and educational technology is still emerging. The use of Technology in DTE in Sub Saharan Africa is hampered mainly by

poverty, a lack of expertise, unstable economic environment, lack of infrastructure, and a largely technologically illiterate user group (ADEA, 2002, 2006).

Case study
The case studies (desk-based research) of 3 countries namely Hong Kong, Malawi and Ghana were conducted in order to get an in-depth knowledge and better understanding of the practices and research regarding distance education for teachers, specifically the primary school teacher

Lessons learnt from the three-country case studies
DE has been defined within the context of national and institutional policies, which have been directed towards particular purposes, target groups, levels of education and training. Again analysis from the three countries context and programme indicate elements of face-to-face contact (for two-way communication), use of technology (print) for one-way communication, a form of separation between learner and tutor, certification, pedagogy which is learner-centered, and giving educational opportunities to all irrespective of gender or location.

All the three countries have programmes that combine conventional and distance methods

There is evidence that learner support (particularly Ghana and Malawi) and teaching practice are the weakest points in DE for teachers, and these problems might be due in part to the scartered nature of school locations, and the heavy teaching load of tutors/headtechers etc, making it difficult for them to invest substantial time in this activity.

RQ1: *Why has distance education been used in teacher education in developing countries?*

The CAS findings seems to suggest that DE has been used in teacher education in developing countries for a number of reasons, which could be looked at from the angle of the learner and the angle of the employer. However both cases/angles are important features from the perspective of the government. Governments in developing countries particularly Ghana have introduced DTE provision in order to: increase access to professional teacher training; reach more teachers in geographically difficult areas/disadvantaged communities; upgrade the qualification of untrained teachers; promote teachers to higher grade; reduce gender gap that exists between male and female teacher trainees; overcome regional balance in access to teacher education; keep serving teachers in the classroom, while they upgrade themselves; reduce the attritiion rate; reach teachers especially those who could not meet the minimum entry qualification of traditional teacher training colleges and improve cost-effectiveness of educational resource.

However there remain a lot of challenges like access when it comes to indivuduals with disabilities like visual and hearing impairment, access to educational facilites like libraries and computers, and the high cost of enrolling on DTE programme (for the learner).

RQ2: *To what extent can technology be used in teacher education by distance in developing countries*?

Technologies are used in developing countries to produce teaching and learning materials (for example books, modules, and handouts) and also to increase access to teacher education. Varieties of technologies are being used for DTE programmes in developing countries; however the main technology used is the print media with face-to-face meetings. Print media provides a permanent document for teaching and learning process and has been used to stimulate learning by means of one-way communnication. Print media is usually used in combination of face-to-face meeting for the purpose of promoting dialogue and feedback between learners and tutors and learners and learners. Some developing countries are using radio, audio and video equipment as a supplement to print medium to train massive number of teachers. The new technologies (computers and internet) are being used to train teachers on how to use the computer and internet and their application in the classroom, and this is done usually during face-to-face sessions.

A number of developing countries particularly Ghana have only limited access to computers and digital technologies, and therefore making it difficult for trainee teachers to have enough exposure, to acquire the needed skills to be able to integrate it in their teaching. It should be emphasized that for a developing country like Ghana to enjoy the full benefits of current technology, the following should be addressed: tutor/teachers capacity in the use of ICT should be built since many of them lack the skill and training in the use of technologies; the necessary supportive environemnt is needed (appropraite technical infrustracture with enough computers and internet facilities). .

RQ3: *how good is distance education for upgrading teachers in developing countries*?
There is evidence from the CAS that the benefits of using DE to upgrade the qualification of primary school teachers in developing countries particulrly Ghana include the following: acquistion of more knowledge and skills needed to improve classroom teaching and learning, skills in classroom management; gaining more confidence in teaching; gaining professional and social recognition; addressing inequalitites in teacher qualification; strenthening the link between theory and pracitce and widenning access to teacher qualification

For DE to be seen as a viable option to be used in upgrading primary teachers a number of challenges should be addressed and these include the following: setting in place an effective arrangement to support trainee students and in particular to supervise their classroom practice, and continuous support in the learning of their modules when face-to-face sessions are over. By this, human resource in schools (head teachers and qualified teachers), colleges (tutors) and district offices (tutors/administrators) and other

educational authorities should be well trained and properly involved to provide excellent support mechanisms.

Gaps and the need for further research

As can be seen in the abundant literature on the effect of distance teacher education, the majority of data were drawn from the learners' perspective instead of the teachers' (Carr et al., 2001; Gibson et al., 2001). Although some teachers' viewpoints could be found in these literatures, very little full-scale research has been done to collect the teacher's (tutors) side of the story.

Most of literature on using DE to upgrade the qualification of teachers seems to provide little documented experiences on whether the actual changes taking place in the classroom is as a result of upgrading of teacher qualification and the new skills acquired. Fullan (1991) makes the point that there is little evidence about the impact of such components (p295). Though not suggesting that initial teacher education is ineffective Fullan (1991) does makes the point that the quality of programme experiences vary greatly and that further investigations need to be undertaken to identify the particular characteristics that might make a difference.

Again most of the literature reviewed; on DE and quality teaching appear to have drawn conclusions based on teachers' statements, opinions, experiences and beliefs. In the view of Meyer (2002), "majority of the articles published on distance education and quality continue to be position papers, beliefs and personal experience. These articles may provide excellent advice, but rarely present the results of well-designed research" (p17).

Majority of the studies appear to rely on a selected range of teacher characteristics in making judgements. This approach according to Harmon and Lambrinos (2007) is subject to problems of bias from omitting unobserved characteristics such as motivation, maturity and independent learning skills, which have impoartant effects on learning outcomes.

Timeline for data collection

Phase	Task	Period/Date	Place
Phase One (Piloting of Instrument)	Finalise approvals from Schools/CoEs for Piloting of Instrument	3/12/2010 – 11/12/2010	CoE, District/ UTs school of professional practice
	Piloting of Instrument (focus group interview at a CoE)	3/1/2011	CoE
	Interview with Senior Management figure at CoE	4/01/2011	CoE
	One classroom observation tutorial during residential face-to-face session	4/01/2011	CoE
	One-on-one interview with UTs / Classroom practice teaching/lesson observation	17/01/2011-18/01/2011 19/01/2011-20/01/2011	UTs school of professional practice
	Review of piloted Instrument	21/01/2011 – 26/01/2011	
Phase Two – Full scale research (Initial preparation)	Finalise approvals from Schools/Districts/CoEs	01/02/2011-23/02/2011	CoE, District/ UTs school of professional practice
Phase Two Full scale research (documentary analysis)	Collection of more documents on UTDBE programme and start of documentary analysis	01/05/2011 -	
Phase Two Full scale research (CoE)	Focus group interview with 6 UTs	25/07/2011	CoE
	Classroom observation tutorial during residential face-to-face session	26/07/2011 – 27/07/2011	CoE
	Final review of interview Instrument for Senior Management figure	28/07/2011	CoE
	Interview with Senior	29/07/2011	CoE

	Management figure (STm)		
Phase Three Full scale research (Field – UT1s) school of professional practice	Interacting with UT1s, school authorities, handling and using video equipment and explaining other details as indicated in the permission letter/letter of consent	1/08/2011	UT1s school of professional practice
	Interview with UT1s on her perception about the UTDBE programme	2/08/2011	UT1s school of professional practice
	Interview on a videoed lesson from UT1s classroom teaching	3/08/2011	UT1s school of professional practice
Phase Three Full scale research (Field – UT2m) school of professional practice	Interacting with UT2m, school authorities, handling and using video equipment and explaining other details as indicated in the permission letter/letter of consent	5/08/2011	UT2m school of professional practice
	Interview with UT2m on his perception about the UTDBE programme	8/08/2011	UT2m school of professional practice
	Interview on a videoed lesson from UT2m classroom teaching	9/08/2011	UT2m school of professional practice
Phase Three Full scale research (Field – UT3s) school of professional practice	Interacting with UT3s, school authorities, handling and using video equipment and explaining other details as indicated in the permission letter/letter of consent	11/08/2011	UT3s school of professional practice
	Interview with UT3s on her perception about the UTDBE programme	12/08/2011	UT3s school of professional practice
	Interview on a videoed lesson from UT3s classroom teaching	15/08/2011	UT3s school of professional practice

Phase Three Full scale research (Field – UT4s) school of professional practice	Interacting with UT4s, school authorities, handling and using video equipment and explaining other details as indicated in the permission letter/letter of consent	17/08/2011	UT4s school of professional practice
	Interview with UT4s on her perception about the UTDBE programme	18/08/2011	UT4s school of professional practice
	Interview on a videoed lesson from UT4s classroom teaching	19/08/2011	UT4s school of professional practice
Phase Three Full scale research (Field – UT5m) school of professional practice	Interacting with UT5m, school authorities, handling and using video equipment and explaining other details as indicated in the permission letter/letter of consent	22/08/2011	UT5m school of professional practice
	Interview with UT5m on his perception about the UTDBE programme	23/08/2011	UT5m school of professional practice
	Interview on a videoed lesson from UT5m classroom teaching	24/08/2011	UT5m school of professional practice
Phase Three Full scale research (Field – UT6m) school of professional practice	Interacting with UT6m, school authorities, handling and using video equipment and explaining other details as indicated in the permission letter/letter of consent	26/08/2011	UT6m school of professional practice
	Interview with UT6m on his perception about the UTDBE programme	29/08/2011	UT6m school of professional practice
	Interview on a videoed lesson from UT6m classroom teaching	30/08/2011	UT6m school of professional practice
Phase Four	Data Analysis (Start)	01/05/2011	

(Data Analysis)			
Phase Four Write up results	Write up (Begin) results Proof reading Sharing of reports with local actors/respondents/supervisors	3/09/2011	

PARTICIPANT INFORMATION SHEET - GENERAL

STUDY TITLE: DISTANCE EDUCATION FOR TEACHER EDUCATION IN GHANA: UNTRAINED TEACHER EXPERIENCE

Dear participant (Untrained teacher)

You are cordially being invited to take part in this study with the title stated above. Please before you take a decision whether to take part or not, it is vital to read this carefully and comprehend why the research is being done, the role you will play and your level of involvement.

PURPOSE OF THE STUDY
The purpose of the research is to find out from untrained teachers/principal of training centre/district coordinator, who are involved in the Untrained Teachers' Diploma in Basic Education (UTDBE), their views on how the programme has influenced professional development and practice of the untrained teacher and quality teaching and learning in general.
The research is particularly relevant to all stakeholders involved in Distance Teacher Education since it aims at supporting the on-going teacher education reform in Ghana. By this, the outcome of this study research is to inform policy and practice, contribute to knowledge about distance teacher education, with the ultimate aim of improving the programme.

The study which will involve extensive and series of classroom observations in-depth interviews, will take place from June 2011 to August 2011. There will be one-on-one interviews for untrained teachers, principal and coordinator at the district education office and a focus group interview for selected untrained teachers. Additionally there will be discussion/classroom observations on lessons taught by untrained teachers and college tutors respectively. The purpose is to understand the perceptions, activities and views of all involved in the research with regard to the relevance and adequacy of the distance teacher education programme vis-à-vis the classroom realities and the socio cultural contexts within which teaching takes place.

WHY HAVE I BEING INVITED?
You have been chosen among other untrained teachers, because of the focal point of the research and your schedule as a classroom teacher and an untrained teacher on UTDBE programme. However your involvement and participation is entirely voluntary. Consequently, you may decide to take part or not to take part. If you agree to take part, after reading this information sheet you are asked to sign a consent form. On the other hand if you decide not to take part, you are free to pull out, without stating any reason or reasons.

As regards confidentiality and anonymity, I will make all attempts to safeguard participants' anonymity and confidentiality, while recognisng that in small-scale research, anonymity of respondents in the local context cannot be completely guaranteed.

Your involvement and outcome of the research will not in any way impact on your final mark/performance/grade point, promotion and progression in the service.

WHAT HAPPEN TO ME IF I TAKE PART?
Semi-structured interviews will be conducted (focus group interview for 6 untrained teachers, and also one-on-one interviews). On return to your own schools, each of you (untrained teachers) will be encouraged to video two of your lessons, play back the videotape and select excerpts which you feel are good practices for discussion with the researcher in a later interview. As regards interview, the researcher would like to ask for your permission to use audiotape to record it.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?
The study will uncover how DE for teachers has influenced their professional development and quality teaching and learning. It will seek to detail views on the actual and potential contribution of the DTE programme, while at the same time revealing the challenges. The views expressed and suggestions made will contribute to knowledge about distance teacher education, and will also inform the programme organizers on certain issues to take into consideration as they attempt to look at extending the UTDBE programme. Untrained teachers will reflect on their practices which may help them gain a better understanding of their professional practices, which ultimately could lead to improvement in the profession as a whole.

WILL WHAT I SAY IN THIS STUDY BE KEPT CONFIDENTIAL?
To ensure that what you say is kept confidential, the following actions will be performed:
(i)   all the electronic versions of the study will be kept in a computer using a password known only the researcher.
(ii)   Pseudonyms will be used when reporting from transcription data as well as case study locations (Each interviewee will be given the option of being referred to by a pseudonym of his/her choice).
(iii)   content of all transcribed interviews, observations made and any other report written will be given to each respondent to proof read and approve the content. Respondents will be given the opportunity to review a draft of the final thesis.
(iv)   the research will contribute to the thesis for my Doctor of Education degree and will therefore be in a public domain. It will also be desposited with the Ministry of Education as the sponsoring body.

WHAT DO I DO IF I WANT TO TAKE PART?
If you want to take part, you are requested to sign the consent form which has also been provided and return this to me (using my contact details below). I will then contact you about your involvement in the research.

WHAT WILL HAPPEN TO THE RESULTS OF THE RESEARCH STUDY?

See (iii) on paragraph - will what I say in this study be kept confidential? The results of the study which will be presented as a thesis for my EdD (Doctorate) degree will be published.

WHO HAS REVIEWED THE STUDY?
The research has been approved by a Cluster-based Research Ethics Committee (C-REC) or through the School of Education and Social Work ethical review process.

CONTACT FOR FURTHER INFORMATION
For any information, you may contact the following for further information.
Researcher: Philip V. Akoto
                      Teacher Education Division
                      Box MB 247, Accra Ghana
          Tel: 233 (0) 244 519 819

Supervisor: Dr. Barbara Crossouard
                      Education and Social Work
                      University of Sussex

If you (participants) have any concerns about the way in which the study has been conducted, you should contact the Chair of the C-REC who reviewed the project or my (researcher's) supervisor.

THANK YOU
I would like to thank you very much for taking time off your busy schedule to read this document.

PARTICIPANT CONSENT FORM (UNTRAINED TEACHER)

DISTANCE EDUCATION FOR TEACHER EDUCATION IN GHANA: UNTRAINED
TEACHER EXPERIENCE
Project approval reference: c-recss@sussex.ac.uk

I agree to take part in the above research study, which is being conducted by Philip V.
Akoto, a student of the School of Education, University of Sussex in the United
Kingdom. I have had an indepth explanation of the purpose the project, and my level
involvement. I have read and understood the explanatory statements which I will keep for
records. I understand that by agreeing to take part means that I am willing to:
(i)   allow the researcher to interview me (One-on-one)
(ii)   allow the researcher to interview me and other untrained teachers at the same
time (focus group)
(iii)   allow the interview to be audiotaped
(iv)   have discussion with the researcher on excepts of my videotaped lessons
(v)   make available some of pupils' exercise books for the researcher to analyse
(vi)   make myself available for a further interview/discussion/interaction after the DE
training

I understand that any information I provide will be treated as confidential and that no
information that I grant will lead to the identification of any individual in the reporting of
the project either by the researcher or by any other party.

I understand that my particpation is voluntary and that I can choose to participate in part
or the entire project. I can also withdraw at any stage/phase of the project without being
penalised or disadvantaged in anyway.

I would like the researcher to continue negotiate with me for my consent at any stage of
the project.

Name:
Signature:
Date:

Independent witness to participant's voluntary and informed consent (if this is necessary
for your project for example, where the relationship between participant which might be
deemed to unduely influence the participant's voluntary consent).

I believe that ………………………….(name) understands the above project and gives
his/her consent voluntarily
Name:
Signature:
Address:
Date:

PERMISSION TO UNDERTAKE RESEARCH

THE DIRECTOR OF EDUCATION,
AKWAPIM NORTH DISTRICT
EASTERN REGION - GHANA

Dear Sir/Madam,

PERMISSION TO UNDERTAKE RESEARCH IN SIX BASIC SCHOOLS IN YOUR DISTRICT – ONE UNTRAINED TEACHER EACH FROM THE SELECTED SCHOOLS

I am a student of University of Sussex, pursing a professional doctorate in education (Ed D). As part of the fulfillment for the award of the certificate, I am researching into Ghana's Distance Teacher Education programme called Untrained Teachers Diploma in Basic Education (UTDBE). This study will seek to understand the perceptions, activities and views of selected untrained teachers, senior management figure at college of education and coordinator at a district education office with regard to the relevance and adequacy of the distance teacher education programme vis-à-vis the classroom realities and the socio cultural contexts within which teaching takes place. To explore these issues, analysis of documents on the programme and policy texts will be conducted. This will be followed by a series of semi-structured interviews and lesson observation and discussion.

The purpose of the research is to contribute to knowledge about distance teacher education, with the ultimate aim of improving the programme, supporting the on-going teacher education reform in Ghana and also to find out how the programme has influenced professional development and practice of the untrained teacher and quality teaching and learning in general

I would like to ask permission to use the selected schools in your district. However participation by untrained teachers in the selected schools in the study is voluntary and has the opportunity to withdraw from the research study any time they wish to do so.

The research has been approved by the University of Sussex Ethics Committee and dates for the study are indicated below:
•   June 2011 – Familization and selection of schools and untrained teachers
•   July 2011 -   Focus group interview with selected untrained teachers
•   August 2011 - Interview with untrained teachers on his perception about the UTDBE programme
        August 2011 - Interview with untrained teachers on a videoed lesson from classroom

Thank you for the usual cooperation
Kind regards

Philip V. Akoto
cc; All the 6 selected Primary schools in Akwapim North District
      All the 6 selected untrained teachers

INSTRUMENT – SEMI STRUCTURED INTERVIEW (FOCUS GROUP INTERVIEW) – UNTRAINED TEACHERS

1. Why did you decide to become a teacher and what are your expectations?

2. In your view and reflecting on your experiences, what constituted a good teacher?

3. As a teacher without any formal training, what (past) experiences influenced or informed the way you presented lessons in class to your pupils?

4. What motivated you to enroll on the UTDBE programme and what are your expectations?

INSTRUMENT - ONE-ON-ONE INTERVIEW FOR UNTRAINED TEACHER (Perception about the UTDBE programme)

1. As you reflect on your experiences on the UTDBE programme, what specific issues or activities would you point to that you believed really prepared you for the classroom teaching and practice?

2. What kind of support(s) did you receive on the programme and how do you find the appropriateness of the support(s) received?

3. How beneficial was the field experience/practicum in preparing you for the classroom teaching and your professional practice?

4. How beneficial was the residential face-to-face experience in preparing you for the classroom teaching and your professional practice?

5. How do find the level of appropriateness of curriculum of the UTDBE programme to the primary school teacher?

6. How are you able to use the skills acquired on the programme in the classroom teaching and learning?

7. What are some of the strengths of the UTDBE programme in preparing you for the world of teaching?

8. What do you feel are some of the weakness of the UTDBE programme in preparing would be teachers professionally?

9. What are some of the challenges you faced as an untrained teacher pursing a diploma through the UTDBE programme?

10. If you are to add anything to the UTDBE progamme or change anything about the UTDBE programme, what will you add or change? Indicate reason or reasons for your stand taken.

11. Has the UTDBE programme met your expectation? Why?

INSTRUMENT - ONE-ON-ONE INTERVIEW FOR UNTRAINED TEACHER
(Excepts of video data on UTs teaching)

1. Based on the excepts of your videoed lesson, what did you do that you saw as promoting learning during the following stages of your lesson:
    a. Introduction stage
    b. Presentation stage
    c. Conclusion stage

2. Based on the excepts of your videoed lesson, discuss in more detail what you did that you think did not promote learning during the following stages of your lesson:
    a. Introduction stage
    b. Presentation stage
    c. Conclusion stage

3. Based on the excepts of your videoed lesson what are some of the aspects of the class teaching that posed as a surprise to you?

4. Based on the excepts of your videoed lesson what did you learn about yourself?

ONE-ON-ONE INTERVIEW FOR SENIOR MANAGEMENT FIGURE

1. What kind of professional support(s) do you give to untrained teachers on the programme during and after residential face-to-face meetings and how do you find the appropriateness of the support(s)?

2. How beneficial has been the residential face-to-face meetings in preparing untrained teachers for the classroom teaching and professional practice?

3. What are some of the strengths and weakness of the UTDBE programme in preparing untrained teachers for the world of teaching?

UTDBE COURSES AND CREDIT ALLOCATIONS

Year One
Semester one

Course Code	Course to be taken	Credits
FDC 111	English Language Studies	**2**
EPS 111	Principles and Practice of Education	**2**
FDC 112	Mathematics (Number & Basic Algebra)	**2**
PRA 111	Physical Education (Principles, Foundations and Methods)	**2**
FDC 113	Ghanaian Language and Culture (Language and & Lang. Teaching)	**2**

*Total number of credits (**10**)*

Semester two

Course Code	Course to be taken	Credits
FDC 119	Religious and Moral Education (Gen, Intro & Meth)	**2**
FDC 118	Environmental and Social Studies	**2**
FDC 114	Integrated Science 1	**2**
PRA 121	Music and Dance (Elements and Methods)	**2**
EPS 121	Child and Adolescent Development and learning	**2**

*Total number of credits (**10**)*

Total number of credits for year one, semester one and semester two = (20)

Year Two
Semester one

Course Code	Course to be taken	Credits
FDC 124	Integrated Science 2	**2**
EPS 211	Principles and Methods of teaching in Basic Schools	**2**
FDC 121	English (with Elements of literature) 1	**2**
GNS 121	HIV/AIDS	**2**

*Total number of credits (**8**)*

Semester two

Course Code	Course to be taken	Credits
FDC 122	Mathematics 2 (Trigonometry & Geometry)	**2**
FDC 123	Ghanaian Language and Culture 2 (literature & Culture Studies)	**2**
EPS 221	Educating the Individual with Special needs	**2**

FDC 128	Environmental and Social Studies 2	**2**
FDC 112	Pre-Vocational Skills (Art related)	**2**

*Total number of credits (**10**)*

Total number of credits for year two semester one and semester two = (18)

Year Three
Semester one

Course Code	Course to be taken	Credits
PFC 211	Methods of teaching English (Primary)	**2**
PFC 212	Methods of Teaching Primary School. Mathematics	**2**
EPS 301	Trends in Education and School Management	**2**
PFC 218	Methods of Teaching Environmental and Social Studies 2	**2**

*Total number of credits (**8**)*

Semester two

Course Code	Course to be taken	Credits
GNS 221	Information and Communication Technology	**2**
PFC 212	Methods of Teaching Integrated Science	**2**
ETP 390	Teaching Practice (1)	**6**
FDC 212	Statistics and Probability	**2**

*Total number of credits (**12**)*

Total number of credits for year three semester one and semester two = (20)

Year Four
Semester one

Course Code	Course to be taken	Credits
PFC 211J	Methods of Teaching English (Junior Secondary)	**2**
PFC 222	Methods of Teaching JSS Mathematics	**2**
EPS 123	Principles and Methods of Early Childhood Teaching	**2**
FDC 224	Integrated Science 3	**2**

*Total number of credits (**8**)*

Semester two

Course Code	Course to be taken	Credits
FDC 228	Environmental and Social Studies 3	**2**
FDC 222	Further Algebra	**2**
ETP 390	Teaching Practice (2)	**6**
EPS 302	Introduction to Guidance and Counselling	**2**

*Total number of credits (**12**)*

Total number of credits for year four semester one and semester two = (20)

Appendix 14

SOME TECHNICAL AND TYPOGRAPHICAL ERRORS FOUND IN MATHEMATICS MODULES

2: LESSON 6: APPLICATION OF PERCENTAGES - PROFIT AND LOSS

Dear learner, you are welcome to Lesson 6 of Unit 2. We have discussed in the previous lessons what percentages are and how they can be calculated. We can apply percentages in various ways and one of this is <u>Profit and loss.</u> In the lessons that follow we will talk about other applications of Percentages.

OBJECTIVES
By the end of this lesson you should be able to:
- explain some terms related to profit and loss
- express profit or loss as a percentage in a transaction.

CONTENT

Profit and Loss
Cost Price - Is the price at which a shop keeper buys an article.
Selling Price - Is the price at which a shop keeper sells items to his or her customers.
Profit - Is the gain a shop keeper gets ~~between~~ *over* the cost price ~~and selling price.~~

(i.e. profit = selling price(SP) – Cost Price (CP)
This means the selling price is greater than the cost price
∴ Selling Price (SP) = Profit + Cost Price
Hence Profit % = $\frac{Profit}{Cost\ Price}$ x 100%

$= \frac{SP - CP}{CP}$ x 100%

[handwritten: Premises do not lead to this conclusion]

Sometimes for some reasons, a shopkeeper reduces the selling price such that it becomes less than the cost price. Here the difference between the cost price and selling price is a loss. ~~Loss % = loss x 100%~~

$= \frac{CP - SP}{CP}$ x 100%

[handwritten: $Loss\ \% = \frac{Loss}{Cost\ Price} \times 100\% = \frac{CP - SP}{CP} \times 100\%$]

Example 1:
A woman sells 5 cups of rice for ₵12,500.00 and makes a profit of ₵500.00 per cup. What is her profit percent?

Solution
Selling price = ₵12,500.00
Profit = 5 x ₵500.00 = ₵2,500
The cost price = Selling price – profit
= ₵12,500 - ₵2,500
= ₵10,000

103

let us try 423_{five} x 34_{five}.

ion

t:

423_{five}
$\underline{\times 34_{five}}$
3302
3120
+1422ₗᵢᵥₑ
32142ₓᵢᵥₑ

y this: 354_{seven}
$\underline{\times 32_{seven}}$

solution the same as the worked example below?

$354seven$
$\underline{\times 32_{seven}}$
1111
$\underline{22220}$
23331_{seven}

1041
1425
15321ₛₑᵥₑₙ

SUMMARY

In this lesson we have learnt that:
- When adding in number bases we add the ones first and after that we add fives, fours, sevens in that order.
- When subtracting numbers in bases we rename the numbers and after that we subtract.
- In number bases the actual number of the bases does appear in the numerals.

ESS TESTS

the following:

ven + 243seven

ght + 566eight

=1415

ur – 113four

x 245

ur x 22four

$234_5 - 141_5$

$432_5 \times 24_5$

$232_{four} \times 22_{four}$

RS

ven

4) 213_{four}
5) 23023_5
6) 13030_{four}