Competence-based Curriculum (CBC) in Tanzania: Tutors’ Understanding and their Instructional Practices
COMPETENCE-BASED CURRICULUM (CBC) IN TANZANIA: TUTORS’ UNDERSTANDING AND THEIR INSTRUCTIONAL PRACTICES

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Competence-based Curriculum (CBC) in Tanzania: Tutors’ Understanding and their Instructional Practices
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Abstract


The overall aim of the study is to investigate tutors’ understanding of a competence-based curriculum (CBC) and how they train the student-teachers to implement CBC in actual classroom situations in ordinary level (O-level) secondary schools in Tanzania.

The study employed a qualitative research approach informed by the interpretive paradigm. It involved a total of 12 methodology tutors. The tutors were purposively and conveniently selected from four teachers’ colleges in Tanzania that offer the Diploma in Secondary Education. Data were generated through semi-structured interviews, classroom observations, and document review methods. Deductive and inductive approaches as well as the hermeneutic phenomenology tradition informed data analysis and interpretations, respectively.

The findings, in brief, reveal that in certain respects tutors understand CBC in relatively different ways and thus give it different meanings. Two main understandings with regard to CBC’s meaning and intentions are identified: CBC as an application-oriented curriculum and CBC as an activity-based curriculum. In the former, CBC is understood as a curriculum emphasising the building of learners’ ability to become practical, creative, and applying the skills they receive to solving real problems in daily life and become functional in society. In the latter, CBC is understood as nothing but a curriculum emphasising learning through activities in the classroom. The key difference between the two categories of understanding is that, in the latter category, tutors are less sensitive to applying what is learned beyond classroom and subject contexts. As for reasons for the CBC introduction in Tanzania, five categories of understanding are identified, such as education being too theoretical, coping with global trends, the desire for a creative and independent generation, external influences, and poor academic performance. Interestingly, all tutors held an understanding that the teaching approaches relevant for CBC are learner-centred approaches.

Moreover, the findings reveal that tutors’ instructional practices contradicted their understanding of CBC as a curriculum that basically emphasises invisible pedagogic practices. The tutors’ instructional practices could be described as more teacher-centred, theoretical, and maintaining instructions of an authoritarian, rather than a learner-centred character, as the new curricula seem to emphasise. Lecture-dominated instructions characterised by strong framing and classification are the norm. The findings of tutors’ understandings and their instructional practices can be attributed to the various contextual factors coined as administrative, pedagogical, and physical and ecological factors. The results show that contextual cues are possibly more powerful factors to explain tutors’ instructional practices and they may thus need to be accorded due attention. The tutors proposed some conditions to establish a long-term framework for tutor learning to support educational change. The tutors’ ideas are theorized in a framework constituting a combination of such conditions as reflection, community, conceptual inputs, action, and an institution dealing with education change.

Keywords: Competence-based curriculum, instructional practices, Tanzania, tutors’ understanding.
Svensk sammanfattning

Avhandlingen övergripande syfte är att undersöka hur lärarutbildare uppfattar en kompetensbaserad läroplan (competence-based curriculum, CBC) och hur de utbildar sina lärarkandidater att realisera den i klassrumssituationer i grundskolan i Tanzania.


Resultatet visar att lärarutbildarna i vissa avseenden skiljer sig åt i sina uppfattningar om CBC och att deras tolkning av dess innebörd skifter. Två huvudsakliga uppfattningar om meningen och avsiktarna med CBC har identifierats: dels CBC som tillämpningsinriktad läroplan, dels CBC som tillämpningsbaserad läroplan. I den förra uppfattas CBC som en läroplan som betonar uppbyggnaden av studenternas förmåga att arbeta praktiskt och kreativt och att tillämpa de färdigheter de erhållit för att lösa verkliga problem i vardagen och fungera i samhället. Enligt den senare uppfattning utgör CBC enbart en läroplan som betonar inlärning genom aktiviteter inom klassrummens ram. Den väsentliga skillnaden mellan de två kategorierna är att lärarutbildarna i den senare är mindre mottagliga för att tillämpa vad de lärt sig utanför klassrummens och ämnets kontexter. Vad beträffar motiven för införandet av CBC i Tanzania har fem skäl identifierats, nämligen att: utbildningsen är för teoretisk, att den ska anknyta till globala trender, att den stärker att forma en kreativ och självständig generation, att den har påverkats utifrån, och att de akademiska prestationerna är för svaga. Intressant nog delade alla lärarutbildare uppfattningen att de undervisningsstrategier som är relevanta för CBC är de som är elevcentrera...

Dessutom visar resultaten att lärarutbildarnas undervisningspraktik motsäger deras uppfattning om CBC som en läroplan som främst betonar en osynlig pedagogisk praktik. Lärarutbildarnas undervisningspraktik kan beskrivas som mer lärarcentrerad och teoretisk med bibehållande av en auktoritativ hållning snarare än den mer elevcentrerade som de nya läroplanerna framhåller. Normen i lärarutbildarnas praktik utgöras av en undervisning som domineras av föreläsningar inom fastställda ramar och klassifikationer. Slutsatsen beträffande lärarutbildarnas uppfattningar och

Keywords: kompetensbaserad läroplan, lärarutbildares uppfattningar, Tanzania, undervisningspraktik.
Dedication

To my parents, my brothers and sisters, and to my beloved wife, Khadija Sanze including our beloved children Mariam, Ally, and Nurat
Acknowledgements

First of all, I would like to thank our Almighty God for enabling and protecting me throughout the time I dedicated myself to this thesis work and to all my PhD studies. My sincere thanks go to my dear parents, Mr. Siwala A. Nzima, and my mother Mariam Ibrahim for their parental care and their contributions, which laid a strong base in my academic life. I wish to extend my sincere appreciations to the World Bank for its financial support to my PhD studies through the University of Dar es Salaam. I would also like to thank the University of Dar es Salaam for its trust and for granting me the study leave to undertake my PhD studies abroad.

During this study, the field work was conducted at teachers’ colleges in Tanzania, and the thesis was written at the Department of Education, Linnaeus University, Sweden. I am grateful to all the institutions, and, of course, I am most grateful to all of the individuals who work at these institutions, who in one way or the other supported me in realizing this thesis. It is challenging to mention them all here, but I wish to express my sincere gratitude to my supervisors, Martin Stigmar, Jan Håkansson, and Christer Ohlin. Thank you, my supervisors, for your academic support and intellectual guidance during my study, without which this study could not be successfully accomplished. I am indebted to extend a special thanks to Per Gerrevall, my examiner, who oversaw my PhD studies. I am grateful to Joakim Krantz for reading my thesis work from an “outsider’s” point of view and for his insightful feedback. I am also grateful to Per Gerrevall and Richard Shukia for their constructive and insightful feedback at my halfway seminar in 2014. My heartfelt thanks also goes to Daniel Sundberg and Bettina Vogt, who through their profound and sincere scrutiny of my thesis work at the final seminar, pointed out what I need to focus on to conclude it.

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<th>Definition</th>
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<tbody>
<tr>
<td>APA</td>
<td>American Psychological Association</td>
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<tr>
<td>CBC</td>
<td>Competence-based Curriculum</td>
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<tr>
<td>EFA</td>
<td>Education for All</td>
</tr>
<tr>
<td>ESDP</td>
<td>Education Sector Development Programme</td>
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<td>ETP</td>
<td>Education and Training Policy</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<tr>
<td>MoEVT</td>
<td>Ministry of Education and Vocational Training</td>
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<td>NBS</td>
<td>National Bureau of Statistics</td>
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<td>NECTA</td>
<td>National Examinations Council of Tanzania</td>
</tr>
<tr>
<td>NSGRP</td>
<td>National Strategy for Growth and Reduction of Poverty</td>
</tr>
<tr>
<td>PMO-RALG</td>
<td>Prime Minister’s Office - Regional Administration and Local Government</td>
</tr>
<tr>
<td>SSA</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>TIE</td>
<td>Tanzania Institute of Education</td>
</tr>
<tr>
<td>TTCs</td>
<td>Teacher Training Colleges</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organisations</td>
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<td>URT</td>
<td>United Republic of Tanzania</td>
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CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.0 Introduction
This chapter introduces the study investigating tutors' understanding of competence-based curriculum (henceforth CBC) and how they train student-teachers to implement CBC in actual classroom situations in ordinary level (O-level) secondary schools in Tanzania. The chapter is organised into several parts. It opens up with a background to the problem, which aims to provide the reader with some background information as well as problematising the research field. The chapter then proceeds with the aim of the study and with research questions. Other parts include the significance of the study, origin of the study, an outline of the thesis, and chapter summary.

1.1 Background to the problem
This background attempts to examine the emergence of CBC as an educational change in Tanzania. The global education policy context (regarded as a societal arena) is highlighted first, and then I proceed to the concrete arena – the Tanzanian curriculum policy context. This could help readers to understand how the CBC reform movement in Tanzania is also connected to and influenced by the global education policy movement.

The global education policy context
During the last two decades, due to globalisation, the nations of the world have become increasingly understood, more or less, as a community with one history, one place and one state. As Sundberg and Wahlström (2012) explain, this understanding can be said to also imply, more or less explicitly, the idea...
of a common lifeworld in many respects. Today, in education, for example, a global education policy that has been circulating, transformed and/or borrowed between countries, has emphasised concepts such as ‘competence’, ‘standards’, ‘school improvement’, ‘choice’, and ‘privatisation’. If the premises underlying the global policy packages are carefully examined, it becomes clear that they imply certain politics of knowledge that is, certain notions as to what counts as valid knowledge in this era and what teaching and learning ought to be like (Sundberg & Wahlström, 2012). The means through which these ideas spread and become globalised include both networks and flow of ideas from sending countries or transnational organisations such as the World Bank, UNESCO, and the like, to countries that receive education policies (which may include both developed and developing nations) (Exley, Braun, & Ball, 2011, p. 214).

In the movement towards standard-based, outcomes-based, and competence-based curricula, the transnational organisations and agreements, e.g. the Organisation for Economic Cooperation and Development (OECD), UNESCO, Education for All (EFA) goals and the 2000 Millennium Development Goals (MDGs) have become increasingly important as actors, networks and shaping forces in curriculum reforms (see also Exley, Braun, & Ball, 2011). For example, the extension of Education for All (EFA) goals from equal access to education towards quality learning (especially after the 2000 Dakar conference) has influenced and accelerated curriculum reforms in most countries of the world (Chisholm & Leyendecker, 2008; UNESCO, 2000). In Sub-Saharan Africa (henceforth SSA) the curriculum reforms stressed two major things: i) the need of changing curriculum contents to make them more relevant both in local and global contexts in terms of desirable competences for the work situation and for everyday life; ii) changing the teaching-learning process into more learner-centred approaches (UNESCO, 2000). As a result, curriculum policies adopted by most countries in SSA in the late twentieth and early twenty-first centuries are based on outcomes- or competence-based curricula as well as on learner-centred pedagogy. These policies are expected to move education away from a transmission paradigm based on rote memorisation and the repetition of content to a vision of education based on meaningful, relevant, as well as applicable learning in everyday life and work situations (Chisholm & Leyendecker, 2008).

The above policy idea echoes the conceptions of learning discussed by Marton & Booth (1997, p. 38) as coming to an understanding of things, as seeing something in a different way, and as changing as a person. In their opinion, these three conceptions view learning as seeking meaning rather than as primarily reproducing. The view of learning as seeking meaning focuses beyond the tasks of learning per se to the world that the tasks open for the learners. Thus, it can be said that curriculum policies in SSA intend to move education, and of course learning, far beyond just the acquisition of knowledge for later reproduction, to being applied in real life situations and functioning in the socio-economic development of society at large. It is also
believed that the reforms are a necessary response to the globalised knowledge economy, which has increased the need for skills, and to technological change. Having highlighted the education (and curriculum) policy context at the international arena, let us now turn the focus to a more concrete arena at a national level – the Tanzanian context.

CBC reform in Tanzania
As in other SSA countries, the global educational vocabulary of a ‘knowledge economy’ also affected Tanzania and thus necessitated changes in curriculum orientation. In the early 2000s Tanzania reformed her curricula at primary, secondary and teacher education levels in order to provide education that prepares individuals who can fit into today’s world of work and who can cope with the rapidly growing socio-economic, scientific and technological developments which are taking place at global, regional, and national levels (Ministry of Education and Vocational Training [MoEVT], 2007a, 2007b; United Republic of Tanzania [URT], 2014). This reform involved a change from content-based teaching to CBC, underlined by a shift in paradigm from traditional to a more progressive view of education. The traditional view (which underpins content-based curricula) focuses on knowledge acquisition as the main goal of education. This view leads to a classical concept of knowledge as school-based or discipline-based, and does not insist on the integration of school knowledge and real life situations. On the other hand, the progressive view stresses that knowledge should be applicable in solving real problems. It stresses knowledge in the context of its application (cf. Ornstein & Hunkins, 2013).

The above observation is clearly manifested in various curricular documents. To give just one example, the preface of the Geography Pedagogy module for a diploma in secondary education clearly states:

“The year between 1965 and 2010 witnessed curriculum reforms worldwide. These were triggered by the changing labour market demands for school/college graduates who could better contribute to global socio-economic development. Employers worldwide are looking for creative and competent teachers who can innovatively respond to new emerging challenges in the different sectors of the economy...” (Tanzania Institute of Education [TIE], 2013a, p. iv).

The document continues to elaborate that:

“Tanzania responded to worldwide trends in curriculum reform and labour market demands by reforming the teacher education curriculum in 2007 and 2008. It became evident that such reforms should address the pedagogy behind the teaching and learning of competence based education adopted by Tanzania” (ibid.).
These are just a few examples of policy statements related to the CBC reform which are found in the various curricular documents (e.g. syllabuses or modules in Tanzania), signifying that the shift was also a response to global trends in education. As will be elaborated on later in the context chapter, when the above statements are carefully scrutinised, it becomes evident that the CBC reform in Tanzania embodies the social efficiency curriculum ideology, i.e. its view is that the purpose of schooling is to efficiently meet the needs of society by training young people to become functional as future contributing members of society. The reform was also intended to make the curriculum responsive to and fulfil the requirements for achieving the goals of various global policies such as EFA goals, the 2000 MDGs, as well as the demands of key national policy documents and development plans which function as regulative policies. However, some specific examples of the emphasis of these policy documents and plans are highlighted in the next chapter dealing with the context of the study.

Prior to the CBC reform, major curriculum reforms occurred in 1967, 1979 and 1997. These reforms were primarily conducted to transform education from the colonial to the Tanzanian education system by either introducing or removing subjects in a curriculum package. The nature and character of the curricula remained content-based, focusing on the acquisition of academic content knowledge. These prior reforms are briefly discussed in the context chapter. Central to the curriculum reform that occurred in the early 2000s at various levels of education in Tanzania was a shift in focus from content-based teaching to CBC. In general terms, competence can be taken to mean the ability to perform a particular activity at an expected standard. In the context of school learning, for example, it can be understood as the ability of the student to accomplish tasks adequately, to find solutions to problems and apply them in classroom work as well as in general life situations (cf. Tilya & Mafumiko, 2010, p.41). Thus, it is concerned with what people can do with what they know rather than with what they know.

To highlight briefly, the main distinction between CBC and a content-based curriculum is that the former focuses on developing learners’ ability to apply knowledge in a new problem situation (beyond classroom and subject contexts) - sometimes referred to as knowledge transfer - whereas the latter focuses on the acquisition and reproduction of academic content knowledge (mostly within the confines of the classroom and subject contexts) without necessarily applying it to the outside world. It focuses on the delivery of the content. This suggests that content-based curricula view the content as the ultimate end. On the other hand, CBC stresses learning outcomes in terms of the development of desired competences, e.g. transferable/generic skills, such as problem-solving, critical thinking, creativity, information technology, teamwork and meta-learning, which graduates might take along into a range of different employment and life activities. The concept signifies the shift of emphasis from inputs (content knowledge) by the teacher to students for reproducing later, to learning outcomes, e.g. what the learner can do with what
they know in a new problem situation. The ultimate goal is for CBC to help to spearhead the educational and socio-economic development of the country. It will lead to ‘a successful life’ and a ‘well-functioning society’. However, it is worth noting that the relation between content-based curricula and CBC is rather complex. For example, in CBC the content is still important, but it should be applied as a means to an end and not as an end in itself (Tilya & Mafumiko, 2010). The concept of competence and CBC are discussed in detail in later chapters, particularly the literature review chapter.

Moreover, in the new curriculum in Tanzania (e.g., in the various syllabuses), the emphasis is on the use of teaching approaches which are learner-centred and activity-oriented. The introductory sections of these revised syllabuses indicate that the learner-centred teaching approach is the key to the implementation of CBC. For example, the Biology Pedagogy syllabus for a diploma in secondary education clearly stipulates: “The Biology teacher should put more emphasis on the application of learner centred approaches and techniques and collaborate with other internal and external colleagues to improve the teaching and learning of the Biology subject” (MoEV, 2009a, p. iv, italics my emphasis). The learner-centred teaching approach has been characterised as an instructional practice that focuses on learners’ needs, interests and background and which actively engage learners in a variety of activities during the learning process (Darling-Hammond, 2000, Weimer, 2002). Learner-centred education promotes active learning by requiring learners to play a more active role during the teaching and learning process (Weimer, 2002). This approach is discussed further in the literature review chapter.

The teacher is the key to the qualitative improvement of education systems. Scholars have acknowledged that the teacher is the heart and a critical determinant of the success or failure of whatever curricular reform or innovation to be implemented (Henshall & Fontanez, 2010; Komba, 2007). In this light, teachers are expected to play important roles as part of systemic reform efforts. Teacher education provides opportunities for prospective and practising teachers to explore new roles, develop new instructional techniques, refine their practice and broaden themselves both as educators and as individuals (Komba, 2007). As noted elsewhere, following the reform of the curriculum at the primary and secondary school levels, and in recognition of the centrality of the teacher in the realisation of quality education between 2006 and 2009, the MoEV, through TIE, reviewed and issued the new teacher education curricula at the Grade IIIA and Diploma levels, respectively (these levels of teacher education will be clarified in the context chapter). The new teacher education curricula are regarded as competence-based and are expected to equip prospective teachers with relevant competences to

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3 TIE is an abbreviation of the Tanzania Institute of Education - an institute responsible for curriculum design and development in Tanzania, which is under the Ministry of Education and Vocational Training (MoEV).
effectively implement CBC in schools (cf. MoEVT, 2007a). In this way, the primary and secondary education curriculum reform was integrated into the teacher education curriculum with the aim to enable student-teachers to develop the requisite teaching competences that are relevant to the curricula they are supposed to handle. In the process, the MoEVT, through its agent TIE, issued new curricula to schools and colleges with the expectation that they would be implemented as planned. It seems that policy makers and curriculum developers perceive curriculum policies as a set of rational activities and assume that they will be correctly implemented.

There are different understandings of the relationship between policy-making and implementation. On the one hand, there is a rational bureaucratic process or state-control model which presumes a linear and unproblematic translation of policy into practice, and on the other hand, the conflict and bargaining model, which understands the policy process as loosely coupled and impossible to control tightly (de Clercq, 1997, as cited in Bertram, 2012). In fact, the latter is understood as the expectation that fractures will occur as policy moves between different sites. As Bertram (2012) explains, generally speaking policy makers and government officials tend to conceive policies as a set of rational activities and assume that these are correctly implemented, whereas academic researchers may be more concerned with issues like complexity, re-interpretations or contradictions. The current study is in line with this latter perspective, assuming that curriculum policy implementation is a complex and contested terrain.

The problem
As indicated in the background, there is glaring evidence that, like in most SSA countries, the education policy movement away from content-based curricula towards CBC in Tanzania has largely been influenced by external forces (i.e., the international education policy discourse, and transnational organisations and agreements), as well as by certain internal conditions. Internally, the most critical issue is that it was centrally initiated and mandated – in the sense that the ‘what’ and the ‘how’ were contested and negotiated within the state arena and distributed via regulations, syllabuses, etc., downward to practitioners for action. Being centrally initiated and/or mandated, it has been characterised by top-down accountability and linear dissemination. For example, the new syllabuses were prepared by TIE and distributed to schools and colleges for implementation. Thus, the way the CBC reform was introduced in Tanzania implies that the government assumes linear implementation to take place from one policy arena to another, something that usually does not happen. It appears that curriculum developers/planners at the formulation arena focus on the relevance of the curriculum reform at the national (and international) level and make assumptions about its feasibility at the practice level without a substantial understanding of the educational context and dynamics on the ground.
The evidence from the study commissioned by MoEVT to investigate the causes of the decline of the 2010 National Form Four Examination results shows that there was little or no involvement of other important stakeholders such as teachers and tutors during the new curriculum-making process (MoEVT, 2011). Looking from the point of view of the training of servicing teachers and teacher educators in the CBC reform in Tanzania, it appears that very few teachers received orientation on the revised curricula. For instance, the MoEVT (2011) research report on the decline of the 2010 National Form Four Examination results indicates that only 588 secondary school teachers (1.5%) received orientation on the new curricula between the years 2008 and 2010. According to the report, this situation might as well explain the decline in students’ academic performance in national examinations, as the majority of the teachers were not conversant with the new curricula. In addition, the TIE (2008) report of inspectors’ workshop clearly indicates that following the revision of the diploma in education curriculum, only college principals and a few tutors were oriented about the revised curriculum in 2007. The report does not, however, provide any specific statistics of this. This supports the claim that ever since CBC was officially introduced (and of course during its implementation) very little training has been given to school teachers, let alone to those college tutors who are responsible for teacher training (cf. Shemwelelekwa, 2008; Tilya & Mafumiko, 2010).

It is acknowledged that when educational changes are introduced, the teacher plays a pivotal role in the change process. Structural and curricular changes alone may not be sufficient unless they take into account that the teacher is the key to the qualitative improvement of education and determines the success or failure of whatever curriculum reform is desired to implement (Henshall & Fontanez, 2010). This means that when curricular reforms are introduced, teacher education is very important. Considering the above observations, it is logic to question that if even tutors were given little or no orientation on CBC, then how do they understand/interpret it and how do they train student-teachers to implement it in schools. Indeed, this is an important question that deserves further exploration.

Comparative curriculum studies suggest that global education ideas are often transformed as they move from the international arenas to national and local contexts (Anderson-Levitt, 2008) and that there is no linear way of implementation from one arena to another (Henshall & Fontanez, 2010). This is in line with Bernstein’s (1996/2000) concept of recontextualisation. Central to this concept, as I understand it, is the idea that when educational knowledge (e.g., a curriculum policy text) is produced it becomes recontextualised (re-interpreted, re-fashioned, transformed/given different meanings, etc.) as it moves between places, for example, from policy makers, curriculum writers and written curriculum documents to various implementers in college and school contexts. This, however, should not be interpreted as a linear or top-down process; instead, the process may be rather complex. Further, the literature suggests that in implementing curriculum reforms, local actors,
especially in contexts where reforms are introduced from top down, may be ambivalent, blending ideas in the reforms with local practices or even resisting them (e.g., Anderson-Levitt, 2008; Henshall & Fontanez, 2010). In other words, educational change is not a question of a simple relationship between ‘senders’ and ‘receivers’. This is so, especially when the change demands a significant redirection of pedagogic approaches which do not support what local actors are already doing (Ornstein & Hunkins, 2013) and when the rhetoric of change does not match the reality of their everyday classroom practices (Bailey, 2000).

As discussed in the literature review chapter, several studies (e.g., Amede, 2012; Kasuga, 2012; Mtitu, 2014; Shemweleleka, 2008; Tilya & Mafumiko, 2010) focusing on the implementation of the educational change revealed how CBC and the advocated student-centred instruction still remains a big challenge for teachers in Tanzania. The prime focus of most of these studies has been on the investigation of the use of student-centred instruction at the lower levels of education, particularly in secondary schools. Also, it appears that the main interest in these studies was a focus on evaluating the extent to which teachers have succeeded or failed in implementing the new curriculum in relation to what is required by it. Nevertheless, most of these studies indicate that teacher education is both part of the problem and may become one of the solutions towards better pedagogical practices.

However, these previous studies in the Tanzanian context are important and trigger a further question: ‘How are teachers trained to implement CBC during their college teacher education?’ There is a paucity of studies around this question in Tanzania. Consequently, several issues regarding this question remain unknown and thus necessitate further inquiry. There is a need for more knowledge about the recontextualisation of CBC in Tanzania for the reasons put forward later in the section devoted to the significance of the study. The interest in this study is to describe and understand how CBC becomes recontextualised as it moves between actors in Tanzania (e.g. as it moves between the formulation arena and actors at the practice level - in teachers’ colleges). More specifically, looking closely at teacher education in teachers’ colleges, the study intends to contribute towards an understanding of how tutors, as an important group of actors, interpret CBC and train student-teachers to implement it in secondary schools in Tanzania, and what factors influence their understanding and instructional practices. Therefore, tutors’ understanding of CBC and their instructional practices in that regard are central in this thesis. To some extent, the study also contains a practical knowledge interest, which is directed towards understanding conditions that would help to establish a long-term framework for tutor learning to support change, not only for the current CBC change, but also for any other similar changes that will occur in future. The contribution made by this thesis is that it reveals how tutors understand CBC, what pedagogical practices they apply when training student-teachers to implement it, and what factors explain this. It also reveals the conditions that will provide support for future long-term
tutor learning, due to their virtue of educating teachers. The following part specifies the study object in terms of overarching aim and research questions.

1.2 Aim of the study and research questions

The overall aim of this study is twofold: i) to explore how tutors in diploma teachers’ colleges understand/interpret CBC; and ii) to examine how they train student-teachers to implement CBC in the actual classroom situation in secondary schools in Tanzania.

The object of the study is defined for empirical and investigative purposes in terms of the following clarifying research questions:

1. In what ways do tutors understand/interpret CBC when it comes to:
   - its conceptual meaning, curriculum intentions, and reasons for its introduction in Tanzania?
   - teaching-learning approaches relevant for CBC?
   - pedagogical skills required for teachers to be able to implement CBC?

2. How, and with what arguments do tutors train student-teachers to implement CBC?

3. How can contextual factors be understood as determinants of the tutors’ training practices?

4. What conditions would help to establish a framework for long-term tutor learning to support the educational change?

1.3 Significance of the study

Conducting a study of this nature is very important for a variety of reasons. Firstly, as emphasised elsewhere in this thesis, the insights generated will contribute knowledge from the Tanzanian context of how tutors (and teachers’ colleges at large) interpret CBC and train student-teachers. Secondly, the findings may inform educational developers in Tanzania (e.g., policy planners at the Ministry of Education, curriculum developers at institutes of education, teacher educators in universities, principals and tutors in teachers’ colleges) regarding the implementation of the current educational change from the point of view of teacher education in teachers’ colleges. Thirdly, conducting a study of this nature could provide some illumination of the nature of the obstacles and the possibilities for teacher education deriving from CBC implementation. Finally, this study contributes towards the development of and stimulates further research and discussions on curriculum issues and teaching in teacher education with a view to promoting quality teaching and learning in Tanzania.

In the context of this study, the terms understand and interpret are used interchangeably.
and beyond. Although this study has great relevance in the context of Tanzania, as an empirical study of curriculum change it also forms a contribution to the international research field of comparative curriculum studies, providing lessons to be drawn from Tanzania.

1.4 Origin of the study

My interest in studying curriculum and teaching issues largely emerged from my own background in the field of curricula and teaching. The study partly grew out of my professional background as a former secondary school teacher, and later on as a member of faculty in one of the Universities in Tanzania that offers teacher education, as well as my career interest in curriculum studies. As a university lecturer I specialise in teaching such courses as curriculum development and teaching, geography education, and the pedagogy of teacher education. My motive to study this topic also emerged from my recognition of the importance of teacher education in educational change and the necessity of casting a critical eye on the interpretation of the CBC reform by tutors in teachers’ colleges within the context of Tanzania. It was also deemed important to understand this question given the approach in which the CBC reform was introduced in Tanzania.

It need therefore be emphasised that this study is not primarily meant as an evaluation (a functionalist interest), in the sense that the major interest is not focused on the normative question of whether or not CBC is being implemented as planned (albeit this might be reflected in the study). Rather, as emphasised earlier, it embraces a critical viewpoint aiming to uncover issues and deepen our perception of how teacher educators (tutors) in teachers’ colleges understand CBC, how they train student-teachers, and what factors influence their understanding and practices. The investigation is not primarily based on what is required by official curriculum documents as a yardstick for analysis, but is rather informed by research and by theories motivating this study. The study is not meant to suggest that I agree with or support/promote CBC.

Creswell (2007, 2009) suggests that in qualitative research it is important for the researcher to be aware of personal biases and experiences in order to adequately describe participants’ perspectives and experiences. I went to the field with this in mind. As a researcher, I was keen not to accept my pre-understanding and experiences at face value so as to avoid influencing participant reflections and experiences. Personal biases were minimized through a number of strategies, as discussed later in the methodology chapter.
1.5 Outline of the thesis

This thesis consists of eight intersecting chapters. In the first chapter, including this segment, the introduction, background to the problem, aim and research questions of the empirical investigation are presented. The significance of the study is also discussed. In Chapter Two, the context of the study is presented. The chapter particularly aims at achieving a two-fold purpose. The first aim is to enhance readers’ better understanding of the context where this study was conducted. Secondly, it reviews and analyses the structure of formal education and training of Tanzania, including providing an overview of curriculum reforms in Tanzania from 1961 to date, as well as of pre-service teacher education. Special attention is given to the diploma in secondary teacher education programme, as this constitutes the focus of the study. In Chapter Three, its theoretical and analytical framework are presented and motivated. As discussed later, the study draws on the perspectives from pedagogic device theory (Bernstein, 1996/2000) and the frame factor theory (Lundgren, 1979) as theoretical points of departure for understanding the study problems. Chapter Four reviews and discusses the literature relevant to the study.

Chapter Five elucidates the research methodology followed in the present study. Methodological issues concerning the underlying interpretive research tradition and the methods of empirical data generation are described and justified. Further, the methods and procedures used to analyse the empirical data are discussed and clarified. Finally, it discusses issues with regard to ethical and quality considerations of the study. In Chapter Six, the findings of the research are presented on the basis of the major research questions that guided the study. In Chapter Seven, its key findings are discussed. The relation to previous research and to the theoretical framework is considered. Finally, in Chapter Eight, conclusions are drawn from the findings of the study. In addition, it encompasses the implications of the study, its limitations, and suggestions for further research.

1.6 Chapter Summary

In brief, Chapter One introduced the study and problematised the research field. It was learned that the movement away from content-driven curricula to CBC in Tanzania was influenced by the general global education policy discourse as well as by internal factors. It was also learnt that CBC and its emphasised learner-centred approach remains a big challenge to teachers in Tanzania. Amidst all this, there is little knowledge about tutors’ understanding of CBC and how they train teachers to implement CBC in secondary schools. This situation motivated the need for the present study. The next chapter presents its context.
CHAPTER TWO: CONTEXT OF THE STUDY

2.0 Overview

This chapter presents the context where the study was conducted. It is organised into six main parts. The chapter opens up with some basic background information about the United Republic of Tanzania. The second part presents the current education system in Tanzania, including the structure of formal education and training, as well as the management of the education sector in general. This is followed by an overview of curriculum reforms in Tanzania from 1961 to date. Then, teacher education (pre-service teacher education in particular) in Tanzania is described. Special attention is given to the diploma in secondary teacher education as being the focus of the study. The chapter concludes with a summary.

2.1 The United Republic of Tanzania: basic information

The United Republic of Tanzania (URT) was formed following the union of the former two sovereign states, namely Tanganyika and Zanzibar, which united to form the Union Government in 1964. Prior to their independence in 1961 (Tanganyika) and 1963 (Zanzibar), the two countries were under British protectorate and an Arab regime, respectively. After the union, Tanganyika came to be popularly known as Tanzania Mainland, while Zanzibar is called Tanzania Zanzibar or just Zanzibar (see also Kitta, 2004). However, this study was conducted in Tanzania Mainland, from where the researcher originates. The URT is located in East Africa, whose largest country it is, covering an area of 945,087 sq. km. It is the 12th largest of the 54 countries of Africa. The country borders on Kenya and Uganda to the north, and the Indian Ocean to the east. To the south, it borders on Mozambique, Malawi and Zambia, and to the west on Rwanda, Burundi, and the Democratic Republic of Congo (DRC).
The country is divided into 30 administrative regions of which 25 are in Tanzania Mainland and 5 in Zanzibar (URT, 2013). According to the 2012 Population and Housing Census (PHC) for Tanzania, the country’s population was estimated to be 45 million people, of which 51.4 percent were females (ibid). The population comprises more than 120 tribes, each speaking its own tribe language, but is united by the Kiswahili language as a lingua franca medium of communication. The PHC 2013 statistics shows that young people (0-14 years of age) account for 43.9 percent of the total population, while those aged 15-35 account for 34.7 percent and those between 35-64 comprise 20.4 percent of the population (ibid.). Thus, the young population is likely to grow for many years, a situation that will have resource implications as well as affect the country’s social economic development. It also implies that a large number of quality teachers will be needed in schools to educate this growing youth population. A majority of the Tanzanian population (about 70.4%) lives in rural areas, engaging in household farming as the main economic activity. According to the 2011/12 Household Budget Survey (HBS) conducted by the National Bureau of Statistics [NBS] (2013a), the average Tanzania Mainland households consist of five people. Besides, about half (48%) of the household members are dependants (children below age 15 and elders aged 65 or more). Moreover, statistics indicate that about 20 percent of the adults had no education in 2011/12. The average literacy rate for overall household members (5 years and above) is 73 percent (NBS, 2013b). This shows that about 27 percent of the household members are illiterate.

2.2 The system and structure of education and training in Tanzania

The current structure of the formal education and training system in Tanzania constitutes five levels of education as shown in Figure 1. The system can be described as hierarchical, ranging from pre-primary to higher education. The bigger arrows in the figure show the hierarchical nature of formal education and training, from the pre-primary to university levels.
Figure 1 above shows that the structure of formal education and training is organised in the following order 2-7-4-2-3+, that is; two years of pre-primary education; seven years of primary education (standard I – VII); four years of Ordinary Secondary Education (forms 1-4), which is commonly known as O-level secondary education; two years of Advanced Secondary Education (forms 5 and 6), which is commonly known as A-level secondary education; and three or more years of tertiary education depending on the field of specialisation. The current official school attending age ranges from 5-6 years for pre-primary education, 7-13 years for primary education, 14-17 years for O-level secondary education, 18-19 years for A-level secondary education, and 20-24 years for university education (MoEVT, 2013b). The figure shows further that alongside the formal structure of schooling there exists other post-primary and post-secondary education as well as training for working life,
such as certificate and diploma training colleges which take less than three years. For example, graduates who have completed O-level secondary schools and A-level secondary schools can join teacher education at the certificate or diploma level depending on their qualifications and interest. They can later join higher education for further studies. However, it should be noted that, although the figure indicates that there is a possibility for graduates of primary education to join training courses at the certificate level, they are not allowed to undertake certificate courses for teaching. They can instead join other vocational training like tailoring, carpentry or masonry. Teacher education will be discussed further in section 2.4.

The criteria used for the promotion of students from one level of education to another (e.g., from primary to secondary and eventually to university education) are the grades they obtain from the appropriate selection examinations, which are set by the external body, the National Examinations Council of Tanzania [NECTA], at the final year of a given education level. However, it should be noted that the pre-primary education cycle has no examinations for promotion purposes. This means that, after completing two years of pre-primary education, the children directly join grade one in primary schools. However, the new Education and Training Policy of Tanzania (which was launched in 2015) shows that the structure of formal education will change in the near future to become 1+-10-2-3+ (URT, 2014). This means that, while in the current structure children were expected to attend pre-primary school for two years beginning at age 5, they will then study for one year (or more years depending on age) and proceed to primary education. The school age threshold will also change. Children will begin pre-primary school between ages 3 and 5 and primary education at age 6 instead of 7. According to the new structure, the ideal time spent by a student in schooling will be reduced to 16 years in total instead of 18 years in the current structure. The new structure suggests that basic education will last for ten years and will cover lower secondary education. Another radical shift in this regard is that secondary education (being part of basic education) will now be fee free (URT, 2014).

2.2.1 Management of the education sector
Following the implementation of the Decentralization by Devolution policy (D by D), the management and co-ordination of formal education and training in Tanzania is currently primarily under the Ministry of Education and Vocational Training (MoEVT) and the Prime Minister’s Office through the Department of Regional Administration and Local Government (PMO-RALG). The latter is basically involved in the management and administration of the basic education sector (pre-primary, primary, and secondary education) to plan, for example, for their development, to monitor and evaluate their performance and to ensure that they are properly supplied with appropriate facilities for the purpose of providing quality education for all (PMO-RALG, 2014). The MoEVT manages the higher education sector and teacher
education in teachers’ colleges and has an oversight role of the overall education sector including the formulation of policy guidelines. The government also recognises and coordinates formal and non-formal education provided by some communities, non-governmental organizations (NGOs), and individuals.

With the exception of higher education, which has its own curriculum orientations and quality assurance system, the curricula and final examinations for other levels of education (e.g., primary, secondary and teacher education at certificate and diploma levels) in Tanzania are centralised. The government controls the curriculum and examinations through two organs under the MoEVT, that is: the Tanzania Institute of Education (TIE) and the National Examinations Council of Tanzania (NECTA). TIE is mandated to design, develop, and monitor curriculum materials and implementation for pre-primary, primary, secondary, and teacher education at certificate and diploma levels (URT, 1995). For more details of the structure of teacher education in Tanzania, see the later sub-section on the structure of pre-service teacher education. TIE is not responsible for curricula in higher learning instructions such as universities and university colleges. On the other hand, NECTA is responsible for national examinations for all levels of education, except higher education. Thus, it prepares and administers examinations for primary, secondary and teacher education at certificate and diploma levels only.

### 2.2.2 Medium of instruction

The formal education system is characterised by a bilingual policy (Vuzo, 2010). The policy promotes the use of both *Kiswahili*, the national language, and a foreign language, *English*. *Kiswahili* is used as a medium of instruction in public pre-primary and primary schools, and in teachers’ colleges which train Grade III ‘A’ teachers (commonly known as certificate teachers), while *English* is taught as a school subject (ibid.). However, *English* is used as a medium of instruction in English medium pre-primary and primary schools, which serve pupils from foreign countries and interested Tanzanians. At secondary and tertiary education levels things turn round. In ordinary level secondary education the medium of instruction is *English*, and *Kiswahili* is taught as a compulsory subject. In advanced secondary education, at the teacher education diploma level and in higher education the medium of instruction is *English*. At these levels *Kiswahili* is taught only to those students taking it as a subject that is compulsory within their subject combinations (see also Maro, 2013). However, there has been a great concern about the weaknesses caused by this policy and how this relates to the education quality. Vuzo (2010) argues that the use of *English* as a medium of instruction in secondary schools in Tanzania impede both the teaching and learning process in the classrooms. To this effect, there has been a so far unresolved debate among academics and the public at large in Tanzania as to whether *Kiswahili* should be used as a medium of instruction throughout all levels of education.
2.3 An overview of curriculum reforms in Tanzania from 1961 to date

Since its independence in 1961 Tanzania has been working hard to improve her education quality. One highly important area in this endeavour has been reforming the curriculum to respond to societal needs and consciousness as well as to global changes in ways of thinking and practice in education. For example, since independence Tanzania has undergone four major curriculum reforms, which have involved changes of major areas of the curriculum, that is, the content, teaching-learning methods and techniques, assessment and evaluation as well as teaching-learning materials (TIE, 2013b). There have also occurred some temporal reviews and improvements of some parts of the curricula as needs have arisen. The reforms can be understood on the basis of the historical, social-economic and political contexts in which they have developed. The major reforms include the following:

(i) The 1967 curriculum reform,
(ii) The 1979 curriculum reform,
(iii) The 1997 curriculum reform, and
(iv) The 2005 curriculum reform.

(i) The 1967 curriculum reform

Before 1967 the existing curriculum was inherited from the British colonial rule, which was based on discrimination, focused on the creation of classes and was restricted to the few individuals earmarked to service colonial interests (TIE, 2013b). The 1967 curriculum reform was the first, and it aimed to change the education system from the colonial to the Tanzanian system with a focus on creating education for self-reliance based on cultural and social citizenship. The change took place in response to the introduction of the Education for Self-Reliance (ESR) philosophy, which was an outcome of the Arusha Declaration, and it aimed to offset the weaknesses of an education system inherited from the colonial period. The Arusha Declaration spelled out the main pillars on which the country’s orientation to socialism stands (Ishumi, 1976). The pillars included, among others, respect for human dignity, co-operation in human endeavours for the welfare of all, and the obligation to work and achieve for the good of all (cf. Ishumi, 1976; Kitta, 2004). The 1967 education change was ratified by The Education Act No. 25 of 1978, which, apart from legitimising the curriculum reform, legalised other changes including making primary school enrolment and attendance compulsory for children of ages 7 to 13 and centralising school curricula and syllabuses (Kitta, 2004).

Generally, the ESR philosophy emphasised the need for a curriculum reform establishing education that will enable the learner to become an independent, creative thinker, able to combine theory with practical life skills. TIE (2013b, p. 10-11) outlines some of the specific goals of the resulting curriculum with its ESR orientation. They include:
(a) To teach learners to feel part of the community where they live.
(b) Education to inculcate the spirit of people living together and working together.
(c) Education to make learners feel that they are all equal human beings and to eliminate ethnic, race, religion and education pride or arrogance.
(d) To develop creative skills and build self-esteem.
(e) To prepare children for work in rural areas and independence.

This reform could be interpreted as the independent government’s effort to define its own education system. It can be said that the government, by using the curriculum as an agency of socialisation, aimed to establish what knowledge is to be learnt and what values and attitudes are acceptable in Tanzanian society. Thus, through the curriculum reform, the independent government achieved power and control over the education.

Although in the 1967 reform the advocated purpose of schooling seems to be that of efficiently meeting the needs of society by training young people to become self-reliant and future contributing members of society (see for example the goals outlined in (a) – (e) above), internally the curricula were still promoting the learning of academic disciplines, accomplished through the transmission of their knowledge and ways of thinking to students. This could be understood as a different curriculum ideology embedded in the school curricula. It echoes what Schiro (2013) referred to as ‘the scholar academic ideology’, which views the purpose of education as being to enable children to learn academic disciplines, i.e. to acquire an understanding of an academic discipline by learning its content. The scholarly academic ideology assumes the task of education to be to extend the academic disciplines by introducing young people to them (Schiro, 2013). This means that there were contradictions of pedagogies and curriculum ideologies at play. While the goals of the curriculum reform seemed to more or less promote a social efficiency ideology, the actual school curriculum contents and structure embedded a different ideology - the scholarly academic ideology. There was very little or no linkage between the content learned in schools and practice/real life in communities, as assumed by the ESR philosophy (cf. Ishumi, 1976). This could be partly explained by the lack of expertise among the curriculum developers themselves. It could also be due to the dominance of the classical concept of knowledge as school-based or discipline-based. Some authors (e.g., Osaki, 2002) observe that sometimes the ESR philosophy was misinterpreted as being only about establishing school farms where students could work after class hours without links to what they learnt in the classrooms.

(ii) The 1979 curriculum reform
The 1979 curriculum reform was also guided by the philosophy of Education for Self-Reliance and the aim was to strengthen the implementation of the ideology of socialism and self-reliance. The reform also focused on the practical implementation of the motto of “Politics is Agriculture” and the
Musoma Declaration on Education for All (TIE, 2013b). These changes led to the establishment of schools specialising in business, technical and agriculture education. The reform emphasised the need for greater balance between teaching theory and practice. The science and mathematics subjects were also strengthened and emphasised. Other changes that took place in this period involved the introduction of vocational training curricula for graduates of primary schools. The goal of the 1979 reform was to prepare paraprofessionals (e.g., those who have completed primary or lower secondary education and obtained vocational training) in the fields of agriculture, engineering, business and domestic science to increase graduates in these skills and improve the economy at the individual level and the country at large (ibid.).

There hardly exists any literature on these curriculum reforms in relation to teacher education. Therefore, the review here is based on very few sources that yet provide very scant information in that regard. The reforms in 1967 and 1979 have had implications on teacher education. For example, one of the impacts of the Musoma Declaration on Education for All was the increased enrolment in primary schools, which in turn raised the demand for primary school teachers. In order to meet the increased demand, a number of strategies were adopted. One was to reduce the amount of time spent by grade ‘A’ student-teachers in teachers’ colleges from two years’ full-time college study to one year. The second year was covered by school-based training. It was assumed that college tutors would supervise such students, as they would be visiting schools (Kalugula, 2001). Also, within this period primary school leavers were recruited as grade ‘C’ or ‘B’ teachers and qualified to teach in primary schools (Meena, 2009). Arguably, these measures were adopted more as strategies to meet teacher demands caused by the expansion of primary education than to improve teacher education. Recruitment of these teachers, particularly the grade ‘B’ ones, continued for many years until 1996 when it was abolished. However, these teachers were useful, especially in rural areas, despite the fact that they were unqualified (Chediel, 2004).

In addition, during this period, more than 90% of all science and mathematics teachers, especially in secondary schools, were expatriates (Chonjo, 1994). Following the political pressure of producing more teachers locally, teacher education was expanded. For example, degree programmes such as Bachelor of Arts with Education (BA. Ed) and Bachelor of Science with Education (BSc. Ed) were established. The intention was to prepare subject specialists who could teach the expanded secondary education sector. Teacher education in Tanzania is discussed further in later sections.

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5 Grade ‘C’ teachers received a ‘crash course’ in teaching methodology for 1 year, while the course duration for grade ‘B’ teachers was 4 years. The first two years were devoted to academic subjects, equivalent to form two secondary education and the second year to education studies. Grade ‘A’ teachers are those who have completed ordinary level secondary education and passed the respective National Examinations.
(iii) The 1997 curriculum reform

The 1997 curriculum reform was a result of the recommendations of the reports by the two National Task Forces - the 1982 report of a Presidential Commission on Education popularly known as the “Makweta Commission”, and the 1992 report of a National Task Force on Education, which were appointed in 1981 and 1990, respectively, to review the then existing education system and propose a suitable education system and necessary changes to be realized by the year 2000 and for the 21st century. Some of the factors which propelled the review of the education system were the changing political economy perspectives from socialism to liberalism in 1980s and the introduction of multipartism (multi-party system) in Tanzania in the early 1990s. It should be noted that from independence in 1961 up to 1990, Tanzania adhered to a single party system. Chama cha Mapinduzi [CCM] (“The revolutionary party”) was the only political and ruling party. Therefore, the reform could also be perceived as the government’s effort to balance between external pressure (the wider global socioeconomic context, e.g. liberalism policies) and internal pressure caused by previous political actions and the public opinion.

The recommendations of the two reports led to the formulation of the Tanzania Education and Training Policy (ETP) of 1995. This policy provided the direction for the improvement of the education system in general and the curriculum in particular (TIE, 2013b). As a result, the new curricula (e.g., the preschool, primary, secondary, and teacher education curricula) translated the goals and objectives of education stipulated by the ETP at each level. The most significant changes in the 1997 curriculum reform involved the reduction of subjects at the primary school level from 13 to 7 and the introduction of new curriculum packages at the primary, secondary and teacher education levels, for example, the subjects of Social Studies and Life Skills at the primary school level. At the lower secondary school level (forms I-IV), such subjects as Information and Computer Studies, and Civics replacing ‘Elimu ya Siasa’ (Political Education), which was mainly meant to spread socialism ideology – were introduced. In high schools (forms V-VI) the General Studies subject (GS) was introduced. The changes also included the embedding of cross-cutting issues (e.g., gender, HIV-Aids) in general subjects for all levels of education. Teacher education at certificate and diploma levels involved both academic and professional subjects. The system of specialisation in the teaching subjects was introduced in teacher education at the certificate level in order to create vibrant teachers in the respective areas of specialisation (ibid). Before this, prospective teachers at this level were supposed to learn all subjects that were taught at the primary school level.

However, as has been presented above, all these prior reforms (i.e., 1967-1997) were introduced primarily to transform education from the colonial to a Tanzanian education system. They mainly involved the restructuring of the subjects and changes in the contents by either introducing or removing certain elements in a curriculum package. Although some improvements took place
between 1961 and 1997, the curricula were still challenged by scholars as being content-based in nature and character. Much emphasis still lay on the delivery and acquisition of academic content knowledge. There was little or no emphasis on the application/linkage of that knowledge with real life – beyond subject and classroom/school contexts. The curricula were content-driven, based on the assumption that if the prescribed content was delivered, the goals of school education would also be achieved. This means that goals were secondary and regarded more as a way of legitimising and expressing the purpose of school. Above all, some of the contents of the school subjects were irrelevant to the learners’ immediate environment and to the Tanzanian context at large (Chonjo, Osaki, Mrutu, & Possi, 1996). Methods of teaching were not significantly changed (not even in the curriculum documents themselves, let alone their actual implementation). The pedagogy was highly teacher-centred, giving few opportunities for learners to participate, experience or practise what they were learning (c.f. Chonjo, Osaki, Mrutu, & Possi, 1996; Ottevanger, de Feiter, Osaki, & van den Akker, 2005; TIE, 2013b). That is to say, the teaching-learning paradigm remained characterised by the transmission-acquisition metaphor.

(iv) The 2005 curriculum reform
Developments in science, society and the economy formed the basis for the (renewed) interest in competence and in competence-based curricula. As a result of these developments, the acquisition of knowledge for its own sake was no longer the major aim of education and training but the application of acquired knowledge. The 2005 reform centred on the establishment of a curriculum emphasising competences, called “Competence-based Curriculum”. The nation-guiding philosophy of the reform is still ‘Education for Self-Reliance’ (TIE, 2013b). Moreover, the reform was conducted in response to the demands of various national and international policy statements and agreements. The most influential international agreements which Tanzania subscribed to include the EFA goals and the 2000 MDGs. In education, the goals of both agreements emphasise the provision of quality education to all. The implications of this included the change of curricula (both content and pedagogy) to equip learners with the requisite knowledge and skills to meet the recent development challenges (ibid.).

At the national level, the policies and plans that greatly influenced the change include: the Education and Training Policy (ETP) of 1995; the Tanzania Development Vision (2025); the National Strategy for Growth and Reduction of Poverty [NSGRP] 2005-2010; the Education Sector Development Programme 1999-2009 [ESDP] and the Secondary Education Development Plan 2004-2009 [SEDP] (MoEVT, 2007a; 2007b; TIE, 2013b). Functioning as regulative policy documents, for example, the ETP of 1995 emphasises, inter alia, the provision of quality education through curriculum review, the use of appropriate assessment procedures, and the improvement of teacher management and provision. The goal of the Tanzania Development
Vision (2025) is to build a nation with high quality education at all levels; a nation with a quantity and quality of educated people sufficiently equipped with the requisite knowledge to solve problems, meet development challenges as well as being competitive on regional and global labour markets (MoEVT, 2007a).

In the curriculum context the goal of NSGRP 2005-2010 was to establish a curriculum capable of equipping learners with knowledge, skills, and attitudes which would enable them to engage in productive activities and contribute to the reduction of poverty in society. ESDP and SEDP also promoted, for instance, the application of learner-friendly teaching-learning methods and strategies (MoEVT, 2007a; 2007b). To sum up, the goals of various national development programmes and plans demanded changes and improvements of the curricula at various levels of education. The 2005 reform can also be regarded as a continuation of the 1997 reform, which also took place in response to the global education policy movement towards knowledge economy.

Although commonly known as ‘the 2005 curriculum reform’, this reform was initiated in stages. For example, in pre-primary, primary and secondary education forms I-IV it started between 2004 and 2005; in higher secondary education forms V-VI 2008-2009; and in teacher education certificate and diploma level between 2006 and 2009. In this curriculum reform, the contents of all subjects were modified in order to emphasise the skills, concepts and basic principles required in professional development, self-employment, and to prepare for the labour market (TIE, 2013b). Such competences as the acquisition of multiple life skills; creativity; critical, reflective, and independent thinking; problem solving skills; and an ability to adapt to cutting edge technology are examples of the most emphasised issues in curriculum documents such as the secondary education curriculum (MoEVT, 2007b) as well as the teacher education curriculum (cf. MoEVT, 2007a). New subjects and cross-cutting issues were also introduced and emphasised. For example, Information and Communication Technology (ICT), Personalities and Sports at the primary school level (TIE, 2013b). As reported earlier, apart from modifications and the introduction of new subjects, a major issue in the 2005 reform was the emphasised shift in teaching approach from teacher-centred to student-centred pedagogy (MoEVT, 2007a; 2007b). The new emphasis is on constructivist perspectives where methods of teaching and learning should focus on the active involvement of the learner during lessons, which may require learners to perform a great deal of practice to gain and maintain their mastery of skills (MoEVT, 2007a; 2007b; TIE, 2013b). When it comes to teacher education, apart from the review of the curricula for teacher education at certificate and diploma levels in 2006 and 2007, the reform involved the introduction of the new teacher education programme for training pre-primary teachers at the certificate level (TIE, 2013b).

As part of an international education policy dialogue, the 2005 reform can be said to echo or represent an instrumental conception of education which
emphasises necessary competences such as problem-solving, critical thinking, creativity, information technology, team work, learning to learn, managing one’s own learning and so on, for both ‘a successful life’ and a ‘well-functioning society’. Generally, the curriculum ideology that seems to underlie the CBC reform in Tanzania resonates with what Michael Schiro termed ‘social efficiency ideology’. This ideology views the purpose of schooling as being to efficiently meet the needs of society by training young people to become functional as future contributing members of society (Schiro, 2013). It parallel with what Young (2008) referred to by the broader term ‘technical-instrumentalism’. Under this ideology the goal is to train them in the skills and procedures they will need at a workplace and in everyday life at home in order to live productively and perpetuate the functioning of society. Those who subscribe to the social efficiency ideology believe that the essence of learners lies in their competences and in the activities they are capable of performing (ibid.). Figure 2 summarises the timeline for major curriculum changes in the Tanzanian education system and the main issues that drive each change.

Figure 2: Timeline for major curriculum changes in Tanzanian education system

2.4 Teacher Education in Tanzania

In this study, teacher education is taken to mean the provision of specialised education and training to individuals who intend to become professional teachers and updating qualified teachers’ knowledge, skills and attitudes in the form of continuing professional development. This definition reflects both pre-service and in-service dimensions. Teacher education in Tanzania, as in most parts of the world, is recognised and emphasised as a critical determinant of quality education. As Anangisye (2010) argues, the role of teachers in Tanzania today is not only crucial for the growth and development of the intellectual community but also for innovations in the education industry. Teacher education programmes in Tanzania are divided into two categories: initial teacher education, commonly known as pre-service teacher education, and continuing professional development, commonly known as in-service teacher education. In-service teacher education is meant to provide opportunities for servicing teachers to refurbish their knowledge and skills of teaching, as well as acclimatising new teachers to be able to carry out their
new role of teaching effectively. In-service teacher education in Tanzania is provided through various modalities ranging from meetings, seminars and workshops to short courses, depending on the aim and scope as well as on available resources (Bhalalusesa et al., 2011).

**Aims of teacher education in Tanzania**

The curriculum for a diploma in teacher education (MoEVT, 2007a, p. 5) reiterates the overall aims of teacher education in Tanzania as follows:

- To impart to teacher trainees theories and principles of education psychology, guidance and counselling;
- To impart to teacher trainees principles and pedagogical skills of creativity and innovation;
- To promote an understanding of the foundations of the school curriculum;
- To sharpen the teacher trainees’, teachers’ and tutors’ knowledge and mastery of selected subjects, skills and technologies;
- To impart skills and techniques of educational research, assessment and evaluation;
- To enable both teacher trainees, serving teachers and tutors to acquire leadership and management skills in education and training.

### 2.4.1 Management and organisation of teacher education

Teacher education lies under the auspices of the MoEVT, which has the overall responsibility for the management and provision of teacher education in Tanzania. Currently, teacher education in Tanzania is offered in teachers’ colleges (non-university institutions), commonly known as Teacher Training Colleges (TTCs), and in universities, both public (Government) and private (Non-government) institutions. Teacher education in teachers’ colleges belongs directly under the directorate of teacher education of the MoEVT and follows a centralised curriculum. Teacher education in colleges is governed by teacher education policies, guidelines and standards issued by the MoEVT through its department of teacher education. This department is also responsible for overseeing the implementation of the teacher education curriculum nationwide (MoEVT, 2007a). The task of inspection is mainly the responsibility of the Zonal School Inspectorate Department, which is given mandate under the Education Act No. 25 of 1978 and its amendment No.10 of 1995 to assess the provision of education in the colleges and provide appropriate advice to rectify any anomalies observed (ibid., p. 31). This means that college principals and tutors follow directives from the central government and thus have comparatively little or no degree of freedom when it comes to the implementation of the standardised curriculum. As universities are regarded as autonomous institutions, they organise their own curricula for
teacher education programmes, which are then approved by individual university senates and the Tanzania Commission for Universities (TCU). The context chapter looks more closely at pre-service teacher education, particularly in TTCs, as this is the focus of the study. Nevertheless, information about teacher education at university level is somewhat provided to make a complete picture.

2.4.2 Pre-service teacher education in Tanzania

Pre-service teacher education is the initial programme for those aspiring to become professional teachers with a particular qualification and is meant to provide a supply of better-trained teachers for the entire education system. It offers a strategic opportunity for ensuring that all teachers are ready and able to start a successful teaching career (Bhalalusesa et al., 2011). To this effect, as Kansanen (2002) observes, initial teacher education is of great significance in educating competent teachers, and any defects arising from this are extremely difficult to correct afterwards. This means that for a country like Tanzania, where opportunities for in-service training are rare, the effectiveness of pre-service teacher education is essential. However, this is not to say that in-service teacher education should be neglected, because teachers need lifelong learning.

2.4.2.1 The structure of pre-service teacher education in Tanzania

Pre-service teacher education in Tanzania has a relatively complex structure. It is divided into three major levels according to the qualification provided: (i) Grade III ‘A’ teacher education, (ii) Diploma teacher education and (iii) the Bachelor’s degree. Prospective teachers at the Grade III ‘A’ and Diploma levels are trained in teacher training colleges (non-university institutions), while teachers at the Bachelor’s degree level are trained in recognized universities and university colleges. Grade III ‘A’ and diploma programmes last for two years, constituting both college-based courses and field experience. College-based courses comprise such components as professional courses and academic and teaching methods courses. The field experience concerns practical teaching experience in actual school contexts. As Lewin and Stuart (2003) clarify, this is an opportunity for student-teachers to bring all other components together and practise the role of a teacher. Upon successful completion, Grade III ‘A’ graduates are awarded a Grade III ‘A’ Certificate in Education. According to the MoEVT policy, graduates of this programme can teach in primary or pre-primary schools only (see Figure 3). Graduates of the diploma programme are awarded a Diploma in Education Certificate and are expected to teach in ordinary level (O-level) secondary schools, particularly forms one and two (URT, 1995). Although the policy demands that teachers with a Diploma in Education Certificate are qualified to teach forms one and two only (which are the lowest classes in ordinary secondary education), while forms three to six are to be taught by university graduate teachers, this has not been the case in practice. Due to the shortage of
university graduate teachers, teachers with a Diploma in Education qualification have been teaching up to forms three and four, and in some cases, to forms five and six (Meena, 2009).

Currently, the Bachelor of Education degree takes three years. Before the year 2005, the Bachelor’s degree programmes involved four years. The increased demand for secondary school teachers due to the introduction of the secondary education development plan (SEDP) 2004-2009, which, for instance, aimed to raise enrolment in secondary schools by 50 per cent, was the major factor behind the reduction of the duration of degree programmes from four to three years (Meena, 2009). University teacher education programmes comprise residential courses which include professional studies, academic and teaching methods courses, as well as field experience. The graduates qualify to teach in advanced level (A-level) secondary schools or in teacher training colleges (URT, 1995), depending on the degree programme attended. For example, Bachelor of Arts with Education (BA.Ed) or Bachelor of Science with Education (B.Sc.Ed) qualifies graduates for teaching in advanced level secondary schools. Those attending Bachelor of Education (B.Ed.) programmes qualify for teaching at teachers’ colleges. Thus, one of the major relations between universities and teachers’ colleges is that the former prepare tutors who will go to teach in the latter. There are two major approaches of providing education programmes at the university level. The first approach is conventional in nature and character, in the sense that students attend studies at universities directly and full time. The second approach is through distance education. This approach helps to prepare graduate teachers through the Open University of Tanzania (OUT). It has to do with an alternative approach to meeting teacher demands (Anangisye, 2010).

Besides undergraduate degrees, some universities, for example the University of Dar es Salaam, offer post-graduate studies such as the Post-Graduate Diploma in Education (PGDE) for those who have undergone specific preparation in fields other than education, such as engineering, agriculture or environmental science. This is because currently a reasonable number of people are joining the teaching profession since employment is guaranteed due to the increased demand for teachers. The duration of the PGDE programme is one year, and candidates attend education courses similar to those offered to undergraduate students. Experience shows that most teachers educated in this way will be found teaching in advanced level secondary schools. It is important to note that one can find some degree graduates teaching in in pre-primary schools. This is because some universities (e.g., the University of Dar es Salaam) have recently begun to offer bachelor degrees in early childhood education. Figure 3 illustrates the structure of teacher education in Tanzania. On its right hand side are the various levels of education that the graduates become qualified to teach.
2.4.2.2 Admission to teacher education

In Tanzania, the admission to pre-service teacher education is open to all secondary school leavers depending on the levels they want to train, and on their qualifications for the programme applied to. Grade III ‘A’ and Diploma teacher education programmes recruit candidates who have completed ordinary level and advanced level secondary education, respectively. The minimum qualification for admission into these training programmes is division three of the Certificate of Secondary Education Examinations (CSEE) or the Advanced Certificate of Secondary Education Examinations (ACSEE) (cf. MoEVT, 2007a). However, in reality division three is seen as a maximum qualification. As a matter of clarification, in Tanzania final secondary education examination results are classified into divisions or classes. Basically, a student is considered to have passed if she or he attains between I, II, III, and IV divisions. On the other hand, a student is considered to have failed if he/she attains division zero. This means that a majority of students who perform higher, i.e. divisions I & II, progress to higher learning institutions, such as universities and university colleges. Hence, certificate and diploma teachers’ colleges have to make do with poor performers, which raises the question of quality. In fact, Anangisye (2010) observes that for decades now when it comes to real practice, even students with division IV and zero have been admitted to teacher education programmes, both at Diploma and Grade III ‘A’ teachers’ colleges. Some authors (e.g., Kitta & Fussy, 2013) highlight that the selection of ill-qualified candidates to join teachers’ colleges might also be attributed to the mushrooming of university colleges, which has reduced the pool from which to select the candidates. Entry into university teacher education programmes is controlled by the Tanzania Commission for Universities (TCU), whose minimum admission is at least two principal passes in teaching subjects - a minimum of division III.

The above observations also reveal that at the entrance into teacher education programmes no real assessments of suitability are made, only a
selection of applicants who have shown an interest in training to become teachers and have met the admission requirements. Experience shows that assessment during teacher education is the only ‘gatekeeper’ to the teaching profession. For example, in Grade III ‘A’ and Diploma teacher education programmes, a judgment about the suitability and competence of the prospective teachers is made by the teacher education institutions in question through formative assessments (e.g., of teaching practice, pedagogical and subject courses) as well as a summative assessment by the external body, the National Examinations Council of Tanzania (NECTA). In Tanzania, it is NECTA that issues the teaching certificate to newly educated teachers for all non-university teacher education institutions (see also MoEVT, 2007a, p. 23 & 24). Therefore, with regard to non-university institutions, they are themselves responsible for conducting the formative assessment of candidates and submit continuous assessment (CA) marks to NECTA, which is responsible for summative assessment. Ideally, CA contributes 50 per cent of the final assessment of the student-teachers. NECTA combines CA and the marks obtained at the final examination to grade the candidates (MoEVT, 2007a). A recent circular issued by the MoEVT (Education Circular No. 3 of 2013, with reference No. ED/OKE/NE/VOL.1/01/31) directs the teachers’ colleges to assess student-teachers at the end of year one. According to the circular, only candidates who manage to get a Pass mark of 41 in each subject should be allowed to continue to their second-year training. Those who fail in more than four subjects may be discontinued from studies (MoEVT, 2013a). It seems that the MoEVT is in a way trying to emphasise suitability tests in teachers’ colleges.

Available basic education statistics show that by 2013 there were 126 teacher training colleges, of which 34 are government- and 92 are non-government-owned (MoEVT, 2013b). Thus, the number has increased from a total of 105 in the year 2012. According to the data, it is the number of non-government colleges that has increased from 71 in 2012 to 92 in 2013, i.e. an increase of 21 colleges. The number of non-government teacher training colleges has partly increased due to the liberalisation policies which began in the early 1990s and has continued to accelerate until recently. Following liberalisation policies, individuals and private agencies were encouraged to invest in education to complement government efforts (Bhalalusesa et al., 2011). The difference between government- and non-government-owned colleges is that the former are established, financed and resourced by the state and are directly responsible to the state government. In other words, they are government institutions. The latter are private institutions in the sense that they are established and owned by NGOs, communities, and individuals. Thus, in certain respects they are not directly responsible to the government, though they still have to follow the rules and regulations of education provision issued by the government. In that respect they are under government control.
Generally, the total enrolment in both government and non-government teachers’ colleges increases year after year. For example, the total enrolment of Grade III ‘A’ and Diploma students has increased by 62.9% from 21,888 in 2008 to 35,645 in 2013. This suggests that more people continue to opt for teacher education at these levels. The challenge, therefore, will be how to retain this human resource in the profession. Out of the total enrolment 35.1% are diploma students and 64.4% are certificate students (MoEVT, 2013b). However, as Table 1 shows, it is important to note that, despite the existence of many private institutions, most teachers are trained in government teachers’ colleges. Among other reasons, this could partly be explained by the fact that most private institutions are small, admitting only a limited number of students (see also Bhalalusesa et al., 2011). In addition, teachers who have received training in government teachers’ colleges are given first priority to employment by the government.

Table 1: Enrolment in government and non-government teachers’ colleges, 2008-2013

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>16,700</td>
<td>21,723</td>
<td>25,814</td>
<td>24,243</td>
<td>26,626</td>
<td>24,072</td>
</tr>
<tr>
<td>Non-Government</td>
<td>5,188</td>
<td>13,648</td>
<td>10,834</td>
<td>13,455</td>
<td>16,632</td>
<td>11,573</td>
</tr>
</tbody>
</table>


Unfortunately, it has been observed that a majority of the candidates admitted into teacher education programmes in Tanzania are not genuinely interested in teaching as a career (Anangisye, 2010; Kitta & Fussy, 2013; Mkumbo, 2012). The teaching career seems to be the last refuge to many students seeking employment opportunities (Anangisye, 2010). The lack of suitability tests at the admission stage, and of assessment of teachers’ competence through formal induction programmes could be among the reasons contributing to the recruitment of teachers who are not actually committed to the profession.

2.5 Curriculum for pre-service teacher education

Who decides the curriculum for teacher education?
As pointed out earlier, the curricula for Grade III ‘A’ and Diploma in secondary teacher education are designed and developed by the Tanzania Institute of Education (TIE) under the MoEVT and are examined by the National Examination Council of Tanzania (NECTA). This means that decisions about the curriculum are centralised. Those who are involved in making decisions about the curriculum are mostly politicians, curriculum developers and university academics. Even though university academics are

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6 Table 1 shows enrolment in teachers’ colleges (TTCs) only, not universities and university colleges as the latter are not the focus of the study.
involved in decisions, they often work within terms of reference issued by curriculum developers at TIE. As Meena (2009) argues, this model of decision-making seems to be used to ensure uniform delivery and maintain standards. In other words, to use Bernstein’s (1996/2000) ideas, it seems that this model is used as a means through which the state attempts to ‘control official recontextualisation’ (see Part I in Chapter Three for details of the ‘recontextualisation’ concept) for the construction and surveillance of the state pedagogic discourse.

Some tutors from teachers’ colleges have also been involved in the process of designing the curriculum framework and development of syllabuses, as being members of subject panels formed by TIE. Although these tutors might have learnt about curriculum-making during their education at the university, this might not be enough, because initial teacher education at universities more often deals with theory than practice (cf. Clayton, 2007). The lack of training in curriculum development among these tutors makes other experts, i.e. curriculum developers at TIE and university academics, overshadow them and acquire more power in the process (see also Meena, 2009). Arguably, the participation of a few tutors in the curriculum-making process does not guarantee whether other tutors will learn from their colleagues unless such opportunities are provided. Considering the context of decision-making elucidated here, it is clear that teachers’ colleges have always been working within the time frame stipulated in the official curriculum documents and directives from the MoEVT and TIE. Tutors have little or no degree of freedom when it comes to decisions about what content to teach and about teaching time. However, tutors may still exert power in the implementation of the curriculum in colleges through their interpretations and through the teaching process. How tutors interpret the curriculum and how they train student-teachers constitute the study object of the present study.

Nevertheless, TIE itself is facing a shortage of qualified curriculum developers (Meena, 2009). Experience shows that most of the curriculum developers at the institute came directly from being subject teachers in schools. As noted earlier, universities are, in contrast to teachers’ colleges, responsible for their own curricula. However, as Babyegeya (2006) observes, while universities and teachers’ colleges are guided by the general aims of teacher education stipulated in the Education and Training Policy of the country, there is still no well-formulated procedure for coordinating activities between the two parts of the system.

The curriculum approaches that predominated teacher education in Tanzania for many years (e.g. since 1970s to the early 2000s) were mainly discipline-based with a little component of practice-based teacher education (Meena, 2009). Discipline-based teacher education is the curriculum approach that emphasises subject matter knowledge and skills of delivery. The structure is often linear consisting of educational courses and subject disciplines of the school curriculum (Cheng, 2001). In practice, teacher educators and student-teachers follow the same standard, content and structure. The curriculum is
looked upon as representing facts, and teacher education programmes assume a top-down approach, where student-teachers are viewed as ‘empty vessels’ to be filled with knowledge possessed by the teacher educator. Teaching is focused on transmitting facts to student-teachers by relying heavily on textbooks (Meena, 2009). Hence, the curriculum is delivered by textbooks and external examinations. However, the discipline-based approach has been challenged as education disciplines are considered to be highly abstracted from the realities of the teaching situation (cf. Young, 1998). Education disciplines seem to be regarded as something remote and academic. The curricula for Tanzanian teacher education, especially at Grade III ‘A’ and Diploma levels, have been swinging between a discipline-based and a practice-based approach for several decades. Practice-based teacher education considers teachers’ practices as a crucial aspect in both sustaining and challenging the prevailing views of knowledge in the curriculum (Young, 1998). In this kind of approach teaching practice is given its due weight, and within professional studies the intention is to enable student-teachers to link theory and practice. The lack of emphasis on practice-based teacher education is perhaps due to the content-based paradigm which used to dominate the entire education system of Tanzania. Furthermore, the lack of emphasis has been due to funding constraints (cf. Bhalalusesa et al., 2011, Kitta & Fussy, 2013).

In the recent past (between 2006 and 2009) the curriculum for grade III ‘A’ and diploma teacher education in Tanzania has been reviewed to adopt a more competence-based orientation. This follows the reform of the curricula at primary and secondary schools, which are now competence-based. In this curriculum the emphasis is to link the theoretical knowledge to its application context. This kind of teacher education is sometimes called ‘technocratic rationality’ as it is concerned with the technical application of educational knowledge (Beyer & Zeichner, 1987). However, looking at this new teacher education curriculum reveals that there is an overlap with the previous approaches. What distinguishes it from the previous approaches is the kind of specific emphasis given. This kind of curriculum approach for teacher education has been criticised, too. For example, in the context of teacher education, Oberski and McNally (2007) found that competence statements increase the tension in initial teacher education programmes as there is more to teaching than what is stated in competence statements.

Teacher education in Tanzania may also need to consider the current professional agenda that aims to make teaching and teacher education a research-based profession with a formal body of knowledge (Cochran-Smith & Demers, 2008). Research-based teacher education is used to describe a general approach to teacher education that emphasises the development of student-teachers who have the capacity to use research and research-driven competences in their on-going teaching and decision-making (Westbury, Hansen, Kansanen, & Björkqvist, 2005). Another goal is to enable student-teachers and practising teachers to adopt an inquiry stance to their work. The
outcome would be producing teachers who are autonomous and reflective, rather than passive recipients of external decisions or mere technicians. In teachers’ colleges in Tanzania, student-teachers learn about research in the course named Research, Measurement and Evaluation, which is taught in the classroom, like any other subjects. The process ends by their conducting small projects, which may take different forms, such as essay writing, story writing, designing and making teaching materials, or conducting small-scale actual research. This implies that research is considered important in learning about teaching. However, tutors in teachers’ colleges are not engaged in research activities (Galabawa, as cited in Meena, 2009). The main function of tutors has remained to be that of teaching and assessing student-teachers. Some tutors would like to conduct research, but there is no formal support system (Meena, 2009). In addition, tutors have no degree of freedom as their activities are occupied by a detailed curriculum. The next section deepens the discussion by focusing on the curriculum for Diploma in secondary teacher education, because teacher education at the diploma level is the main focus of the current study.

2.6 The Curriculum for Diploma in Secondary Teacher Education in Tanzania

In the year 2007 the curriculum for Diploma in Secondary Teacher Education in Tanzania was reviewed to make it competence-based. The review of the curriculum had been prompted by many factors including among others: (i) changes in the ordinary secondary school curriculum that occurred in 2005, which required the preparation of competent teachers to implement the revised syllabuses that are now competence-based; (ii) the consequences of the previous review (e.g., 1997), which reduced significantly academic content subjects in the programme and emphasised teaching instead (the current one has given both equal weight); and (iii) the increased demand for better quality teachers as advocated within the national and international policy agendas such as the Education and Training Policy of 1995; Tanzania Development Vision (2025); Education for All (EFA); and Millennium Development Goals (MDGs) (MoEVT, 2007a) as well as other forces mentioned elsewhere in this thesis. Thus, the diploma in secondary teacher education curriculum was developed within the context of the above-cited background. Taken into consideration were the current aspects of social, political, and economic contexts in order to prepare student-teachers who can fit into society and compete in the global market (ibid). The curriculum document further explains that “colleges are challenged to produce teachers who are competent, creative, and innovative enough to solve problems and play a role in raising productivity in the era of globalization” (ibid, p. 1). These attributes can also be interpreted as what the curriculum regards as valid characteristics of the kind of a teacher required.
In this section I use Bernstein’s ideas as a basis of my review and discussion of the diploma curriculum. According to Bernstein (1975), there are three important message systems that nearly all schools around the world have in common. The three message systems are: curriculum, pedagogy, and assessment. **Curriculum** defines what counts as valid knowledge, **pedagogy** defines what counts as valid transmission of knowledge, e.g. how teaching should/ought to be, and **assessment** is used to measure the realisation of this knowledge, thus also defining what counts as valid ways of measuring the realization of this knowledge (Bernstein, 1975, p. 85, italics my emphasis). These are important agencies of socialisation in any formal education programme. The curriculum for Diploma in Secondary Teacher Education in Tanzania can be looked upon through these three message systems.

In terms of what counts as **valid knowledge**, this diploma is organised in three broad learning areas, each area containing separate subjects. The broad learning areas are: (i) Professional studies, which include such subjects as curriculum and teaching (CT); the foundations of secondary education (FoE); psychology, guidance and counselling for secondary education (PGC); and research, evaluation and measurement (REM). (ii) Academic courses and teaching methods that include the subjects that student-teachers intend to teach in secondary schools. Student-teachers are required to specialise in two teaching subjects on the basis of grades attained in the advanced secondary education examinations and develop their academic content knowledge and pedagogic skills in those specialised subjects. In the academic content, student-teachers are learning topics similar to what is taught in schools. Teaching methodology courses intend to help student-teachers to develop the requisite skills and techniques relevant to the curricula they are supposed to handle. Here, academic and teaching method courses link the teacher education curriculum directly to the secondary school one. However, it is important to note that the academic and methodology parts of each subject are treated as separate subjects in separate syllabuses. (iii) General courses include subjects such as development studies (DS), ICT, educational media and technology, communication skills, project work, and religion (MoEVT, 2007a; TIE, 2011).

When it comes to **pedagogy**, student-teachers are expected, for instance, to acquire the competences of guiding learners to create and construct knowledge through a variety of **learner-centred methods** and **developmentally appropriate materials** (MoEVT, 2007a). Both the curriculum document for Diploma in education and the framework for Diploma in Teacher Education programmes stipulate explicitly that, just as in secondary schools, the teaching and learning methods for Diploma in Education shall be **learner-centred** and **interactive** in nature (MoEVT, 2007a, p. 22; TIE; 2011). This can be interpreted as what the curriculum defines as valid transmission of knowledge. The curriculum emphasises that in this context learning is to be viewed as an interactive, shared and productive process. Tutors are not expected to be the sole source of
knowledge but rather to act as facilitators and guides, as well as providing a broad range of learning experiences (MoEVT, 2007a, p. 22).

Tutors are expected to model these kinds of teacher roles that the prospective teachers can occupy in their future practices in secondary schools. Student-teachers are encouraged to assume greater responsibility for their own learning. They are supposed to be engaged in active learning experiences (MoEVT, 2007a). Further, the curriculum emphasises the creation of opportunities for student-teacher-tutor and student-teacher-student-teacher interactions. Such methods as seminars, media-supported teaching and practical activities coupled with reflections in and on practice are highly recommended (ibid.). It is expected that these strategies will enable student-teachers to develop the required competences that are crucial for achieving reflective practice and committed teaching. However, apart from prescribing topics and mentioning some instructional methods and resources that tutors could use in the teaching process, the various syllabuses, including the pedagogy syllabuses, do not describe in detail how competent, creative and innovative teachers should/could be produced.

Moreover, the delivery of the programme includes two major components: college-based training and field experience. Field experience, commonly known as Block Teaching Practice (BTP), constitutes the second component of the programme. It is an opportunity for student-teachers to practise actual teaching in a real school and classroom environment. Arguably, teaching practice is the ultimate field experience. The diploma programme contains a two-phase teaching practice placement, each phase being supposed to last for eight weeks (MoEVT, 2007a). The first phase takes place at the end of first year, while the second phase takes place towards the end of second year. During BTP student-teachers are supervised by tutors from their colleges in collaboration with mentors at the schools (i.e., residence teachers). For example, colleges often provide guidelines to school heads on which to base trainee assessment. Among others, the guidelines intend to assess student-teachers’ overall discipline and participation in various school teaching and management activities. Even though the Diploma in Teacher Education programme suggests a two-phase approach of teaching practice constituting eight weeks each, experience shows that the actual practice appears to be rather short. This could be attributed to a lack of funds to support supervisors and student-teachers throughout the entire period of BTP (see also Bhalalusesa et al., 2011). This means that teaching practice constitutes a small share only of the entire programme.

Regarding assessment, the curriculum stresses that student-teachers will undergo continuous and final assessment. Continuous assessment is expected to be administered by tutors in a variety of ways over time to allow them to

For examples of required teaching competences to be developed to student-teachers, see Appendix I, which provides a list of competences from the biology and geography pedagogy syllabuses for Diploma in Secondary Teacher Education, 2009a & 2009b, respectively.
observe multiple tasks and to collect information about what student-teachers know, understand, and can do (MoEVT, 2007a, p. 23). Practical assessment strategies such as Block Teaching Practice (BTP), Single Lesson Teaching Practice (SLTP), microteaching, seminar presentations, practical sessions and projects are among the strategies emphasised. Continuous assessment contributes 50% in the final assessment of the student-teacher (ibid, p. 24).

Having seen all these assumptions and recommendations, it is clear that the curriculum, although it contains some elements of mixed perspectives, implicitly seems to adopt more of a social constructivism approach – with the emphasis on the formation of knowledge through interactions. In addition, based on Bernstein’s (1996/2000) ideas, the Diploma curriculum seems to motivate a pedagogic process characterised by weak regulative and instructional rules, in which learners are given freedom to participate and gain some control over decisions and the possibility to include their own ideas and proposals into the teaching-learning process. Thus, the curriculum suggests an invisible pedagogic practice where the tutor does not come to the fore to control everything in a pedagogic relation. This can be said to be the theory of instruction informing the Diploma curriculum. The same seems to be the underlying principle of CBC and its advocated learner-centred methods in the secondary school curriculum.

Further, Bernstein (1975) distinguishes between two different curriculum types when looked at from the perspectives of framing and classification. These are open and closed curricula. He termed the closed curriculum a collection type, where all subjects are taught in isolation from each other, with strong boundaries separating each subject content. Consequently, the closed or collection type curriculum is a strongly classified curriculum. On the other hand, an open curriculum is what he termed an integrated curriculum type. In this case the subjects are not isolated from each other, but the boundaries between them are blurred or broken down, and the relationship between them can be drawn. Therefore, an integrated curriculum is a weakly classified curriculum (see also Cause, 2010). As we have seen in the above review, the curriculum for Diploma in Secondary Teacher Education in Tanzania is organised into separate subjects. Besides, in teachers’ colleges the subjects are taught in isolation from each other. Even for the teaching subjects the academic part and the methodology part are separated; each has its own syllabus in a separate document. Owing to Bernstein’s distinctions and descriptions, it can be argued that at the organisational/structural level the Diploma in Secondary Education curriculum contains elements of a closed curriculum and could therefore be described as a closed or collection curriculum type.

The prescribed teaching/number of contact hours per week is 30 hours, of which more than 50% is allotted to educational and other studies and less on teaching methodology subjects. Usually in teachers’ colleges there are six to seven lessons or periods a day, which last for one hour, starting from 8.00 or 7.30am and ending at around 3.00pm. However, experience shows that after
teaching hours student teachers proceed to extra-curricular activities such as cleaning the environment, watering gardens, chopping firewood, and the like. This has been a common practice for many years, which has resulted in reducing students’ private learning time - commonly known as ‘preparation time’. For example, only two hours, between 8.00pm and 10.00pm, are allotted by college administrations to the official after-class private learning time. This means that while students have many subjects to study, they have little time for private studies.

The study focal point within the categorisation of teacher education in Tanzania
The aim of the current study is to explore how tutors in teachers’ colleges understand/interpret the CBC and train student-teachers to implement it in secondary schools. As pointed out earlier, teacher education programmes in Tanzania are divided into two categories: i) pre-service and ii) in-service teacher education. This study focuses on pre-service teacher education, which has been prioritised because, given the socio-economic context in Tanzania, it has been the main agent and focus whenever the government intends to train teachers to meet the demands of new curricula reforms as well as of the expansion in pre-primary, primary and secondary schools (see also Meena, 2009). Thus, a great deal of the recontextualisation of the curriculum might be taking place here.

As we have seen, pre-service teacher education in Tanzania is offered in universities and teachers’ colleges. For reasons of feasibility, the current study is delimited to Diploma teachers’ training colleges. It was not possible to investigate the problem at all levels of teacher education in Tanzania, given the resources at disposal. Also, there are other reasons that prompted this specific focus. First, the Diploma teachers’ colleges are the ones which prepare most teachers for ordinary level secondary schools – the schools whose teachers have been reported by several studies to have problems in implementing CBC (cf. Amede, 2012; Kasuga, 2012; Shemwele, 2008; Tilya & Mafumiko, 2010). It is argued that the way curricula are implemented in schools is partly to be attributed to the way in which teachers are educated. Although there could be other factors that contribute to the problem, I argue that teacher education may be part of it. It was thought important to explore teacher training at this level. Secondly, the colleges are involved directly in the implementation of the centralised curriculum developed by MoEVT through TIE. Thus it is possible to see if there are tensions and contradictions in the process of recontextualising the official curriculum. The current study, therefore, does not include teacher education at grade III ‘A’ and university levels.


2.7 Chapter Summary

This chapter presented the context where the study was conducted. It opened with an overview in which the main sections of the chapter were outlined. It can be learnt from this chapter that the education sector in Tanzania is still developing and that various efforts are underway to improve the quality of education. However, some challenges continue to face the education sector in Tanzania, teacher education in particular. The challenges include but are not limited to low commitment and motivation among teachers – both servicing ones and those admitted to teacher education programmes – as well as a poor infrastructure (Anangisye, 2010; Kitta & Fussy, 2013; Mkumbo, 2012). Other challenges include: changes in training duration and the subsequent dilemma as to whether the focus of the curriculum should be on mastering the subject matter (the teaching subjects) or on teaching methodology or both. Further, practice-based teacher education has not been given due weight. This is because of the little time given to teaching practice in schools due to financial constraints (cf. Bhalalusesa et al., 2011, Kitta & Fussy, 2013).

From the discussion about the curriculum-making process, it can be learnt that although some tutors have been involved in the curriculum review process, the lack of training in curriculum development among these tutors makes other experts, i.e. curriculum developers at TIE and university academics, overshadow them and acquire more power in the process. Further, the formulated curricula are still criticised by their colleagues (cf. Meena, 2009). This situation triggers more questions like: What is the extent of involving educators in curriculum-making? What degree of freedom are they given to impose their own practical experience on the curriculum? Arguably, the participation of a few tutors in the curriculum-making process does not guarantee whether other tutors will learn from their colleagues unless such opportunities are provided. However, further research on how tutors understand CBC and their instructional practices in this regard is important. Further, the curriculum for teacher education at diploma and certificate levels are designed by TIE, while at the university level the universities have the autonomy to design their own curricula. The problem, however, is that there is no linkage between courses offered at the lower levels of teacher education (certificate and diploma) and the higher level (university). In addition, while universities and teachers’ colleges are guided by the general aims of teacher education stipulated in the Education and Training Policy of the country, there is still no well formulated procedure for coordinating activities between them. For a country like Tanzania where different levels of teacher education exist, it may be necessary to cast a critical eye on these tensions in order to achieve a well-defined connected system. In the following chapter, the theoretical point of departure of this study is presented.
CHAPTER THREE: THEORETICAL POINT OF DEPARTURE AND ANALYTICAL FRAMEWORK

3.0 Overview

This chapter discusses the study’s theoretical point of departure and presents the framework for analysing the empirical data. The motivation behind the two theories that are used, particularly as theoretical points of departure for the study – the theory of pedagogic device (Bernstein, 1996/2000), and the frame-factor theory (Lundgren, 1979) – are presented. These theories have been chosen as they are central pedagogical theories directed towards understanding curriculum issues, teaching and the conditions of teaching. They have been widely used by researchers in curriculum reforms and teaching processes. In this study, Bernstein’s theory is considered relevant for analysing and understanding the recontextualisation of the CBC reform, i.e. how CBC is interpreted/understood by tutors, and for describing the tutors’ pedagogic practices in teacher preparation, whereas Lundgren’s theory is considered appropriate for analysing and understanding the factors influencing tutors’ pedagogic practices. The specific use of the theoretical perspectives is clarified later in this chapter. This part primarily clarifies its organisation.

The chapter, first, briefly summarises the central concepts and ideas in the theories in order to deepen the understanding of the study problem (e.g., the research questions). This is considered more or less as a theoretical background – understanding the theories in relation to the problem under investigation as a whole. This first part is broken down into two sub-parts. Part I is devoted to a discussion of Bernstein’s theory of pedagogic device, highlighting some of its main ideas, its relation to the curriculum development process in Tanzania and the focus of the study. Part II delves into a discussion of Lundgren’s frame-factor theory and its relevance to the current study. Then, the analytical framework is presented, in an attempt to specify what theoretical concepts are applied and for what purposes in the empirical analysis. It was deemed appropriate to do so because of the scope and complexity of
Bernstein’s theory. This is followed by a brief justification for blending the two theories in this study. The chapter concludes with a summary. In the following part, the theory of pedagogic device is discussed.

3.1 Part I: Bernstein’s Theory of Pedagogic Device

The education process and classroom reality of a particular context could be understood on the basis of Bernstein’s (1996/2000) Theory of Pedagogic Device. This theory attempts to describe the general principles which underlie the transformation of educational knowledge (e.g., the official curriculum) into pedagogic communication (Bernstein, 1996/2000). Bertram (2012) elaborates that the theory concerns systemic and institutionalized ways in which knowledge is transformed from the field of knowledge production into the school system and its distribution and evaluation within the school system. The theory developed out of Bernstein’s critique of cultural reproduction studies, which focused on examining what is carried or relayed by education, such as class, gender and race inequalities, rather than on what constitutes the relay itself (ibid.). Bernstein argued that such studies failed to focus on the internal analysis of the structure of the discourse itself. Bernstein’s major focus, therefore, was on understanding how education could be understood on its own terms, not merely as a transmission for social class and other inequalities. As Bertram (2012) explains, he wanted to explicate the inner logic of pedagogic discourse and its practice.

Singh (2002) describes the pedagogic device theory as an ensemble of rules or procedures that, according to Bernstein, provide a model for analysing the process by which expert knowledge (e.g., an official curriculum) is converted into the classroom teaching-learning process. Therefore, the theory allows a researcher to go beyond the question of how faithfully the official curriculum message is interpreted and implemented to describing in nuanced ways the ways in which the policy message is recontextualised (re-interpreted/re-fashioned) as it moves through various levels of the education system (Bertram, 2012). In the theory Bernstein (1996/2000) discusses, for instance, different rules and fields involved in the process of transforming knowledge into pedagogic communication, such as production, recontextualising and reproduction. In the transformation of knowledge, the key process is recontextualisation, whereby knowledge produced on one site, i.e. the production field, is selectively transferred to sites of reproduction, e.g. teachers’ colleges and schools. This process is, however, not straightforward and cannot be taken for granted (Moore, 2013). It therefore requires careful investigation.

Bernstein (1996/2000) distinguishes three fields, all with their special interests, rules and regulations. The three main fields include: the field of production, the field of recontextualisation, and the field of reproduction. Taken together, these fields form part of the distributive rules of the pedagogic device (see also Singh, 2002). The field of production is the place whose main
work consists of the formulation of educational knowledge, ideas and related practices. It concerns the process by which new knowledge, discourses and ideas are created and modified. To clarify, this may involve, for example, the creation of education and training policies, curriculum policies, and school subjects, which is usually performed by policy makers and university academics. The field of *recontextualisation* is the place where the main activity consists of appropriating discourses from the field of production and transforming them into a pedagogic discourse, e.g. the actual teaching process. Bertram (2012) describes it as the place where there is a selection of knowledge from the field of production, a process resulting in the production of a pedagogic discourse. In this process the original discourse from the field of production may undergo an ideological transformation. As I have understood the theory in simple terms, when viewed from a curriculum reform perspective, recontextualisation can be understood as an interpretation of the curriculum policy text from, for example, international and/or national levels (depending on where it originates/is produced) to concrete official curriculum documents, e.g. syllabuses or teacher guides and then to actual pedagogic practices in schools. The field of *reproduction* is the arena where teachers or tutors engage in pedagogics/teaching and assessment practice. As Bertram (2012) explains, it is in this arena that the evaluative rules regulate what counts as a legitimate production. This arena can be understood as colleges and school locations where the teaching process takes place.

The recontextualising field can thus be divided into two arenas: official recontextualising and pedagogical recontextualising (Bernstein, 1996/2000). The official recontextualising field is found at the government/ministerial level (e.g., the Ministry of Education) when, for example, agents like curriculum designers make selections about the knowledge, pedagogy and assessment that will constitute the official curriculum, i.e. concrete curriculum documents such as syllabuses. Hence, the official recontextualising field can be understood as a means through which it is controlled by the state. The official recontextualisation is, according to Bernstein (1996/2000, p. 115), “…created and dominated by the state for the construction and surveillance of state pedagogic discourse.” Although this idea of state control of the curriculum may be questioned, especially in today’s global context of curriculum making and network society, it may still hold true particularly in countries/education systems that use centralized curricula.

The pedagogical recontextualising field, on the other hand, operates in school and college contexts. It concerns the local interpretation of the official recontextualisation by local actors, for instance, the interpretation of curriculum documents such as syllabuses and teachers’ guides by tutors as they ascribe meanings to and translate them into teaching plans and eventually to the actual teaching process. The pedagogical recontextualising field is under control of the social groups, e.g. teachers, tutors in schools and colleges. It may thus depend on the specific context of each school or college and its pedagogic practice as well as on the personal frames of reference of each
teacher. In this way, the contents and experiences learnt in schools and classrooms are influenced by the relationships which characterise their specific teaching context. They can also be influenced by relations between schools and family and community contexts. As Lamnias (2002, p. 35) argues, in general, the process of recontextualisation ‘presupposes intermediations and produces dilemmas’.

To sum up, as expounded by Bertram (2012), in the Official Recontextualising Field the curriculum designers make selections about the knowledge (content), pedagogy and assessment that will constitute the official curriculum. Then, local actors, who may also include textbook writers, let alone tutors and school teachers, interpret the curriculum document in the so-called Pedagogic Recontextualising Field. The field of reproduction is the arena where tutors and school teachers engage in pedagogic and assessment practice. However, these are theoretical ideas. In practice it may be difficult to separate, for example, between the pedagogic recontextualising field and the reproduction field since they are so closely connected. Nevertheless, the pedagogic device theory points to the empirical fields within the education system that are possible to investigate. To become located within the fields discussed by Bernstein, this study focuses its attention on the fields of pedagogic recontextualising and reproduction (e.g., in college contexts where interpretations of the official curriculum and teaching practices occur) with a primary interest in exploring and understanding how the tutors interpret/understand CBC and how (within the constraints of macro and micro contexts) they train student-teachers to implement CBC in secondary schools.

Bernstein’s concepts of production, recontextualisation and reproduction resemble Lundgren’s (1983) idea of formulation and realization arenas when considering curriculum reform. According to him, the formulation arena is where the curriculum policy is produced, while the realization arena is where the curriculum policy is implemented and achieved. Lundgren adds that there exists between the two arenas a transforming and mediating arena where, through for instance teachers’ interpretation of the syllabuses, the development of work schemes and day-to-day lesson plans, and eventually the actual teaching, the discourses from the formulation arena are transformed into pedagogic discourses in schools and classrooms.

Another aspect of crucial importance that Bernstein discusses in his theory is the idea of regulative and instructional rules. The regulative rules concern those of social order and are underpinned by rules of hierarchy. Hierarchical rules regulate the form of communication between people with different hierarchical positions (e.g., as is the case between teacher and students). This idea of Bernstein’s is clarified further by Morais (2002) in that the regulative discourse is a discourse of order which translates the dominant values of society and regulates the form of how knowledge is to be communicated. Instructional rules, on the other hand, concern the “…selection, sequence, pacing and criteria of the knowledge…” (Bernstein (1996/2000, p. 13). They are underlined by discursive rules, which refer to the principles that regulate
the teaching-learning of the specific subject – e.g., biology, history or geography. Of the two discourses, the regulative discourse is the dominant one in the sense that the teaching-learning process in the classroom is often regulated by rules of social order and conduct (ibid.). Bernstein (1996/2000) then argues that the inner logic of any pedagogic discourse consists of the relationship between these fundamental rules and that, although all modalities of a pedagogic practice are derived from the same rules, they may vary according to the degree of classification and framing.

Classification embodies power relations and denotes the extent of boundaries maintained between categories. For the purpose of educational research, it can specifically indicate the extent of boundaries maintained between teachers and students, between subjects (e.g., academic and non-academic disciplines), and between spaces/places. Classification is supposed to be strong when there is a sharp boundary between categories or things, causing hierarchies in which each category has a specific status and voice and therefore a given power; whereas it is weak when the boundaries are weak or blurred. Framing determines the locus of control over the selection, sequencing, pacing of the instructional process, and evaluation criteria between categories (e.g., teachers and students) engaged in a communicative context (e.g., the classroom). Thus, framing is considered as strong when categories with a higher status (e.g., teachers) have control over the above aspects, and weak when categories with a lower status (e.g., students) also have some control over them during the teaching-learning process (Bernstein, 1990, 1996/2000).

During the teaching-learning process at the classroom level, for example, the teacher and the students engage in the relationships which involve the selection of content and competences, the sequence of learning, pacing - i.e., the expected rate of learning, and evaluation criteria, in other words, those which determine the achievement of the intended learning outcomes. Framing will be strong in situations where the teacher controls the selection of content and activities, the order to be followed in learning (sequence), the time allocated for learning each competence/experience as well as whether she/he decides and clarifies the evaluation criteria to the students. Framing will be weak if the student also has some control over the aforesaid elements. In terms of control over the norms of social conduct, a weak framing will occur when, for example, the student is allowed to criticise teachers’ practices by saying whatever they feel at any time and in any manner, etc. When, however, the teacher sticks to given rules and status in a relation, the framing is strong. Framing can also acquire a ‘very strong’ value when, for example, the teacher uses commands or warnings, either verbally or physically, as a form of leading students to behave in a given way, without giving reasons (Bernstein, 1996/2000).

In general, where framing is strong, the pedagogic practices become visible, the rules that control the relations are explicit and largely known to the learner, and the teacher has explicit control over the selection, sequence,
pacing and criteria for evaluation. Vice versa is true where framing is weak. In this case, learners become visible and are given freedom to participate, bringing in their own ideas, comments, suggestions and questions. Bernstein (1990, 1996/2000) suggests that the achievement of successful teaching and learning is to a great extent caused by the weak framing of different aspects in a teaching-learning process. However, Morais and Neves (2001) found that, while weak classifications and framings are essential conditions for learning in other aspects in the pedagogic process (e.g., in selection, sequencing, and pacing), they are less so at the level of evaluation criteria. This suggests that students’ learning is less affected by their own control over the evaluation criteria.

The classification and framing relations described above may apply equally well to teacher education colleges, provided we substitute tutors for teachers, student-teachers for students, and teacher education colleges for schools. Therefore, although Bernstein’s theory developed out of research in schools, I argue that the concepts are still relevant to studying teaching at teacher education colleges. Cause (2010) suggests that framing and classification concepts can be used as a tool for analysing and illuminating pedagogic processes in schools (and of course colleges).

**Connecting Bernstein’s theory to the Tanzanian context and the focus of the study**

Using Bernstein’s concepts and ideas enables us to discuss in general the education system in Tanzania, curriculum development and teaching processes in particular. For example, looking at the curriculum development process, Tanzania has a centralised education system. In this system, curriculum development is centralised and proceeds through three main stages: the policy formulation stage, the programme and material development stage, and the implementation-cum-review stage. The stages correspond to Bernstein’s production, recontextualisation, and reproduction levels, respectively. For instance, the first two stages can be connected to production and recontextualisation. The third stage (implementation-cum-review) is connected to the reproduction level. However, pedagogic knowledge (in this case the written curriculum) produced in the policy formulation and programme and material development stages may still undergo a recontextualising process at the implementation-cum review stage, through so-called pedagogic recontextualisation.

In a centralised education system, the producers of the curriculum are positioned above the reproducers (i.e., implementers), for example, the experts working on drafting the curriculum policy and the parliament deciding on laws and regulations regarding education are positioned at the higher levels. Those working in the official recontextualising field, e.g. at the MoEVT and TIE, with responsibility for facilitating the execution of policies, because of their strategic position in the middle, and because of their power, are also
positioned above the implementers - teachers and tutors in schools and colleges.

The implementers, on the other hand, are not completely powerless, as they are the main actors in the pedagogic recontextualising field. For example, the implementers in the teachers’ colleges, the tutors, control the acquirers or learners (student-teachers) and may alter the curriculum through the way they interpret and translate it from the official curriculum document into instructional practices in the classrooms. Thus, it is clear that tutors, through their agency role, may have a mediating impact on the curriculum reform. They may understand the curriculum reform in their own ways. In addition, as pointed out elsewhere, the literature suggests that in the process of educational change, those at the practice level (e.g., schools/colleges) may resist change and struggle for autonomy in their field of work (cf. Bailey, 2000; Ornstein & Hunkins, 2013; Schmidt & Datnow, 2005). Owing to this idea, it may be possible that tutors who have been working in colleges to train teachers for some time, and who have possibly developed their own traditional deep-rooted theory of action, receive and interpret the CBC policy critically, not just accepting it. The question of how tutors understand/interpret CBC is vital and thus worth investigating.

However, Bernstein’s theory has received some criticism. One piece of criticism is that it does not lend itself towards providing an adequate, straightforward description, as his ideas do not translate easily into simple formulae but they demand serious attention (Atkinson, 2001, cited in Cause, 2010). This could be one of the very reasons why some researchers avoid using his theory as a theoretical foundation for a project (Cause, 2010). Still, this criticism does not seem to question the applicability of the theory; it rather seems that the opacity of Bernstein’s writing should be blamed. After all, one may argue that this is common for most substantive theories, because their propositions are usually at a higher level of abstraction. However, what appears to be the important solution, as Cause (2010) suggests, is for the researcher to be courageous enough to invest the energy and time necessary to understand the theory.

Despite the criticism, several researchers in developed and developing countries have used his theory as their theoretical foundation. Although Bernstein’s work from 1970 to 2000 was based on experience and an analysis of the British education system, it is applicable to all forms of pedagogical action (Barrett, 2007). Similarly, Sriprakash (2010) observes that his development of an abstract language of description for pedagogy carries the potential for being used to describe and explain pedagogic practice across different national and social contexts. For example, Bernstein’s theories have been used for research on the western liberal education system (cf. Arnot & Reay, 2007; Moore, Arnot, Beck, & Daniels, 2006; Morais, et al., 2001; Muller, Davies, Morais, 2004). Even in developing countries, researchers have recently drawn on Bernstein’s theory of pedagogy to analyse educational processes (cf. Abraham, 2010; Barrett, 2007; Hoadley, 2008; Nyambe &
Wilmot, 2008; Sriprakash, 2010). In these studies, Bernstein’s theories have been applied as a framework for critical investigations of the principles that govern/underlie pedagogic relations and the way practitioners (teachers) interpret educational reforms. Barrett (2007), for example, drew on Bernstein’s theory in her study of classroom practice in Tanzanian primary schools, acknowledging that the depth of Bernstein’s description and analysis of pedagogy makes them into useful tools. Nyambe and Wilmot (2008) used Bernstein’s theory of pedagogic discourse (of 1990, 1996, and 2000) as a framework for understanding how teacher educators in a Namibian college of education interpret and practise learner-centred pedagogy. A yet another example can be drawn from Sriprakash’s (2010) study in which the researcher drew on Bernstein to identify the principles and underlying assumptions of the reform (child-centred education) and to analyse how these were reinterpreted by teachers in their practice in rural Indian primary schools. In all of these studies, concepts of Bernstein’s theories provided clear descriptions and facilitated interpretation.

The study was also interested in understanding the factors related to how tutors interpret CBC and train student-teachers (e.g., why do they use certain strategies/methods rather than others). Thus, the study explored the frame factors influencing the teaching process. To achieve this goal, the study drew on Lundgren’s Frame Factor Theory, some central ideas of which I briefly discuss below.

3.2 Part II: The Frame Factor Theory

The Frame Factor Theory was first introduced by Urban Dahllöf in the late 1960s when he provided the outlines of a theory explaining the relations between the steering group and the time spent on different curriculum units during class instructions and educational outcomes in the Swedish comprehensive school. However, the theory was not to any great extent developed further by Dahllöf. Instead, this was done by his former Ph.D. student Ulf P. Lundgren, who broadened the scope of the theory and helped it to play an important part in Swedish educational research and beyond (Broady & Lindblad, 1998).

Based on the frame factor theory, teaching can be thought of as a locally and situationally construed process, occurring within limits. This means that there are circumstances in which teaching happens or in which teaching is to be considered. These limits, such as the time available for teaching, curriculum objectives and contents, class size and ability grouping, are what Dahllöf and Lundgren in the 1960s and 1970s, respectively, referred to as frame factors. The limits, which can arise in many ways and forms, are explained in some detail below. For example, at a micro level (school and classroom levels) they could take the form of time available for teaching, curriculum content and demands, ability grouping, available resources of different kinds (e.g., teaching aids), class size, or teacher competence
(Lundgren, 1999). At the macro level (i.e., a societal/ideological/national level or simply the education system level) Lundgren discusses the different forms the steering of education systems and teaching processes can take. These can be explained in terms of Lundgren’s legal, economic, ideological and evaluation systems (Lundgren, 1990). For example, in legal and economic terms, the limits could consist of political steering and control of education by the government through the enactment of school laws or regulations or supporting schools economically via the allocation of resources and the use of regulations to control their appropriation. The constitution of the country, different policies and curricula establish the ideology that guides national education. Eventually, at the school level, its authorities are involved in evaluation via school supervision.

In summary, frame factors can be understood as circumstances/aspects that influence the teaching-learning process. These frame factors exert force on teachers, who in turn formulate their teaching strategies and patterns of interaction in line with the frames available to them. Different researchers provide different categorisations of the frames, for example, the time available for teaching, space, class size, syllabus recommendations (in terms of objectives, content, methods and time), the composition of the group of students, and the way knowledge is assessed and demonstrated (cf. Gustafsson, 1998; Lindblad, Linde, & Naeslund, 1998). However, Broady (1999) thought that most important of all these frame factors is time. We could simply categorise the frame factors into three broad categories - physical and ecological (size and structure of school buildings or classrooms, distance between home and school, relation with external institutions, etc.), administrative, and pedagogical (cf. Dahllöf, 1978). Administrative frames can take the form of laws or rules and regulations, e.g. for class size, admission requirements or the total time available for the teaching of a certain course (for both its theoretical and practical parts) in terms of hours per week. Pedagogical frames can take the form of prescriptive principles and general recommendations in the curriculum document, e.g. content to be covered in a given subject or course, general style of teaching (teacher-centred, student-centred, individualisation, etc.), and assessment strategies. The pedagogical frame factors can also include available resources of different kinds, e.g. teaching aids or the sum of money that may be put at the department’s or teacher’s disposal for purchasing the desired teaching-learning aids. Many of these factors also lie outside the influence of any part of the school system, while others can be changed at some higher educational levels, e.g. by the Parliament, the Ministry of Education, or at least the Institute of Education, which issues recommendations, e.g., about teaching methods and teachers’ guides (see also Dahllöf, 1978).

In an article discussing a further development of the frame factor theory, Lundgren (1999) explains that the frames do not work in a straightforward cause-effect system. They are more like “frames of possibility” which enable or constrain the possibilities of or for certain kinds of teaching processes
(ibid.). From Lundgren’s perspectives, it can be argued that recognising the compelling influence of contextual factors, including both the local school context and wider constraints, has led to the understanding that pedagogic processes in schools or colleges should be interpreted in the light of the wider contexts in which they occur. Thus, the frame factor theory recognises the interplay of contextual factors that can influence (facilitate or inhibit) teachers’ and tutors’ pedagogical processes in schools or colleges, respectively. Arguably, the theory can therefore provide an appropriate framework for understanding and explaining the pedagogical practice of tutors, e.g. why they act the way they do (preferring certain pedagogical strategies to others). The frame factor theory ideas are similar to the ones discussed in Clark and Peterson’s (1986) model of “Teacher Thought and Action”, where they explain that in teaching there are contextual factors which act as constraints and opportunities that enable or limit the teaching process. Examples of such factors include: the physical environment, the emotional environment, the whole college ethos, the curriculum, and the wider social-political and cultural environment.

In the Tanzanian school system, most educational decisions are taken at a higher level of accountability by Parliament, the MoEVt, or at least by the TIE. I argue that implementing educational reforms such as CBC is not only a question of taking logically and psychologically coherent steps from macro to micro levels. The implementation will also depend on the context and on the feedback from the operational level, e.g. colleges. For this reason it is important to explore how contextual factors influence the pedagogical practices in colleges when it comes to training student-teachers for CBC implementation in schools.

3.2.1 The analytical framework
In the foregoing sections I have briefly described the central theories informing this study. In this section I describe the analytical framework, where the main concepts used to guide the analysis of empirical materials are specified, for example, what major concepts from the theories I use and for what purpose. Based on the theory of pedagogic device (Bernstein, 1996/2000), I argue that it is possible to investigate and understand the recontextualisation of a curriculum reform by different recontextualising agents, a subject that forms part of this study. As apparent from the previous discussion, central to Bernstein’s recontextualisation concept is the idea that when a curriculum idea moves from one place to another, it becomes recontextualised since it is inevitable that a transformation will take place as it is transferred from the state curriculum authorities to school/college contexts and teachers’/tutors’ practices.

In this study the concept of recontextualisation, especially its pedagogic aspect, inspired the analysis of and understanding how tutors, as important recontextualising agents in diploma teachers’ colleges, interpret/understand CBC. During the empirical work (generation and analysis of the empirical
materials), for example, inspirations from the concept helped to guide the formulation of semi-structured interview questions and the analysis of data to understand in what ways the tutors interpret the CBC. Therefore, during the analysis process, I approached the data with the idea in mind that there are various interpretations of the CBC. The task was to identify such interpretations and describe them accordingly.

At the micro level (e.g., the classroom level), Bernstein’s concepts of framing and classification are used as lenses for analysing and illuminating what characterises tutors’ instructional practices. Through these concepts it is also possible to understand the regulative and instructional rules embedded in these. The concepts helped in dealing with one of the research questions that sought to examine how tutors train student-teachers to implement CBC in actual classroom situations. Thus, apart from gaining an understanding of tutors’ instructional practices, information about framing and classification helps to understand what happens in the classrooms, what kind of examples (in terms of instructional practices) might be modelled by the tutors to the student-teachers, and what could be the implications of this for student-teachers’ future practices. Do they, for example, model the invisible pedagogic practices which seem to underlie the CBC? This would also increase our understanding of how teaching is handled by the tutors.

As pointed out earlier, this study was also interested in exploring and understanding the contextual factors influencing tutors’ instructional practices. To achieve this, I use the frame factor theory (with its precategories, administrative, pedagogical, physical and ecological frames) as the analytical framework. The reason is to arrive at an understanding of all contextual factors which influence the tutors’ instructional practices that might emerge from the data, whether they are at the macro level (e.g., due to the education system and structures, e.g., curriculum demands, evaluation system, conditions in terms of regulations or laws and other demands from the government/ministry of education), or at the local level (e.g., due to the local contexts in colleges and classrooms). ‘Contextual factors’ is hereby used as an inclusive term, intending to capture factors emerging at any of the levels specified above. I have clarified this because researchers sometimes refer to ‘contextual factors’ as only comprising factors at local contexts in schools/colleges. As Carlgren and Lindblad (1991) suggest, I am convinced that one way of gaining a better insight into how the contextual factors work is to describe them from the tutors’ point of view. Thus, I collected empirical data on this aspect through semi-structured interviews with the tutors, supplemented by observations of general college and classroom environments (e.g., the number of students, seating arrangements, or the availability of teaching-learning material).

However, other relevant literatures from the field of education were considered to complement the theories, e.g., when analysing empirical data for some of the research questions. The cognitive apprenticeship model (Collins, et al., 1989), for example, was considered and found to be very useful when
analysing one part of the first research question about tutors’ understanding of CBC when it comes to pedagogical skills required for teachers to effectively implement CBC in classrooms. According to Seezink and Poell (2010), this is a well-known framework from the education literature, which has been used by researchers even in the context of competence-based education (CBE). For example, Seezink and Poell themselves used the model to investigate the extent to which teachers had already incorporated core elements of the normative theory of CBE into their individual action theories. The goal was to identify teachers’ continuing professional development (CPD) needs for CBE. According to this model, there are four basic categories of elements which are relevant as pedagogical skills to be possessed by teachers in the context of CBC. They include: content (e.g., the ability to differentiate between types of knowledge such as domain-specific and heuristic knowledge, as this would help to choose appropriate teaching strategies/methods); methods, which involves the ability to use a repertoire of teaching methods including modelling, coaching, scaffolding, articulation, reflection, and exploration. These methods provide learners with the opportunity to observe, engage in, and invent expert strategies in their context (see also Seezink, Poell, & Kirschner, 2009). Other dimensions include: sequence, which involves the skill to identify changing learning needs and adjust the sequence and structure of learning materials accordingly; and sociology, which concerns the social context of the learning environment. This element insists that learning should be embedded in authentic situations. Important principles associated with this dimension are situated learning, a culture of expert practice, promoting intrinsic motivation, and exploiting cooperation. As this model sheds light on important elements to be considered when planning for teaching in CBE contexts, it was considered a useful guide in the current study when analysing and categorising tutors’ understanding of pedagogical skills required for teachers to effectively facilitate learning in the context of CBC. As Seezink and Poell (2010) argue, the elements would help in designing a powerful teaching and learning environment, which in turn would enable learners (whether in secondary or teacher education) to integrate and use knowledge in solving real-world problems.

3.3 Justification for blending the two theories in this study

As mentioned elsewhere in this thesis, the main interest of this study is directed towards an understanding of how tutors interpret/understand externally and/or centrally initiated curriculum change - CBC - and how they train student-teachers to implement it in schools. Bernstein’s theory of pedagogic device has thoroughly discussed this field of study by using such concepts as production, recontextualisation and reproduction to denote the different levels of educational activities from curriculum construction to
teaching processes. Based on Bernstein’s theoretical perspectives, the first two research questions in this study centre their investigation on two closely connected levels of pedagogic activities: recontextualisation (e.g., the understanding/interpretation of the curriculum) and reproduction (e.g., teaching in the classroom). Therefore, Bernstein’s theoretical perspectives were deemed appropriate as the framework to analyse, discussing and understanding around these questions.

Nevertheless, the study sought to explore and understand contextual factors influencing the training process – the frame factors. As we have seen, although Basil Bernstein discusses the issue of framing, his idea seems to refer primarily to the locus of control over different pedagogic aspects. As the concept, framing in Bernstein’s theory focuses on internal processes in a classroom but is considered inadequate for exploring and understanding contextual factors within and outside the college environments that influence the tutors’ practices. The frame factor theory is therefore considered more appropriate in this respect. It suits the objective better, since it may help to understand contextual factors at different levels, e.g. from the societal/national level to the classroom and teaching context. However, in this study Bernstein’s theoretical concepts work more at the level of tutors’ understandings and classroom/instructional practices, whereas the frame factor theory works more in understanding contextual frames. The perspectives from the two theories, however, are used together in this study because they do not contradict each other but rather strengthen the understanding of the investigated phenomena.

3.4 Chapter Summary

This chapter has laid a foundation on which to base the investigation. Central concepts and ideas in Bernstein’s Pedagogic Device Theory and Lundgren’s Frame Factor Theory were reviewed to understand them and to deepen the understanding of the study research questions. Bernstein’s theory in particular is considered useful when exploring the different pedagogic activities in teachers’ colleges such as pedagogic recontextualisation, which concerns the question of how the tutors interpret the curriculum policy, and the reproduction field in which the interest is to critically examine and describe tutors’ instructional practices when training student-teachers to implement CBC in actual classrooms in schools. Lundgren’s frame factor theory is used to study factors influencing the tutors’ instructional practices.

The analysis of the empirical materials follows both deductive and inductive approaches in the coding and categorisation of data (see the data analysis section for clarity). In the deductive approach, the theoretical concepts (especially the concepts specified in the analytical framework) are used to focus the analysis of issues of interest to the study and the identification of themes or categories. Overall, the dual theoretical perspectives primarily inspired this study as a whole. Generally speaking, by
applying both Bernstein’s theory of pedagogic device and Lundgren’s frame factor theory, this study is expected to contribute knowledge of how CBC is recontextualized by tutors and how they train teachers to implement CBC in schools. The use of these theoretical perspectives should also stimulate further research, discussions and reflections on how curriculum changes in Tanzania (and other parts of the world) are contextualized and recontextualized as they move from transnational curriculum scripts to national and the classroom levels in different localities. However, the theories fell short of addressing some of the issues in this investigation. For example, when analysing and understanding the fourth question dealing with conditions for establishing a framework for long-term tutor learning to support the change. In this and similar situations, other relevant literatures from the field of education were considered as complements to the theories, as will be done in the discussion of findings. The following chapter reviews other relevant literature to deepen our understanding of the phenomenon investigated.
CHAPTER FOUR: LITERATURE REVIEW

4.0 Overview

This chapter reviews relevant literature, both theoretical and empirical. The task involves a review of secondary sources such as articles of relevance in journals, books, policy documents, theses, and relevant documents retrieved from the World Wide Web (WWW). Such documents were traced in libraries of Linnaeus University, Dar es Salaam universities and teachers’ colleges. Other equally important offices included MoEVT and TIE. Important to note is that these were also important sources of information when writing other chapters, such as the background, the context of the study, the theoretical framework, and methodology. This chapter opens with an attempt to conceptualize competence and competence-based curriculum. In this respect, the guiding questions are how competence and a competence-based curriculum can be conceptualized and what are effective ways of acquiring and developing competence. The aim is to gain greater insight into them as they constitute the main concepts in this study. To achieve this, a review of relevant literature discussing the teaching and learning approaches relevant for CBC is presented. This will be followed by a discussion of relevant empirical studies on teachers’ conceptions of teaching and learning from other parts of the world. The chapter then discusses some perspectives on educational change and their implications on teacher learning to support the change. Finally, the chapter presents a review of relevant empirical studies in SSA, especially in Tanzania, with a view to acquire further knowledge in the research field and identify the knowledge gap(s). The chapter concludes with a summary.
4.1 The theoretical context of competence-based curriculum

4.1.1 The conception of competence

Although the interest in the concept of competence-based curriculum has recently increased, the literature suggests that defining ‘competence’ is problematic since there are too many definitions (Wong, 2008) and no consensus about the exact meaning of the concept (Seezink & Poell, 2010). Weinert (2001) uses the term ‘conceptual inflation’ when talking about conceptual vagueness in defining the concept of ‘competence’. The lack of a generally accepted operational definition of competence is generally acknowledged by other authors as well (cf. Garavan & McGuire, 2001). Bunda and Sanders (1979) explain that there are two categories of definitions of competence. One category considers competence as a hypothetical construct. The second refers to competence as a standard of performance, either implicitly or explicitly. This meaning closely relates the definition of competence to mastery or criterion levels of performance. According to them, in the first category of definitions, competence is viewed much like the ‘skills’, ‘achievement’, and ‘intelligence’ constructs. In this case, competence only fits into some conceptual frameworks. Wong (2008) argues that sometimes when curriculum specialists, for example, talk of a “list of competencies” they refer to this hypothetical construct definition. There is great variation in the breadth of the construct definition. In some definitions, competence is broader and refers to a combination of cognitive, affective, and psychomotor skills (ibid.).

Hager and Gonczi (1996) consider this construct definition as a generic approach in which competence is viewed as possession of series of desirable attributes including knowledge of appropriate sorts, skills and abilities such as problem solving, analysis, communication or pattern recognition, as well as attitudes of the appropriate kind. Conceived this way, teaching and assessment may be seen in terms of training and assessing candidates in each of these separate attributes. As Hager and Gonczi observe, this kind of conception contains an element of weakness and has been criticised on the grounds that it distinguishes between the possession of attributes and actual practice or performance. In other words, it views the possession of attributes as one aspect and the application of those attributes in actual practice as something else. It hence implies that teaching and/or assessing students in generic skills (e.g., problem-solving or communication skills) in isolation from actual practice creates a further problem concerning how students will learn to transfer this learning to real life or work situations (ibid.).

Considering the above challenge led to a different approach, involving an integrated conception of competence. According to this, competence is conceptualised in terms of knowledge, abilities, skills and attitudes displayed or revealed in the context of specific realistic tasks of an appropriate level of
generality (Biggs, 1994; Hager, 1994; Hager & Gonczi, 1996). One notable feature of this conception is the specification of key task(s), which is central to the practice and identification of attributes required for the competent performance. Attributes may include cognitive skills (e.g., knowledge, critical thinking or problem-solving strategies), interpersonal skills and affective and psychomotor skills (Hager & Gonczi, 1996). They argue that this integrated approach to conceptualizing competence may help even to specify standards for assessing learning. This is because when attributes and tasks are specified and integrated they can produce competence standards.

The above conception of competence relates to a definition advanced by Rychen and Salganik (2003, p. 43), who defined competence as “the ability to successfully meet complex demands in a particular context through the mobilization of psychosocial prerequisites (including both cognitive and noncognitive aspects)”. Yet another similar definition, which relates more to school learning, has been forwarded by Tilya and Mafumiko (2010, p. 40). They write: “Competence generally refers to the ability to do a particular activity to a prescribed standard. It is the ability of students to accomplish tasks adequately, to find solutions and apply them in a classroom or work situation”. Tilya and Mafumiko (2010) elucidate that, in more general terms, competence is regarded as the integrated abilities required to cope with complex tasks. According to them, competence may constitute attributes that are trainable (knowledge and skills) and such as are more complex (attitudes and beliefs). This meaning also closely relates the definition of competence to mastery or criterion levels of performance.

Examples of competence definitions synchronized

From an extensive and intensive review and comparison of competence definitions by various authors, Kouwenhoven (2003) divides these definitions into five groups. The distinct groups of definition may help to see the dimensions of the concept. The groups are presented in Box 1.

Box 1. Five groups of competence definitions, after Kouwenhoven (2003)

1. Competence as the ability to perform at a desired level or according to certain standards. This refers to competence as output.
2. Competence as the ability to choose and use the attributes (knowledge, skills and attitudes) that are needed for a performance at a desired level. This involves meta-cognitive attributes.
3. Competence as the possession of certain attributes (knowledge, skills and attitudes), or competence as input.
4. Competence as a mere description of what someone can do. This refers also to competence as output.
5. More complete definitions of competence, containing elements of the four groups above

Nevertheless, a distinction can be made between ‘domain-specific’ and ‘generic’ competences, following Evarwijn’s (1996 as cited in Kouwenhoven, 2003) categorisation. Competences can be ‘domain specific’, relating to
groups of knowledge, skills and attitudes within one specific content domain related to a particular profession or subject. ‘Generic’ competences are those needed in all/across content domains in professions or curricula and can be utilized in new problem or life situations (transferable), for example, communication, numeracy, information technology, problem solving, critical thinking, and working with others. The term ‘life skills’ is sometimes considered to refer to generic competences because of their transferability. On account of the nature of transferability, generic competences seem basic for the life of today, within and outside professions or subjects (Kouwenhoven, 2003).

Generally speaking, the definition of the ‘competence’ concept may vary according to the context in which it is used. In their constructivist approach to the formulation of a competence definition, Stoof, Martens, Van Merriënboer, and Bastiaens (2002) explain that the viability of the definition depends on 1) People, i.e. who is defining competence? From what point of view?; 2) Goal, i.e. What is the purpose of the definition?; 3) Context, i.e. In what type of organisation and in what types of process is the definition going to be used? Thus, there are boundaries that determine what competence is and what it is not. In that respect there may be differences in the way competence is defined/conceived and used in the context of, for example, business and industry, and in education. Stoof et al. (2002) propose a pragmatic solution for defining competence, i.e. depending on the context in which the competence concept is used. They consider the search for an overarching definition as an objectivist approach that is pointless in the absence of absolute truth and instead advocate a constructivist approach in which the “…criterion for a competence definition is not whether the definition is true but the extent to which the constructed definition has proved to be adequate in the context to which it is used” (p. 347). Some authors simply accept the fact that there is a lack of a generally accepted operational definition of competence and thus support the pragmatic approach (Rychen & Salganik, 2002). The guiding principle in a pragmatic approach is the usability of the definition, and ‘truth’ takes the form of ‘agreement of usability’ between the members of the community that uses it (Kouwenhoven, 2003).

What transpires as a prime focus in various conceptions of competence is the development of competent people, having the ability or capability (relevant knowledge, skills and attitudes) to satisfactorily complete some task(s) both in work or in life situations in general. In general, the concept of competence centres on the ability to do, which in turn focuses attention on the attributes that comprise this ability. This study, however, adopts this broader conception of competence as the ability to choose and use an integrated combination of knowledge, skills and attitudes to perform a particular activity or to meet the demands in a particular context to a prescribed standard. This definition embodies both cognitive and affective competence, e.g. the ability to choose the attributes (knowledge, skills and attitudes) needed to perform a particular task, and functional competence, e.g. the ability to apply such
knowledge, skills and attitudes in a specific realistic task – be it a cognitive, affective or psychomotor task. This conception can be said to be consistent with the need for describing tasks (activities) and assessing them during teaching and learning processes.

**Criticisms of the competence concept**

The competence concept and its application have received criticism from several authors. It is directed towards the traditional, behaviourist approach to competence and competence-based education (CBE). Concern is often expressed that a competence-based approach movement will result in the ‘vocationalisation’ of general education, a situation that, in the opinion of the authors, will cause the impoverishment of learning (Bates, 1995). This has led some authors to conclude that competence-based education is likely to be more suitable for vocational education than for other categories of education such as teacher training (Bell & Mitchell, 2001; Dhillon & Moreland, 1996, cited in Kouwenhoven, 2003).

Another observation was advanced by Ashworth and Saxton (1990), concerning the emptiness of competence statements such as “The candidate is able to …”. This resembles the behaviourist tradition of formulating educational objectives. Ramsay (1993) views this mere listing of what a student should be able to do as a lack of an epistemological foundation. According to Ramsay, in practice it is simply assumed that students will learn if they take part. Another criticism which is closely connected to a behaviourist approach in the competence movement concerns the atomisation and fragmentation of learning into measurable chunks in competence-based education (Kouwenhoven, 2003). In the case of competence-based teacher training, for example, it has been asserted that there may be a danger in narrowing the training to teaching/assessing technical competences only, whereas other skills such as communication, group techniques, and problem-solving are also important workplace skills (Thomson, 1990, cited in Kouwenhoven, 2003). Most authors attribute the danger of producing ever longer lists of tasks and related skills to a behaviourist approach (Kouwenhoven, 2003).

Other authors have criticised the competence concept on the basis of lack of conceptual clarity, which means that there is conceptual confusion. This is because there is a multitude of meanings that do not contribute to conceptual clarity. For example, according to Ashworth and Saxton (1990), if competence is taken as an outcome, it is not clear whether the way this outcome has been produced is important. According to them, outcomes can be the result of diverse individual processes. They further assert that the mental process involved in a competence is unclear, which makes the choice of teaching methods very difficult.

Nevertheless, some authors have asserted that in the competence concept there is no attention to fundamental and specialist knowledge and that the competence approach leads to generalists. Fundamental knowledge in the
subjects is thought to be downgraded in favour of action. Knowledge and understanding appear only to be recognised to the extent to which they are visible in the performance of a task or occupation (Moodly, 2000, cited in Kouwenhoven, 2003). The risk to downgrade fundamental disciplinary knowledge in competence approach is highlighted further by other scholars, for example, Biesta (2010) and Young (2008). Further, the use of competences as pre-determined goals can act as a barrier to creative and high-level education activities or deep learning (Ashworth & Saxton, 1990). Moreover, in the competence approach, there is a general trend to move towards more general occupational skills and to a more professional profile. This implies the education and production of generalists (De Bie & Mostert, 2000, cited in Kouwenhoven, 2003).

However, Kouwenhoven (2003) observes that the behaviourist approach in the competence concept can be recognized in the 1960 – 1980 period. After that, under the influence of cognitivism and constructivism, a more holistic approach to CBE has been advocated. The changing role of knowledge in industrialised societies, for example, has been mentioned in relation to the justification of CBE. The ability to apply knowledge has become more important than solely the possession of knowledge.

**4.1.2 Competence-based curriculum (CBC)**

CBC can be conceived as the type of curriculum that aims at enabling learners to develop, integrate and use the desirable competences (attributes) needed for them to function well in their communities rather than focusing only on knowledge acquisition. CBC aims to put students in realistic situations under which they should demonstrate whether they can solve certain problems or perform a particular activity and how they do it (Seezink & Poell, 2010; Tilya & Mafumiko, 2010). It aims, in a general sense, to make people competent (Kouwenhoven, 2003), i.e. having the ability to realize various tasks, including occupational tasks. In this type of curriculum the emphasis is not on the absorption of cognitive knowledge as content-based curriculum does but is rather on the application of this knowledge to solve realistic problems. For example, making applications would mean using the knowledge of terms, facts, principles, or procedures to solve problems in new or unfamiliar situations.

A further elaboration of the difference between a content-based curriculum and CBC can be made according to the curriculum’s philosophical and ideological foundations on which they are grounded, which have in turn influenced the teaching and learning principles of each curriculum orientation. Content-based curricula can be said to be entirely rooted in perennialism and essentialism philosophies of education in which the preservation of traditional body of knowledge is valued. Perennialism represents an unchanging view of reality. It emphasises on subject-centred curriculum and considers knowledge acquisition and preservation of the best knowledge, values, and dispositions of
society from the distant and recent past as the ultimate goal of education (Ornstein & Hunkins, 2013).

Rickover (1958), cited by Ornstein and Hunkins (2013), explains that, like perennialism, essentialism emphasises education based on the collection of factual knowledge by all children to the limit of their absorptive capacity. Thus, curricula that take students’ interests or social issues into account are regarded as wasteful. In both philosophies, the teacher is considered the only master and authority of a particular subject. Teaching is primarily characterised by transmission of knowledge by the use of such methods as oral exposition, lectures, standard questions, laboratory demonstrations, the use of textbooks and other didactical strategies (Ornstein & Hunkins, 2013). Learning is dominated by rote learning, recitation, and textbook authority (ibid.). However, it can be argued that both perennialists and essentialists foster a classical concept of knowledge as school-based or discipline-based, and do not insist on the integration of school/subject knowledge and real life situations.

Following Young (2008), a content-based curriculum may be seen as being underpinned by an ideology that can be described as ‘neo-conservative traditionalism’, viewing curricula as a given body of knowledge and considering that the responsibility of schools is to transmit this to the students. The preservation of a traditional body of knowledge constitutes its values. Today, neo-conservative traditionalism is increasingly seen as (a) too slow in the production of knowledge, (b) too inefficient and too elitist to ensure that the majority of the population acquires the skills and qualifications needed, and (c) too out of touch with the increasingly competitive global society in which we find ourselves (Gibbons et al. 1994, 2000, cited in Young, 2008, p. 32).

On the other hand, CBC draws heavily on progressivism as an educational philosophy. Progressivism stems from pragmatic philosophy, as a reaction against perennialist thinking and the traditional view of education as school-based or discipline-based. Generally speaking, progressivism emphasises curricula that are based on a learner’s experiences and interests and prepare a learner for the affairs of life in order to become functional in society (cf. Dewey, 1938). Progressivists reject the idea of an unchanging and universal truth, as they believe both the learner and the learner’s environment to be constantly changing. In progressivist thought, teaching should focus on developing generic or transferable skills, e.g., problem solving, critical thinking, numeracy or working with others that could be useful beyond classroom contexts. For example, progressivism emphasises teaching how to think, not what to think (Ornstein & Hunkins, 2013). Such questions as Why? How come? and What if? are much more important than What? Who? and When? The three latter questions may mean that only reproduction of acquired knowledge is required (ibid.).

During the teaching-learning process, teachers should assume such roles as ‘guides’, ‘facilitators’ or ‘leaders of group activities’. According to
progressivist thinking, learning occurs when a person engages actively in performing skills, such as problem solving, that are transferable to a wide variety of subjects and situations beyond classroom contexts (Ornstein & Hunkins, 2013). Thus, progressivism includes constructivist learning ideas. Constructivism learning paradigm posits that individuals construct their own knowledge in interaction with their physical and social environment through, for example, dialogue and discussions (c.f. Nuthall, 1997). The central principle of constructivism is that learning is an active process, and therefore learners actively participate in the construction of knowledge rather than being passive knowledge receivers (McCombs, 2003). To sum up, the progressive view of education insists on the meaningful connection between school knowledge and real life situations. This is also the crux of CBC. The CBC policy in Tanzania reflects the above ideas and emphasises the development of students’ competences including, e.g., critical and creative thinking, problem-solving skills, literacy, and communicative competence.

From the perspective of the contemporary curriculum policy debate, CBC seems to be driven by what Young (2008) described as ‘technical-instrumentalism’ ideology. Technical-instrumentalism opposes the ‘neo-conservative traditionalism’ curriculum ideology which, as we have seen earlier, carries an idea of the curriculum as a given body of knowledge and the responsibility of schools being to transmit this to the students. To technical-instrumentalists, the curriculum imperative is not educational in the traditional sense but directed towards what they see as the needs of the economy (ibid.). According to the author, unlike neo-conservatives, technical-instrumentalists are more attentive to the changing global economy and its implications. They interpret knowledge and learning needs based on the market demands. They support moves towards more connective, integrated, modular curricula and more facilitative approaches to pedagogy. Young (2008) explains that the tension between the two models has influenced the development of the curriculum for more than a century. However, in the past two decades, technical-instrumentalism has provided the dominant rhetoric for change as well as influencing substantive reforms (ibid.).

The technical-instrumentalist view does not go unchallenged. The progressive, technical-instrumentalist line of thinking has been criticised, and its concerns can also be understood as criticisms of CBC. The major criticism is directed towards the overemphasis on the learner and the learning process at the expense of the subject matter as a given body of knowledge. Biesta (2010) refers to this phenomenon as the ‘learnification’ of education, in which the language of education has been taken over by a language of learning. As a result, the emphasis in the discussion of curriculum issues has shifted from questions about the content of education to questions about the process. For this reason, discussions about knowledge seem to have been put aside in favour of a discussion about skills and competences (see also Biesta, 2006; 2014). Similarly, Young (2008) argues that the instrumentalism view is in danger of undermining fundamental knowledge and formal education in
general. Following instrumentalism, education is increasingly directed towards political and economic goals as well as being justified by them. This situation necessarily reduces the space and autonomy for the work of specialist professionals, including both teachers and researchers (ibid.). Following these and other criticisms, there have been calls to bring knowledge back into the discussion about the curriculum in which instrumentalism has also been described as a problematic form of relativism that should be questioned in modern curriculum theory and practice. For example, drawing on social realism, Young (2008) argues for bringing knowledge back into the discussion. Social realism, in Young’s opinion, is an alternative to forms of social constructivism, which are not only unable to explain for the idea of knowledge growth but also encourage students and researchers in education to disregard the ‘realist’ traditions of social theory. There is consequently a debate about the relevance of the current idea of a curriculum form that favours skills and competences because of its strong relativist tendencies and implications.

Biesta (2014), for example, agrees that there is a need to bring knowledge back into curriculum conversations, but this should take place pragmatically; that is, “always in relation to matters of human concern - and not relativistically – which would be by suggesting that anything goes, which it obviously does not” (ibid., p. 46). Without suggesting agreement with or support for Dewey’s views, Biesta argues for a (re)consideration of pragmatism as a productive way of involving the question of knowledge in the curriculum discussion, rather than putting it aside as being part of the problem. For example, as I understand it, Biesta’s idea is that the concept of coordination in Dewey’s pragmatism is important, not only in terms of process – that is, pedagogy – but also in terms of curricular content and educational achievement, and that it might help to ensure that there definitely is a connection between the content and the child.

It is important, however, to point out that, on the basis of reviewing various kinds of literature, my interpretation of the two curriculum approaches reveals that there is an overlap. The overlapping of the approaches implies that one approach may contain some elements of another. For instance, in CBC learners still have to learn the content. The difference can thus be seen as a continuum rather than as a dichotomy. What distinguishes one form of curriculum from another is just the kind of specific emphasis given, as well as, the organization, naturally. Below, I attempt to summarise the main emphasis of each form of curriculum along the following dimensions:

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8Social realism reclaims the prominence of knowledge and recognises that knowledge cannot be reduced to the activities and interests of those who produce or transmit it (Young, 2008). However, a detailed discussion of Young’s social realism theories is beyond the scope of the current study. For details, see for example, Young (2008). The purpose in this section is to highlight that CBC is also faced with some criticisms/problems.
from the idea of ‘liberal education’ with the emphasis on the pursuit of education for its own sake to emphasising the function of the curriculum;

from insulation/boundaries to connectivity between disciplines and subjects as well as between knowledge and its application, not just absorption and reproducing content;

from a view of content as a given and uncontested body of knowledge to the rhetoric of ‘competitiveness’ and ‘relevance’;

from teacher-centred/authoritarian to facilitative or collaborative approaches to pedagogy (learner-centred approaches);

from linear sequencing to modular choice as curriculum principles; and

from separation of general and vocational knowledge to their integration.

Content-based curriculum tends to endorse the first of each of these options. It assumes that knowledge is best produced and transmitted through an insulated, specialist, linear and hierarchical mode whereas CBC (which has parallels with technical-instrumentalism) supports the moves from the first towards the second option (see also Young, 2008 for similar observations). However, as we have seen in the earlier discussion, both approaches contain their weaknesses/challenges.

4.1.3 CBC in Sub-Saharan African (SSA) countries

CBC has a long history in other parts of the world, particularly in America and Europe. Although the roots of CBC can be traced back to the 1920s, the first competence-based curricula appeared in the 1960s in the USA as ‘competency-based education and training’ (CBET) in teacher education (Kouwenhoven, 2003, p. 42). In SSA the CBC movement is very recent. Some elements of CBE developments can be traced back at least to the late 1990s. For example, Musonda (1999) describes a teacher education reform experiment in Zambia that started in 1998 and was directed toward a competence-based curriculum aimed at developing, broadening and deepening the pedagogical and professional competences of trainees through active methods of study. According to the author, the reform suffered serious implementation problems, because the implementers (the tutors) had not grasped and accepted the concept of CBC. Early CBC endeavours can also be traced in Mozambique. In 2003, for example, Kouwenhoven (2003) successfully designed, through research, a competence-based curriculum to be used at the faculty of education in one of the Mozambican universities. Therefore, as pointed out elsewhere in this thesis, developments in CBC in most SSA countries began after they had subscribed to international agreements such as the 2000 MDGs and EFA goals (especially after the Dakar conference of 2000), which stressed quality learning for all (cf. Chisholm &
Leyendecker, 2008; UNESCO, 2000). In South Africa, for example, an outcome-based approach (OBE) was adopted, covering the whole education system, in the so-called Curriculum 2005. Tanzania also adopted CBC in the early 2000s, also covering the whole education system. According to a GTZ (2000) (Gesellschaft für Technische Zusammenarbeit [Corporation for technical cooperation]) report, most of the countries in Eastern and Southern Africa (e.g., Swaziland, Malawi, Kenya, Namibia, Zimbabwe, Mozambique, Uganda, Tanzania and Botswana) joined the movement at about the same time in the early 2000s, by which time most of them were first working on a National Qualifications Framework.

CBC aims to make students competent through the acquisition of competences (both domain-specific and generic) and through further development of newly acquired or already held competences (Kouwenhoven, 2003). CBC has the goal to enable learners to respond to the needs of daily life and society accordingly. It is clear that CBC is an essential tool for fostering the idea of competence-based education (CBE). Some authors (e.g., Seezink & Poell, 2010; Tilya & Mafumiko, 2010; Wong, 2008) suggest that this form of education involves setting clear learning outcomes (descriptions of specific and generic competences to be acquired and developed by the students) so that their attainment can be seen in form of specific learner behaviours as well as establishing the conditions and opportunities within the system that facilitate the achievement of those essential outcomes for all students.

Generally speaking, the literature on CBC espouses a normative theory about how learning and teaching ought to take place. CBC is based on a (social) constructivist learning paradigm and focuses on the active involvement of the learners in an interactive learning process, which should be optimally situated within authentic environments (Seezink & Poell, 2010). In the context of CBC, therefore, the role of the teacher is that of a ‘cognitive guide’ who facilitates students’ construction of knowledge and development of desired competences (Kouwenhoven, 2003). Before the introduction of CBC, most of the learning in schools was detached from relevant practical contexts, since the focus was on the transmission of knowledge from the teacher to the student in a more theoretical context. Sometimes this knowledge lacked relevance to real life situations (see also Seezink & Poell, 2010). However, CBC aims to reconnect education and real life. The next section discusses teaching-learning approaches relevant to CBC.

4.2 Teaching-learning approaches relevant to CBC

Approaches to teaching have been categorised within two broad orientations – from being more teacher-centred/content-oriented, where teaching is generally seen as the organisation and transmission of content, to becoming learner-centred and/or learning-centred, where teaching and teachers’ main role is that of facilitating student learning (Kember, 1997, 2008). The main role of the teacher in the teacher-centred approach has traditionally remained to involve
passing on facts, concepts, and rules, managing action sequences, and thinking for students in the most possible direct way (Borich, 2007). All activities like structuring, questioning, anticipating, focusing, motivating, and clarifying goals are performed by the teacher during the teaching process. Students may also ask questions as well as structuring the discourse, but only when they are given the chance to ask for the clarification of particular points made by the teacher. With a teacher-centred approach, learners are treated as passive recipients of information. The teacher-centred approach is consistent with the transfer theory (Fox, 1983), which treats knowledge as a commodity to be transferred from one vessel to another. Thus, the learning process can be said to be dominated by the “acquisition metaphor”, to use the words of Sfard (1998). Learners are dependent on external regulation, and learning is regarded as a kind of addition or intake of knowledge from the outside world into the learner’s mind. To this effect, the teacher-centred approach could be equally regarded as characterised by strong classification and framing, ideas which, according to Bernstein (1996/2000), may impede students’ learning.

The literature on CBC seems to downplay the dominance of the teacher-centred/content-oriented paradigm in favour of learning and learner-centred approaches. Likewise, the CBC reform, at least in the Tanzanian context, has greatly emphasised the use of the learner-centred teaching approach in schools and colleges. As reported elsewhere in this thesis, this is evident in the various policy statements made in the curriculum documents, including the diploma in teacher education curriculum. In Tanzania, the learner-centred approach is also commonly known as ‘participatory methods’ (see also Anney, 2013; Msonde, 2011). However, the tendency to sideline one approach in favour of the other is viewed as problematic, as will be discussed later.

4.2.1 Learner-centred approach

Although learner-centred education has recently become one of the most prevalent education ideas in most SSA countries, it has a long historical development. In the UK and other parts of Western Europe, for example, learner-centred education has been a widely adopted concept since the 1960s (Plowden, 1967 cited in Mtika, 2010). In SSA the notion became apparent in the 1990s and 2000s after most countries had made curriculum reforms towards outcomes- or competence-based education (Chisholm & Leyendecker, 2008; Stears, 2009; O’Sullivan, 2004).

What then is a learner-centred approach? According to Gibbs (1992), the term “learner-centred” refers to environments that pay careful attention to the experiences (i.e., knowledge, skills, attitudes, and beliefs) that the learners bring to the educational setting. The term also fits the concept of “diagnostic teaching” (Bell, 1982) in its attempt to discover students’ prior knowledge in relation to the problem or issue at hand, discussing their misconceptions carefully and giving them issues to keep thinking about, which will enable them to reshape their ideas (ibid.). Thus, the learner-centred teaching approach can be viewed as a teaching practice that is responsive to learners’ needs,
interests and background and involving learners actively in the learning process through various activities. The focus is both on the individual learner and the learning process. In this approach, the “participation metaphor” (Sfard, 1998) plays a dominant role in the learning process.

Some scholars (e.g., Biggs, 1999; Kitta & Tilya, 2010; Tilya & Mafumiko, 2010) suggest that learner-centred teaching approach starts with an understanding of the educational context from which the learners comes (their heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs). Then it proceeds to using the best available knowledge about learning and how it occurs, as well as applying teaching practices that are most effective in promoting motivation, learning and achievement of all learners. This suggests further that for the learner-centred teachers, building on the conceptual and cultural knowledge that students bring with them into the classroom is important.

The learner-centred teaching approach has been described as constituting many features which are important to observe. It involves assisting students to acquire fundamental skills for learning, which will eventually provide a basis for lifelong learning (Tilya & Mafumiko, 2010). According to Weimer (2002), aspects such as what and how the learner is learning, the context under which the learner is learning, whether the learner is retaining and applying the learned material, and how current learning positioning the learner for subsequent learning form the focus of the attention of the learner-centred teaching approach. The teacher’s role remains to be that of facilitating learners’ education. Facilitation in this regard may mean providing opportunities for individual students to acquire knowledge and construct meaning through their own activities and through discussions, reflections and sharing ideas with other learners with minimal corrective intervention. Learners become more responsible for their education by engaging themselves in such activities as direct exploration, experimentation, contextualisation and expression in a democratic way (ibid.). Also, learners are encouraged to interact with the subject matter, with one another and the teacher, and with the learning environment in general (Dang, 2006; Mtika & Gates, 2010; O’Sullivan, 2004). This implies that the role of the teacher as an ‘expert’ and ‘activator’ shifts towards being a ‘facilitator’.

Therefore, if interpreted from Bernstein’s (1996/2000) perspectives, it could be said that in this approach framing and classification are weak because the boundaries between categories, e.g. the teacher and the student are blurred. The student may also have the opportunity to control the selection, sequencing, pacing and evaluation of learning, as well as having a voice in the teaching-learning process in general, a situation which may contribute to better learning. Some studies show that this approach has proved to be conducive to meaningful learning (Dang, 2006; Fox, 1983; Kember, 2008) and that it resonates with the desire to ensure that learners are effectively equipped with competences in creativity, critical thinking and problem-solving skills (Mtika & Gates, 2010). In the context of CBC, learner-centered methods seem
to be the most effective ways to enable students to acquire desired competences and further develop the newly acquired or already held competences.

4.2.2 Examples of learner-centred methods relevant for CBC

Examples of learner-centred teaching methods for competence development have been illustrated in the education literature. Such methods include, for instance, discussions, debates, observations, drills and practice, problem-solving, study visits, exploring nature, discovery methods, laboratory work and practicums. Other examples comprise role playing, games and singing to stimulate imagination, cooperative and collaborative learning, and independent study or projects (Biggs, 1999; Borich, 2007; Kouwenhoven, 2003; Tilya & Mafumiko, 2010; Weimer, 2002). They are the means towards developing desirable competences in part of the learner, as they are more interactive and could give learners greater opportunities to construct their own knowledge and experience the realities in the learning process. In the context of CBC, the lecture method could be used as a starting point but can be modified to become more interactive and participatory if combined with one or more methods mentioned above (Tilya & Mafumiko, 2010) which are said to be more relevant to CBC. However, the degree to which the methods could be used effectively has been found to vary within subjects and between disciplines – for example from medicine and natural sciences to social sciences and humanities as discussed in the next section.

4.2.3 Is learner-centred approach preferred by all? - Critical aspects of learner-centred approach

Although the learner-centred teaching approach seems to be promoted in the context of CBC, it has been challenged by scholars. The literature shows both extremes in terms of preference of the learner-centred teaching approach among learners and teachers. For example, learners, especially hard working and achievement-oriented ones, have been found to be motivated by this new mode (Mc Comb, 2001; Weimer, 2002). Yet, some learners claim to prefer and thrive with the teacher-centred approach as it makes less demand on them than the learner-centred approach (Weimer, 2002). In classroom contexts, the latter approach has been criticised for being time-consuming, and thus inappropriate and expensive, particularly in more structured areas (i.e., in natural sciences) where a solid body of knowledge has to be covered within a limited period of time.

The question of the suitability of teaching approaches for the curriculum has been viewed as one that depends on the nature and character of the subjects and the purpose of education. It could also be seen as one that depends on the group of students, when applied, under what conditions, etc. In the context of natural science, for example, teachers have been found to be more likely to approach teaching through direct teaching methods, i.e. lectures and demonstrations, than in disciplines such as social sciences and humanities.
(Lueddeke, 2003; Trigwell, 2002). According to Laksov (2007), the nature and character of the subjects might be among the reasons behind this situation. We may develop this discussion further on the basis of ideas from other educational authors. For example, Biesta (2014) observes that the curriculum is in itself a ‘multifaceted phenomenon’ – meaning that it has different elements that may require different teaching approaches. According to the author, the requirements for a curriculum for learning mathematics might be quite different from curricula concerned with, for example, car mechanics, aviation, citizenship, beauty therapy or geography. After all, requirements vary even within subjects. The point is that there may be some parts of the curriculum that require ‘getting it right’ in the sense of getting the facts right. This could then require teacher-centred and direct instruction approaches rather than learner-centred approaches. While there are arguments for getting it right in a subject like geography, mathematics, and the like, it is also desirable that students develop a critical understanding of the field, a situation which may require more learner-centred methods such as problem solving, discovery methods or discussions.

Empirical research findings also highlight the importance of ‘direct instruction’ for different groups of students. Results from extensive meta-analyses of empirical studies show that active and guided instruction is much more effective than unguided, facilitative instruction (Hattie, 2009). For example, direct instruction, where the teacher assumes the role of an ‘activator’, has been found to be effective both for regular and special education and lower ability students compared to facilitative instruction such as inquiry-based teaching, problem-based learning, individualised instruction and the like (ibid.). In short, direct instruction underscores the power of explicitly stating the learning intention and success criteria, and then engaging students in moving towards these. This notion echoes Bernstein’s (1990, 1996/2000) idea of the importance of explicit rules in teaching related to pupils from different social classes (e.g., to help pupils from low income families who have no access to books and other materials).

In most SSA countries, Tanzania in particular, a contradiction of learner-centred pedagogy is rooted within teachers’ and students’ culture, in which a formalistic, teacher-centred pedagogy has historically and traditionally been a norm. In the case of Tanzania, elders were historically believed and respected to be the source of knowledge and wisdom (Siwale & Sefu, 1977, cited in Mtitu, 2014). Traditional education, therefore, developed authoritative power and autonomous behaviours amongst teachers and led to inferiority complexes among students. Children were expected to constantly respect their elders as sources of knowledge and wisdom. This elder-child relationship continued to influence teaching-learning practices for many years. In line with Mtitu (2014), the cultural contradiction and complexity regarding the teacher-student relationship could imply the need to address the complexity amongst education stake holders, including curriculum and policy planners, teachers, students, parents and the general community.
Tabulawa (2013) criticises learner-centred pedagogy from a socio-cultural perspective as westernised and conditionally imposed on developing economies’ educational contexts without fair consideration of cultural, technological, socio-economic and political grounds. In Tanzania, for example, despite the supposed adoption of a learner-centred pedagogy, research is currently inconclusive about the effectiveness of learner-centred pedagogy in the classroom. Some research conducted in the context of Tanzania (e.g., Barrett, 2007; Vavrus, 2009) has argued for going beyond the polarisation of pedagogical approaches as either teacher-centred or learner-centred, considering a combination rather than a dichotomy, and choosing an approach depending on the situation at hand. This is what is obviously suggested by Hattie (2009) in his idea of visible teaching and learning, proposing a model which “combines” rather than “contrasts” teacher-centred teaching and student-centred learning and knowing. (p. 26, italics, my emphasis).

In a more or less similar discussion, Aspelin (2014) challenges the idea of regarding teaching as a matter of adjusting or responding to the individual needs of students (student/learner-centred) from a relational perspective. According to the author, the widespread pedagogical attitude that is promoted in the contemporary educational discourse (e.g. individualised teaching) tends to dilute the position of teachers. In addition, the emphasis that seems to be placed on the learner and that requires a teacher to consider first the learner’s needs, circumstances and experiences might lead to confusion among teachers, because in some contexts teachers may interpret this as if they should be guided by needs explicitly stated by the student. From a relational perspective⁹, Aspelin (2014) argues that the genuine pedagogical attitude¹⁰ is that which adopts an asymmetric inter-subjective relationship, where a teacher-student relationship is understood as the one in which the teacher and the student appear as active subjects on the basis of their respective positions. That is, the teacher’s response to the action of the student is founded on co-existence with the student, aiming at the same time at the student’s progress, i.e. showing the student a path from the present situation (ibid, p.7). In other words, teacher-student relationships are interpreted as a matter of experiencing

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⁹ A relational pedagogy is, according to Aspelin (2014), a third communicative path between the two dominant paths in education during the twentieth century: teacher-centred and student/learner-centred. It can be defined as a theoretical perspective on humans as relational beings (Aspelin & Persson, 2011, cited in Aspelin, 2014).

¹⁰ i.e. teachers’ way of relating to the student in a pedagogic process (the ‘how aspect’ of the pedagogical relationship). Apart from an asymmetric inter-subjective relationship, Aspelin (2014) describes two more different types of teacher-student relationships: an asymmetric subject-object relationship and an asymmetric object-subject relationship. In an asymmetric subject-object relationship, the student is given a passive position vs the teacher’s activity. This kind of relationship is associated with the traditional teacher-centred approach. In a second relationship, an asymmetric object-subject relationship, the teacher takes a passive position vs the student’s activity. That is, the teacher’s response to the student’s actions lacks pedagogical purpose and direction. Aspelin suspects that this relationship is becoming more common in the contemporary educational discourse.
from the student’s side and, at the same time, as the teacher taking a stand with regard to the pedagogical subject.

Other challenges to the learner-centred approach are closely connected to the criticism of CBC in general. Some authors writing on curriculum theory and research highlight the dangers of this approach of focusing on learners and the learning process and its tendency to sideline the prominence of disciplinary/subject knowledge. One of the problems is that this line of thinking facilitates an economic understanding of the process of education in which the learner is supposed to know what she or he wants, and where the provider (e.g., the educator or an education institution) is simply there to meet the needs of the learners (Biesta, 2006). This depiction poses a threat to educational professionalism, Biesta argues, in undermining its role. It forgets that educational professionals have a crucial role to play in the process of, for example, needs definition. The idea that education should be about meeting the predefined needs of the learner is also problematic, because it suggests a framework in which only questions about the efficiency and effectiveness of the educational process seem to be meaningful. Biesta warns that the more important questions about the content and the basic purpose of education will then become less important.

4.3 Competence-based assessment

Since learning and the application of educational experiences is the focus and the ultimate goal of CBC, assessment becomes an important component. In this respect, this should be a continuous activity that derives instruction from rather than being a conclusion of CBC. The emphasis is put on school-based assessment, rather than on the use of externally set examinations (Wolf, 1995). As Guskey (2005) observes, school-based assessment helps teachers to identify instructional weaknesses and diagnose individual student learning problems. The primary concern lies in the process of helping students to reach proficiency. Externally set examinations just do not offer teachers much help in that respect. Moreover, in CBC the assessment is also made more realistic as it involves problem-solving and real-world tasks (Kitta & Tilya, 2010). The purpose of assessment should not simply end up in making judgment on how well the student, class or school is performing, but the process should rather be completed when the assessment results are used to improve subsequent learning (Huba & Freed, 2000; Masters, 2002). This means that in the context of CBC, assessment should be learner-centred, in the sense that it should be used as a means to gather information to understand what students know and can do with their knowledge as a result of their educational experience. It also means that one purpose of assessment in CBC should be to provide teachers and students with information that can be used to guide individual improvement in the teaching and learning process. Thus, formative rather than summative assessment should come to the fore. Instead of norm-referencing assessment, criterion-based assessment procedures are preferred in which
learners are assessed according to how well they can perform on a specific learning task. Wolf (1995) argues for the need to change traditional examinations, which seem to exert a constraining influence on how teachers and students approach new curricula.

Moreover, Gonzi (1994) emphasises the use of methods which assess a number of elements of competence and their performance criteria simultaneously and provide a broad base of evidence from which to infer competence. According to Hager (1995), the choice of methods should be guided by a criterion implying which method is more capable of assessing competence holistically, e.g. one that combines theory and practice. Since formative assessment is essential and important, a complete record of competence development should be recorded for each learner (Field & Drydale, 1991, cited in Kouwenhoven, 2003). This can be done, for example, through a portfolio that can also stimulate reflection by the students.

4.4 Teaching approaches and conceptions of teaching and learning

The relation between teaching approaches and conceptions of teaching and learning has received attention from educational researchers. Evidence from different studies suggests that teachers’ conceptions of and approaches to teaching influence learners’ learning approaches and the ultimate learning. For example, studies of university teachers’ approaches to teaching (Kember, 1997, 2008; Kember & Kwan, 2000; Marton & Booth, 1997; Prosser & Trigwell, 1994; Trigwell, Prosser, & Waterhouse, 1999) show that these approaches are linked to teachers’ conceptions of teaching and learning. Further, studies by Gow and Kember (1993) and Kember and Gow (1994) consistently showed that teachers’ beliefs about teaching influenced the approaches to learning that students applied in their courses. This fact was also found by Sheppard and Gilbert (1991) in their case study of four departments. In their view, lecturers’ theories of teaching (i.e., their theory-in-action) had an impact on the development of students’ epistemological beliefs. This suggests that, in the era of CBC, it is important that tutors’ conceptions of teaching are desirable ones.

There has also been a good deal of attention on how students approach the task of learning. Studies made to explore students’ approaches to learning have identified several different ones. Commonly established approaches include: deep and surface learning (Marton & Säljö, 1976) and strategic or achievement orientations (Entwistle, 1997). These have also been discussed by Laksov (2007). She elaborates on the conclusion that deep approach, also referred to as meaning-oriented approach, occurs when students direct their attention to the meaning of the text, thereby increasing their opportunity of understanding the issue they are dealing with in the text. On the other hand, when students attend to the surface features of the text for the purpose of
being able to reproduce it for assessment, they are adopting the so-called surface or reproduction-oriented learning approach. When students organise their studying to manage the time aspect and adjust their approach with the intention of passing the requirements of the assessment, they adopt a strategic or achievement approach to learning (ibid.). Indeed, following this approach, students may be superficial or deep in their learning depending on the standard of performance required of them (ibid.). Marton and Säljö (1976) concluded that the deep approach is more likely to lead to a more fundamental and long-lasting understanding.

Moreover, these approaches to learning have also been found to vary according to the changing contexts of teaching and learning as well as the curriculum orientation. In the context of traditional content-based curriculum, where an information transmission/teacher-centred approach is dominant, the surface approach is promoted (Lonka & Lindblom-Ylänne, 1996, see also Trigwell et al., 1999), while problem-based, competence-based curricula with their inherent learner-centred approach to teaching promote deep or meaning-oriented approaches to learning (Norman & Schmidt, 2000; Seezink & Poell, 2010; Tilya & Mafumiko, 2010). This implies that for the effective implementation of CBC, teachers need to have appropriate teaching competences to enable their students to develop the attitude of the deep-learning or meaning-oriented approach. Biggs (1999, p. 73) identifies ‘learner activity’ and ‘interaction with others’ as the strategies likely to encourage a deep approach. These observations are consistent with those of Fox (1983), who suggests that the teacher-centred teaching approach is consistent with simple theories of teaching and seems to encourage a surface approach to learning; while the learning environment that promotes experiential learning activities seems to encourage a deep approach.

A study by Vermunt (1996) has linked the learning approach to the degree to which students and teachers can regulate and control the learning process. It can generally be learnt from this study that in the surface/reproduction-oriented learning style learners were found to be dependent on external regulation (the teacher, assessment requirements, etc.), and learning was regarded as some kind of addition or intake of knowledge from an external source (e.g., the teacher). As regards the deep/meaning-oriented learning style it was characterised by learners being in control of their own learning process, aiming for a deep understanding of the subject matter, and understanding learning as something you can construct yourself (ibid.). This means that in reproduction-oriented learning the teacher has greater control of the teaching and learning process than in the meaning-oriented learning approach. In the latter, learners are more independent and responsible for their own learning. This supports Bernstein’s (1996/2000) idea that weak framing can facilitate better learning; while the vice-versa is also true. Although this study was conducted at the higher education level, its findings are still valuable to the understanding of teaching and learning at other levels of education including teachers’ colleges. However, additional research is important.
What can be further learnt from these studies is that the ways tutors train student-teachers will have important implications for their student-teachers’ approaches to learning, which in turn will affect their future practices in schools. This idea echoes what is known as teacher learning through ‘apprenticeship of observation’ (Lortie, 1975). It refers to what teachers learn about teaching from the observations they themselves made when they were students from their own respected teachers. Several studies have shown a powerful effect of this form of learning on how student-teachers and beginning teachers believe and think about teaching (Evans, 1999; Feiman-Nemser, 2001; Hollingsworth, 1989; Kagan, 1992; Lortie, 1975). However, teachers’ epistemological beliefs seem to be very influential and thus important.

In respect to what has been discussed above about teachers’ and learners’ conceptions of and approaches to learning and teaching, the implications for teacher education practice seem clear: to promote deep or meaningful learning, which seems to be the focus of CBC. It therefore appears reasonable to say that student-teachers need to be trained adequately in relevant teaching approaches such as learner-centred approaches by using those which provide them with opportunities for experiential learning activities. That is to say, teacher education programmes are responsible for providing student-teachers with the appropriate pedagogical skills. This will therefore depend on, for instance, tutors’ understanding of CBC and their instructional practices. How tutors understand CBC and how they train students-teachers form the focus of the present study.

4.5 Perspectives on educational change and teacher learning for educational change

During the recent decade, drastic changes have occurred in education policy and practice, both in developed and developing countries. Most countries have embarked on educational changes based on the widely shared view that education and the economy are inextricably linked. One of the study research questions focuses on conditions to establish a long-term framework for tutor learning to support educational change. For this reason, it was deemed appropriate to include in this study a brief review of the literature on the above-mentioned topic with a view to acquire further knowledge in that respect. The literature on educational change generally reveals two broad perspectives about educational change and their assumed teacher learning processes to support change. They include: (i) a mechanistic view of educational change and (ii) a complexity view of educational change (cf. Hoban, 2002). Recently, the widely shared view about educational change is that this is highly complex and that teachers play a pivotal role in the change process (Henshall & Fontanez, 2010). The two broad perspectives about
educational change and their implications for teacher learning are briefly discussed below.

(i) A mechanistic view of educational change
This perspective views educational change as a linear step-by-step process associated with a simplistic approach to teacher learning to support change. According to Hoban (2002), central to this view is an emphasis on analysis to identify independent elements or parts that are similar to variables in scientific experiments. It includes assumptions consistent with a positivistic paradigm, assuming reality to be objective, observable, explainable and predicted (ibid.). The view of reality proposed by this perspective is one of a static context which assumes that teachers and classrooms are similar from place to place. That is to say, the perspective assumes that the same factors or conditions that operate in one context will work in the same way in another. Hoban (2002) explains that this perspective dominated educational change processes throughout the last century influencing ideas about the nature of teaching and teacher learning to support change.

Within a mechanistic view of educational change, teaching is conceived either as a craft or a labour. When viewed as a craft, teaching is assumed to be a repertoire of skills that are mastered through learning one element at a time by teachers gathering for a day or a brief workshop and receiving a new policy, curriculum or set of instructional strategies from an expert, who often comes from outside the institution, and then returning to their classrooms for implementation with little back-up support for continuing the change process (Hoban, 2002). Similarly, when conceived as a labour, teaching is considered as a set of goals, lesson plans and skills that have been designed by others for teachers to implement.

The implications of the above conceptions on the process of teacher learning to support change is that teacher learning is assumed to be an ‘additive’ process, involving attending seminars and workshops to gain additional knowledge and skills to increase the mastery of teaching. This notion has been challenged for considering teacher learning as an ‘event’ and not a ‘process’, with little back-up support for continuing the change process; and the context of the schools where teachers work before training is offered is often not taken into consideration. In the context of Tanzania, for example, Mhando and Mrimi (2004) found that primary school teachers could not teach in their own classroom in accordance with what they had learnt in a workshop conducted in a place with modern chairs, soft boards for displaying teaching aids, flip charts and marker pens. They pointed out that the crucial shortcomings of the workshop were that it did not take into consideration that primary schools have overcrowded classrooms and a shortage of teaching aids. Moreover, there is a tendency to perceive formal knowledge produced by university researchers or other experts to have a higher status than practical knowledge generated by teachers in schools (Cochran-Smith and Lytle, 1993; Cochran-Smith, 1994, cited in Hoban, 2002). Further, one-off workshops
assume that teachers have the desire to change, which may sometimes not be the case, especially when the change conflicts with what they have already been doing or with resources and routines already established (cf. Ornstein & Hunkins, 2013). What can be further learned from this discussion is that in educational changes the problem may not be the quality of innovations/reforms, but the way the reforms are introduced and the lack of a well-designed learning environment for teachers to help them adjust to a new reform. There has been a call for a new way of thinking about educational change that takes into account the complex nature of the change process.

(ii) A complexity view of educational change
In the late twentieth century a more dynamic paradigm for educational change drawing on complexity theory emerged. Central to the complexity theory is the idea that the behaviour of a system is not due to linear cause and effect relationships between independent elements (as assumed in a mechanistic view), but the behaviour of a system is rather caused by nonlinear interactions related to the interrelationships that exist among a combination of elements and groups of elements (Hoban, 2002). In a complexity view, educational change is viewed as a complex process constituting many interrelated elements. One way to think about how these elements are interconnected is through the notion of ‘change frames’ (Fink, 2000; Hargreaves, Shaw, & Fink, 1997), which refers to multiple forces for understanding the dynamic and interrelated nature of the change process. What is important in this understanding is that ‘change frames’ are not mutually exclusive and do not act in isolation from each other but are interrelated. Thus, the idea of change frames enables administrators, teachers, and researchers to understand the multidimensionality and hence the complexity of change in schools or colleges.

In short, the thinking consistent with a complexity view has been that, in educational reform, everything is connected to everything else. Therefore, it is difficult to change one thing without changing the rest (Hargreaves, 2010). According to various authors, such elements may include, for instance, a new curriculum (which recommends the teaching strategies, assessment, and resources to be used), different students, parents and community expectations, and available resources. Others may include: infrastructure, school culture, school leadership and politics, including those external to a school or college, such as government and district policies, as well as those internal to a school or college, such as how power and opportunities are distributed, which all interact as a system. Change is more likely to occur when these elements are integrated and harmonised (see also Datnow, Hubbard, & Mehan, 2002; Goodson, 2001). Therefore, both local (school- or college-level) and external contexts seem highly influential and thus important to be understood and considered.
Most of the above ideas are consistent with the frame factor theory (Lundgren, 1979), which acknowledges the existence of factors influencing the teaching-learning process and the overall implementation of educational reforms. The theory recognises the complex interrelatedness of the frames, and perceives that the frames do not work in a straightforward cause-effect system.

**Implications of the complexity view on teacher learning to support change**

In contrast to a mechanistic view, a conception of teaching held by a complexity view acknowledges the dynamic context of each classroom. Teaching is viewed as more than the delivery of a prescribed content using a stock of strategies acquired in a one-off workshop or seminar. Teaching involves ‘a dynamic relationship that changes with different students and contexts’ (Hoban, 2000, p. 165). This implies that what a teacher does in a classroom is influenced by a combination of factors, including the curriculum, the wider context and the way students respond to instruction at that particular time. This point of view is consistent with a conception of teaching as an art or profession (cf. Wise, Darling-Hammond, McLaughlin, & Bernstein, 1984) characterised by ‘holistic judgment’ (Day 1999) about what, when and how to teach in relation to a particular context.

When teaching is conceived as an art it means developing a repertoire of strategies as well as understanding that their application depends on making informed judgments about contexts which best suit their use as well as unpredictable classroom moments. However, when it comes to teacher learning to support change, short-term approaches to teacher learning, as portrayed in the mechanistic paradigm, are usually inadequate for promoting change as they do not cater for its long-term, non-linear nature (Hoban, 2002). If educational change is viewed as a complex process, then there is a need to accompany this by a framework for long-term teacher learning, because change is, in essence, learning to do something in a different way, involving adjustments to several elements of classroom practice over time (ibid, p. 39). This means that efforts for complex educational change (like the CBC reform) need a long-term approach to support teacher learning. But what conditions would help to achieve this goal? It thus seemed important to explore, from the tutors’ perspectives, what conditions would help to establish a long-term framework for them to learn to support the change.

**4.6 Relevant studies from SSA and Tanzania in particular**

The recent educational reforms in SSA have received attention by educational researchers trying to understand how these changes (i.e., curriculum changes) are adopted and adapted by the local practitioners in local contexts (e.g.
teachers and tutors in schools and colleges, respectively). Research around these recent reforms in other SSA countries suggests that the idea of learner-centred education has not notably permeated the classrooms. Classroom interaction research still shows the dominance of teacher-centred approaches (e.g., Moloi, et al., 2008; Nykiel-Herbert, 2004; O’Sullivan, 2004; Vavrus, 2009). The main issue pointed out therefore concerns weaknesses in both teachers’ pedagogical content knowledge (PCK) and classroom practices. This implies that, for one thing, implementers did not receive proper education and training in implementing the reforms. Other studies have reported contradictory findings. For example, a study of Namibian teacher educators’ interpretation and practice of learner-centred pedagogy (Nyambe & Wilmot, 2008) revealed that while interview data suggested that the teacher educators’ interpretations were rooted in the internal logic of learner-centred pedagogy, observations of their pedagogic practices contradicted their views, as their classroom practices reflected teacher-centred approaches. However, the critical question is: ‘to what extent can international evidence be used to inform practice in local contexts?’ This seemed to trigger more research in the context of Tanzania.

In common with other SSA countries, similar findings have been reported by comparatively few studies in schools in Tanzania. Studies (e.g., Abdallah, 2012; Amede, 2012; Kasuga, 2012; Shemwelekwa, 2008; Mpate, 2012; Mpayo, 2012; Tilya & Mafumiko, 2010) focusing on the implementation of CBC reform suggest that CBC and its embedded learner-centred pedagogy still constitutes a big challenge for teachers in schools. These studies were conducted in lower level education, mostly in secondary schools in different regions in Mainland Tanzania. They revealed that teachers had a low understanding of the reform and seldom used learner-centred and activity-based strategies when teaching students in secondary schools as suggested by the official curriculum. Studies by Shemwelekwa (2008) and Kasuga (2012) that focused on mathematics and biology subjects established that the assessment strategies involving learners directly, such as self-assessment, written reports, essays and practical tasks, were rarely used. Generally, it appears from all these studies that there are incongruences between intended and implemented curriculum changes. Among the recommendations suggested by these studies was to strengthen teacher education both at pre and in-service levels.

In dealing yet with the implementation of CBC in Tanzania, but from the perspective of national assessment, a study by Alphonce (2011) examined the extent to which National Examinations (NEs) in Tanzania (particularly the Form Two Secondary Education Examination [FTSEE] and Certificate of Secondary Education Examination [CSEE] –done at the final year of O-level secondary education) assess students’ learning achievement in Higher Order Cognitive Skills (HOCS) in biology after the introduction of the 2005 CBC. In this study the FTSEE and CSEE biology examination papers of 2008, 2009, and 2010 were subjected to content analysis. Findings revealed that 89% and
65% of the questions in FTSEE and CSEE, respectively, assessed Lower Order Cognitive Skills, while only 11% and 35% of the questions in FTSEE and CSEE, respectively, assessed HOCS. Based on these findings, and on the fact that the type of examination could influence the selection of content, approaches as well as effort and time devoted in teaching and learning, it was concluded that FTSEE and CSEE still promote surface learning in the schools instead of deep learning, which is the emphasis of CBC.

Nevertheless, a literature survey reveals that, with regard to the CBC change, there are still comparatively few studies focusing on tutors as important actors in teachers’ colleges in Tanzania. This reflects observations by other researches on teacher educators in SSA countries (Lewin & Stuart, 2003; Vavrus, 2009; O’Sullivan, 2010; Hardman, Abd-Kadir, & Tibuhinda, 2012) which suggest that as a group, teacher educators are often overlooked. For example, with respect to the CBC reform, relatively very few micro research studies conducted by Masters students at the University of Dar es Salaam (e.g., Nnko, 2013; Paul, 2012) focused on the implementation of specific subject syllabuses – English and biology, respectively. The studies employed mixed methods such as questionnaires, observations, checklists, interviews and document reviews to collect data. They indicate a limited awareness only of the revised competence-based English and biology syllabuses by the tutors and that the tutors had not changed their classroom practices as per the syllabus recommendations. However important these studies are, they were far from answering such important questions as: ‘In what ways do tutors interpret/understand CBC?’, ‘How, and with what arguments do they train student-teachers to implement CBC in actual classroom situations?’

Another relevant study was conducted by Hardman et al. (2012) to explore the training need of teacher educators in Tanzania who, in the light of recent reforms to teacher education, will be responsible for education and training at the pre- and in-service levels. The study focused on teachers’ colleges that offer certificate courses in primary school teaching. The study indicates, for instance, the prevalence of poor pedagogical practices, where large groups of trainees are lectured to much of the time, suggesting that the advocacy of new pedagogies occur more in name than in practice. Consistent with Vavrus’ (2009) study of reforming pre- and in-service teacher education and training in Tanzania and beyond, they argued for a need to consider local cultural and educational circumstances influencing pedagogical practice. In addition, a study by Hardman et al. (2012) points to the need to create a lifelong framework for tutors to upgrade their pedagogic knowledge and skills over a sustained period of time. However, the question that seems to remain inadequately attended to and thus requires further investigation is: ‘What conditions would help to establish a framework for long-term tutor learning to support educational change?’ The current study therefore, intends to contribute knowledge about this question by exploring it from the perspectives of the tutors themselves. Together with this question, the study also intends to
contribute knowledge of the questions emphasised in italics in the preceding paragraph.

4.7 Chapter Summary

This chapter reviewed relevant literature, both of a theoretical and empirical character. It opened with an attempt to conceptualize competence and competence-based curricula and ended with a review of relevant empirical studies in SSA, and Tanzania in particular. In a nutshell, we learn from the chapter that the CBC reform has provided a fertile ground for researchers in the recent past. This review shows that most of the research related to the CBC reform in SSA, and Tanzania in particular is concentrated mainly on studies of primary and lower secondary education. Whether good or bad, these studies are very informative. Unfortunately, very few studies of this nature have been devoted to tutors and teacher education in Tanzania. When the few studies that focused on teacher education are critically examined, it becomes clear that their prime focus has been on investigating the use of student-centred instruction. In this light, most previous studies in Tanzania have focused on the extent to which teachers have succeeded or failed in implementing the new curriculum. Indeed, very little is known regarding how the CBC is recontextualised in teachers’ colleges in Tanzania. However, central to the current study, the research problem explored is: How do tutors in diploma teachers’ colleges in Tanzania understand/interpret CBC and how (within the constraints of macro and micro contexts) do they train student-teachers to implement CBC in actual classroom situations in secondary schools in Tanzania. This is the gap to which I intend to contribute knowledge. In line with the interpretive paradigm, the study employs a qualitative research approach using such methods as semi-structured interviews, classroom observations, and document reviews to generate data pertinent to the study. The following chapter discusses the methodological aspects of the study.
CHAPTER FIVE: RESEARCH METHODOLOGY

5.0 Overview

In this chapter the methodological question of how to go about the investigation of knowledge is discussed. It covers a discussion of the research paradigm that this study is directed towards, the research approach, study sites and sampling procedures. Other items are data generation methods, the data analysis procedure, ethical issues and considerations, the quality aspects of the study, as well as chapter summaries. In the next section I discuss the research paradigm that underpins the study.

5.1 Research paradigm

This study employs a qualitative research approach informed by the interpretive paradigm. This paradigm denotes an alternative to the positivist orthodoxy that follows the practices and norms of natural science in the conduct of research (Bryman, 2012). In brief, interpretivism holds ontological (i.e., beliefs about the nature of reality and its characteristics) and epistemological (i.e., assumptions about how can we know reality) assumptions that reality is subjective and multiple (context-based) and constructed by people, depending on their context and personal frames of reference as they interact with the world around them (Lincoln & Guba, 1985; Creswell, 2007). Through this interaction, people develop subjective meanings of their experiences about phenomena. Therefore, multiple perspectives about reality are possible. That is to say, multiple constructions and interpretations of events and experiences are consistent with the philosophical underpinnings of the interpretive paradigm. These subjective meanings are in a constant state of revision (Bryman, 2012). The essence of interpretive research is to understand reality as constructed by people from a particular context as they engage in interactions (Bogdan & Biklen, 2003).
Furthermore, in this perspective human action is seen as meaningful; that is, each action carries meaning or a certain intentional content (Schwandt, 2000). As human action is meaningful, people act on the bases of the meanings that they ascribe to their acts and/or to the acts of others. Thus, to understand a particular social action (e.g., teaching) the inquirer must grasp the meanings that constitute that action (ibid.). The inquirer and the known are thus interactive and inseparable (Lincoln & Guba, 1985). This implies that to discover and understand, for example, the meanings and the causes or reasons for certain tutors’ instructional practices, the researcher has to get closer and interact with the participants in their natural work settings (e.g., classrooms and the college environment) through such methods as interviews and observations. Therefore, findings emerge from the interactions between the researcher and the participants as the research progresses (see also Creswell, 2007 for a similar note).

The perspective acknowledges that research is value-bound (Lincoln & Guba, 1985); that is, it is influenced by context, the researcher’s choice and formulation of the research problem and questions, the choice of research paradigm and theory, and the ways findings are generated and interpreted. In this light, in order to increase the trustworthiness of the research, it is important to report the research process more transparently (see also Bryman, 2012; Creswell, 2007, 2009). Generally speaking, the current study is based on this view of realities and on how to get to know them, mainly because it offers the possibility to explore and understand the study problem through interaction with the participants within the college settings, using interviews, observations and reviews of their teaching plans. Therefore, the study follows an interpretive perspective (Denzin & Lincoln, 2000; Lincoln & Guba, 1985).

More specifically, on the basis of the study aim and the nature of research questions, the interpretive perspective was considered ideal in this study because of two main reasons. First, the perspective allowed the possibility to explore the study object through interaction with participants within their work environment. Interaction, in the context of this study, means having a closer look at tutors’ teaching plans, observing their classroom instructional practices, and conducting interviews with them within their everyday work environment. Given the character and nature of interpretivism, interaction was presumed a viable course to exploring and understanding the participants’ practices and meanings, in this right, social reality. Secondly, an interpretive perspective was deemed appropriate to guide the meaning-making process. The perspective offered the possibility to make interpretations and report data (the multiple meanings and reasons tutors ascribe to their actions, their multiple understanding of CBC, etc.) based on participants’ perspectives as well as the researcher’s frames of reference. Thus, tutors’ pedagogical practices could be understood within the framework of the interpretive paradigm, where the rationale for the use of certain training strategies rather than others could be grasped. This way, the knowledge of tutors’
understandings of CBC and their practices in relation to the training of student-teachers for CBC implementation would be generated.

I was aware that the biggest methodological and conceptual challenge facing interpretive researchers is related to the treatment of the participant vis-à-vis the researcher perspective. Following Cohen, Manion, and Morrison (2011), it may not always be possible in practice to keep interpretations free from pre-conceptions due to the researcher’s background and experiences. Therefore, it is generally advisable to avoid forcing participants, through interpretation, to enter into a conceptual world that is alien to them (Bogdan & Biklen, 2003). Instead, accuracy in interpretive research depends on the extent to which what is reported by the researcher corresponds to what actually happened in the field or to what was spoken (ibid.). Ascribing meanings to certain participants’ words or behaviours without any precautions, for example stepping back and reflecting on the meanings of the situations, may be a disadvantage (Ajjawi & Higgs, 2007). Being aware of this challenge and relevant advice, as discussed later in the section of quality issues of the study, I strived to produce reports consistent with the data to make their assertion plausible. I was keen not to allow myself preconceptions and interpretations at face value. This was achieved through using, for instance, such strategies as member checks or member validation and peer validation (Kvale & Brinkmann, 2009).

It is also important to mention that the present study is inclined towards the hermeneutic-phenomenological tradition. The tradition acknowledges describing and interpreting data from participants’ perspectives as well as from the researcher’s pre-understandings (Bryman, 2012). Hermeneutic phenomenology assumes the absence of distinction between individuals and their experience. For that matter, in the process of research, bracketing per se the researcher’s pre-understanding is difficult, since it is not possible to stand outside one’s pre-understanding and experience. As Bryman (2012) seems to argue, when a social science researcher takes an interpretive stance, the hermeneutic phenomenological tradition in particular will almost certainly be aiming to place the interpretations that have been elicited by the participants into a social scientific frame. This echoes Kvale and Brickmann’s (2009) assertion that meaning-making is not free from presupposition. It is, however, acknowledged that the interpretations of the findings of this study are also layered with my frames of reference that is, the theoretical perspectives, the relevant literature, as well as background or personal experience. This acknowledgement reflects the deductive-inductive approach employed during the analysis and interpretations of the findings. Generally speaking, inspirations from hermeneutic phenomenology and the reflexivity attitude shaped the exploration of tutors’ experiences with further abstraction and interpretation based on theoretical insights as well as insights from the relevant literature, which expounded meanings and assumptions in the participants’ views that they themselves might have difficulty in articulating.
5.2 Research approach

The overarching aim of this study was to explore how tutors of diploma teachers’ colleges in Tanzania understand CBC and to examine how they train student-teachers to implement CBC in actual classroom situations in secondary schools in Tanzania. The nature and character of the research questions of this study called for a qualitative approach and data generation as they concern aspects of human behaviour (i.e., understandings and actions) which could not be easily measured and understood quantitatively. Qualitative research concerns the exploration, description, interpretation and reporting of social phenomena as they occur in an everyday environment through data from interviews, observations and documents (Patton, 2002). Denzin and Lincoln (2000, p. 3) emphasise that “qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of meanings people bring to them”. This means that qualitative research, as Bryman (2012) explains, involves the epistemic stance of the interpretivism paradigm. The approach also gives voice to the participants and probes meanings underlying certain participant behaviours and actions (Cohen et al., 2011).

Qualitative studies follow a different logic from quantitative research. The latter generally follows a model based on hypotheses and law or theory testing (Bryman, 2012). It assumes that an issue or situation can be expressed through a number of variables that can be quantified. Thus, quantitative approaches are suitable for questions of numbers, or of the amount of existing material, or questions regarding hypothesis-testing. Hence, the approach was considered ill-suited for the present study. In contrast, the qualitative research approach was considered appropriate for the study because of its many advantages. It allowed, for instance, the generation of data pertinent to the study through the review of the documents containing teaching plans, observations of classroom practices, and interviews with the tutors within their everyday work environment. The flexible nature of the qualitative research design allowed analysing data both deductively and inductively. For example, deductive analysis was possible by using analytical concepts from the theoretical framework of the study. Still, data could also be approached inductively - building from particulars to general themes, assuming that we know little about the investigated phenomenon, thus allowing insights into matters that had not been focused on by the theories to emerge. The selection of research sites and participants is described in the following sections.

5.2.1 Selection of research sites

Although writing work on the topic was largely carried out at Linnaeus University in Sweden, raw data was generated in Tanzania. An important question was “Where would the author obtain data for the study?” To provide a detailed exploration of the problem, the data generation was confined to four settings, i.e. four government teacher training colleges (henceforth TTCs)
specialising in training secondary school teachers at the diploma level, named colleges A, B, C, and D. Several different logistical considerations influenced the choice of the settings. The four TTCs were selected purposively on the basis of the following criteria. First, they are long and well established teachers’ colleges in Tanzania (e.g., since the 1930s and 1940s), hence they were assumed to be well resourced and having tutors with diverse educational backgrounds and experiences (e.g., newly qualified and experienced tutors from the disciplines of social and natural sciences) who could provide relevant information to the study. Secondly, the colleges enrol and produce a large number of diploma teachers each year (e.g., more than 700 teachers), and thus they would provide a good picture of the situation of teacher training in that regard. As noted elsewhere, most diploma teachers in Tanzania receive their teacher education in government colleges. Thirdly, accessibility was another important criterion for inclusion. The colleges were selected because they are accessible, facilitating frequent visits and meetings with respondents. Frequent access to respondents was a motivating factor, since it enabled me to meet with participants and seek clarity/verification of issues whenever deemed necessary. Fourthly, variation by geographical location was also considered, to include sites from different parts of the country. Variation would give the results a better validation and representation of what is going on in teachers’ colleges. Thus, one college each was selected from North Western Tanzania, Central Tanzania, Eastern Tanzania, and North Eastern Tanzania.

Involving multiple sites was considered suitable because it gives the possibility to explore the study object from different college settings. The strategy helps to increase variation in terms of contexts and participants, which in turn offers different perspectives and practices, if any, regarding the investigated issue than would be the case with a single site. Further, consistently with Miles, Huberman, and Saldana (2014), multiple sites were considered useful as they offer an even deeper understanding of the phenomenon under investigation as well as a good picture of locally grounded reasons behind certain practices. Similarly, as Bryman (2012) observes, conducting qualitative research in more than one setting can be helpful in identifying the significance of the context and the ways in which it influences behaviour. Further, this strategy gives a chance for readers to transfer the conclusions reached to other similar contexts with which they are familiar. The following section briefly describes the college contexts where this study was conducted.

**Contextual description of College A**
College A is the oldest teachers’ college which was established by the British Colonial Government. According to the data available at the academic office, the college was officially inaugurated on 8th July, 1939, by Sir Mark Young, the then British Governor. The college train secondary school teachers at the diploma level in different areas of specialisation such as natural science, social science, physical education, theatre art as well as fine art and music. The
College has the capacity to accommodate 1,052 student-teachers. At the time of the study the college had about 1,200 student-teachers and a total of 54 tutors with different qualifications. Out of these, 37 were males and 17 were females. Ten (10) tutors held a Master’s degree, 42 a Bachelor’s degree and 2 held a Diploma in education. Out of these tutors, only nine (9) teach science subjects and four (4) teach mathematics (source, Academic office, College A).

At this college female tutors are fewer than males. This could be linked to the general situation of having fewer females in higher education in Tanzania. Statistically, the tutor/student ratio seems reasonable, but in practice some tutors had a larger teaching load than others, especially those teaching social science subjects and general education courses. The college buildings (e.g., classrooms) are generally old, though some rehabilitation has been done from time to time. The number of classrooms is generally small compared to the number of student-teachers. This situation causes some tutors to assemble a large number of student-teachers in one big hall for lectures. Such halls were not originally meant for lectures but for meetings and theatrical performances. Some classes observed had more than 70 student-teachers at a time with only one tutor; while the recommended ratio of student-teachers per class should not exceed 35 (cf. MoEVt, 2007a, p. 18). Most classrooms lacked enough teaching and learning facilities. For example, almost all classes visited were without modern teaching and learning facilities like projectors or whiteboards. The college library had insufficient space and books and most of the books were outdated. The few existing up-to-date books were kept in a special reserve and were not allowed to be taken out of the library.

There were tea break meetings every day between 10.00 and 10.30 in the staff room where tutors gathered for tea and announcements. The meetings were also used for discussions of any issue related to academic matters. Sometimes, presentations concerning pedagogical issues of interest were made by selected tutors followed by a plenary discussion.

Contextual description of College B
This is among the oldest teachers’ colleges in Tanzania. Available records at the college shows that its history began around the late 1930s and that after being transferred to several places it was inaugurated at the present location in 1960. The college chiefly trains secondary school teachers at the diploma level in different areas of specialization such as natural science and social science. At the time of this study the college was offering both Diploma and Certificate courses and had enrolled a total of 1,165 students. According to the academic office, the ideal capacity of the college (in terms of infrastructure) is around 800 student-teachers. The college had 53 tutors, of whom 14 were females and 39 were males. Seven (7) tutors held a Master’s degree and the rest held a Bachelor’s degree (source, Academic Office, College B).

Sometimes, the college premises host seminars and workshops on academic and professional support to in-service teachers run by the MoEVt or TIE. It also sometimes hosts such important activities as the marking of
national examinations at various levels of education. This gives tutors the opportunity to meet other professionals to share experiences of teaching and learning in general. The college infrastructure (buildings, classrooms, toilets, roads, etc.) is generally old, and the number of students has exceeded its carrying capacity. Most classrooms visited had insufficient teaching and learning facilities. For example, almost all classes were without facilities like computers, projectors, whiteboards or displays. As usual, the most noted teaching/learning facilities in the classrooms were blackboards and noticeboards. The college has a library but it is short of books as well as space. The college has a laboratory building but is small and without adequate equipment necessary for conducting science practicals.

As in other colleges, I noticed that every day, between 10.00 and 10.30, all tutors met in the staffroom for a tea break. During these meetings, different announcements relating to matters like security, sickness and discipline were made by the tutor-on-duty. Other tutors also received the opportunity to discuss any issues related to academic matters and to the general condition of the college. The meetings were also attended by the college principal and vice principal, depending on their availability.

Contextual description of College C

This college is also among the oldest colleges established since colonial times in the 1920s and of moving to several places before it was permanently based at the current location. The college runs the Diploma course in secondary school teaching. Sometimes it also offers training for the Grade III ‘A’ Certificate in teaching primary schools. At the time of this study, the Certificate course was also running. The college capacity is around 950 students. During this study the college had enrolled a total of 1,253 student-teachers of whom 672 were training at the Diploma level for teaching in secondary schools. Available data at the office of the principal showed a total of 66 teaching staff, of whom 55 were males and 11 were females. However, there were no readily available data showing the qualifications of the tutors. Nevertheless, not all tutors were available for teaching for different reasons, including study leave.

As is the case in the other colleges involved in this study, the college infrastructure (buildings, roads, etc.) is generally old, though some simple rehabilitation has been made from time to time, such as repainting buildings or replacing broken items. Classrooms (and even tutors who were available) are few compared to the number of student-teachers. This situation forced some tutors to assemble a large number of student-teachers in one big hall for lectures. According to the tutors, sometimes even the dining hall is used for teaching and examinations. Most classrooms were ill-resourced, having only blackboards, noticeboards and few displays on the walls. The college has a library but, as usual, without enough course books, especially current books. The college has a so-called ‘ICT’ Centre, which is meant to offer information and communication technology courses for student-teachers as well as for
tutors. The centre has three computer rooms with about 18 functioning computers each. In total, there were fewer than 60 computers at the centre. Student-teachers visited the centre in shifts when having ICT lessons. The centre is open during working days between 8.00 and 16.00.

Even at this college there was a culture of meeting every day during tea breaks, but the meetings were used primarily for receiving administrative announcements rather than for discussing pedagogical issues. When I asked tutors about this, they claimed to discuss pedagogical issues in their respective departments, not at the tea break. This may imply that when it comes to teaching issues, the culture of collaboration is more departmentally than collegewise oriented.

**Contextual description of College D**

College D was established in 1930s by missionaries and was nationalised in August, 1966. The college offers a two-year Diploma course in secondary school teaching for social and natural science subjects. The college has also been used for hosting in-service teacher training programmes run by the MoEVT. This offers a possibility for the resident tutors to meet other educators and share different ideas. At times it has also been used as a centre for marking of various national examinations. At the time of this study (the academic year 2013/2014), enrolment stood at 1,152 student-teachers, of whom only 242 were females. At this college, enrolment was high in science subjects, e.g. out of the total, 653 were science students. This is due to the increased demand for science teachers in secondary schools. The college had 107 tutors of whom 58 were females and 49 were males. Thus the college had the highest number of tutors compared to the rest of the colleges involved in this study. Theoretically, the tutor/student-teacher ratio seems reasonable. Nevertheless, not all tutors were available for teaching for different reasons, including study leave.

Important infrastructure such as classrooms, laboratories, dormitories, and the library, albeit old, is in place. However, occasional rehabilitation of college buildings in general has taken place. It was reported that the reasons for the lack of classrooms and the library space was because they were designed in the 1960s to accommodate only a few students. According to the academic office, while other books seem available and sufficiently represented, books on competence-based curriculum were lacking. The college has an Information and Communication Technology (ICT) lab, but ICT facilities are quite inadequate in terms of computers and servers, and Internet connectivity is poor. To sum up, all colleges enrol students from different parts of the country, and their graduates are also employed and work as teachers in different parts of the country. In certain respects there are further similarities between the colleges where the study was conducted. The next section discusses the selection of participants.
5.2.2 Selection of participants

The study involved 12 tutors in total. Participants were selected mainly through a purposive sampling strategy. In this strategy the inquirer selects individuals for the study who are assumed to be able to provide information regarding the research problem or a central phenomenon in the study (Creswell, 2007). A purposeful selection method was chosen in order to select information-rich participants for a detailed study (see also Denzin & Lincoln, 2000). This method of sampling is consistent with the interpretive paradigm research (Ajjawi & Higgs, 2007). Since the central problem of the study was to understand how tutors interpret CBC and how they train student-teachers to implement CBC in actual classroom situations, this study focused solely on methodology tutors (i.e., those who are responsible for teaching methods courses) from the sampled TTCs as potential respondents. Methodology tutors were purposively targeted by virtue of their responsibility to train student-teachers on how to implement CBC (e.g., how to plan, select materials and methods, teach, and assess). Methodology tutors were considered ‘information-rich’ respondents who could provide information relevant to the study. They were regarded as ‘information rich’ in the sense that the methods courses they are teaching occupy a central role in training teachers to implement CBC. They were thus assumed to provide a suitable context for answering certain research questions.

At least during the field work, there was an average of nine tutors who were teaching methodology courses in each college visited. However, it would not be feasible to study all methodology tutors in the selected institutions within the limits of time and resources. Consequently, a few participants had to be selected from each sampled college. To reach this goal, purposeful maximal sampling was employed. In this light, I purposefully selected a few participants who would possibly contribute differences from or different perspectives on the problem. This form of sampling was motivated because when differences are considered at the beginning of the study, it increases the likelihood that the findings will reflect differences in practice or different perspectives, if any - an ideal in qualitative studies (cf. Creswell, 2007; Miles & Huberman, 1994). Initially, the study was delimited to two methodology tutors in each sampled college - one from natural sciences (biology subject) and one from social sciences (the geography subject). The methodology tutors from the two subjects were selected as exemplifying tutors of the broader categories (natural and social sciences) of which they are members. It was hoped that the differences in practice as a result of different traditions within the subjects would be captured. The term ‘exemplifying’ is preferred to ‘representative’ because, as Bryman (2012) observes, the notion of representativeness can sometimes lead to confusion. The notion of exemplification here implies that the methodology tutors from the two subjects were chosen, not because they were extreme or unusual in any way but because they were assumed to provide a suitable context for understanding different perspectives and practices from the two different fields - natural and
social sciences. This was done strategically in order to highlight or capture possible variations, if any, in that respect. Further, the two subjects were chosen for three further reasons. First, they form one of the subject combinations in teachers’ colleges when it comes to teaching specialisation. Secondly, they are compulsory to all students in O-level secondary schools (i.e., forms I-IV) where the prospective teachers will be teaching. Thirdly, the subjects are very practical in nature and form a foundation for later important specialisations such as nursing, doctors, agriculture, environmentalists or land surveying. It was therefore thought important to understand how teachers are trained to develop the required learners’ competences in these foundational subjects.

Then, how was the actual process of selecting participants conducted? After gaining access to the colleges and obtaining permission from the college principals, I was linked to the academic office where I declared my interests. The academic office then linked me to the departments where the tutors in question were to be found. While at the departments, I introduced myself and the study as well as the kind of respondents I would like to meet. In most colleges, the division of teaching responsibilities was that one tutor is assigned to coordinate and teach one method course in a particular subject and class. This made it easier to purposively select the tutor (from the subject in question) who was available at the department during the day of selection and the entire period of the study.

However, in circumstances where more than one tutor in the department taught the same course, another possibility for sampling within the purposive genre was considered. In this case, a ‘random purposeful sampling’ technique (cf. Miles & Huberman, 1994) was employed to find one tutor. It is a technique used to select one or a few participants when a potential purposeful sample is large. Thus, its purpose is to add credibility to the sample when such a situation is faced (ibid.). Bryman (2012) also observes that random sampling gives a known chance to all members who meet the selection criteria to be selected and reduces the risks of being biased in the selection of participants. For example, in case three tutors were teaching the same course, I prepared three small pieces of paper on one of which was written ‘YES’ while the other two read ‘NO’. Then I folded the papers and mixed them thoroughly in a box. Thereafter, I asked the tutors to pick only one piece of paper from the box. The tutor who picked ‘Yes’ was selected and asked to participate in the study. Qualitative research writers (e.g., Creswell, 2007, Bryman, 2012; Miles & Hubern, 1994; Miles, Huberman, & Saldana, 2014) agree that random purposeful sampling can be used in qualitative research. Using the above procedures I was able to obtain a total of eight (8) tutors who were interviewed and observed while teaching in the classrooms - four (4) biology tutors and four (4) geography tutors.

Nevertheless, in the course of the study, to obtain a feeling that the study is no longer yielding information that is extremely different or unaccounted for by data already generated, I later decided, thanks to the good cooperation I
received from tutors in each college, to interview more methodology tutors than the eight observed ones. Thus, in each college, one more methodology tutor was conveniently selected for an interview alone. This makes a grand total of twelve (12) participants in the whole study – three from each college. All told, eight of the participants were males and four were females. The number of years the participants had worked as college tutors ranged from three to thirty, which demonstrated a wide level of teaching experience and varying stages in the teaching career. The advantages of this range of experience are the richness of data obtained and the multiple perspectives illuminating the study object. Table 2 summarizes the tutors’ background information. To keep the colleges and participants anonymous, pseudonyms are used. It should also be clarified that the names attached to the participants are not meant to identify their gender but are only used to distinguish them from one another.
Table 2: Tutors’ background information

<table>
<thead>
<tr>
<th>College</th>
<th>Tutors</th>
<th>Teaching qualification</th>
<th>College teaching experience</th>
<th>CBC training (seminar/workshop)</th>
<th>Subject/course assigned to teach</th>
</tr>
</thead>
<tbody>
<tr>
<td>College A</td>
<td>Mose</td>
<td>Master’s degree</td>
<td>30 years</td>
<td>One week</td>
<td>Biology methods</td>
</tr>
<tr>
<td></td>
<td>Chewa</td>
<td>Bachelor’s degree</td>
<td>22 years</td>
<td>One week</td>
<td>Geography methods</td>
</tr>
<tr>
<td></td>
<td>Rose*</td>
<td>Bachelor’s degree</td>
<td>5 years</td>
<td>One week</td>
<td>English methods</td>
</tr>
<tr>
<td>College B</td>
<td>Gamba</td>
<td>Bachelor’s degree</td>
<td>10 years</td>
<td>One week</td>
<td>Biology methods</td>
</tr>
<tr>
<td></td>
<td>Simba</td>
<td>Bachelor’s degree</td>
<td>5 years</td>
<td>One week</td>
<td>Geography methods</td>
</tr>
<tr>
<td></td>
<td>Beno*</td>
<td>Bachelor’s degree</td>
<td>13 years</td>
<td>Nil</td>
<td>History methods</td>
</tr>
<tr>
<td>College C</td>
<td>Mawazo</td>
<td>Bachelor’s degree</td>
<td>13 years</td>
<td>One day</td>
<td>Geography methods</td>
</tr>
<tr>
<td></td>
<td>Ali</td>
<td>Bachelor’s degree</td>
<td>3 years</td>
<td>One day</td>
<td>Biology methods</td>
</tr>
<tr>
<td></td>
<td>Godi*</td>
<td>Bachelor’s degree</td>
<td>5 years</td>
<td>One day</td>
<td>English methods</td>
</tr>
<tr>
<td>College D</td>
<td>Matata</td>
<td>Master’s degree</td>
<td>11 years</td>
<td>Three days</td>
<td>Biology methods</td>
</tr>
<tr>
<td></td>
<td>Flora</td>
<td>Bachelor’s degree</td>
<td>3 years</td>
<td>One day</td>
<td>Geography methods</td>
</tr>
<tr>
<td></td>
<td>Zena*</td>
<td>Master’s degree</td>
<td>9 years</td>
<td>Nil</td>
<td>Communication skills</td>
</tr>
</tbody>
</table>

Table 2 shows that the majority of the tutors held a Bachelor’s degree in education. All tutors had not received enough training (e.g., at least three months) related to CBC. Most of them attended indoor seminars/workshops, which ranged between one day and one week. The workshops/seminars were mostly delivered by educators from the Tanzania Institute of Education (TIE). Some reported that they attended only once, in a day, way back in 2005. Most of the tutors reported that those in-door seminars/workshops were not very useful, because they were too short. Also, according to the tutors, the seminar leaders/presenters themselves seemed to have little understanding of CBC as they were not able to answer a satisfactory number of questions raised by the participants. Overall, the table suggests that not much support for comprehending and implementing CBC in the training of student-teachers has been given to the tutors.

11 Table 2 shows all the twelve (12) tutors who were involved in this study. The names with an asterisk indicate that the tutors were not observed while teaching.
5.3 Data generation methods

In this study I employed interviews, classroom observations, and document reviews as methods of data generation. These methods were chosen because they are congruent with the research paradigm and enabled access to participants’ experiences. As Bryman (2012) notes, the use of more than one method to generate the required data (Methods Triangulation) provides better information. By looking at the phenomenon under investigation from more than one direction, the findings will be cross-checked, which would not happen if a single method had been used. Methods triangulation was considered important to help to increasing the credibility of the study findings. Credibility demonstrates to what extent the findings represent reality (Guba & Lincoln, 1981). Further, using different methods of data generation was considered because this might compensate for individual method limitations and exploit their various benefits. However, in general terms, the three methods focused on the same phenomenon under investigation. For example, apart from gaining access to how tutors interpret CBC and train teachers-to-be using the interviews, the observation and document review methods enabled me to gain further access to how tutors actually train student-teachers in their everyday classroom environments. Integrating these methods enabled the generation of adequate qualitative data for the analysis process (in line with Best & Kahn, 2006). Generally, these advantages motivated the use of these different methods to understand the study object. Table 3 summarizes the data generation process, and in the following sections I elaborate on each of the methods and the way I employed them in this research.

Table 3: Summary of data generation process

<table>
<thead>
<tr>
<th>Colleges</th>
<th>Tutors</th>
<th>Activity 1</th>
<th>Activity 2</th>
<th>Activity 3</th>
<th>Activity 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>College A</td>
<td></td>
<td>Main Interview</td>
<td>Observ-Interv.1</td>
<td>Observ-Interv.2</td>
<td>Document review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>2.</td>
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<tr>
<td></td>
<td></td>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College B</td>
<td></td>
<td>Main Interview</td>
<td>Observ-Interv.1</td>
<td>Observ-Interv.2</td>
<td>Document review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.</td>
<td></td>
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<tr>
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<td>2.</td>
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<tr>
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<td></td>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College C</td>
<td></td>
<td>Main Interview</td>
<td>Observ-Interv.1</td>
<td>Observ-Interv.2</td>
<td>Document review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>2.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College D</td>
<td></td>
<td>Main Interview</td>
<td>Observ-Interv.1</td>
<td>Observ-Interv.2</td>
<td>Document review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.</td>
<td></td>
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</tr>
<tr>
<td></td>
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<td>2.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Key: Observ-Interv. - An observation followed by a post-observation video-stimulated interview to seek further clarification of classroom processes.

5.3.1 The interviews: approach and process

A qualitative research interview can be defined as a conversation containing structure and purpose (Kvale & Brinkmann 2009, p. 3). This implies that a research interview is a professional conversation that goes beyond the spontaneous exchange of views as in everyday conversation. This study employed interviews with the tutors as the main method of data generation. They were chosen in order to engage the tutors to verbally express their understanding and experiences about the object of study. Qualitative interviews are a viable means of learning about peoples’ views, understandings or conceptions (Bryman, 2012) by allowing the interviewer to enter into the interviewee’s perspectives and gain a deeper understanding of the meanings and experiences of their lived world (Kvale & Brinkmann, 2009). Such advantages motivated the choice and use of the interview method in this study.

There are various ways of conducting research interviews, including structured, semi-structured, and unstructured interviews. The form of interviews used in the present research was semi-structured; in other words, they contained a guide with a few lead questions, leaving room for follow-up (probing) questions to emerge in the course of the discussion. Consistently with Kvale and Brinkmann’s suggestion, the interviews were open to changes in the sequence and form of questions in order to follow up the specific answers given by the respondents. A semi-structured interview format was considered suitable for this research because it allows the generation of rich qualitative data due to its flexibility, but is still focused and time-effective (cf. Patton, 2002). Even though structured interviews and questionnaires are focused and time-effective, they limit participants’ responses, they are inflexible and overlook the emotional dimension (Fontana & Frey, 2000; Patton, 2002). On the other hand, unstructured interviews are highly flexible but are less focused and require the researcher to “immerse” himself/herself in the field for a substantially long period of time as a participant observer (ibid.). Thus, questionnaires, structured and unstructured interviews were considered ill-suited for the present study. A semi-structured interview format was chosen to provide the advantages of both structured and unstructured ones.

I conducted the interviews at the agreed time in the respective tutors’ offices. They took place one-to-one in the sense that one interviewee was interviewed at a time. The aim was to capture personal understanding and experiences. The interviews were conducted before and after lesson observations. I am aware that one may interpret this as a quasi-experimental design. However, it is not, since the post-observation interviews were meant to follow up or attempt to clarify unclear issues noted during classroom observations. Interviews before lesson observations were conducted primarily
to explore e.g. tutors’ understanding of CBC, strategies/methods they employ to train student-teachers, constraints and opportunities, as well as their views about the CBC reform. I was conscious about the risk that interviews before observations could influence the tutors’ practices during the observations. However, in this research it was still considered important to start with pre-observation interviews. These interviews served as a strategy for establishing rapport and building trust before gaining access to a further investigation of tutors’ practices. They provided opportunities to agree on a convenient time for lesson observations. In this light, it was advantageous to start with the interviews before embarking on classroom observations. Arguably, the benefits were greater than the risks.

A total of twelve tutors were interviewed in this study, of whom eight (i.e., those who were observed while teaching) were interviewed before and after classroom observations. The remaining four were interviewed only once. These were additional tutors who were conveniently selected and interviewed in the course of the research. The duration of most interviews ranged from forty (40) to fifty (50) minutes depending on how interested tutors were to carry on the conversation, as well as on the scope of their reflection. For example, some participants seemed very interested in the topic and took more time to explain things. The differences in the duration of the interviews was further due to natural individual differences in the sense that some people speak very slowly and therefore spend more time to explain things and vice versa. Thus, the amount of content and the course of the dialogue somewhat varied between interviews. During the field work, only one interview session was held in a day.

The interview sessions were influenced by the interview guide, which consisted of an outline of topics to be covered, and a few open-ended lead questions. The interview guide had the advantage of enabling interviewing the study participants systematically and maintaining the focus of the study on each interviewee (see also Patton, 2002). For instance, the guide for interviews before classroom observations was organised into such topics as the conceptual and procedural knowledge of tutors regarding CBC, actual teaching methods used by tutors, assessment strategies used by tutors, as well as constraints and opportunities. This was planned beforehand in order to enable the interview process itself to be conducted systematically and to simplify later analysis (in line with Kvale, 2007; Kvale & Brinkmann, 2009 suggestions). Under each domain of inquiry some few general entry questions were prepared (see Appendix D), and the interviews developed on the basis of the responses from the participants.

Before the conversation started, the interview was introduced by a briefing by me to the respondent about the purpose of the study and interview, the use of a tape recorder, the respondents’ right to privacy and to confidential treatment of the information they provided, as well as asking if the respondent had any question before the starting of the interview. This helped me to build trust in the participants. During the interviews, I felt that the briefing I
provided minimised potential tension and anxiety deriving from the effect of recording, as the participants seemed not to pay any attention to the recording device. With this experience I believe that the participants responded freely, openly and without tension.

In the present research, the interview is seen as a human meeting which aims to bring out human experiences. As Kvale (2007) observes, it was thus necessary to create an atmosphere of conversation, acceptance and respect towards the otherness of the interviewee, so as to reach the goal of entering the participants’ perspectives and experiences. I was aware of the dynamic dimension of the interviews, i.e. regarding the interpersonal relationship in the interview. In this case, during the interviews, a good contact was established by attentive listening, with the interviewer showing interest, understanding and respect for the respondents’ words. This was done, for example, by giving a nod, giving motivating signals in words such as ‘mmhh!’…, ‘Ok!’, or ahaa!.

Consistently with perspectives from hermeneutic-phenomenology epistemology, an effort was made in course of the interviews not to affect the dialogue’s outcome according to my own perceptions, but rather to stimulate and allow for the experiences of the interviewees to come to the fore. An advantage is that I conducted the interviews myself, which contributes to a better understanding of the meaning of the interview accounts. Follow-up questions based on tutors’ statements, aiming at the development of the discussion, the clarification of the meaning of the tutor’s accounts, and the concretisation and exemplification of the general statements were considered. The adoption of this strategy provoked rich accounts, which enhanced the trustworthiness of the research. The strategy also helped to embed analysis and tentative interpretations during the interview process. This strategy is similar to what is referred to as ‘member checks’. The quality of the interview, analysis and interpretation of the interviewees’ statements, can be enhanced when the interviewer is the researcher himself (Kvale, 2007; Kvale & Brinkmann, 2009).

It is also important to elaborate in this sub-section on the post-observation interviews. In this study, these interviews were conducted to seek clarification of some observed instructional practices that remained unclear to me as they were based on classroom observations alone, and to further explore the meaning and reasons underlying the tutors’ actions. This was in cognizance of the fact that observations are limited to observable behaviours, i.e., can only record what happens and what can be seen, and that it may be dangerous to infer the reasons, intentions and causes lying behind actors’ behaviours (Cohen et al., 2011). Thus, post-observation interviews probed the meanings and intentions of, e.g., certain tutors’ actions in classrooms, the sequence of tasks, the use of resources, or reasons for preferring certain methods to others. These interviews were also used as an opportunity to seek clarity of issues from interviews made before the classroom observations.

For the post-observation interviews, some questions were prepared before the classroom observations, but most of them were formulated during the
actual observations, where I noted some issues who needed clarifying. These pre-observation questions include, for instance: *Would you please explain why you used this/these method (s) and material? What alternative strategies could have been used to bring about better knowledge of, skills at and experiences of implementing CBC in schools? Why didn’t you use such strategies? What specific skills at/experiences of implementing CBC do you think student-teachers have learned during this session?* (see the post-observation interview guide in Appendix F). These served as basic questions which were asked to all participants who were observed in the classrooms.

To facilitate memorising some incidents of the teaching episode I employed a technique during the post-observation interviews called ‘stimulated recall’. Stimulated recall is a method that involves replaying a video record of a teaching episode to enable a viewer (i.e., the teacher of the episode) to recall and comment on his/her decisions during the episode and on other matters of interest (cf. Clack & Peterson, 1986; Rowe, 2009). The tutors were shown parts of the video clip of their lessons to stimulate recalling their teaching episode. Through a shared control of when to stop the video clip, the tutors were asked to describe or comment on their actions and decisions, which was deemed important for the research. Instances when the tutor assigned a seatwork to be performed in groups were among those selected as focal points for further discussion. The tutors were, for instance, asked to clarify why they gave seatwork in groups and what they thought student-teachers benefited from such work in relation to learning to implement CBC. I was aware that video-stimulated interviews may be stressful and may create anxiety to the tutors. To minimise that risk, I strived to establish good rapport and built trust with the participants by recapitulating the purpose of the study and interview and, as pointed out earlier, conducted the interviews in a less threatening environment, preferably in the tutor’s office.

All interviews were recorded by a Digital Voice Recorder (DVR) to ensure the preservation of the participant’s actual words for transcription and further analysis. Recording the participants’ actual voices enabled me to preserve original data that could later be retrieved to check for accuracy in case something was unclear in a transcript and during the data processing. In the course of the interviews, I took some field notes to supplement DVR in case it would fail. This strategy ensured the reliability of data (see also Kvale & Brinkmann, 2009; Patton, 2002). More details about how data was kept are provided in the later section concerning ethical considerations. Interviews are limited in that they can only provide self-reported behaviour, i.e. behaviour that can only be inferred. Such reports may sometimes be inconsistent with what actually happens. However, the researcher’s ways of finding out about the social reality are not limited to interviews only. Scholars widely acknowledge the use of other ways that suit the interpretive perspective. Given the nature and character of the phenomenon under investigation, classroom observations and the review of documents were employed to gain further access to the tutors’ instructional practices.
The interview language
In diploma teachers colleges in Tanzania, English is used as a medium of instruction and is emphasised in daily communications. In this study participants were not restricted to using English but were free to choose which of the two languages of English and Kiswahili they would prefer to use during the interviews. It was thought prudent to give the participants this freedom because the enquiry was carried out in a Kiswahili-speaking culture and environment. It was hoped that by giving freedom to use Kiswahili, the confidence and freedom of the informants could be increased without a language barrier. Consequently, some used English, while others chose Kiswahili. Since some interviews were then made in Kiswahili, language issues were to be observed. In line with Temple and Young (2004), when a research undertaking subscribes to the interpretive view of social reality and, at some stages, involves the use of more than one language (e.g., during interviews and reporting), it is necessary to consider matters of translation. This is because of the risk of misinterpreting the informants’ meanings, especially when the data analysis is performed by other researchers than the ones who conduct the interviews. Below I briefly explain how I handled issues of translation.

As reported earlier, all the interviews in this study were conducted by me. This helped me to understand the interviewees well as I was able to probe deeper into their meanings. Temple and Young (2004) suggest that researchers who can make their own translations are automatically the ones best situated to perform cross-language data analyses. During this study some strategies were considered to minimise the risks of translation. First, I transcribed the interviews verbatim and analysed them in their original language. This was done as an attempt to ensure that I captured a correct understanding of the participants’ perspectives, meanings, and experiences from the primary data. Then, for the Kiswahili transcripts, I later on translated the identified relevant text supporting/representing the themes into English and presented them along with the relevant themes. Thus, the translation took place at some later stage of the analysis process. In translating the relevant text, an attempt was made to ensure that it agreed with a correct version of text. However, to ensure the credibility of the translation, I used a further technique of peer validation. I consulted one senior lecturer from the Department of Linguistics at the University of Dar es Salaam, who also had a background in education. In so doing, I gave out a version with the developed themes (representing the participants’ meanings/interpretations), relevant texts in Kiswahili and the translated version in English. I asked for checking and advice on the agreement of the translated texts. I received the comment that I had been able to capture the correct equivalent words, but in some parts I received suggestions of more appropriate terms to use. The fact that I myself come from a Kiswahili-speaking context and conducted the interviews myself, and that I am fluent in both Kiswahili and English, should contribute to the agreement between the original and translated versions of the relevant texts.
5.3.2 Classroom observations

The classroom observation method was employed as an alternative method to complement data generated through interviews. Observations are valuable means of revealing social dynamics and processes in daily practices (Best & Kahn, 2006; Patton, 2002). The method was preferred because it offered the possibility to follow the actual instructional strategies and the way the tutors employed them, instead of depending on self-reported behaviour from the interviews alone. The method also provided an opportunity to observe classroom conditions that would act as frame factors of the training process. Consistently with suggestions offered by scholars such as Bryman (2012); Cohen et al., (2011) and Patton (2002), classroom observations were expected to provide greater opportunities to view tutors’ instructional practices.

Observations of the kind available to researchers lie on a continuum from unstructured to structured. Following Cohen et al. (2011), three kinds of observation can be established in a continuum: 1) structured observations, 2) semi-structured observations, and 3) unstructured observations. In this research, the observations were semi-structured in the sense that an agenda of issues to be observed was known and prepared in an observation guide, but during the process of classroom observations the data gathering (or recording of observation notes) to illuminate these issues was done in a far less fixed manner (in line with Cohen et al., 2011). In using the guide there was room for changing, e.g., the sequence of observation, or adding more data. For instance, if I encountered a situation at the very beginning of the lesson which gave some important information of the pedagogical aspect, I immediately noted it down. The data gathering was responsive to classroom situations and I remained open-minded to allow for recording any other potentially insightful information for the study.

A semi-structured observation was preferred as it is flexible but still focused, which enabled me to record data in an open-ended manner and to come up with a detailed description of aspects considered important to the research. This kind of observation also made it possible to record any situations/behaviour (e.g. some tutors’ and student-teachers’ direct utterances in a communication) that I thought would add value to the research. It was to the benefit of the study to use this kind of observation because of its elements of both structured and unstructured observations. This was also done in cognizance of the difficulty of predicting what would emerge in social interactions. Structured observation was considered unsuitable in this research because it might limit the data gathering due to its inflexibility, thus neglecting other aspects that could emerge as important for the research only because they did not appear on the observation schedule. Structured observations seem suitable for hypothesis-testing research, as their hypotheses are often determined and the observational data can be used to conform to or disprove these hypotheses (see also Cohen et al., 2011). On the other hand, although semi-structured and unstructured observations are consistent with the interpretive qualitative research that this study subscribes to, the latter were
considered unsuitable in this study as there might turn the data generation into shambles without a clear focus, a situation that could lead to spending too long time in the field collecting information that was irrelevant to the research. On the grounds of effectiveness and efficiency, I considered unstructured observation unsuitable in the context of this study.

With this method, a total of eight (8) methodology tutors – two from each teachers’ college were individually observed twice while teaching in the classrooms on agreed hours and days during the first term of the 2013/2014 academic year (September, 2013 to January, 2014). Hence, a total of 16 classroom observations were conducted. Classroom observations focused on, but not limited to, aspects such as the classroom environment, the teaching/training strategies employed, tutors’ behaviours (how they interact and communicate with learners - framing, classification, etc.), the teaching-learning resources and assessment strategies used, as well as other possible influencing factors. Thus, by focusing on the above elements I was able to record data on facts, events, and behaviours in the classrooms. An observation guide was designed on the basis of insights from the theoretical framework that guided the study and the research questions. The observation guide helped to record the aforementioned information, to maintain the focus of the investigation, and to counteract the risk of getting lost. For details of the classroom observation guide, see Appendix E.

All the classroom observations were carried out by me. I was also responsible for taking observation notes, while one trained person assisted in taking videos. So, apart from taking observation notes, classroom observations were videoed (by participant consent). It is important to note that the videos were not recorded for later analysis but were intended to stimulate the discussion during post-observation interviews. Classroom observations involved observing tutors directly while they were teaching. During the process, I and the camera man were seated at the back of the classroom remaining as unobtrusive as possible. From the rear side of the classroom I was able to watch the tutor and the students and carefully take observation notes. Some incidences of tutor-trainee direct utterances in a communication, which were thought important as representative excerpts that would support or illustrate findings, were also noted down. Similarly, from this vantage point, the camera man was able to see the tutor and the students, and with the assistance of a wide-angle video camera, it was possible to video-record the classroom processes. Most classroom observations lasted for an hour, depending on how the lessons were scheduled.

The notion of participant observation may sometimes be imprecise and confusing, as participant observers vary considerably in how much they participate in the social settings in which they locate themselves (Bryman, 2012). I will therefore clarify my role in the observations conducted. During these, I took up the role of a ‘non-participant observer’ in the sense that I was present in the social setting being observed (i.e., the classrooms) but did not participate in activities such as asking and answering questions or doing
assignments like those done by the teacher or students. Non-participant observation is the term used to describe “a situation in which the observer observes but does not participate in what is going on in the social setting” (Bryman, 2012, p. 273).

During this process, ethical considerations were observed. For example, prior to observations, I informed the tutors about the nature of the observation and my role as an observer, and about my wish to video-record their class sessions so that we could use the video recordings to stimulate the discussion afterwards. Further, the participants were told about the procedures to ensure the anonymity and confidentiality of information to be recorded and about the intention of the video records being to assist post-observation interviews (for full details of information to participants, see Appendix B). The aim of providing this information to participants was twofold: first, to meet their right to know the purpose and procedure of the research and, second, to seek and obtain their informed consent to be observed and recorded (see for example Cohen et al., 2011; Swedish Research Council Report Series 3, 2011).

Moreover, I was aware that observing others in order to gain knowledge of their actual practice and behaviours, especially in overt observations where the presence of the observer is known (as was the case in this study), is a challenging situation. As Cohen et al. (2011, p. 473) cautioned, during observations participants might behave differently when they know that they are being observed and recorded. Consistently with suggestions by writers (e.g., Cohen et al., 2011; Patton, 2002), in order to minimize this effect, I tried as much as possible to build trust in and empathy with the participants from the very beginning of the research. I explained clearly to the tutors the purpose of the research and the procedure of classroom observations, insisting that it was not an inspection activity. Furthermore, I adopted a habituation strategy. For instance, I spent time with participants (e.g., during tea breaks in the staff room) and through informal conversations, shared with them my experience as a teacher so as to get them used to me and make them revert to their natural behaviour (cf. Cohen et al., 2011, p. 474). In addition, I made repeated classroom observations with the same tutors at least twice over the study period, each turn in a different but similar group. These strategies, I believe, helped to minimise biased or ‘artificial’ conduct or practice on the part of the tutors. I was also aware that sometimes, as a researcher, when you are taking observation notes you may run the risk of interpreting your observations wrongly. To counteract this risk I noted all episodes that I felt were unclear to me and sought clarity from the tutor during post-observation interviews.

Generally, lesson observations provided great advantages to the study because: (i) they helped to reveal what the tutors actually do rather than what they say they do. Equally importantly, observations helped to confirm and complement data derived from interviews; and (ii) tutors’ classroom behaviour or actions could easily be linked to the frames of teaching, which the study was interested in exploring as well. However, the approach was still susceptible to some limitations. Observations can only record what happens
and what can be seen. It may not always be possible to understand fully the reasons, intentions, and causes that lie behind certain actions or behaviours (Cohen et al., 2011). To minimise this limitation, as noted elsewhere, classroom observations were followed by the second phase of interviews, where further clarity of issues was sought. Following this, a review of documents such as lesson plans was made to confirm and gain further information on, for example, the teaching strategies, teaching-learning resources, and assessment strategies used by the tutors. In the next section I discuss the document review process.

5.3.3 Document review

By document review as a method of data generation, I mean the collection and analysis of information from different kinds of extant material related to a topic under investigation. Documents provide rich information for social and educational researchers (Patton, 2002; Punch, 2009). Documents are important in triangulation, where an intersecting set of different methods is used in a research (Punch, 2009). Upon agreement and permission by the respective tutors, I collected and reviewed tutors’ teaching portfolios – written lesson plans for previous (at least up to two months back) and observed lessons, schemes of work as well as available written records of assignments given to student-teachers during their college course. The analysis of these documents helped to supplement the data generated through interviews and classroom observations. The documents were subjected to qualitative content analysis whose main focus was to explore the kind of teaching methods, teaching-learning resources, and assessment strategies that tutors had planned and/or used in the teaching process. It was presumed that the analysis of such documents would contribute to the understanding of tutors’ practices in relation to preparing student-teachers for CBC implementation in schools.

In this research I managed to review a total of seventy-nine lesson plans and all schemes of work of the tutors whom I observed while teaching in the classrooms, as well as records of assignments made available to me during the field work. All the documents were from the first term of the 2013/2014 academic year. A document review guide (see Appendix G) was prepared and used to accomplish this task. Depending on the agreed arrangement between me and the tutor, reviews of these documents were conducted at either the tutor’s office or at the time and place convenient for the researcher. The review of teaching portfolios was undertaken after interviews and observation exercises had been completed. This was deemed appropriate to minimise the risk of bias in case the documents had been analysed in advance. It took between two and three hours to finish reviewing each tutor’s teaching portfolio. Generally speaking, the document review was well motivated as it helped to supplement and cross-check data from the interviews and observations.
5.4 Data analysis procedure

In line with Kvale and Brinkmann (2009), there is no formula or clear agreement that exists concerning how to go about analysing qualitative data. The analysis of data in this study did not abide by one method alone; instead the interplay of methods and techniques (an eclectic approach) such as thematic analysis and content analysis was employed. The thematic analysis method was employed mainly to analyse interview data, whereas the content analysis method was applied to analysing data from documents such as tutors’ lesson plans and classroom observation notes. More details of how and why the methods were motivated in this study are provided in later sections.

In this study both deductive and inductive approaches were employed in coding and categorising data. The deductive approach involved analysing data based on previous knowledge or theory. In this respect, I coded data by fitting it into a pre-existing coding frame or preconception, based on the assumption that theme identification might be informed by previous knowledge from theories and literature related to the investigated phenomenon. The inductive approach means that the themes/categories came from the data rather than being imposed from previous knowledge or theory. For example, I coded the data without trying to fit it into a pre-existing coding frame or the researcher’s analytic preconceptions (see also Braun & Clarke, 2006). Thus, I immersed myself in the data descriptions open-mindedly, trying to understand and reflect on specific meaning segments emerging from the data set. This was based on the assumption that we know little about the investigated phenomenon, for which reason there might be issues identified from the data which had not been accounted for by the existing theories or literature. For example, inductive analysis was particularly preferable when developing themes concerning tutors’ understanding of CBC meaning, because there were no preconceptions about this, a situation which motivates the need for this study. In this case the form of thematic analysis was more data-driven.

In the deductive approach, perspectives from central theories (e.g., as specified earlier in the analytical framework in Chapter Three) were used to focus the analysis of issues of interest on the study and identification of themes or categories. With the theoretical concepts in mind, I repeatedly read my data to understand and categorise it. Thus, the process involved going back and forth between data and theories as well as other relevant literature. For instance, the Frame Factor theory was used when analysing data to identify and understand the contextual factors described by the tutors as influencing their instructional practices. Using the pre-categories from the theory, it was possible to categorise the factors into, for instance, physical frames, administrative frames, and pedagogical frames. Bernstein’s concept of recontextualisation inspired the analysis of data to understand in what ways the tutors interpret CBC. Concepts such as framing and classification focused the analysis of data to identify, describe and understand what characterises the tutors’ instructional practices. However, it is important to note that, unlike the
Frame Factor theory and its pre-categories of frame factors, the established themes of tutors’ understandings of CBC did not come directly from Bernstein’s theory, as they had not been pre-specified by the theory but were more data-driven. As reported in the theory chapter, I also used other relevant literature from the education field (e.g., the cognitive apprenticeship model by Collins et al., 1989) as analytical tool to complement the theories.

Nevertheless, the interpretation of data was inspired by hermeneutic-phenomenological epistemology. The hermeneutical task involves reconstructing the relationship of individual units of meaning to a meaningful context (Delanty, 2005). In order to achieve a complete understanding, the hermeneutical method, the ‘hermeneutic circle’, which denotes a back and forth movement between parts (data) and evolving understanding of the phenomenon (Ajjawi & Higgs, 2007), was considered. Techniques such as repeated reading of the data items, noting patterns, making comparisons, making conceptual/theoretical coherence, as well as intersubjective agreement (e.g., involving colleagues to check and comment on categories generated against data) were employed to ensure that the interpretation was consistent with the data and to make the data comprehensible in more abstract patterns. The actual procedures of analysing the interviews, observation notes and lesson plans are described in the sections that follow.

The procedure of analysing the interviews
The interview data was analysed through the thematic analysis method. As Braun and Clarke (2006) describe, the method is suitable for identifying, analysing and reporting patterns or themes within data. In this method, the themes identified are strongly linked to the data and the ‘keyness’ of the theme is not necessarily dependent on its frequency of appearance (as is the case in content analysis), but rather on its potential to capture something important in relation to the study research question. Braun and Clarke (2006, p. 5) maintain that “through its theoretical freedom, thematic analysis provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet complex account of data”. In this study, thematic analysis was motivated in the analysis of interviews due to the benefit of its flexibility in the sense that it allowed both inductive and deductive approaches when searching for themes. Through this method, even an idea that appears once in the data can stand out as a theme, provided that it addresses particular research question(s) in the study. Thus, the method was considered suitable as it offered the possibility to capture any important idea worth discussing regardless of its frequency of appearance. This method also enabled me to support descriptions and interpretations made with relevant data extracts from the participants.

The term ‘flexibility’ could sometimes be misinterpreted, as if no systematic process is followed in the analysis. In this study the analysis was made systematically. To achieve this, I adopted and adapted Braun and Clarke’s (2006) system, which includes the following steps: familiarisation with data, generating initial codes, searching for themes, reviewing themes,
defining and naming themes, and producing the report. However, in this study, these steps were not strictly treated as distinct but some of them were combined. For example, when searching for themes, naming and defining them was done concurrently. This was preferred in order to maintain the flow of ideas.

Nevertheless, when searching for themes and defining them, the interplay of techniques such as categorisation and meaning condensation (cf. Kvale & Brinkmann, 2009) were employed. Before I begin to describe each step in the analysis process, it is prudent to define a few of the terms used through this section. Data set refers to all the data from the interviews that are used for this particular analysis. A data set in this instance includes all interview transcripts before and after classroom observations. Data item is used to refer to each individual piece of interview, which together make up the data set. A data item in this case means an individual tutor interview transcript. Data extract refers to an individual coded chunk of data, which has been identified within, and extracted from, a data item. The analysis procedure can be described as follows:

Step 1: Familiarisation with data
Familiarisation with the content and understanding of the interview data began during data collection. For instance, during interviewing the correct impression and understanding of data was ensured by listening carefully to the interviewees, by posing follow-up questions to seek clarifications, as well as follow-up questions of an interpretive nature to check if I had understood them correctly. The audio recordings containing interview data were carefully listened to and transcribed verbatim. To ensure the complete representation of the data set and the reliability of the transcription, I repeatedly listened to each audio recording. Clarity of issues which seemed unclear was sought from the participants in question during the field work either by telephone or in person and added to this participant’s data item. This process enabled carrying out data analysis simultaneously with data generation. It made the analysis into an ongoing process involving continual reflections about the data. Early involvement in the analysis also helped directing the subsequent data collection (see also Miles & Huberman, 1994). Transcripts were labelled and stored both in soft and hard copies. Because further analysis of interview data was planned to be made with the assistance of a NVivo computer software program, all soft copies of transcripts were later imported into this program. The program was motivated in this study because it functioned as a database where a record of ideas, searches, and initial analysis can be kept. It also enables searching for large quantities of data quickly and easily, across sources, thus making the analysis process more accurate and reliable (cf. Edhlund, 2011).
Step 2: Generating initial codes/nodes

The term ‘node’ is similar to ‘code’ – an often used term in qualitative data analysis (cf. Edhlund, 2011). It can be defined as a label (one or few keywords) that is attached to the data ‘chunks’. Codes are usually attached to data chunks or the relevant text in an interview transcript in order to permit later identification of that data chunk (Kvale & Brinkmann, 2009; Miles, Huberman, & Saldana, 2014). In the context of this study, the terms ‘node’ and ‘code’ are used interchangeably. In this study, two cycles were involved during the generation of initial codes. The first cycle involved generating initial free nodes. A free node is a simple type of node which may not relate to any other nodes and may not give the meanings contained in the data. Free nodes are often useful at the initial stages of coding data, when patterns in the data set are still being explored (Edhlund, 2011). In this instance, the process was more deductive in the sense that I started with my predefined headings/sub-topics in the interview guide, which I had generated from the major research questions, as my initial free nodes. This helped me to organise my data into relevant topics in relation to the research questions. Thus free nodes such as conceptual understanding (which was further broken down into three parts: CBC meaning, curriculum intentions, and reasons for introduction); procedural knowledge (teaching-learning approaches relevant for CBC, pedagogical skills required of teachers, etc.); tutor’s practices; and limits and possibilities were generated in an NVivo project as a starting point. The idea was that these topics should become the initial free nodes to which relevant data chunks could be attached to come up with a version of relevant data extracts for further analysis.

I repeatedly read one data item after another to identify relevant texts. Through the drag-and-drop method, the relevant texts were put together in the respective free nodes exemplified above to form relevant data extracts. The task proceeded until the whole data set was completed. This process enabled me to assemble data chunks that go together, and to condense the bulk data into readily analysable units. The result was a condensed version of relevant data extracts from all participants, organised in initial free nodes. However, these initial free nodes could not tell anything about the meaning of data. The process of generating meaningful codes started during the second-circle coding.

During the second circle, the data extracts in the free nodes were repeatedly and critically read and reflection was made on their meaning. Repeating ideas (statements referring to the same or similar idea) and any idea that told something of importance to the study were identified. These ideas served as a basis for generating new nodes/codes closely representing the data meaning. The basic unit for idea identification was a word, a sentence or a paragraph. The ideas were labelled with a few words. For example, under the free node ‘CBC meaning’, codes such as ‘curriculum preparing to be practical in life’, ‘apply creativity in life’, ‘skills to do things’, ‘ability to do things’ or ‘apply skills in life’ were created. Relevant data extracts ranging from a
sentence to a paragraph were attached to the respective new nodes through the drag-and-drop method. This process resulted in a list of several new nodes with their relevant data extracts supporting them. To obtain a clear image of each node, a brief description of each along with supported data extracts was made. After this, an analysis across the data set to search for themes was done as described in the next step. It is important to note that in this study the interest was to perform cross analysis and come up with themes across the whole sample of tutors.

**Step 3: Searching, naming and defining the themes**

The Braun and Clarke (2006) procedure treats searching for themes and theme naming and defining as separate stages, but in practice the boundary between them is blurred. In this study I combined them into one stage. At this stage the nodes with their data extracts were critically re-read to determine which ones are more conceptually unified. These ones were grouped together and merged to generate a common meaning – a theme. In grouping and merging the nodes into themes, an effort was made to make the grouping process authentic following the two criteria of homogeneity and mutual exclusiveness. For instance, codes/nodes were reflected upon to ensure that all codes forming a particular theme possessed a common conceptual feature. Therefore, unlike the preceding step, this stage involved moving up progressively from the empirical/field data to a more conceptual overview of the landscape, a process that enabled me to turn the data into more comprehensible abstract patterns. This tactic is what is sometimes referred to as ‘making conceptual/theoretical coherence’ (cf. Miles, Huberman, & Saldana, 2014). The result was a few qualitatively different themes.

In this study a theme was assigned a name of between one and several words as a memo to focus it. As pointed out earlier, theme identification and naming were done either deductively or inductively, so that by using such a number of words the reader would obtain a clear and immediate sense of what it referred to. In other words, the wording (phraseology) of the themes was based on the tutors’ own expressions as well as on inspirations from the theoretical perspectives and other relevant literature. In case themes were identified and named inductively, the underlying central meaning or the tutors’ own expressions were used as a basis to name a theme. To exemplify, nodes/codes like ‘prepare the learner to be practical and creative in life’, ‘apply creativity in life’, ‘skills to do things’, ‘ability to do things’, ‘apply skills in life’, ‘apply knowledge and skills in everyday life’ were merged to form a theme named ‘Application-oriented curriculum’. However, when categorising the frame factors, the process was done more deductively using pre-categories from the Frame Factor theory. For example, nodes such as ‘class size’, ‘structure of some college buildings’, ‘space’, etc., were categorised into a major theme called ‘physical frames’. ‘Total time for teaching’, ‘interference of teaching time-table’, ‘the college leadership’, ‘demands placed on tutors by circulars’ were categorised as ‘administrative
frames’. ‘The prescribed content and methods in relation to available time’, ‘lack or shortage of training opportunities for tutors on CBC’, ‘lack of money at the department’s/teachers’ disposal to buy teaching-learning materials’, etc., were categorised as ‘pedagogical frames’. With this process, I made conceptual ‘addition’ to the empirical data to make them more broadly understood and applicable.

Step 4: Reviewing themes
The next step was to thoroughly revise and countercheck the themes against the relevant text as well as against the entire raw data set to ensure that the correct meanings were sustained and that all information relevant to the study had been extracted fully. To achieve this, the process involved re-reading the transcripts, back-and-forth cycling between theory and data. In this process, colleagues (e.g., three fellow doctoral students) were also asked to countercheck if the themes represented the correct meaning of the interview statements used to amplify such themes. I was aware that colleagues rarely have the same chance/conditions to encounter a data set in the same way as the researcher does, as this could be too demanding for them. However, to minimise this shortcoming, I did not give out the entire data set (all the raw data from the interviews) against which they should countercheck the themes; instead I gave them a version with developed themes with their descriptions as well as data extracts amplifying them. I discussed with them the process through which I had arrived at the themes I had created. In addition, senior researchers, i.e. supervisors, were asked to cross-check the developed coding system and the themes I had created. They, too, were satisfied with the themes identified. They even advised me to reduce the number of quotations amplifying the themes, as they were too many. Finally, a clear description of the themes in relation to the research question which they were addressing was made, and a report was presented in the results chapter. Some relevant data extracts were used as quotations to amplify the themes.

Analysis of documents
As noted earlier, the tutors’ teaching portfolios (lesson plans, schemes of work and other available records of assignments) were subjected to a qualitative content analysis. Based on Mayring (2015), the method combines two fundamental steps of analysis: the first is the qualitative interpretive step adhering to a hermeneutical logic in categorising data followed by the second step which is a quantitative analysis of the frequencies of those categories – e.g., checking whether the same category of methods, materials, assessment strategies are coded in several text passages in the analysed lesson plans or schemes of work. The method was preferred because, together with text analysis (assigning categories to the text passages in the teaching plans), it offered the possibility of integrating quantitative elements, i.e. counting the frequency with which a particular teaching-learning method, teaching-learning material and assessment strategy was planned and/or used by the tutors. It
should, however, not be taken to mean that the focus was mainly on the quantitative content analysis. It was rather assumed that, if frequencies are also noted, it could be useful when drawing conclusions about the tutors’ practices.

The tutors’ teaching portfolios were analysed to detect the teaching-learning strategies, teaching-learning resources, and assessment techniques which tutors had employed both previous to and during the time of this study. The documents were critically and repeatedly read through focusing on the above-mentioned elements. The process involved the extraction, summarisation as well as computation of frequencies. The unit of analysis ranged from a single word to a complete document - e.g., a lesson plan. During the process, I designed a template in which a summary of teaching-learning methods, teaching-learning materials, and assessment techniques were noted together with their frequency of appearance. This was done for each tutor’s documents, and later on summary data from all the tutors was established. The ultimate aim of analysing these documents was to supplement and cross-check data from interviews and classroom observations.

Analysis of classroom observation notes
As noted elsewhere, in this investigation 16 classroom observations were conducted. Classroom observations focused on addressing specific questions included the classroom environment, the content and structure of the lesson, pedagogy – instructional methods and teaching-learning materials used, tutor behaviour – how the tutor interacts and communicates with student-teachers, and assessment strategies/techniques. These aspects constituted the bases for the analysis. Observation notes were subjected to a content analysis, whereby information about the aforementioned aspects was extracted. Just as in the analysis of lesson plans, the analysis of observation notes was made by concentrating on reading data from one tutor at a time until all required aspects were covered and a summary of major issues prepared before proceeding to another tutor until all observed tutors were completed.

Some direct utterances in a communication between tutor and student-teachers which were thought important as exemplifying excerpts that would support or illustrate findings were written down. The process also involved moving back and forth between data and theory when trying to make an interpretation. For example, since data on tutor interaction and communication with student-teachers was noted during classroom observations, observation notes were repeatedly read to determine the locus of control over the selection of, for example, what is to be discussed, how and when, as well as the sequencing and pacing of the instructional process. How is the control over the norms of social conduct, and who has voice and power in the pedagogic relation in the classrooms? This information helped to make interpretive comments about what characterises the tutors’ instructional practices in terms of framing and classification. The concepts of classification and framing were thus used as the analytical framework of that case. The information from all
the tutors regarding the aforementioned aspects was then to be summarised in a table to simplify access to them when presenting data.

To accomplish this task, a data matrix (see for example Appendix H) was prepared in which rows indicated the colleges and the tutors, whereas columns indicated information about aspects such as the classroom environment, the content and structure of the lesson, or pedagogy. A summary data description of each tutor for each aspect was recorded in the relevant columns. The last column indicated overall interpretive comments/inferential remarks for each tutor’s classroom practices. The output was a summary of data from observation notes condensed in one table. Thus, reading horizontally provides information of each tutor’s instructional practices, while reading vertically provides information of tutors’ instructional practices across the tutor population. Apart from summarising observation notes into a user-friendly format, the matrix helped to see the patterns of tutors’ instructional practices. This was useful when making interpretations and drawing conclusions.

Eventually, the major findings across the data generation methods – interviews, classroom observations, and document reviews – were pooled together and formed a basis for presentation as well as a discussion of findings.

### 5.5 Ethical issues and considerations

The literature suggests that an ethical dimension is inherent in all research. Regardless of where researchers come from or carry out their research, when planning or conducting research, ethical concerns are important to everyone. The American Educational Research Association cited in Anangisye (2007) clearly elucidates:

[…] We should strive to maintain the integrity of our research, of our research community, and of all those with whom we have professional relations. We should pledge ourselves to do this by maintaining our own competence and that of people we induct into the field, by continually evaluating our research for its ethical and scientific adequacy and by conducting our internal and external relations according to the highest ethical standards (p. 48).

In this light, to embark into research activities means getting involved in ethical obligations. Arguably, there is no doubt that research undertakings in education-related fields are inherently ethical. In this respect, the present study called for ethical considerations, and ethical issues were reflected at virtually every stage of the study process. To begin with, this thesis is an original undertaking. Other scholars’ ideas are acknowledged accordingly. Before leaving for data collection in Tanzania, the research proposal was presented at the planning seminar to obtain clearance from the senior professors in pedagogy at Linnaeus University. In this study, data was derived primarily
from human beings. Hence, as a researcher, I was responsible for each informant and every source of data involved in the inquiry. In consequence, I adhered to the procedures required to conduct research in the Tanzanian context. I had to accomplish the following. First, prior to field work, I applied and obtained research clearance from the Director of Research and Publications at the University of Dar es Salaam – the researcher’s host institution responsible for research clearance matters (see Appendix A for a sample research clearance/permit letter for one of the regions where one of the colleges was to be found). The research clearance enabled me to obtain access to the Regional Administrative Secretary (RAS) as well as the District Administrative Secretaries (DAS) of regions and districts where the study was conducted. The DAS, in turn, issued research permits giving access to the institutions (teachers’ colleges) where I conducted the study. The college principals issued further permits to access the departments and the informants.

Ethical issues also applied to individual informants. As Cohen et al. (2011, p. 77) observe, informed consent is a foundation of ethical behaviour, as it respects the right of individuals to exert control over their lives and to make decisions for themselves. In consequence, I adhered to the general American Psychological Association’s [APA] (2010) ethical principles of integrity, justice and respect for people’s rights and dignity. At this level, prior to the inquiry process, I sought consent from informants. This process involved, for instance, briefing them, both verbally and in written form, about the purpose, procedure and advantage of the study. I clearly informed participants that they had the right to ask for clarity and were given the chance to ask questions and consider things before giving consent. I also informed them that participation is voluntary. This guaranteed informants’ freedom to participate in the study, to withdraw or even to rejoin the study at any time. The ethical standard of informed consent was emphasised throughout the study.

Some prospective participants asked questions around the procedure involved in the study before they gave consent to participate. For example, one tutor asked whether the video records were going to be shown to other people. I clarified the question raised, stating that videos would not be shown to other people but would only be used for the purpose of the study – e.g., to help in the discussion during post-observation interviews. Eventually, only those informants who volunteered participated in the study. After their agreement to take part in the study, I asked them to sign a written consent form (see Appendix C) as an assurance that they had consented to participate. All this was done within the college environment before the study commenced. The signed forms were kept confidentially. All registered participants remained involved throughout the data collection period. (See Appendix B for details of the content of the information given to participants when asked to take part in the study).

Documentation, data protection and record-keeping are important ethical aspects in research (Swedish Research Council’s Report Series 3, 2011). In this light, ethical considerations were essential during and after the field work.
I was aware that a poor management of data would lead to the infringement of participants’ personhood. In that respect, I consciously adopted the following procedures to ensure confidentiality and anonymity. First, during data collection, all interviews were recorded in a Digital Voice Recorder (DVR). The audio files in the DVR and the video records were later on transferred to a password-locked computer and remained confidential. Back-up copies were produced and stored in different locations, such as an external hard drive protected by a password. I transcribed the audio-recorded interview proceedings verbatim, resulting in about 90 (single-spaced) pages of transcripts. All transcripts and video records were labelled using letter codes like T1BuInt1Ge or T2BuInt1Bio, so that nobody except me could recognize whose interview or video it was. These materials were kept safely in files and remained confidential until the analysis process was completed and the final report written. They would be kept in the archive for at least ten years for reference. To sum up, all the information was treated and kept confidentially keeping in mind the various obligations for information protection.

In the same vein, the reporting and discussion of the findings was handled with such ethical concerns in mind. As Cohen et al. (2011) argue, the researcher has a responsibility to all informants whose views are used in the report. Hence, in reporting the research findings two matters were ethically crucial. As discussed elsewhere, the participants’ experiences and the names of the colleges had to be treated confidentially and guaranteed anonymity. Therefore, where participants’ actual words were deemed necessary to support the report, pseudonyms were employed. This also applied to the names of the college where the study was conducted. Pseudonyms helped to ensure anonymity and confidentiality (Cohen et al., 2011).

5.6 Quality considerations of the study

The issue of rigour and trustworthiness of research findings has been a concern for researchers across research traditions. Since rigour and trustworthiness concern quality aspects of the research and the research findings, they warrant a discussion in the present study, too. Rigour and trustworthiness are important issues that are to be considered in all kinds of research to ensure that findings are to be trusted and believed (Merriam, 1995). Within the positivistic research tradition, validity and reliability are the criteria used to justify the knowledge produced. Based on the objectivistic epistemology, the concept of validity defines how truthful the research results are when it comes to correspondence with the external objective reality which is investigated, whereas reliability indicates whether the results produced are consistent over time and can be replicated (Kvale, 1995).

In qualitative research, rigour and trustworthiness go hand in hand. For the product of research to be credible the process must be rigorous (Lincoln & Guba, 2000). Although the issue of the trustworthiness of qualitative research continues to be challenged by the positivistic research tradition on the basis of,
for example, the question of “how can generalization be made from a small, non-random sample?” or “how can we know that the researcher is not biased, for example in the analysis and interpretation of data?”, it is argued that defensible knowledge claims are possible by using criteria that are consistent with the basic ontological and epistemological assumptions on which the research is based (cf. Merriam, 1995). Trustworthiness in qualitative or interpretive research can be discussed on the basis of such criteria as credibility, dependability and transferability (Guba & Lincoln, 1981). The first demonstrates the extent to which findings represent reality; the second concerns whether the results of the study are consistent with the data; and the third deals with whether findings can be transferred or generalized to other similar contexts or situations (Merriam, 1995). Within the framework of the interpretive research view, attention was paid to the issues of the trustworthiness of this research throughout the research process. The main considerations to ensure quality in this research are briefly presented.

To strengthen the credibility and dependability of findings, various strategies were employed. One of them was triangulation. Literally, the concept suggests a combination of strategies to ascertain the research findings (McNeill, 1985). Triangulation can take different forms. For example, it can refer to the use of multiple data sources to help studying and understanding the problem (Data Triangulation), the use of more than one method to generate data (Methods Triangulation), the use of more than one theory to make sense of the problem (Theory Triangulation), or involving multiple researchers in an investigation (Investigator Triangulation). As noted elsewhere, this research applied more than one method to generate the data required (Methods Triangulation). Data were generated using interviews, classroom observations and document reviews. Therefore, there is congruence between the adopted paradigm and the methods chosen. Further, informants from the fields of natural and social sciences were recruited, offering the possibility to generate rich qualitative data and enabled cross-checking the consistency of information given. For example, answers given by one informant were checked against answers to the same question put to other informants. In this light, I used multiple data sources to help in studying and understanding the problem (Data Triangulation). Multiple methods and sources of data generation enhance the depth and richness of the data and reduce its systematic bias (see also Denzin & Lincoln, 2000). In addition, using multiple methods and sources of data in this research may be seen as a way of encouraging reflexivity in the data generation and analysis or compassion vis-à-vis the interaction between the researcher and the research (see also Ajjawi & Higgs, 2007). The use of multiple methods and sources of data, as discussed above, enhanced achieving the credibility and dependability of the findings.

In this study all interviews, observations of classroom teaching and document reviews were conducted by me. Thus it was possible to embed ‘member checks’ or ‘member validation’ (Kvale & Brinkmann, 2009) during the data generation. The dialogic and personal way I conducted the interviews
facilitated a direct and motivating nature of communication. For example, the open questions, as well as the quality of the follow-up questions, which were asking for specifications, descriptive clarifications, exemplifications, meaning confirmations, or further elaborations, increased the clarity of the interview material and thus strengthened the credibility and dependability of the research (in line with Kvale & Brinkmann, 2009). The fact that I conducted the interviews, classroom observations, and document review by myself was a benefit regarding understanding the meaning of the interview accounts and tutors’ practices. This way, I argue that the findings of the study are consistent with the data generated.

As reported earlier, in the data analysis process and during categorisation in particular, intersubjective agreement was emphasised in which fellow doctoral students were asked to read through part of the coded interview transcripts to comment on the themes to see whether they would code the material in a similar way. In addition, senior researchers, i.e. supervisors, were asked to cross-check the developed coding system and the themes I had created. This is what is sometimes referred to as theme verification or peer validation (cf. Kvale & Brinkmann, 2009).

Thick description (Lincoln & Guba, 1985) was taken into consideration. In this research, the theoretical orientation of the research (i.e., the research paradigm) and its related research methods, data generation and analysis process were explicated in detail. The aim was to allow openness in the research process so that readers could evaluate the quality of the research work. Ensuring that the voices of both the participants and the researcher are evident in the text also enhances authenticity (Lincoln & Guba, 2000). This was achieved through descriptions of the central themes supported by various quotations of the participants’ actual words in order to allow them to speak for themselves. This strategy, I believe, helps the reader to develop insights into and obtain a feeling of the meanings contained in the data.

The generalisability of interpretive qualitative research is constrained by the view of knowledge as context-based (Green, 1998). Thus similarity between the ‘contexts’ is essential for generalisation to be made. Qualitative research writers have discussed different ways through which transferability or generalisability in qualitative studies could be enhanced (cf. Eisenhart, 2009; Larsson, 2009; & Merriam, 1998). For example, Larsson (2009) discusses three possibilities or strategies that could enhance knowledge claims from qualitative research to be justifiably generalised or transferred. They include: generalisation through maximum variation, generalisation through context similarity, and generalisation through the recognition of patterns. As pointed out earlier, this research was conducted in multi-sites whose contexts were described. Also, variation in terms of sample components was attempted. The study involved diversity of participants, both new and experienced tutors, from the disciplines of natural science, social science and language. This may offer the possibility to generalise through context similarity in the sense that, after reading the details of contexts and developing insights into the
interpretations made in this study, the reader (with his or her intimate knowledge of a second context) can decide whether the studied contexts are similar to others with which they are familiar and whether the findings can be justifiably transferred to those other contexts. This is similar to what Merriam (1995) referred to as “reader or user generalizability”. Also, detailed descriptions of the findings that I have provided give the reader the possibility to generalise the knowledge claims through recognising patterns.

At the preparation stage and before the main investigation commenced, some strategies were considered to enhance the trustworthiness of the data generated. They include: (a) colleagues and expert opinion, and (b) a pilot study. At first, the interview, observation, and document review guides were given to colleagues (e.g., to about four fellow doctoral students) and senior researchers (including the supervisors) at Linnaeus University for comments on the content and structure of the instruments. This helped to reshape the content and structure of the instruments in relation to the focus of the study. For example, the following advice was given and taken into consideration accordingly: (i) in terms of structure it was advised to organise questions according to the domains of information they are searching, which in turn reflect the major research questions. Following this comment the questions were grouped under the following topics: Conceptual and Procedural Knowledge of Tutors Regarding CBC, Actual Teaching Methods used by Tutors, Assessment Strategies used by Tutors, and Constraints and Opportunities. This was thought to make the interview process systematic and help later analysis. (ii) in terms of content, moderations were made, for example, of the question - Based on your understanding, what is the philosophy behind CBC? The term ‘philosophy’ was thought too high and might lead to ambiguity. Thus the question was changed to what do you think are the reasons why CBC was introduced in the Tanzanian education system? Advised was also offered to include in the background information questions like: Have you ever attended any course/seminar/training related to CBC? If yes, where? When? For how long was the training? What did the course cover? How did you find it? How often are you getting on-the-job training regarding CBC? Questions like these were deemed important as they would help to grasp whether tutors had got any orientation course on CBC and whether those seminars/training were useful. Other questions in the guides seemed satisfactory.

Nevertheless, in Dar es Salaam I received the opportunity to discuss the questions with colleagues, namely two fellow assistant lecturers who were conveniently approached from the Department of Educational Psychology and Curriculum Studies, University of Dar es Salaam, where I am working. These teachers voluntarily agreed to take part in the discussion. During the discussion the guides were thoroughly read and it was agreed that the questions were relevant and clear.

Piloting is the best way of detecting flaws, if any, in the instruments and can help to make modifications accordingly (Bryman, 2012; Patton, 2002). A
pilot study was conducted in between August and September, 2013 (before embarking on the main study) at one diploma teachers’ college in Dar es Salaam. The aim was to determine whether the interview, observation, as well as document review guides would satisfactorily capture the required data and identify flaws, if any, and make necessary adjustments. It also involved checking whether the recording gadgets such as the digital voice recorder and video camera were functioning well, as well as foreseeing possible recording problems. Two tutors were conveniently selected to participate in the interviews and classroom observations. After conducting the interviews and observations I gave the participants the opportunity to comment on, e.g., whether the questions were clear, on the length of the interviews and on the procedure involved. The participants were of the opinion that the questions, the questioning and the procedure were reasonable. However, slight modifications were suggested in, for example, breaking down the first question in the domain of conceptual and procedural knowledge of tutors. On this basis, the first question was broken down into two questions: (1) How do you understand the concept of CBC (its meaning, etc.)?; (2) What does CBC intend to do when it comes to students’ learning? Before this, as this was a single question, it was thought that this could limit the information. Further, participants were asked to comment on the information to participants and the consent forms. After reading the forms they commented that the information provided was clear and well understood. Hence, no modifications were made on them. Before embarking on to the main field work, instruments were revised in light of the information elicited from the pilot study. Figure 4 summarises the overall research design of this study.
5.7 Chapter Summary

This chapter focused on the methodological aspects of the study. It opened with an overview in which the main sections of the chapter were outlined. Central to this chapter were the deployed study approach and the way of interpreting the findings. A qualitative research approach informed by the interpretive perspective was chosen to guide this study. The approaches were deemed appropriate for allowing, for instance, an exploration of the study
object through interviews, classroom observations, and a review of documents and for making interpretations of data based on participants’ points of view as well as on the researcher’s preconceptions. The tutors’ pedagogical practices in this respect could be best understood through the use of the interpretive perspective, where the rationale for the choice of specific pedagogic strategies could be grasped. In the following chapter I present the findings of the study.
CHAPTER SIX: FINDINGS

6.0 Overview
This chapter presents the findings of the study. It is divided into four main sections based on the research questions. Section one presents the findings about the tutors’ understandings of CBC. The second section presents the tutors’ instructional practices and the third the contextual factors that influence the tutors’ training practices. The fourth section presents findings about the conditions that would help to establish a framework for long-term tutor learning to support educational change. The chapter concludes with a summary.

6.1 Tutors’ understanding of CBC
This section presents findings about tutors’ understanding of CBC. It responds to the first research question: In what ways do tutors understand/interpret CBC when it comes to:

- its conceptual meaning, curriculum intentions, and reasons for its introduction in Tanzania?
- teaching-learning approaches relevant for CBC?
- pedagogical skills required for teachers to be able to implement CBC?

These three broad areas were emphasised on the basis of the understanding that the implementation of the curriculum reform depends very much on, for instance, how practitioners understand the meaning, the intentions and reasons for its introduction, and not least how it could/should be put into practice. In brief, as described in the data analysis procedure, the analysis of data regarding the above focused areas proceeded from identifying relevant statements from one data item (e.g., individual tutor’s piece of interview) to another until the whole data set (e.g., all interview transcripts) was completed, and condensing similar meaning units/views into themes/categories of tutors’ understandings. It is important to note that in this study the interest was to
undertake cross analysis and come up with themes. From the empirical data, various tutors’ understandings in relation to the areas which were focused on emerged. Table 4 summarises the identified themes/categories of tutors’ understandings to provide an organising framework prior to the presentation of the details of each theme supported by representative quotations from the interviews with the tutors.

Table 4: Categories of tutors’ understanding/interpretation of CBC

<table>
<thead>
<tr>
<th>The elements focused on</th>
<th>Categories</th>
<th>Intention:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptual meaning of CBC &amp; its intention(s)</td>
<td>CBC as application-oriented curriculum</td>
<td>Preparing the learner to become functional in society, independent and competitive in working life</td>
</tr>
<tr>
<td></td>
<td>CBC as activity-based curriculum</td>
<td>Active learning, boosting students’ academic performance</td>
</tr>
<tr>
<td>Reasons for CBC introduction into Tanzania</td>
<td>Education being too theoretical</td>
<td></td>
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<tr>
<td></td>
<td>Desire for creative and independent/self-reliant generation</td>
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<td></td>
<td>Coping with global trends</td>
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<td>External influence</td>
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<td></td>
<td>Poor academic performance</td>
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<tr>
<td>Relevant teaching approaches</td>
<td>Student-centred approach (participatory methods)</td>
<td></td>
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<tr>
<td>Pedagogical skills required of teachers</td>
<td>Mastery of content</td>
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<td></td>
<td>Skill at identifying learners’ needs</td>
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<tr>
<td></td>
<td>Repertoire of teaching methods</td>
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<tr>
<td></td>
<td>Sociology (the social context of learning)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tolerance, hard work &amp; reading beyond student requirements</td>
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<td></td>
<td>Flexibility towards adopting changes</td>
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6.1.1 Conceptual meaning of CBC and its intention(s)
As pointed out earlier, interviews were analysed thematically to detect the patterns of the tutors’ understanding of the meaning and intentions of CBC. As Table 4 indicates, findings revealed two basic understandings/interpretations emerging from the tutors’ answers. Their understandings were condensed into two major themes: (i) CBC as an application-oriented curriculum, and (ii) CBC as an activity-based curriculum.
**CBC as an application-oriented curriculum**

Most of the tutors understood CBC as a curriculum whose emphasis is on building learners’ ability so that they become practical and creative, applying the skills they acquire in solving problems in everyday life situations. It is a curriculum that emphasises creativity and the application of the learned experiences in solving day-to-day problems as well as work-related activities for the income-generation. A few relevant examples from the interview data where this meaning is revealed are presented in the following quotes:

*CBC is a curriculum that builds the learner’s skill to do things than to know only the content without its application. It emphasizes more a person to be able to relate what he/she learns in the class and the real life situation where they live in the society.* (Tutor Mose)

*CBC is a curriculum whose intention is to prepare the learner to be practical and creative and who use his brain to solve different problems and not to use it (brain) to cram that here I was told 1 times 3 the answer is three.* (Tutor Simba).

A similar view was given by Tutor Matata, who explained that:

*CBC is a teaching and learning of specific skills which are to be demonstrated later by a learner when executing work...* (Tutor Matata)

The tutors who interpreted CBC as an application-oriented curriculum related CBC intentions to its underlying meaning, that is, the intention is to prepare the learners to be functional in society, applying the skills learned to create their own income-generation activities (self-employment) as well as becoming competitive in the world of work in general. This view manifests itself in the following utterances:

*Me, in my understanding is like what I have said... is to give the learner skill and when he complete his training...for example secondary students....despite of having that skill but they should be able to use that skill in everyday life...* (Tutor Zena)

*...its aim is to enable the learner get the skills to do things. Unlike in the past when the student was required to know the content from beginning to the end without even knowing its application in normal life situation.* (Tutor Mose)

*...the intention is to enable a student to get skills and apply the skills learned in their daily life. This is the whole philosophy of CBC.* (Tutor Rose)
The quotation below exemplifies similar views:

…the purpose of CBC is to enable the learners to use the skills they get from the classroom outside the classroom....so it intends to prepare a person to perform the intended works correctly... (Tutor Matata)

Findings revealed further variants in CBC as an application-oriented curriculum. The first variant worth mentioning comes from those who interpreted CBC as a curriculum focusing on preparing a learner with knowledge and skills applicable both at work and in general life activities. They seemed to refer to a curriculum focusing on preparing an individual with capabilities for life encounters in general. The second variant relates to those few who seemed to mean a curriculum emphasising the preparation of an individual with workplace skills, i.e. skills that are likely to make someone employable, that is, to prepare the learner to become competitive in the job market. Fairly typical responses included the following phrases “…prepare individuals who can compete in the international job market…”

Nevertheless, under the theme ‘CBC as an application-oriented curriculum’, the analysis generally did not produce any pattern of understanding by teaching experience or by the subject of specialisation (e.g., between science and social sciences). Similar interpretations were shared by all categories of tutors, even though, by comparison, experienced tutors were in the majority.

*CBC as an activity-based curriculum*

Findings revealed further that some of the tutors had a different understanding of the concept of CBC. They understood CBC in ways that suggest a form of curriculum that emphasises activity-based pedagogy only. Further, that it is a curriculum that insists on the active involvement of learners in the lesson by giving them the opportunity for hands-on activities during the teaching-learning situation. In other words, they viewed it just as a curriculum emphasising learning by doing. According to the tutors, learners should be the main actors rather than a teacher during the teaching-learning process. They did not seem to extend the meaning to applying what is learned beyond the classroom context. Based on the findings, this is the key difference in understanding from the tutors who conceived CBC as an application-oriented curriculum. The tutors in the category ‘activity-based curriculum’ viewed CBC more as a participatory curriculum, to use other words. This view is depicted in the following data extracts from the interviews:

CBC is the methods of teaching which target that the learner is the one to participate more than you who teaches. It emphasises that the learners should be the more actors on what they are learning and you (teacher) be the listener.... (Tutor Chewa)
Competence based curriculum is a kind of curriculum that triggers out the knowledge of the learner. The teacher and the learners work cooperatively so that everybody has a chance to say something but the one who should dominate the class should be the learner. (Tutor Godi)

This is a curriculum that insists letting a student to practise what they are learning during the teaching-learning situation...learn the subject practically. (Tutor Flora)

When it comes to its intentions, these tutors thought that CBC intends just to make students active during the teaching-learning process, learn practically, and to boost students’ academic performance. Their views were typically expressed in such phrases as: “...the intention is to enable students to achieve better (academic achievement)...” “...to enable one to get all what he/she learns practically...through activities...” “...the purpose is to make the learner active and to make him a member of the learning process...” According to the findings, all tutors who interpreted CBC as an activity-based curriculum came from the social sciences.

The two above-mentioned basic themes (CBC as an application-oriented curriculum and CBC as an activity-based curriculum) seem to be related as they share some ideas. Both categories recognise the learner’s active involvement in the learning process. Both place the teacher in a more human and responsive role than that of the provider or transmitter of information. However, a further emerging distinction worth mentioning is that CBC as an activity-based curriculum is more subject focused, while as an application-oriented curriculum CBC is more student-focused. That is to say, those who interpreted CBC as an activity-based curriculum seem to place more emphasis on the subject. They viewed CBC as a curriculum that focuses on the active involvement of the learners during the learning process to enable them to experience the subject matter practically. Phrases like “...learn the subject practically...” were common in their expressions. This category of understanding does not seem to be concerned with what the learners will do with the subject-matter after school. As pointed out before, the tutors did not seem to extend their meaning to the application of learned knowledge and skills beyond the subject contexts. But the opposite view seems to place more emphasis on what will happen with this knowledge/subject after school life. For example, what the student will do with this knowledge, what will happen to a student as a person, as the utterances in CBC as application-oriented curriculum reveal.
6.1.2 Reasons for introducing CBC in Tanzania

The study was also interested in investigating tutors’ understanding of the reasons why CBC was introduced in the education system in Tanzania in general. As Table 4 indicates, five related themes were identified: education being too theoretical, the desire for a creative and independent/self-reliant generation, external influence, coping with global trends, and poor academic performance.

_Reasons for introducing CBC in Tanzania_

The study was also interested in investigating tutors’ understanding of the reasons why CBC was introduced in the education system in Tanzania in general. As Table 4 indicates, five related themes were identified: education being too theoretical, the desire for a creative and independent/self-reliant generation, external influence, coping with global trends, and poor academic performance.

_Education being too theoretical_

Most of the tutors thought that the too theoretical emphasis in education was the reason that prompted the introduction of CBC into the education system. They pointed out that the kind of curriculum that had existed before was more content-based in the sense that it focused on offering learners domain/subject knowledge for its own sake, with the effect that they acquired nothing but theoretical knowledge, which was not of great help to becoming self-reliant and dealing with practical problems in the communities where they live. This is evident in the following words expressed by one of the tutors: “…we were getting education that was too theoretical, which did not help a person…” The tutors further that CBC was introduced after it had become obvious that graduates from different levels of education only had subject matter knowledge but were unable to apply it in real problem situations in their lives. This situation was due to the teaching that focused on transmitting knowledge and skills to learners without connecting this with the problem/real context where they could be used. Thus, CBC was introduced in order to bridge the gap between theoretical knowledge and its practical application. These views are also evident in the following tutors’ statements:

…it was after seeing how graduates look like in the society…they live in the society sometimes they become not practical. This was a result of teaching that focused solely on transmitting knowledge or skills to learners without connecting to the real problem situation where it can be used.... (Tutor Beno)

A similar view was expressed by yet another tutor who said that “Me, in my understanding, I think that they discovered that when students complete certain courses or level of education they just come out with knowledge of the material but they cannot apply them in normal life” (Tutor Ali)

_Desire for creative and independent/self-reliant generation_

The need for creativity in life was an issue pointed out by other tutors. They thought that CBC was introduced because currently creativity is urgently required for people to survive both at work and in everyday life. Thus, it was thought timely to introduce CBC so that a generation of creative and independent or self-reliant people could be produced, with the ability to cope...
with the demands of modern life. The following interview excerpts manifest this view:

...to produce learners who become independent or self-reliant in life...to enable them become creative in life...I think it has been introduced because nowadays we are supposed to be more creative...people are supposed to be creative so that they can create things or projects or different activities which can simplify life. (Tutor Rose)

But the second thing is employment... because here you teach the person to be creative... you know! CBC emphasises so much creativity. Therefore, the learner can use the education they got without problem in everyday life. (Tutor Mawazo)

This CBC has come in order to reduce the issue of poverty... People graduate in different professions at different levels but still they are not self-reliant. Therefore, if they are not self-reliant, poverty continues to confront them... (Tutor Zena)

Additional things that transpire in the last two quotes above are the issue of employment and poverty reduction. The quotes suggest that CBC was introduced to enable individuals to become self-reliant, create their own employment and hence reduce poverty.

Coping with global trends
Coping with global trends was a recurring theme. The tutors thought that CBC was introduced in Tanzania because the country wanted to cope with the general global trends in the development of science and technology as well as of education. They observed that globally it appears that the focus of education has been on the development of people who have skills to perform work, who can cope with rapidly occurring technological changes as well as compete in the changing demands of the job market, both at national and international arenas. They further that CBC was introduced because ‘we are also looking at what other countries are doing when it comes to education so that we don’t lag behind’. The following quotations exemplify the tutors’ sentiments:

Maybe I could say is because of technological changes. Because technology is growing every day and it needs its everyday use. That is why CBC was brought, and I don’t think if it is only in this country. (Tutor Mose)

I think it was introduced because of the general international wave of the job market that needs people who have skills to perform work.
I think even other countries have it... so even for us we are also looking what other countries are doing so that we don’t lag behind time and remain backward. (Tutor Matata)

Reflecting on the same ‘coping with global trends’ theme, other tutors related the introduction of CBC much more to the general shift in learning and teaching perspectives from behaviourism to constructivism, i.e., that the perspective had now changed from viewing teaching as the transmission of knowledge and learning as the acquisition of the same, to a view of learning as a construction of knowledge, and as participation, and teaching as facilitation or guidance. This understanding is very clearly manifested in the following utterance:

I think because of the changes of the perspectives in learning because there are different theories of learning. So, maybe there are some researches that have been made and have shown that behaviourism theory cause someone to be passive in learning. So the teacher was the dominant in the teaching-learning process. But if you use CBC, it means somebody can take the experience from outside the classroom to the classroom. (Tutor Godi)

It seems from the above quotes that CBC is viewed as a global phenomenon. Therefore, Tanzania introduced it to cope with the global trends in education development.

External Influence
Some tutors were of the understanding that CBC was introduced due to external influences in two senses: that, apart from being imposed from outside the country, it was centrally initiated by the government. They further insisted that CBC is not an internal and local initiative (e.g., the idea did not originate from local practitioners) but was imposed from outside the country, even though the purpose was good. They asserted that, contrary to what initiators would expect, internally the emphasis on CBC is weak. This perspective is extensively emphasised in the following utterance from one of the tutors:

CBC is an external thing and we have received it as ‘theme’ (meaning at the level of rhetoric). Looking at the way we implement! We are not initiators! We wanted to go along with other nations, but it is not true that we thought that by doing so Tanzanians will be competent. I can’t say that it was internally driven...no! ...it was externally driven....that is why internally emphasis on CBC is weak. (Tutor Gamba)
According to the findings, the key difference in understanding that seems to feature between the themes of ‘coping with global trends’ and ‘external influence’ is that, in the former, the tutors seem to mean that the government willingly reformed the national curriculum as a strategy to cope with the changing world – presumably viewing it as an internal initiative while in the latter, the tutors were of the opinion that the government was persuaded by powerful nations or transnational organisations to introduce the policy. Here, the curriculum reform is viewed as externally imposed.

**Poor academic performance**

Poor academic performance among students was a reason that featured in the tutors’ interviews. Some of the tutors thought that CBC was introduced after realising a drastic decline of students’ academic performance in national examinations during the 2005-2011 period. The tutors maintained that policymakers thought that if students are trained to be competent, e.g. to think critically and to have problem-solving skills, they would be able to use these skills to boost their academic performance. Hence, CBC was introduced in order to improve students’ academic performance, as one of the tutors said:

*Me, what I see here is performance (academic performance). They have looked at performance especially in secondary and primary schools. Therefore, I think they brought this CBC in order to enhance teaching and performance in schools. I think the source is poor academic performance in schools...they saw that when you train a student to be competent then he/she can boost their academic performance. (Tutor Mawazo)*

Moreover, within this theme, the tutors seem to link the CBC introduction to political reasons. The introduction of the CBC reform was said to be nothing but a government strategy to maintain its political legitimacy, as tutor Beno commented: “…the policy is good, but the decisions were made based on political pressure rather than the reality, especially after experiencing a drastic decline in students’ results. This reform [CBC] is just a political thing…” This comment implies that the tutors interpreted the introduction of the CBC reform just as a ‘political text’ or ‘rhetoric’. The reform was introduced as a ‘quick-fix’ solution to the decline of students’ academic performance. However, there was not enough time for updating/preparing teachers and the infrastructure for the implementation of the reform. Thus, the party government introduced CBC in order to show the public that it was concerned with the country’s education development and to gain greater acceptance.
6.1.3 Teaching-learning approaches relevant to CBC

Interestingly, despite the differences in understanding of the meaning, intentions, and reasons for the CBC introduction into Tanzania, all the tutors were of the understanding that the student-centred teaching approach and methods are appropriate for facilitating learning in the context of CBC. Most of them thought of student-centred methods as methods which actively involve learners in the learning process. Informants unanimously embraced the principle of ‘participation’ and frequently cited question-and-answer as an example of participative practice. They further gave examples of participatory methods such as group work, discussions, projects, experiments, and tours. Others were demonstrations, role play, and even interactive lectures. Their general emphasis was on the active involvement of learners in experiential learning activities, and on the teacher taking on the role of just a guide, coach, or facilitator. These findings are illustrated further by the specific statements made by the tutors such as the following:

The methods which can be applied are those which are student-centred... You prepare activities which the learner himself can do; you become only a guide in doing. So, the student is supposed to be more active than a teacher. The teachers should be guiding only... (Tutor Rose)

Yet another tutor claimed that CBC insists on the participation of the learners in the learning process. Terms like ‘practice’, ‘learning by doing’ were mentioned to exemplify the ideas, as can be seen in the following quotation:

Teaching methods here is especially those involving learners in the sense that you (tutor) lower yourself, you pretend as if you don’t know anything but they know and you take the role of asking questions. More importantly is to make them main actors, main question askers. So, there are things that CBC insists more like practice, learning by doing, and it is more student-centred... (Tutor Simba)

Similar views featured in the interview from another tutor. This tutor went even further to talk about the need for achieving a balance between theory and practice when assessing learning. The tutor emphasised the use of observations as an assessment tool because, in the context of CBC, learners are supposed to be engaged in practical activities which can easily be assessed by observing how to perform and master the skill that is being learned. The tutor said:

For us in [...] we say at least the practical assessment and theoretical be equal. Especially observational assessment should be used more...for example, checklist... (Tutor Gamba)
However, findings revealed that although all the tutors mentioned the student-centred approach as the appropriate teaching approach in the context of CBC, there were some differences in the ways they viewed CBC and its embedded student-centred methods in their work in general. Some of the tutors viewed CBC as something that was too demanding. They looked at it as something increasing teachers’ burdens because it forced them to do a great deal of work in planning activity-oriented lessons. It requires more time for monitoring students’ progress and giving prompt feedback. Other tutors thought that it reduces their work, as students take more responsibility during a teaching-learning situation than a teacher. For example, one tutor said: “…when I say student-centred I mean students should find materials themselves…” They seemed to interpret student-centred methods as something reducing teachers’ teaching work.

6.1.4 Pedagogical skills required for teachers to implement CBC

Interview data were further analysed to determine tutors’ understanding in relation to the pedagogic skills required for teachers to effectively implement CBC in classrooms. In analysing this issue, insights from relevant education literature other than the study theoretical framework (e.g., the cognitive apprenticeship model) were employed as an analytical tool. Thus, interview data was analysed deductively to identify instances where the skills specified by the cognitive apprenticeship model were referred to by the tutors, but also inductively to identify other issues which had not been focused on in the model. Findings revealed that the tutors referred to the mastery of content (subject matter knowledge), the skill at identifying learners’ needs, as well as skills at using different teaching methods. The sociology category was referred to in very few instances by very few tutors. Sequence did not feature a great deal in their utterances. Nevertheless, through inductive analyses, more skills which had not been focused on by the model emerged, including tolerance, hard work, and reading beyond requirements, as well as the skill of flexibility in adopting changes.

Mastery of Content

Mastery of the subject matter was a pedagogical skill primarily mentioned by the tutors. The tutors explained that in CBC teachers should be fit for the content of the subject matter they are going to teach – including both the theoretical and the practical aspects. Stressing this point, Tutor Chewa noted that “…in addition to having knowledge of the content, a teacher should have ability to do things. All these must go together”. The tutors also expressed the need for a teacher to know the contexts where that content could be applied. The following quotes further exemplify instances in which content was referred to:

*The first thing I think they must know what they are going to teach…. (Tutor Rose)*
The teacher must know the subject they are teaching and its demands…. (Tutor Zena)

...for example, if it is a geography teacher and he wants to teach survey, he must know survey theoretically and practically…. (Tutor Simba)

Skill at identifying learners’ needs
Understanding the learners and skill at identifying their needs were seen as important by most tutors. To identify learners’ needs based on their ability, interests, prior knowledge, number, age, and behaviour was thought to be an important pedagogical skill for teachers to possess, as this would help the teacher to decide on the methods and materials to be used, the pacing of the teaching process, and many other classroom matters. A few examples of instances where learner knowledge was referred to are given below:

...when I say you (as a teacher) must know your class I mean for example how to identify their needs, their understanding ...(for example, if you give them that activity will they understand? And will they reach the objective you have set? So you must know what you are going to teach, you have to know your class, then you will know how you are going to teach. (Tutor Rose)

...you must know those (learners) you are going to teach are of which age, how is their psychology? This will lead you to know how you will teach...one need a skill to identify their needs... (Tutor Ali)

Repertoire of teaching methods
Teaching methodology was another pedagogical skill insisted on by all the tutors. They explained that in order to implement CBC effectively, teachers should possess adequate pedagogical content knowledge (PCK) - that is the knowledge of how to structure the content and communicate it to the learners. The tutors stressed that teachers should have a repertoire of methods and techniques, that is, the ability to plan and apply various methods and techniques for facilitating learning. The importance of a repertoire of teaching skills was highly valued and insisted on by the tutors. It was also pointed out that teachers ought to possess the skill of creativity in designing teaching and learning materials. The data extracts presented below illustrate the instances where teaching methods were referred to. However, as can be noted, some of the quotes referred to various elements simultaneously.

The teacher must know the subject he is teaching and its demands. But also should know his students and their ability. Moreover, he must have the ability to use different teaching methods according to the environment and the students’ ability. (Tutor Zena)
...the skill of being creative in making teaching aids is important. Also as a teacher, one is supposed to have many teaching techniques. (Tutor Gamba)

However, one tutor insisted on the need to also possess a technological pedagogical content knowledge (TPCK) as a new skill required of teachers in the modern world, that is, a skill at integrating technology (e.g., the use of computers, software programmes, the Internet, etc.) to facilitate the teaching-learning process. Moreover, another tutor, while talking about the issue of methods, seemed to point to the need to be skilful at handling big classes when saying: “…we need to understand how to handle overcrowded classes…” (Tutor Godi)

Sociology
Nevertheless, a category taken from sociology, that is, the knowledge of the context appropriate for learning a particular skill, the skill of involving learners into a community of practice, was referred by some of the tutors. For example, they pointed out the need for teachers to possess cooperative skills, creativity, and readiness to intervene whenever they see students facing difficulties in practising what they are learning. Below are quotations containing sociological aspects:

*The teacher must be aware of the environment appropriate for teaching and learning of the materials...they (the teachers) must have cooperative skills... Also they must be creative and be ready to intervene whenever a challenge occurs...* (Tutor Mose)

*...teacher must consider the environment. When I say environment I mean two things... for example, other things must be done in the laboratory, and for others you must consider the geography of the area. For example, you are an agriculture teacher, is there a farm where you can take the learners to? or if you are teaching soil erosion, is there any opportunity in the surroundings for the teacher to teach by live example?...* (Tutor Simba)

The above tutors apparently refer to sociology by emphasising embedding learning in authentic situations, thus evoking the idea of situated learning.

Tolerance, hard work and reading beyond student requirements
This featured in the interviews with the tutors as another important skill to be possessed by teachers in order to facilitate learning effectively. It was pointed out that in the context of CBC teachers must be ready to work hard and read beyond student requirements, as teachers are expected to demonstrate a thorough mastery of the subject matter and the competences they are teaching. It was also observed that teachers must possess the skill of tolerance, because
in CBC students are to be given ample time to learn and to be guided. The tutors seemed to refer to the idea of scaffolding. For example, Tutor Mose warned that “…a teacher must be ready to work hard, read beyond students…the issue of participatory methods should not mean reducing teacher’s work, instead it increases the work…”. Another tutor seemed to echo the same issue concerning teachers, namely the skill at working hard and of being responsible for both content and methods. That is, teachers should not interpret CBC and its embedded student-centred methods as something reducing their burden and leaving it to students. Teachers still have the role to assist even in searching materials. For example, Tutor Gamba commented that “…a person (a teacher) should be knowledgeable in what he is going to teach and, instead of hiding behind methodology, leaving the burden of finding the content to students…”

**Flexibility in adopting changes**

This theme also emerged as a pedagogical skill required by teachers to effectively implement CBC in schools and thus worth presenting. The importance of being able to adjust to a new curriculum by trying to appropriate its meaning, underlying assumptions and principles about teaching and learning was stressed, as this could help teachers to understand the goal of a curriculum and to select appropriate learning activities and materials to use. Further, teachers should be flexible in adopting changes in the teaching orientation assumed in a particular curriculum. This view was expressed through such phrases as “…teachers should have a skill of being flexible to change…” “…should be ready to change to a new curriculum…”

**Summary of the key findings in relation to the first research question**

The above section has presented findings about tutors’ understanding of CBC. As we have seen, a number of themes emerged showing that this varies greatly. As regards CBC’s meaning and intentions, two basic understandings emerged: i) CBC as an application-oriented curriculum, and ii) CBC as an activity-based curriculum. The key difference between the two themes is that, in the latter, the tutors did not seem to extend the meaning to the application of what is learned beyond the classroom and the subject contexts.

On the reasons for introducing CBC into the Tanzanian education system themes that emerged included: education being too theoretical, coping with global trends, desire for a creative and independent generation, external influences, and poor academic performance. In the theme of ‘external influences’ the tutors emphasised that the introduction of CBC was not an internal initiative but was rather due to influences from powerful nations and transnational organisations. In other themes, the tutors’ views suggested that the introduction of CBC was an internal initiative entailing that the country recognised the need to reform the curriculum in response to social, economic and political challenges at hand. Interestingly, despite the differences in the understanding of the conceptual meaning, intentions and reasons for CBC’s
introduction into Tanzania, all the tutors agreed that the student-centred teaching approach and methods were appropriate for facilitating learning in the context of CBC. With regard to the pedagogic skills required for teachers to effectively implement CBC in classrooms, findings revealed that the tutors mostly cited such skills as mastery of the content/subject matter, skill at identifying learners’ needs, and the ability to use different teaching methods (repertoire of teaching methods). A few referred to skills at knowing and designing a social context appropriate for learning a particular skill (sociology) the skill of being tolerant, hardworking and reading beyond student requirements or the flexibility in adopting changes.

Most categories of understanding failed to reveal any pattern by teaching experience, academic status, age or teaching specialisation discipline/subject (e.g., natural and social science subjects). In other words, the findings showed no relationship between patterns of understanding and the variables mentioned above. Similar interpretations/understandings were found across the tutor population. However, only one category of understanding produced a clear pattern involving the discipline/subject of specialisation. The tutors who interpreted CBC as an activity-based curriculum (including both experienced and newly qualified tutors) represented a social science discipline, e.g. geography or history. These key findings are discussed further in the discussion Chapter. In the following part the tutors’ instructional practices are presented.
6.2 Tutors’ instructional practices when training student-teachers to implement CBC

This section presents the tutors’ instructional practices when training student-teachers to implement CBC in schools. It responds to the second research question: *How, and with what arguments do tutors train student-teachers to implement CBC?* As indicated in the methodology chapter, to address this question three methods of data generation were employed: classroom observations, interviews (both pre and post-observation video-stimulated interviews), and the analysis of the tutors’ lesson plans, schemes of work, and available records of assignments. The analysis of these documents attempted to understand tutors’ previous and current instructional practices. This was to complement and cross-check data from the interviews and classroom observations. As reported in the methodology chapter, each tutor’s data was analysed followed by identifying common features of instructional practice as well as differences across the tutor population to establish the findings categorised into the following themes: classroom environments, lesson structure, teaching-learning strategies, teaching-learning materials, and assessment strategies. However, most of the tutors’ arguments for the kind of instructional practices they employ were related to contextual factors. To avoid redundancy, most of the arguments will be presented along with contextual factors influencing tutors’ practices in the later section. This section begins with a description of the findings under the theme of classroom environments. For summary classroom observations data by tutors and colleges, see Appendix H.

The classroom environments

Findings revealed that most of the training activities in all the four colleges took place inside the college classrooms. Most of them were similar in terms of layout and facilities. For example, most classrooms had moveable chairs and desks arranged in traditional rows and columns facing the front. However, some classrooms had a slightly different physical arrangement. One (a biology class) was conducted in a laboratory and the other (geography class) in a big recreation hall. The latter had only moveable chairs without desks. No sitting arrangement was noticed in this classroom. Student-teachers sat randomly and nobody could pass around. According to the geography tutor, that situation was typical of all his lessons since he was alone in the subject. He was unable to split student-teachers into small groups for fear that the workload would increase.

In terms of instructional facilities, all the classrooms observed were ill-resourced. The common instructional facilities were blackboards, chalk and a few displays made of large manila sheets or small sheets of paper attached to the walls. The displays showed different objects, including an example of a teacher’s scheme of work, and a new format of a competence-based lesson plan. Unlike the former format for lesson plans, the new format had an
additional space for a teacher to indicate additional information such as the
‘competence’ to be developed in the learners, a stage called
application/practice, reflection, and a space to indicate the assessment
strategy/strategies to be used at each stage of a lesson. Another common
facility was a noticeboard built on sidewalls or at the rear side of the rooms.
Most classrooms visited had no ‘modern’ teaching-learning facilities such as
built-in projectors, computers, projection screens, whiteboards or sound
systems.

Generally, all class sessions were characterised by a large number of
student-teachers ranging between fifty (50) and 100, with relatively few
females – they did not, for example, exceed twenty (20) in any session
observed. The few female students’ presence could partly be explained as a
natural consequence of lowering the admission requirements for female
students in higher education institutions like universities, thus creating a room
for them to proceed to universities and leaving fewer females enrolled in
teachers’ colleges. This reason was highlighted by some of the tutors when
asked why there were fewer females than males in their classroom.

The general atmosphere in all classrooms observed seemed calm and
positive, with student-teachers seated quietly listening, taking notes or doing
deskwork. They talked when allowed or during discussions. There were no
unnecessary movements in the classrooms except on a few occasions when
student-teachers were asked to go to the front of the class to demonstrate
something or were directed to sit in groups for a discussion or group work.
Since all learners were adults, everybody seemed to respect one another, the
tutor, and what was going on in the classrooms.

The lessons structure
At a very general level, the analysis of data revealed similar patterns in all
sessions observed. Findings revealed that all lessons were routinely structured
and progressed in a systematic way from simple to complex or from known to
unknown. For example, data from classroom observations and lesson plans
revealed that the lesson structure constituted the same building blocks based
on the stages of lesson development indicated in the lesson plans -
introduction, new knowledge, reinforcement/practice, reflection, and
consolidation/conclusion. The lessons developed/progressed from introduction
and definitions of terms or concepts to descriptions of, for instance, a
method(s) or stages of a particular activity. All the observed sessions were
scheduled to last for an hour. This commonality in the structure and
progression of the lessons could partly be explained by the very nature of the
lesson plans which the tutors were to follow. The tutors explained that they
structured their lessons that way on the basis of the lesson plan format. There
were also tutors who thought that this structure and progression enabled a
systematic delivery of lessons and could facilitate understanding in some of
the students.
The distinct structures
Although the lessons had similarities in terms of structure, there were some differences in the way the tutors typically put those features together to construct a lesson in real time. For example, there were differences in the way the tutors introduced their lessons. Some of them began with a review of the previous lessons, either by giving hints of what was covered, or by asking student-teachers questions regarding them. According to the tutors, that was done in order to link the previous with the current lessons or to awake the student-teachers. Then they introduced the lesson of the day by mentioning it and writing it on a blackboard. For instance, in one of the classes observed the tutor was teaching the preparation of the new format of a lesson plan, which is consistent with the competence-based curriculum. The lesson was a continuation of the previous lesson on the same topic – preparation for teaching. The introduction could be summarized as below:

After greeting the class, the tutor began by reviewing what was taught during the previous lesson. The tutor posed a whole-class question for anyone to volunteer to mention the parts of the lesson plan which were introduced previously. After response from one student-teacher, the tutor introduced and proceeded with the lesson of the day. (Observational notes: Tutor Mawazo)

The other pattern comprised the tutors who did not begin their lessons by a review, even if the lessons represented a progression of or were linked to the previous ones; instead they just introduced the lesson of the day and proceeded with the presentation of new knowledge and other subsequent stages. Each of these established patterns was found across the colleges and did not go by teaching experience or subject of specialization. Further, as will be illustrated shortly in the following theme, there was a notable variation in the real time spent on a particular stage of a lesson. The majority of the tutors spent more time at presenting a new lesson stage, while few spent more time on the practice stage than on the other lesson stages.

Teaching/training strategies employed by tutors
Findings from the interviews revealed that the common instructional strategies employed by the tutors were lectures, questions and answers, group discussions or seatwork in the classrooms, as well as demonstrations. The majority of the tutors reported that they used lectures as the main method supplemented by questions and answers, and group discussions or seatwork. The majority also reported that sometimes they used demonstrations, especially when they wanted to show something special to the student-teachers. According to the tutors, they considered their lectures as ‘participatory lectures’, because they allowed as much interaction as possible through questions and answers. Using this type of lectures, the tutors
considered themselves to have been employing participatory methods, too, though of low quality, as one of the tutors commented:

*...I call these lectures participatory lectures...they allow some interaction between students and myself through things like questions and answers...they are also participatory methods but not of good quality... (Tutor Mawazo)*

Such experiential teaching-learning strategies as microteaching, library research, projects, seminars and role play were reportedly seldom used. The tutors reported that most often when they teach methodology courses, they rely on giving explanations of the methods or strategies, and of materials suitable for teaching particular subjects. The tutors rarely employed such training strategy as microteaching\(^{12}\), especially when the student-teachers were close to going for Block Teaching Practice in schools. It was evident from all the interviewed tutors that, even though they rarely employed microteaching, the strategy was not effective because, due to their large numbers, not all student-teachers got the opportunity to conduct micro lessons. Findings revealed that the common practice during microteaching was to assign topics in groups, where student-teachers prepare the lessons in the groups, and later during the day of presentation only one group member is randomly picked by the tutor to present the lesson. Other members just observed. Decisions on what topic to prepare and who should present the lesson were made by the tutors. The following data extract exemplifies what the tutors said:

*...I have about 200 students in four streams. If I choose to use, say microteaching method, and give each student-teacher a chance to conduct at least one mini-lesson and give them prompt feedback, I might need not less than 150 hours...what we normally do is to give them topics in groups, they prepare, and one group member present the lesson...(Tutor Gamba)*

Further, findings showed that because there were few or no opportunities for practical training through, for example, microteaching and single-lesson teaching practice (SLTP)\(^{13}\), the tutors alternatively employed demonstrations in classrooms within the colleges to link theory and practice. The tutors claimed that in most cases they demonstrated a particular skill while student-teachers observed. If time allowed, they involved student-teachers through role play.

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\(^{12}\) In microteaching, a student-teacher prepares a short/mini lesson, trying a particular teaching skill, and receives feedback from both the tutor and colleagues while on the college premises. Usually during the teaching process, a student-teacher uses his fellow student-teachers as students.

\(^{13}\) In single-lesson teaching practice (SLTP) a student-teacher prepares and goes to conduct a lesson with real students at nearby schools. Both microteaching and SLTP are forms of college-based practical training before student-teachers go for Block Teaching Practice, where they conduct practical training in schools for a fairly extended period of time.
Classroom observations data revealed similar findings. There was an overall predominance of lecture-dominated instructions. Most lessons were characterised by tutor-fronted interactions made up of explanations, questions and answers, and the use of the blackboard, which dominated most of the instructional time. Also, routinised group work/discussions transpired in all the observed sessions. Nevertheless, data reveal that, although the lessons contained similar features in terms of teaching strategies, there were some differences in the way the tutors unfolded the lessons and used such dominant practices. The following few examples illustrate this point. At one of the colleges – College ‘D’ – in the lessons conducted by the experienced biology methods tutor (Matata), the lecture made up of explanations, intermittent questions and answers, and the use of the blackboard to provide illustrations took up nearly 80% of the instructional time. The rest consisted of administration and interruptions. The practice stage, for example, did not materialise noticeably in the sessions of this tutor. In contrast, the newly qualified geography tutor (Flora) used more or less the same methods as the biology tutor, but lectures characterised by oral explanations, questions and answers and the use of the blackboard as well as manila sheets to illustrate points took up nearly 60% of the time. The rest was made up of deskwork in small groups, administration, reflections and reviewing. The practice stage was clearly exhibited. Thus, compared to the newly qualified geography tutor, the experienced biology tutor spent more time on presentations of the new lessons and less time on other stages such as practice.

Looking at college ‘B’, a reverse experience could be established. In the lessons of the experienced biology methods tutor (Gamba), the lectures, questions and answers, power point presentations and use of blackboard to illustrate points took up nearly 60% of the time. The rest was made up of deskwork/small group discussions, administration, reflections and review. Whereas the newly qualified geography tutor (Simba) spent nearly 80% of the instructional time in lecturing and using the blackboard to illustrate points, the rest was spent on very short discussions, administration and interruptions. Another good example can be drawn from College ‘C’. Ali (the newly qualified biology methods tutor) chiefly applied demonstrations, small group discussions/group work, practical activities, and questions and answers, which took up nearly 80% of the time, while the rest consisted of administration, reflections and reviews. Thus the tutor spent more time on the practice stage than on other parts. The tutor used a variety of instructional materials such as biology chemical reagents and apparatuses to illustrate his lessons. Mawazo, the experienced geography tutor, on the other hand, mainly employed the lecture method and blackboard use, which took up most of the instructional time.

As can be seen from the above examples, there was an absence of any established patterns in terms of teaching experiences and subjects of specialization, because at different times and places tutors with different teaching experiences and subjects manifested all these characteristics. On
some occasions, the observed newly qualified tutors were relatively better in their teaching practices (in the sense that they spent relatively less time on tutor-fronted explanations and writing on the blackboard, and at least allowed more time on group work/discussions) than experienced tutors, whereas the vice versa was true in other colleges. Perhaps, the tutors’ own ability and motivation for using activity-based instructions and the characteristics of the students in terms of numbers and attitudes towards the use of learner-centred methods could be the reasons for this situation.

There were also very few tutors who were contingent with the kind of instructional strategies they employed. Although they used the same dominant teaching strategies, like lectures, group discussions, and questions and answers, different strategies dominated according to the situation at hand. For example, in some of the lessons the tutor used group discussions as well as questions and answers as the main methods and lectures as a supplementary method. In other lessons they changed. They mostly applied lectures as the main method and discussions and questions and answers as supplementary methods. This kind of change was due to the classroom situation, e.g. the attitudes elicited by a particular group of student-teachers. If student-teachers seemed reluctant to use more active learning strategies like discussions and questions and answers, the tutor banked on the lecture method and vice versa. In a post-observation interview, one tutor gave the following comment in this regard:

…I changed the methods depending on the classroom situation. If my students respond positively and quickly to what I tell them to do, then I could use more active learning strategies like group work and questions and answers...but if they are sluggish, I use mostly lecture to save time.... (Tutor Chewa)

Classroom observations data revealed that although the tutors tried to engage learners in the lessons through questions and answers and through discussions, the control of different aspects of the lessons rested on them. Most tutors (except one) controlled the selection of what to be learnt or discussed, the pacing and sequencing of the lesson, as well as the criteria for evaluation. Explicit hierarchical power relations were revealed in most lessons. For example, most of the questions came from the tutors. Student-teachers seldom asked the tutor questions. During the lessons, they remained silent most of the time and talked only when allowed to do so. The tutors were frequently heard giving such authoritative directives as “...write down answers to this question in two minutes...” or “…complete the exercise and collect your exercise books in my office for marking...” (Classroom observations, College ‘D’). In most lessons the tutors controlled the rules of social conduct in the classrooms, and student-teachers were to follow what was directed by them.

While there was little variation in teaching methods between tutors and colleges, there were some differences in the quality of classroom interactions.
As pointed out earlier, only the sessions of one newly qualified biology tutor (Tutor Ali) demonstrated a fairly different experience. Ali’s lessons were both active and interactive in the sense that student-teachers seemed motivated and engaged in various tasks such as discussing, making observations, and doing group work. The tutor was not very strict, as he allowed student-teachers to talk to one another and to perform various activities. Student-teachers seemed relaxed and talked freely with the tutor and with their peers. For instance, in one of the observed sessions, Tutor Ali followed the following procedure:

- Started with a short review of the previous lesson through questions and answers, then introducing the new lesson and demonstrating a particular skill in front of the classroom (e.g., a procedure to prepare chemicals and reagents for biology practicals) for about ten minutes while the whole class observed and took notes;

- Asked student-teachers to form groups of three to four people, taking apparatuses like test tubes, and discussing and preparing chemicals and reagents such as Iodine solution, Copper II Sulphate solution, etc. based on the procedure demonstrated. The tutor went around each group, asked them questions and guided them to perform the task;

- Invited each group to present its findings to the whole class, while other student-teachers discussed findings and asked questions;

- Invited the class to make reflections of the lesson learnt, and asked questions;

- Summarized the lesson and made an advance brief about the next lesson.

In Ali’s lessons student-teachers also had some control over certain aspects. They seemed also to have a much greater influence over the pacing and sequencing/order of the teaching-learning process in the classroom, which indicates a weakened procedural framing. Student-teachers were frequently observed asking the tutor to wait until they had finished the task, and the tutor seemed to respond by waiting for the task to be accomplished before moving on to the next stages of the lessons. The study found that a weakened procedural framing allowed several parallel interactions in the classroom. At the same time, it was found that student-teachers’ influence over the content of the tasks seemed small, and they had no influence over the criteria of evaluation against which their work is being judged. This shows that even in Ali’s lessons, student-teachers only had control of some aspects, not all. However, when compared to the instructional practices of other observed tutors, Ali’s sessions had a relatively weak control over pacing and sequencing as well as weakened power relations. The analysis of the lesson plans of all the tutors, including Ali, suggested that the sequencing and pacing of the lessons entirely reflected the stages of the lesson development indicated in their lesson plans. Generally, it seemed that the selection of content to be taught and the
pacing, sequencing, and assessment strategies used reflected the syllabus requirements, as the tutors reported having followed what the syllabuses demanded. In this respect the syllabuses thus seem to be one of the main steering aspects.

Moreover, findings revealed that the information between what was reported and what was observed among the tutors was consistent overall. Data from lesson plans and schemes of work revealed that the tutors had frequently planned and/or used such instructional methods as lectures, questions and answers, small group work or discussions, and in-class demonstrations. Methods like project work, seminars, jig-saw, and galley walk were lacking and appeared in documents of some of the tutors only. A majority of the lesson plans did not indicate any practical methods such as microteaching and single lesson teaching practice (SLTP). Some of the tutors’ lesson plans did not specify the instructional strategy or strategies to be used. For example, in all Chewa’s lesson plans the tutor just wrote: “any participatory methods” in a space which is supposed to show the instructional strategy/ies to be used in that specific lesson. This confirmed data from interviews in which the tutor reported that their choice of method depended on the situation found in the classroom.

Findings from lesson plans further revealed that the instructional objectives did not explicitly state whether the focus was to develop student-teachers’ ability to implement CBC or not. For example, some objectives were found to focus on enabling student-teachers to acquire the ‘ability to prepare teaching plans, e.g. lesson plans and schemes of work’ but were not explicit as to whether that ability was to prepare ‘competence-based lessons’ or not. This was a dilemma in their teaching plans. The tutors argued that they derive instructional objectives from the syllabuses. This suggests that not even the ways instructional objectives were stated in the various syllabuses did explicitly target on building up CBC implementation skills but rather focused on general teaching skills. As can be seen with regard to the teaching/training strategies employed, the triangulation of interviews, observations, and document reviews brought out similar findings. This triangulation of methods is sufficient for arguing that the findings in this aspect represent the true picture of the tutors’ practices in the colleges.

Teaching-learning materials used
With respect to the instructional materials, findings revealed different experiences between what was reported and what was actually observed in the classrooms. Interviews and document review data revealed that the tutors mostly planned and used a variety of printed and non-printed materials such as modules prepared by TIE, flip charts, manila sheets, syllabuses, and samples of schemes of work and lesson plans. Other materials included models, blackboards and chalk as well as textbooks. However, classroom observations data revealed a slightly different experience. The common teaching-learning aids employed by the majority of the tutors were blackboards and chalk.
Despite the fact that some of the tutors were teaching, for instance, the use of certain instructional resources, they did not have any illustrative materials in the classrooms, even though they had mentioned such materials in their lesson plans. For example, one of the tutors taught ‘how to use media and technology in teaching and learning geography’ but did not use instructional aids other than blackboard and chalk. This suggests that what the tutors planned does not necessarily mean what they implemented.

Only three tutors were observed using extra instructional resources other than blackboards and chalk. For instance, at College ‘B’, one experienced biology tutor (Gamba) was observed using a computer and projector for a power point presentation. Although the tutor used a projector, there was no screen to project the slides/pictures on; instead the front wall was used as a screen. It was learnt that a laptop computer that was used belonged to the tutor but that the projector was college property. According to the tutor, the only projector had to be shared by all tutors in the college. It should be noted that all colleges had at least one laptop, mobile projector and mobile screen, which had to be shared by all tutors. However, in practice, the facilities were not frequently used due to the bureaucratic procedures involved to obtain them. At college ‘C’, one newly qualified biology methods tutor (Ali) also used laboratory equipment, chemicals and reagents when teaching ‘preparation of biology chemicals and reagents’. Another tutor who used at least some extra instructional resource was Flora - the newly qualified geography tutor at college ‘D’. This tutor used a flip chart in one of the sessions.

Assessment strategies employed
The results showed that the assessment practice in colleges is mostly theoretical, based on written or traditional paper and pencil work. Interview data revealed that tutors mostly employed such strategies as oral questions during classroom instructions, written assignments, mid-term tests and terminal examinations. Observations of practical work/activities were reported to have been rarely used, only during microteachings and block teaching practice, especially when student-teachers were practising teaching in schools. According to the findings, written assignments took different forms. They could be in form of short home assignments, projects or portfolio reports. The first is a short-term method which could be assigned on a regular basis, while the other two are long-term methods which might occur only once a year. Findings also revealed that all the tutors preferred group to individual assignments because of the large class sizes. They argued that individual assignments would mean increasing the workload.

Moreover, findings showed that the tutors varied in the frequency and modalities of using such assessment strategies, especially written assignments. For example, some of the tutors (e.g., Simba and Beno) reported that they preferred to give home assignments in groups, which they then regularly marked and gave feedback on. At different times they argued that regular feedback helped student-teachers to identify their points of strength as well as
areas to be improved. Other tutors reported having used group assignments in form of portfolios to be collected and marked at the end of the term. Their main concern was the large class sizes and big workload. This practice shows that assessment data is either seldom or not at all used to improve student-teachers’ learning or tutors’ teaching practices. Observational data revealed that oral questions transpired in most of the lessons. Even when the tutors gave seatwork in the classroom, they did not mark them.

Similar data was found in tutors’ folio records (e.g. lesson plans and records of assignments). Assessment strategies frequently included oral questions in the classroom, home assignments and tests. However, most of the tutors had no readily available records of assignments where I could see the concrete nature and scope of the home assignments given. Nevertheless, I managed to obtain a few records from some of the tutors and found that the nature of the tasks given included the preparation of teaching-learning aids that could be used to teach specific topics in the subjects, preparation of teaching plans, e.g. schemes of work and lesson plans, or, for instance, discussions of the strengths and challenges of using a particular teaching method. Some of these assignments seemed to focus on implementing the competence-based curriculum. For instance, student-teachers were urged to prepare competence-based lesson plans. However, most of the assignments were tightly prescribed in a detailed project specification which allowed little or no freedom of development – for example, giving student-teachers the opportunity of making their own significant contributions to the style and direction of their own learning. Generally, with respect to assessment strategies, the findings from document reviews concurred to a great extent with what was reported during the interviews and what was observed in the classrooms.

Summary of the key findings in relation to the second research question
This section has presented the findings about tutors’ instructional practices when training student-teachers to implement CBC in schools. As we have seen, the findings revealed lecture-dominated instructions characterised by explicit hierarchical power relations. The tutors maintained instructions of an authoritarian character. Most lessons were routinely structured and progressed in a systematic way from simple to complex or from known to unknown. All tutors (except one) retained control over most of the pedagogic aspects, e.g. the selection of content, sequence and pacing of instructions as well as the criteria of evaluation. Practical learning experiences or ‘experiential learning’ in authentic environments were largely lacking. The perennial instructional resources used by the tutors were blackboards and chalk. Other resources such as manila sheets and flip charts were seldom used. Modern facilities like computer technology were notably missing.

The findings further revealed that the formative assessment strategies employed by the tutors were mostly theoretical. Nor did the colleges as a whole have any well-established specific strategic plans for training student-
teachers for CBC implementation in schools. Arguably, it seems that the teaching orientation in the colleges was still more theoretical, teacher-centred and authoritarian in principles than student-centred, as the new curricula seem to emphasise. The contextual factors influencing the tutors’ instructional practices are presented in the next section.

6.3 Contextual factors influencing the tutors’ instructional practices

This study was also interested in exploring and understanding contextual factors that influence tutors’ training practices. These contextual factors are what are referred to in this study as frame factors. This section presents findings in that respect. It responds to the third research question: How can contextual factors be understood as determinants of the tutors’ training practices? With regard to the CBC reform in Tanzania, the findings would also provide useful insights for decision makers, planners, tutors as well as other education stakeholders about the influence of different frame factors on teacher preparation for CBC implementation in schools.

As pointed out elsewhere in this thesis, one way of gaining insight into the ways these external factors work is to describe them from the tutors’ perspectives. This is important in order to understand the influence of the context on tutors’ pedagogic actions. In that regard, data on this aspect was generated, mainly through semi-structured interviews with the tutors. Nevertheless, observation of general college and classroom conditions (number of students, seating arrangements, available space, etc.) was employed as a supplementary method. Table 5 summarises the broad categories and sub-categories (themes) of factors that emerged from the data. The findings are then elaborated on further in the parts that follow.

Table 5: Categories of frame factors that emerged as findings

<table>
<thead>
<tr>
<th>Administrative frames:</th>
<th>Number of student-teachers admitted, total time allocated for teaching, interference of teaching timetable, the college leadership, macro politics, demands by circulars, and nature of national examinations.</th>
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<tbody>
<tr>
<td>Pedagogical frames:</td>
<td>The knowledge of CBC, the availability of instructional resources, syllabus organisation, imbalance between theory and practical part, student-teachers’ negative attitudes towards learner-centered methods.</td>
</tr>
<tr>
<td>Physical and ecological frames:</td>
<td>Class size, structure of college buildings, the college culture, and cooperation with external institutions.</td>
</tr>
</tbody>
</table>

As Table 5 shows, several contextual factors emerged. Inspired by the Frame Factor Theory, the factors were organised into three broad categories – administrative frames, pedagogical frames, and physical and ecological frames. The table demonstrates that tutors’ understanding of CBC and their
instructional practices are influenced by a combination of frame factors, each category of factors also constituting a system in its own right. That is, it forms sub-categories/sub-elements that together create a system that influences tutors’ practices. For example, administrative frames form a system in its own right that constitutes sub-categories of frames such as the number of students admitted, the total time for teaching, college leadership or demands expressed in circulars, which together influence the tutors’ practices. According to the findings, the systems of frame factors do not operate in isolation but in complex interconnections as described in the following sections.

**Administrative frames**

Administrative frames may take the form of rules and regulations for, e.g., the number of students to be admitted or the total time for teaching a certain course in terms of hours per week. They may also include other organisational arrangements within the college. The analysis of data revealed some factors that were more of an administrative nature and were thus categorised as administrative frames. The factors were organised into the following themes: number of student-teachers admitted vs available space; total time allocated for teaching; interference of teaching timetable by non-teaching activities; college leadership; macro-politics; demands placed on tutors by circulars as well as the nature of national examinations. The themes are described in detail in the following parts.

**Number of student-teachers admitted vs available space**

This was a recurrent theme in the four colleges visited. The colleges admit a large number of student-teachers compared to the actual carrying capacity, i.e. available classrooms and tutors. High admission numbers cause large class sizes in most courses, particularly methodology courses. For example, in most of the methodology courses the number of students exceeded sixty. According to the tutors, large class sizes had detrimental implications on their pedagogical practices in many ways. One way was that the situation forced them to assemble a large number of students in big halls which were not meant for teaching or in one classroom to teach them at a go. The other way concerned the kind of teaching-learning strategies they employed. Due to the large numbers of students, it became difficult to use more student-centred and activity-based methods such as microteaching and other strategies of a clinical kind that would involve the student-teachers in performing or experiencing real teaching activities. This might require more time, which according to the college realities was not possible. The following tutors’ utterances exemplify what was said:

...here at our college, there is no first year stream which has less than sixty students. So, sometimes you can know your subject and methods, but the number of students becomes a challenge... (Tutor Zena)
...I think the number of trainees admitted is higher than our capacity. For example, there is no enough time, number of students compared to space and so on. For example, here sometimes we have about 120 people in one room. ...with this number of students, do we have that time? At the same time there is a syllabus which needs you to finish things... (Tutor Simba)

The other way in which the number of student-teachers affected the tutors’ pedagogical practices concerned the assessment modalities and strategies they employed as well as the handling of assessment activities like marking and giving prompt feedback. According to the findings, it was difficult for the tutors to conduct continuous assessments of trainees through, for instance, giving them individual practical assignments like preparing teaching-learning materials on a regular basis and marking their assignments and giving feedback. This was difficult, as it might demand more time as well as increasing the workload. The large number of student-teachers compelled the tutors to use infrequent traditional paper-and-pencil strategies like tests as well as written assignments in groups, thus measuring practical skills in a theoretical manner. It also affected the assessment of the same during BTP. This was pointed out as a training limitation in all colleges, because tutors did not have enough time to make assessments as often as required or to give adequate feedback to their student-teachers. The following data extract reflects some of the tutors’ utterances:

Due to the number of students we have, it is next to impossible to assess them frequently: using practical methods like observations and give them relevant feedback. We just use the normal tests... the paper and pencil ones, and we don’t administer frequently. (Tutor Gamba)

Total time allocated for teaching
The total time allocated for teaching methodology courses in the college teaching timetables was considered insufficient. A majority of the tutors lamented that the number of periods per week allocated to methodology courses was only two, which meant no more than two hours. According to the tutors, this was not enough time compared to the content or the themes and skills to be taught or the teaching approach recommended. They further claimed that pedagogy syllabuses needed more time, as they were meant to provide student-teachers with the concrete skills of implementing the curriculum through practices in an authentic environment. The situation was further added to by the fact that, leave alone the methodology syllabuses, the diploma programme in general is overloaded by too many subjects, which also demand space in the college timetable. According to the tutors, inadequate time also limited their training practices in different ways. One way was that it caused them to rush when teaching so that they could cover the overloaded
syllabus content on time. Further, the situation propelled them to capitalise on using more teacher-centred methods like lectures than practice/activity-based methods. The following quotations capture some of the tutors’ utterance regarding the time factor as a determinant of their pedagogical practices:

...maybe the first thing we should start with is the curriculum. This geography curriculum [Geography academic and pedagogy syllabuses] has a total of 248 for a period of two years. If you divide it means every year you should have 124 periods [lessons]. But the number of periods included here in our college teaching timetable is 66 per year ...which means 66 hours only. Therefore, you find about 50 periods have no time for teaching. What you do [a tutor] is to rush. Four hours coverage you do it in two hours.... (Tutor Mawazo)

There are so many things that you are supposed to teach, but available time in the teaching timetable is not enough... this contributes to the use of things like lectures mostly... (Tutor Simba)

The teaching time indicate in the timetable is not enough...it does not match with content to teach. This is partly because the diploma program has many subjects that demand time allocation too...it is contributed by meager budget from the government.... (Tutor Mose)

What can be learned from the above quotes is that, apart from the fact that the diploma programme has many subjects, one reason behind the inadequate time allocation in the college teaching timetables is the government’s insufficient (financial) budget. Thus colleges are forced to shorten their academic terms, as they could not afford to keep student-teachers for any length of time. This finding makes it evident that things are more complicated and that some problems originate from the outside (from the central government) and are beyond college control.

Interference with teaching timetable by non-teaching activities
Connected to the issue of available time for teaching was interference with the teaching timetable. Some of the tutors pointed out that interference with the teaching timetable from other college events was a limiting factor in their teaching process. They explained that sometimes the college administrations introduced ad-hoc events, such as meetings (e.g., to handle disciplinary cases that might have arisen) that had not been planned in the timetable, which led to interference with the teaching process. Those situations reduced the teaching time, causing the accumulation of loose ends in terms of the content to be taught, and consequently caused tutors to rush in order to compensate for the lost time. The following statement from one of the tutors illustrates this:
...other things are beyond my control because you find that you had planned this week they [students] will do something, but you find in that week there is interference of the timetable and the activity you planned is not done... (Tutor Beno)

The findings further showed that there existed interference of two kinds. One derived from the college administration itself, whereby the teaching timetable was interfered with by ad-hoc operations such as cleaning the premises or unplanned meetings. The other kind was through disturbances caused by fellow tutors, e.g. the tutor-on-duty (TOD), who might go to the classes and summon student-teachers who had not accomplished their duties like chopping firewood, watering gardens, cleaning toilets, etc. Sometimes it involved the whole class, which caused a postponement of lessons and even quarrels among the tutors themselves. Such interference with the teaching timetable was pointed out by tutors from two out of the four colleges involved in this study.

The college leadership
Findings showed that in most colleges the college leadership, i.e. the principals, did not seem to pay proper attention to the educational change by promoting a shared vision for change or initiating and supporting the process. It was reported that the college leadership did not have any specific internal strategy for enabling tutors to develop their knowledge and skills about the change. For example, it did not provide space in the college timetable for tutors to reflect and share insights. The situation even affected individual tutors’ efforts to deal with the change. This observation is verified in the following data chunks:

...there is no emphasis on CBC issues from the college administration. Only to be insisted to go to class to teach... No any plans to develop our skills and knowledge... (Tutor Matata)

Aaah! No! There is no support. I don’t think there is any support. Only individual teachers are making their own efforts. For example, you may need a copy of materials for use in the classroom, but you need to obtain permission from vice principle to get your materials photocopied... Sometimes people say no! ...I just use lecture and materials at my disposal. (Tutor Godi)

Related to college leadership, an issue of micro politics, i.e. politics within the colleges, emerged. Findings revealed an interesting experience in all the colleges visited, which was regarded by the tutors as a constraint in improving their training practices. It was found that within the colleges there were micro politics, in the sense that there existed favouritism and an unfair distribution of opportunities when it comes to attending outdoor training workshops related
Some of the tutors reported that when opportunities arose, the same persons were selected to attend the training workshops. That situation caused others to feel isolated, ignored and less important. According to these tutors, the situation may demoralise and lower their motivation to work hard towards improving their pedagogical practices. The following utterances exemplify what was explained by some of the tutors in this regard:

Sometimes it is very discouraging to see that every time opportunities come you hear the same persons have been selected by the principal to attend. It is as if others have no such ability! It is very discouraging indeed! (Tutor Mawazo)

Commenting on a similar issue, another tutor had this to say: “When opportunities to attend training workshops come, there are people who are often selected to go…others feel ignored and put at the receiving end” (Tutor Godi). The findings suggest that there is a chain of events based on the interplay between actors, where one action is followed by a ‘latent practical inference’ by other actors. For instance, due to the failure to provide space in the college timetable for tutors to engage in discussion and sharing experiences, the tutors seem to infer from that action that the reform was not taken seriously by the government, especially not by the college administration. They therefore banked on actions which were possible within the micro contexts. However, with regard to the issue of support from the college leadership, some variations were found between colleges. In some of the colleges (e.g., at College ‘A’) the tutors seemed to appreciate the little support they were receiving from the college administration, e.g. through inviting curriculum developers from TIE to go and talk about CBC, or by organising some in-door workshops to refurbish their knowledge and skills about CBC.

Macro politics
Macro politics refers to politics external to the colleges which have implications on tutors’ training practices. The findings showed that even politics external to the colleges, such as government and district policies, seemed to constitute a limitation. The majority of the tutors argued that, since CBC started to be implemented in teachers’ colleges in 2009 (e.g. when the new syllabuses were released), there seemed to be no specific follow-up policies/plans to support the implementation of the educational change, not even at the district levels. The findings further revealed that even the inspectorate division seemed to pay little attention to how tutors dealt with the educational change when it comes to teacher training. For example, it was pointed out by some of the tutors that school inspectors concentrated on inspecting routine matters such as whether tutors prepared schemes of work, lesson plans or log books, but not on how they train student-teachers to implement CBC or what challenges and needs they face. That situation gave
the impression that the reform was more political than real and that nobody cared about it. The following quotations represent the views given by several tutors in this regard:

_I have never seen the District education officer or the Regional education officer coming here to discuss with us on how we can improve training on CBC implementation. They do not seem to have any policy regarding this. Even when inspectors came, they don’t seem to bother about issues of CBC....they just inspect if you prepared teaching and whether you teach accordingly._ (Tutor Gamba)

Another quote from a different tutor makes a similar observation:

_....here [at the college] even the preparation of competence-based lesson plans is not done, we just prepare the old ones [traditional teacher-centred lesson plans]. When the inspectors came we told them we don’t prepare because we know little about this [CBC]. They [inspectors] escaped and said it is you tutors who are supposed to tell us what CBC is. So, it is confusion!_ (Tutor Matata)

The above quotations further suggest that even some of the school inspectors have little knowledge about CBC that could give them confidence to intervene. The school inspectors leave the problem to the tutors themselves.

The findings further revealed that demands placed on tutors by circulars from higher authorities (especially the Ministry of Education) constrain the training process. A majority of the tutors reported that the Ministry of Education had recently issued a directive (e.g., Education Circular No. 3 of 2013) that demanded that all colleges had to complete certain topics in the syllabuses within a certain time frame so that student-teachers could be examined for screening purposes to identify unsuitable candidates. Accordingly, that directive acted as a frame, because it steered (and will steer) the teaching pace. The tutors will have to rush in order to meet such demands. This observation is well represented in the following tutor’s utterance:

_...from this year, students will be screened at the end of first year. We have been given that circular. They [the circular] have directed us that by this time certain topics have to be finished. So it forces you to cover a particular content quickly. ...one of the obstacles is these circulars._ (Tutor Ali)

_Nature of national examinations_

The issue of the nature of national examinations set by the National Examinations Council of Tanzania (NECTA) emerged as a contextual condition determining the tutors’ instructional practices, especially the assessment strategies they employ. Some of the tutors argued that most of the
national examination questions are still knowledge-based, measuring primarily reproduction of knowledge. This situation was considered as a determinant factor for them to mainly use assessment strategies like traditional paper and pencil tests and written assignments that were also knowledge-based, so that student-teachers could pass their final examinations. It was observed that if tutors had to concentrate on assessment strategies that focused on observable classroom teaching skills, e.g. practical assessments such as observations of microteaching, student-teachers could end up failing their final exams because the final examination does not focus on observable teaching competences. The following data chunk echoes this:

...even our learners are examinations oriented. If you go slowly in teaching they start asking when we shall finish the syllabus. ....sir, the examination is around the corner. Such kind of comments is giving me a message that they just need content knowledge to answer exams... (Tutor Matata)

Further, what can be discerned from the above quote is that student-teachers also put some pressure on tutors to cover the syllabus on time to enable them to prepare for the final examination. Based on the findings, this factor propelled the use of lectures most of the time, questions and answers and deskwork in the classrooms rather than practical training such as field work or microteaching, so as to cover the content within time and enable trainees to answer their final exams. This further suggests that surface rather than deep learning is promoted in teachers’ colleges. The tutors who brought up this issue recommended that if they were to change assessment practices in colleges, the modalities of the final assessment practice need to be changed first. This finding also suggests that the tutors did not want to be blamed for student failure.

Pedagogical frames
Pedagogical frames are considered to be the factors immediate to the classroom and teaching contexts. They include constraints and affordances in classroom interaction. They may take the form of prescription or recommendations, e.g. concerning the content to be covered within a given time frame or the teaching approaches to be used. They may also take the form of teaching-learning aids at the teachers’ disposal, hardware such as computers, projectors and books and software. The analysis of data revealed that the majority of the tutors pointed out factors which were organised into the following main themes: the availability of instructional resources, student-teachers’ negative attitudes towards learner-centred methods, lack of knowledge about CBC, syllabus organisation, and imbalance between theoretical and practical parts. These frames are elaborated on below.
Availability of instructional resources

Instructional resources are here referred to as teaching-learning materials such as books and computers that can be used to facilitate/support the teaching-learning process. Findings revealed that, in all colleges involved in this study, important teaching-learning materials for supporting change were seriously lacking. For example, all the tutors across colleges at different times bitterly condemned the fact that ever since the curriculum was changed to CBC, nothing but the new syllabuses was issued by TIE for implementation by the tutors in 2009. No other support materials like tutors’ guides and relevant textbooks were made available to guide tutors in the enactment of the new curriculum. In 2013, pedagogy modules were issued but, according to the tutors, they were meant to guide student-teachers and had not been very useful for them as tutors. Although some tutors tried to use these trainee modules as their teaching guides, the modules contained little useful information for them. All the tutors thought that the situation of having no support materials like tutors’ guides and relevant textbooks to complement the syllabuses impeded their training practices, as they had no reliable point of reference to broaden their understanding of the educational change. They were not even able to use such strategies as library research to refer their student-teachers to further reading. The college libraries reportedly had no such resources like journals where they could read the current issues and new ideas about pedagogy. The following tutors’ utterances demonstrate their dissatisfaction:

*It was in the year 2009 when we got these new syllabuses [competence-based syllabi]. For each subject there are two syllabi, one for academic and the other for pedagogy.... However, no support materials like tutors’ guide were issued to help us when implementing this. So, we are doing the way we think is appropriate... (Tutor Matata)*

*...I use those methods because environment forces me to do so... Had there been enough teaching-learning resources and time, I could have not used those methods only, I would have thought of others too... (Tutor Ali)*

*The problem here is lack of teaching-learning resources, especially books. I have never seen even a textbook on CBC here... (Tutor Mose)*

The situation of having no reliable references lowered the tutors’ confidence in explaining thoroughly and guiding student-teachers on the different aspects of CBC. Overall, most of the tutors simply attributed their practices of, for example, using only lectures, blackboard and chalk to the unavailability of other modern teaching-learning materials like computers and projectors, just to mention a few. Moreover, findings revealed that the tutors and their
departments had no money at their disposal for purchasing teaching-learning materials. Thus it was difficult for them to improvise teaching-learning resources as some raw materials had to be bought and the procurement of materials is made centrally by the college administration through its procurement officers when funds are available.

**Student-teachers’ negative attitudes towards learner-centred methods**

The issue of student-teachers’ negative attitude towards the use of learner-centred methods was another recurring theme. This was a determining factor especially in deciding what instructional methods to use. The majority of the tutors claimed that most student-teachers were reluctant to do more work because perhaps they used to be spoon-fed when they were in secondary schools. If the tutors used strategies which demanded trainees to perform various tasks by themselves they became sluggish and it took a long time to accomplish a task. Hence, to save time, the tutors mostly resorted to strategies such as lectures, questions and answers, as well as group discussions. The following quotations verify this observation:

*Trainees’ attitudes are the bigger obstacle too. Most of them came from secondary schools, where teachers were using lectures because they thought it could help them to cover the syllabus on time. Now, here it is them who are supposed to find knowledge. They don’t have metacognition skills. It is very difficult to change them from traditional way of learning to CBC. They seem to dislike this approach...* (Tutor Mose)

*...I can simply say I use them [methods] because they are easy given the nature of the classes we have and attitudes of our student-teachers...* (Tutor Godi)

This finding suggests that the future teachers in schools are unlikely to use learner-centred methods reemphasised by the curricula because, according to the tutors, they seem to dislike the approach.

**Knowledge about CBC**

The analysis of data showed that all the tutors felt that the limited knowledge about CBC was one of the factors which influenced their teaching practices. According to the tutors, this situation was the result of little or no training they had received in CBC, including both its theoretical and practical aspects. Overall, the majority of the tutors had attended very short in-service training, mostly less than a week. Thus most of them felt that they lacked proper and adequate training as well as knowledge of CBC, which in turn acted as a stumbling block in the training process. In all the colleges involved in this study, the tutors considered this as a constraint because, as teacher educators, they had little knowledge, competence and confidence to talk about CBC.
They felt that they needed more training on the whole idea of CBC and on how they could better facilitate the training of student-teachers, given the environment they had. The following statements exemplify the tutors’ claims:

*We have been brought with CBC but we don’t have adequate training. They have introduced for implementation but we still have little knowledge about it. Therefore we fail even how we could help our students on this matter... It makes us unconfident to talk about CBC. The big problem is that for most of us our knowledge ends on preparation of competence-based lesson plans only... (Tutor Matata)*

*Personally, I can’t say that I have received any training. CBC was introduced without even preparation of us teacher educators. I don’t have adequate training... (Tutor Flora)*

*It is assumed that tutors already understand everything about CBC. But tutors who are here know very little on CBC...we are doing things that we are unsure. Knowledge is still low... (Tutor Mawazo)*

This finding shows that the tutors were not socialised into specific ways of conceiving their professional world. Thus their practices could also be explained by their unspecific socialisation to CBC due to their school experiences or education background.

*Syllabus organisation*

Findings revealed that the majority of the tutors felt that the way the syllabuses are organised is a problem. According to the tutors, there is internally (within the syllabus documents) an inconsistency between the kind of prescribed skills/competences to be built up for student-teachers, what methods to be used, and what time to be allocated for each content area. For example, the tutors gave an example from the ‘microteaching and reflections’ content area/topic. In their view, this topic is meant to give student-teachers concrete teaching competences by experiencing real teaching. However, the time allocated to this is very short. In most of the topics the time allotted is not realistic, in their experience. Thus the syllabus documents themselves are contradictory and problematic, because, even if the recommended time had existed in the college time table, it would still have been difficult to translate the syllabuses into practice. This finding is evident in the following quotation from one of the tutors:

*The syllabus content is one of the problems as well. ...if you look at our syllabus [referring to his subject syllabus] you find nine topics. But in each topic you find 4 to 6 subtopics that you have to cover. In*
reality you can consume more than the time specified in the syllabus. So, it is a challenge... (Tutor Godi)

Similarly, another tutor observed: “The syllabus has a problem. There are many things to be taught but time allocated is not enough...” (Tutor Simba). In these quotations (e.g. Tutor Godi’s) it is evident that the tutors felt a problem in translating the documents into practice. Nevertheless, findings revealed that other tutors went further to comment that the diploma curriculum as a whole is not competence-based, as it does not seem to promote competence-based teaching practices. The tutors thought that even though they had little knowledge of CBC, the organisation of various syllabuses (e.g. in pedagogy) did not seem to emphasise practically oriented training; but rather learning things theoretically in the classrooms. The following quote captures this notion:

In short let me say the curriculum does not emphasize CBC to a great extent because, first, it has time limit. Second, it does not consider the students we have. Therefore one of the barriers is the syllabus because it needs so many things in a short time, while as I said earlier, CBC seems to need very few things in long time. (Tutor Ali)

...and the way the syllabus is organized is a problem because the skills to teach are not elaborated, they are just mentioned! And is very difficult for a tutor here to teach the same thing as what is taught in another college... (Tutor Matata)

Moreover, it can be learned from the above quotes (e.g. tutor Matata’s) that teaching skills were just mentioned in the syllabuses but not elaborated on, a situation that was prone to multiple interpretations by the tutors.

Imbalance between theory and practical part
Related to the above problems was the issue of the imbalance between theory and the practical part of the diploma programme as a whole. Results showed that the curriculum for the diploma in secondary education contained many subjects/courses and that a major part of them were more theoretical than practical, while CBC requires ample time for student-teachers to practise the different pedagogical skills. Accordingly, this situation reduced the chances for student-teachers to experience more practice in schools. For example, some of the tutors observed that even the time for block teaching practice (BTP) is short. Above all, due to lack of funds, there is too little time to supervise student-teachers during field work, as one of the tutors explained:

For sure college training is more theoretical. Unless the curriculum reduces other theoretical things and retain large part of practice,
the training will continue to be as it is. That is my opinion. Because they [student-teachers] can learn other theoretical things while at work. At the moment, I think, there are too many general education subjects. They reduce chances for student-teachers to do more practices in the field. (Tutor Mose)

The physical and ecological frames
In the context of this study, physical and ecological frames refer to factors pertaining to the nature and character of college buildings used as classrooms, and factors related to college ethos and professional relations between colleges and other external institutions such as schools and universities. The analysis of data revealed such physical frames as large class sizes and the structure of some college buildings used as classrooms to further determinants of the tutors’ instructional practices. These two factors have already been elaborated on in connection with administrative frames such as the number of student-teachers admitted. Thus, to avoid repetition, they will not be elaborated on again here. However, two more factors which could be put into this category emerged. They include: the college culture and cooperation with external institutions. While it should be clear that these two factors are considered as more ecological than physical, they are further expounded below.

The college culture
Findings revealed that, although some of the tutors reported to have some collaboration within their colleges, there was still a lack of shared beliefs and values among tutors concerning the educational change. A majority of the tutors reported that there were mixed feelings in colleges among the tutors. Some of them received the change positively and were trying to cope with it, while others received it critically and did not seem willing to change their instructional practices. They just conducted business as usual in the sense that they continued to use teacher-centred approaches alone. According to the findings, that situation was not peculiar to one group of tutors only (e.g. experienced or newly qualified, natural or social science) but was apparent among tutors of all age groups and experience. The tutors thought that a lack of shared beliefs and values hindered collaborative relationships and activities among them. Further, most of the tutors thought that mixed practices also gave their student-teachers contradictory messages. The following quotation exemplifies what the tutors said regarding this issue:

The feelings of most tutors are mixed. There are those who are ready to change and those who are not. It is like half by half. There are those who are ready because now it is CBC, so every teacher is supposed to prepare [lesson] based on that format. And there are those who are not ready. It is mixed feelings. I can’t say that all likes it. There are fellows who don’t like to prepare teaching-learning materials. There are fellows who still use pure lecture
method without even improving it. This observation doesn’t go by age! Some are experienced tutors and they implement CBC approach, and others are experienced but when they go to class they don’t do anything than only to lecture from the beginning to the end. Even for the young tutors, some follow it and others don’t. (Tutor Mose)

Cooperation with external institutions
Findings further revealed that there was weak or no collaboration within the colleges themselves and between the colleges and neighbouring schools. The tutors reported a lack of good professional relations with neighbouring schools. The latter did not accord the required support when it comes to offering opportunities for student-teachers to practise teaching with real school children through single-lesson teaching practice (SLTP) during college-based training, before going for the Block Teaching Practice (BTP). This situation caused the tutors not to use practice-based training strategies like SLTP. The following data extract exemplifies how the tutors expressed this situation:

...if you ask the school to bring their children here they raise complications...the teachers want to be paid. For me to take my student-teachers to the schools it is difficult because time becomes an obstacle... (Tutor Ali)

According to the findings, no improvement activities existed like action research activities or learning studies conducted in collaboration with the schools or even between the colleges themselves. It was also reported that the relation between higher education institutions and teachers’ colleges was disappointing. For example, at different times, the respondents observed that there was a gap in communication between these institutions, although they basically have a common purpose. The relation existed only when universities sent their student-teachers to the colleges during field training.

Summary of the key findings in relation to the third research question
This section has presented the factors described by the tutors as influential to their instructional practices. We learn from the findings that there was a combination of factors influencing the tutors’ understanding and instructional practices. The nature of the factors was administrative, pedagogical, physical and ecological, as summarised in Table 5. According to the findings, the factors operated in complex interaction, which together influenced how the tutors trained the student-teachers to implement CBC in secondary schools. According to the tutors’ perspectives, these frames either delimited or added possibilities for preferring teacher-centred to learner-centred approaches. The factors found by this study were frequently cited by the majority of the tutors across disciplines and experiences. However, the strongest outcries concerned the lack of training and knowledge of CBC, the large number of students
admitted, which causes large class sizes, syllabus recommendations relative to available time allocated for teaching (e.g., time allocated both within the syllabuses and actual time in the teaching timetables), the availability of instructional resources, student-teachers’ negative attitudes towards learner-centred methods, and college culture at large. The following section presents findings about conditions that, according to the tutors, would help to establish a long-term framework for tutor learning to support educational change.
6.4 Conditions for establishing a framework for long-term tutor learning to support educational change

In this section I present findings of conditions that would help to establish a framework for long-term tutor learning to support the CBC educational change (and any other similar changes that would occur in future) in response to the research question: *What conditions would help to establish a framework for long-term tutor learning to support the educational change?* Although this question was not initially planned in this study, it emerged as the research developed and data relating to this question appeared from the semi-structured interviews with the tutors, and also from field notes from the college principals. Therefore, in the course of the study I decided to formulate this as supplementary to the main research questions. Analysis of data regarding this question brought out various perspectives from the respondents. The perspectives are presented in the following themes.

*Establishing strong coordination and collaboration between universities, colleges and schools*

Establishing a strong collaboration between higher education institutions offering teacher education, teachers’ colleges and schools in areas of training, research, and consultancy was a recurring theme in the data. It was revealed that the coordination between these three arenas had been weak and unsatisfactory. Reportedly, there was a huge gap in communication between, for example, universities and teachers’ colleges in many respects, including the sharing of new knowledge and experiences about teaching and learning. In that respect, it was suggested that there was a need to establish collaborative action research on important questions and issues regarding the current educational change involving tutors, university scholars from faculties of education, and teachers in schools. Consequently, this would help tutors, first, to broaden their knowledge of new ways of doing things; and secondly, to try new ways and acquire practical evidence of how different strategies can be put into practice. The following data extracts reflect the respondents’ ideas:

*The current situation is very disappointing. I think first, there is no good communication and coordination between the Ministry of education and universities. We, in colleges, are implementing CBC; but I don’t know if universities are implementing it. The same experience is between universities and colleges. The cooperation is only when they bring students to do their practicum, then finish! These are my observations...you can also make research on this. This cannot take us any far. I think to help our tutors we need a strong coordination and collaboration as well. We need to share experiences by conducting researches together and try methods...*

(Principal, Morogoro TTC)
...to improve communication between our institutions...Example between universities and colleges, No coordination! Because now what is happening in universities is not known here...if you look the way teachers are prepared in universities is different from colleges. The diploma teacher is trained differently and the tutor who comes to train diploma teachers is trained differently... (Tutor Matata)

The above quotes also suggest that the tutors recognized the importance of perspectives or ideas from outside the group as an important condition for their learning to support the educational change. This idea is evident through their suggestion of establishing good connection and collaboration with researchers or scholars from universities from whom they could get access to new ideas that would enrich the way they framed their practice, as well as enable them to ‘think outside the box’.

Reflections amongst tutors
Findings showed that other tutors (mostly experienced ones) proposed the need for a culture of reflective practice or reflection as an important condition for long-term tutor learning. They explained that if tutors wanted to develop a culture of rethinking about their past practices, it would help them to learn from their experiences and thus to cope with similar problems in the future. In their opinion, this condition could serve as a personal strategy to improve the training practice and could also be a source of knowledge for others, if there exists a culture of sharing experiences. The following quote reflects this tutors’ idea:

I think even to have a culture of thinking and rethinking about our past teaching practices is necessary. If I did this and worked, then I can use it again in future when I come across the same situation...example, I have large class this year and used particular strategies successfully, then I can try the same next time... (Tutor Gamba)

Collaborative learning activities within colleges
Findings showed that reflection was considered together with establishing collaborative learning activities within the college environments. Most respondents proposed the need to establish learning groups within colleges, in which tutors with their different experiences gained through reflections would collaborate by sharing such experiences through, for example, demonstration lessons, documenting and sharing with colleagues, and discussing concrete examples of what worked well and in what situations or circumstances, etc. This finding suggests that the tutors were proposing the idea of establishing learning communities and situated learning whereby colleges are viewed as basic learning environments, as one of the tutors said:
Well, this system of little, and little, and little seminars will not help. What I see is to establish a well-supported system of educating ourselves...to help ourselves here at the college through things like subject clubs, peer learning and things like that. I think this will be everlasting than to depend on those occasional training. (Tutor Mose)

What can be discerned further from the above quote is that the tutors thought that the current unreliable training workshops would not be of great help without any well-planned collaborative learning strategies within the college environments. The workshop model seemed unworkable because there were many tutors in colleges untrained to the change, and there were no signs of reaching them all, as another tutor elucidated: “There are so many untrained tutors like me in colleges. It is difficult to reach them all! What is possible, perhaps, is for us to assist each other here and to cooperate with researchers...like from universities” (Tutor Zena).

Establishment of an institution dealing with matters of educational change
The analysis of data showed that some of the tutors considered the need to establish an academic organ to specifically deal with educational changes whenever they occur. This body would be responsible for studying teachers’ pedagogical problems and design ways to help resolving these. To work effectively, the institution should have branches in all districts all over the country. It could also be responsible for writing portfolios or training kits to help tutors (and of course teachers) to learn new ways of acting, as one of the tutors elaborated:

We must have an organ, which is an academic organ and which will deal with these new changes when they occur...which will listen to teachers problems of implementing. We must have an organ to study these and come up with a help...writing things to help teachers pedagogically... (Tutor Matata)

Similarly, another tutor from a different college explained:

The TRCs [teachers’ resource centres] are not helpful now days. People there are not trained. So, we must have an organ to study educational issues and help accordingly. An organ that have personnel who are employed there... (Tutor Flora)
Moreover, it was pointed out that, to start with, the existing Teachers’ Resource Centres (TRCs)\textsuperscript{14} premises located in various parts of the country could be used to accommodate institution activities. The organ should, however, have its own employed qualified education experts, whose work would be to study problems relating to the implementation of the current educational change and devise feasible solutions. To sum up, this part has demonstrated multiple conditions which were proposed by the participants in order to establish a long-term framework for their learning to support the educational change. According to the findings, the key conditions emerged include: establishing strong coordination and collaboration between universities, colleges and schools; reflective practices (reflections); collaborative learning activities within colleges; and the establishment of an institution dealing with matters of educational change. As presented above, from the tutors’ perspectives, those conditions would help to establish a long-term framework for tutor learning to support the educational change.

6.5 Chapter Summary

This chapter has presented the findings of the study. It opened up with those about tutors’ understanding of CBC. Findings revealed that the tutors held different understandings, as presented. The differences in understanding could be attributed to a lack of proper training for CBC. This was followed by a part that presented tutors’ instructional practices. Overall findings revealed that the teaching orientation was authoritarian, theoretical, and still follows teacher-centred principles. They also revealed that there were no well-established specific strategic plans for improving the training of student-teachers for CBC implementation, neither within nor between colleges. Colleges (and tutors), who mostly work individually, implemented only what had been prescribed by the new competence-based syllabuses and circulars or directives from the Ministry of Education. Thereafter, the chapter presented contextual factors influencing the tutors’ understanding and training practices. Findings revealed an interplay of factors, which were categorised as administrative, pedagogical, and physical and ecological frames. The chapter then concluded with a presentation of the tutors’ perspectives on the conditions that would help to establish a framework for long-term tutor learning to support the educational change. Table 6 provides an overview of the study, and the following chapter discusses its findings.

\textsuperscript{14} In Tanzania, TRCs are centres which were established in various parts of the country as meeting points for teachers and others involved in education, for the purpose of facilitating teachers’ and school development. TRCs provide facilities and service such as library services, lectures on tapes and audio cassettes, etc.
### Table 6: Overview of the study

<table>
<thead>
<tr>
<th>Overall Aim of the study</th>
<th>Research questions</th>
<th>Method</th>
<th>Findings</th>
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<tbody>
<tr>
<td>The overall aim is twofold: i) To explore how tutors in diploma teachers' colleges understand/interpret CBC; and (ii) to examine how they train student-teachers to implement CBC in the actual classroom situation in secondary schools in Tanzania.</td>
<td></td>
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<tr>
<td><strong>I</strong> In what ways do tutors understand/interpret CBC when it comes to:</td>
<td>In what ways do tutors understand/interpret CBC when it comes to:</td>
<td>Interview occasion I</td>
<td>Themes on CBC meaning &amp; its intention(s)</td>
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<tr>
<td>- teaching-learning approaches relevant for CBC?</td>
<td>• teaching-learning approaches relevant for CBC?</td>
<td></td>
<td>Themes on reasons for CBC introduction in Tanzania</td>
</tr>
<tr>
<td>- pedagogical skills required for teachers to be able to implement CBC?</td>
<td>• pedagogical skills required for teachers to be able to implement CBC?</td>
<td></td>
<td>- Education being too theoretical</td>
</tr>
<tr>
<td><strong>Objective</strong></td>
<td>To reach an understanding of how CBC is understood by tutors in teachers' training colleges.</td>
<td></td>
<td>- Desire for a creative and independent/self-reliant generation</td>
</tr>
<tr>
<td><strong>II</strong> How, and with what arguments do tutors train student-teachers to implement CBC?</td>
<td>How, and with what arguments do tutors train student-teachers to implement CBC?</td>
<td>Classroom observations, Document reviews (e.g. lesson plans), and Interview occasions I, II, &amp; III</td>
<td>Patterns:</td>
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<tr>
<td><strong>Objective</strong></td>
<td>To describe patterns of and explain tutors' instructional practices when training student-teachers to implement CBC in actual classroom situations.</td>
<td>Analysis: deductive-inductive content analysis of observation notes and documents, and thematic analysis of the interviews</td>
<td>- Predominance of lecture-dominated instructions, use of blackboard and chalks</td>
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<td><strong>III</strong> How can contextual factors be understood as determinants of the tutors' training practices?</td>
<td>How can contextual factors be understood as determinants of the tutors' training practices?</td>
<td>Interview occasions I, II, &amp; III, observations</td>
<td>- Instructions are characterized by strong framing and classification.</td>
</tr>
<tr>
<td><strong>Objective</strong></td>
<td>To reach an understanding of contextual factors that influence training of student-teachers for CBC implementation in schools.</td>
<td>Analysis: deductive-inductive thematic analysis based on data from all interview occasions, content analysis of observation notes</td>
<td>- Assessment practice is mostly theoretical, based on traditional paper and pencil work.</td>
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<tr>
<td><strong>IV</strong> What conditions would help to establish a framework for long-term tutor learning to support the educational change?</td>
<td>What conditions would help to establish a framework for long-term tutor learning to support the educational change?</td>
<td>Interview occasions I, II, &amp; III</td>
<td>Themes:</td>
</tr>
<tr>
<td><strong>Objective</strong></td>
<td>To understand the conditions that would help to create a framework for long-term tutor learning</td>
<td>Analysis: deductive-inductive thematic analysis based on data from the interviews</td>
<td><strong>Administrative frames</strong>: Number of student-teachers admitted, total time allocated for teaching, interference of teaching timetable, the college leadership, macro politics, demands by circulars, and nature of national examinations.</td>
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<td></td>
<td></td>
<td></td>
<td><strong>Pedagogical frames</strong>: Knowledge of CBC, the availability of instructional resources, syllabus organization, imbalance between theory and practical part, student-teachers’ negative attitudes towards learner-centered methods.</td>
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<td><strong>Physical and ecological frames</strong>: Class size, structure of college buildings, college culture at large, and cooperation with external institutions.</td>
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<td>Interpretations inspired by the hermeneutic phenomenology tradition</td>
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CHAPTER SEVEN: DISCUSSION OF FINDINGS

7.0 Overview

This chapter discusses and interprets the major findings of the study with the overall aim of addressing the key research questions. The chapter builds on the findings by discussing them in a reflective manner in the light of the relevant literature and the theoretical framework of the study. The discussion in this chapter is organised into four main sections reflecting the main research questions presented in chapter one. In the first section, the findings in relation to the tutors’ understanding of CBC are discussed. Next, those related to the tutors’ instructional practices are examined. Following this, is a section discussing contextual factors influencing tutors’ understanding and practices. The final segment of this chapter discusses the findings in relation to the conditions of establishing a long-term framework to support tutor learning to support the educational change. Prior to the discussion of the major findings, a brief overview of the study, the research design and the research questions addressed in the study is given.

An overview of the study, design and research questions

The aim of this study was to investigate how tutors in diploma teachers colleges in Tanzania understand CBC and how they train student-teachers to implement CBC in actual classroom situations in secondary schools in the country. Exploring tutors’ understanding and their instructional practices is a matter of crucial importance towards an understanding of how the CBC reform is recontextualised in teachers’ colleges as well as of complexities and contradictions on the ground.

This study was inspired by Bernstein’s pedagogic device theory and Lundgren’s frame-factor theory. The prime aim for adapting these theories was to better understand and attempt to explain the tutors’ interpretations of CBC and their training practices. However, insights from other relevant literature were used, too. Overall, the study employed a qualitative research design, with methods, such as semi-structured interviews, classroom
observations, and document reviews, to generate data. The interpretation of findings was inspired by the hermeneutic phenomenological tradition. As indicated in Chapter One, the present study addressed the following research questions:

- In what ways do tutors understand/interpret CBC when it comes to: i) its conceptual meaning, curriculum intentions, and reasons for its introduction in Tanzania?; ii) teaching-learning approaches relevant for CBC?; iii) pedagogical skills required for teachers to be able to implement CBC?
- How, and with what arguments do tutors train student-teachers to implement CBC?
- How can contextual factors be understood as determinants of the tutors’ training practices?
- What conditions would help to establish a framework for long-term tutor learning to support the educational change?

The structure of the discussion will be as follows. In each of the sections, I begin with a synopsis of the major findings before discussing them in relation to the theories motivated for this study and other relevant educational literature. In the next section, I discuss the main findings in relation to the first research question.

### 7.1 Tutors’ understanding of CBC

The initial research question concerned exploring tutors’ understanding of CBC. The analysis of the tutors’ interviews brought out two main themes, describing their understanding of the meaning and intentions of CBC: **CBC as an application-oriented curriculum**; and **CBC as an activity-based curriculum**. With regard to the reasons for the introduction of CBC in the Tanzanian education system, the themes emerged included: education being too theoretical; coping with global trends; desire for a creative and independent/self-reliant generation; external influences; and poor academic performance. The findings further showed that all the tutors held the view that student-centred teaching approach and methods are appropriate for facilitating learning in the context of CBC. With regard to pedagogic skills required for teachers to effectively implement CBC in classrooms, findings revealed that the tutors mostly cited such skills as mastery of the content/subject matter, skill at identifying learners’ needs, and the ability to use different teaching methods (repertoire of teaching methods). Very few referred to the skill of knowing and designing the social context appropriate for learning a particular skill (sociology); the skill of being tolerant, hardworking and reading beyond student requirements, as well as flexibility to adopt changes. Below, I discuss the findings in earnest.
As reported above, the findings from the analysis of the tutors’ interviews brought out two main interconnected themes, describing their understanding of the meaning and intentions of CBC: CBC as an application-oriented curriculum, and CBC as an activity-based curriculum. In the first theme, the tutors interpreted CBC as a curriculum whose emphasis is on building learner’s ability so that they become practical, creative, and apply the skills they acquire in solving real problems in daily life. The tutors in this category related CBC intentions to its underlying meaning; that is, the intention is to prepare the learners to be functional in society, applying the skills learned to create their own income-generation activities (self-employment) as well as to become competitive in the world of work in general. In the latter, the findings suggested that the tutors viewed CBC as a form of curriculum that emphasises only activity-based pedagogy, in other words, a curriculum emphasising learning through activities. These tutors thought that CBC intends just to make students active during the teaching-learning process, to learn practically, and to boost students’ academic performance. The key difference between the two themes is that, unlike the first, in the latter category/theme the tutors did not seem to extend the meaning to applying what is learned beyond the classroom and the subject contexts.

Although the two categories of understanding seem to be related in certain respects, they represent two different understandings whose implications may involve altering the meaning originally intended by the curriculum. As reported in the results chapter, unlike the interpretation of CBC as an application-oriented curriculum, which seems to be more student-focused, CBC as an activity-based curriculum seems to be subject-focused emphasising the learning of the subjects through activities alone. The understanding suggests that the focus is on academics and the ultimate goal is to enable a student to master subject knowledge and skills. What a student will do with the subject knowledge later in life seems not to be the primary concern of CBC, according to these tutors. Thus, it appears that the tutors who interpreted CBC in this way still embody and maintain a content-based curriculum thinking orientation (and the scholar academic ideology), even though they recognise the importance of students’ active involvement in the teaching-learning process. Further, it could be interpreted that these tutors are concerned with the importance of knowledge itself rather than the focus on the usefulness of knowledge. This echoes the on-going debate about the importance of learning fundamental disciplinary/subject knowledge, and the argument for bringing knowledge back into curriculum discussions (cf. Young, 2008). This tutors’ understanding partly contradicts the overall focus on application assumed by the new curriculum documents in Tanzania, i.e., what a student will do with this knowledge, what will happen to a student as a person and contributing member of society (something that seems to be meant by those in the category of CBC as an application-oriented curriculum).

Consequently, in their daily teaching activities, those conceiving CBC as an activity-based curriculum might be concentrating on teaching, e.g.,
‘geography methods’, ‘biology methods’, or ‘history methods’ instead of teaching/training student-teachers to become professional teachers who may selectively apply ‘geography methods’, ‘biology methods’, ‘history methods’, etc., when teaching in secondary schools. Fox (1983) seems to suggest that teachers who are student-focused are likely to concentrate on or emphasise what the student is becoming as a person rather than on where he or she is going in terms of mastery of the subject, as subject-focused thinking does. An overall effect of the difference in understanding the national curriculum (especially the interpretation of CBC as an activity-based curriculum) is that the primary CBC meaning may be transformed from focusing on what the student is becoming as a person and functioning member of society into one that emphasises ‘learning the subject matter through activities in the classroom’. The underlying ideology of the CBC reform in Tanzania is that the essence of learners lies in the competences and activities they are capable of performing in daily life.

This difference in the understanding of the curriculum meaning and intention(s) might be explained by several factors, including the insufficient or non-existing education about CBC that the tutors had received, as revealed in Table 2 in the methodology chapter. Apart from the fact that no tutors had received proper education in CBC, some did not receive any orientation at all. Further, the situation of mixed feelings that was revealed (e.g., some tutors receiving CBC positively while others did not) might contribute to this, as some tutors seemed uninterested and thus may not have taken time to read and reflect on the meaning of CBC. Further, the differences might also be explained by the fact that the official curriculum documents themselves do not define CBC explicitly, its implicitness instead leading to a risk of various interpretations. The effect of this might be the observed contradictions in the tutors’ understandings of CBC. In line with Bernstein (1996/2000), the official recontextualisation (e.g., the national curriculum documents) dominates and controls the interpretations in schools or colleges. This is especially the case in contexts that follow a centralised curriculum, e.g., where schools report to or adhere to a national curriculum. This then implies that to achieve correct and consistent interpretations of the curriculum by its users, the official curriculum has to be very explicit on important matters such as its meanings, intentions and underlying assumptions.

The tutors’ understandings of CBC can be scrutinized further on the basis of Bernstein’s (1996/2000) perspectives in order to understand how they reflect the fundamental rules that constitute the internal logic of CBC. Bernstein (2000) argues that the inner logic of any pedagogic practice constitutes regulative and instructional rules. Such rules concern the rules of hierarchy and of social order and conduct, whereas instructional rules concern those of selection, sequencing content and instructions, pacing of learning, as well as criteria for evaluation. In line with Bernstein’s (2000) ideas, the findings can be interpreting as suggesting that all the tutors understood CBC more or less in ways that indicate a curriculum which emphasises a
pedagogical practice characterised by weak regulative or power relations between teacher and student (or between tutor and student-teacher). For example, weak regulative rules were manifested by the tutors’ use of various communicative terms that ‘masked’ or ‘blurred’ the asymmetrical power relation between teachers and students involved in the teaching-learning process. The tutors masked the power relations in the way they defined CBC and its relevant teaching approaches and methods. For instance, as we have seen in the results chapter, they understood CBC as a curriculum emphasising pedagogic practices based on the pedagogic identity of the teacher, e.g., as ‘a facilitator’, ‘a guide’, ‘a coach’ or ‘a co-learner’.

Therefore, unlike the teacher-centred approach, which is characterised by authoritarian instructional practices based on explicit hierarchical power relations, the understandings held by the tutors reveal that they view CBC as a curriculum which promotes pedagogic practices based on implicit power relations. Their views suggest a weak classification between teacher and students in the sense that the boundary between them in a pedagogic relation is blurred. In the context of CBC there is interaction and cooperation between the teacher and the student in the teaching-learning process. For example, in the interview accounts, the various statements made by the tutors suggested that they proposed an interchange of roles during the teaching-learning process. That is, the teacher becomes a learner of her/his students by pretending that they ‘don’t know anything’, instead they ask questions, and the learners also ask him questions. Thus, teachers’ roles become covert and almost invisible, giving the learner the opportunity to explore and construct their own learning. Moreover, the findings of the current study seem to suggest that the tutors characterise CBC as a curriculum constituting pedagogic processes which motivate weak framing in the sense that, during the teaching-learning process, students also have some control over the selection of what is to be learnt, of the sequencing and the pacing of the teaching-learning process. However, in general terms, the tutors’ proposal of invisible pedagogic practices contradicts other scholars who highlight the importance of visible pedagogy. For instance, Hattie’s (2009) conclusion from meta-analyses of studies, which favour active and guided instruction, rather than offering unguided, facilitative instruction and teachers’ role as a facilitator.

Although the current study did not focus directly on the question ‘What do you mean by teaching?’ as Fox (1983) did, when looked from the perspective of personal theories of teaching proposed by (Fox, 1983) the findings reveal that the tutors’ understandings are consistent with developed theories. The tutors’ descriptions of, for example, relevant teaching-learning approaches (e.g., a learner-centred approach where a teacher becomes ‘a facilitator’, ‘a guide’, ‘a coach’, ‘a co-learner’ or ‘a resource provider’), reflects what Fox referred to as developed theories of teaching (i.e., travelling & growth theories). For example, travelling theory treats a subject as a landscape to be explored by the student while the teacher is viewed as a travelling companion
or expert guide, whereas the growth theory focuses more on the intellectual and emotional development of the learner (ibid.). According to Fox (1983), developed theories place a great deal of emphasis on the activities of students and the contributions they make to their own learning. The teaching strategies consistent with developed theories are those which put much emphasis on ‘experiential learning’, such as simulation, role-play and games or projects.

Nevertheless, the understanding held by the majority of the tutors of CBC as a curriculum oriented towards enabling learners to be creative, practical, and applying the education they have acquired in solving real problems at work and in daily life and a recognition of learner-centred methods as an appropriate approach to enable the development of such abilities is an understanding more or less consistent with various scholarly works on CBE and learner-centred pedagogy (e.g., Darling-Hammond, 2000; Kouwenhoven, 2003; Seezink & Poell, 2010; Tilya & Mafumiko, 2010; and Weimer, 2002) as well as the rhetorical assumptions and propositions laid down in the official pedagogic texts such as curriculum documents, particularly the curriculum for diploma in teacher education in Tanzania (MoEVT, 2007a). For example, the diploma curriculum for teacher education emphasises that the reviewed curriculum, which is now competence-based “…is geared towards developing skills and knowledge essential for workforce with emphasis on the use of science and technology” (p. 1). The curriculum goes on to articulate: “Colleges are being challenged to produce student teachers who are competent, creative and innovative enough to solve problems…” (p. 1). Similarly, the individual subject syllabuses emphasise the use of learner-centred approaches during the teaching-learning process. For instance, the biology pedagogy syllabus for diploma in secondary education (MoEVT, 2009a) stipulates that “The biology teacher should put more emphasis on the application of learner centred approaches and techniques…” (p. iv). As proposed by the relevant literature, the findings show that the majority of the tutors in this study acknowledged or recognized the CBC emphasis on the active involvement of learners in an interactive learning process through activities. This recognition might be explained by the fact that most syllabuses are explicit concerning what teaching approach should be employed within the context of CBC.

Concerning reasons for the CBC introduction into Tanzania the findings showed that the tutors held different understandings, which may also imply different ideologies about the issue. In the ‘external influences’ theme it seemed that the emphasis was that the CBC introduction was not an internal initiative but was rather due to influences from powerful nations and/or transnational organisations. In this case the tutors were fairly critical of the policy. The findings reveal that in other themes, the tutors held the view that the introduction of CBC was an internal initiative, implying that Tanzania willingly changed the curriculum for the reasons pointed out above (other than external influences). These findings echo the debate on why and how countries around the world adopt global education ideas into their education
systems. For example, do countries willingly embrace a globally intended curriculum, or is it imposed by powerful actors? Based on Anderson-Levitt (2008), different perspectives have appeared from different traditions (e.g., modernization theorists, World-system theorists, World-culture theorists, and postcolonial theorists) providing competing answers to such questions. For instance, on the one hand, modernisation theorists argue that the emerging global curriculum ideas have appeared in response to the demands of modern technology and represent a curriculum well situated to the current needs of nations and their students. On the other hand, World-system theorists argue that some countries adopt a global system of education not because it is the best way given their contexts, but because it is imposed by dominant states in the world economic system whose interest it may serve. To World-culture theorists, nations have more or less freely adopted a global culture of schooling (ibid, p. 355). In short there are competing ideas about this question that yet seem to provide partial answers.

A rather mixed picture that emerged from the findings about the reasons why CBC was introduced in Tanzania suggests uncertainty among the tutors about the reasons for this. Although these differences in understanding did not go by teaching experience, they might possibly be explained by a lack of adequate education about the reform, resulting in uncertainties. This explanation is in line with other scholars (e.g., Anderson-Levitt, 2008; Meyer, 2006) who observe that sometimes local actors (especially in systems characterised by a top-down hierarchy of supervision - as is the case in Tanzania) may feel ambivalent about educational reforms, simply because they may not be sufficiently involved in decisions as well as not properly educated about such reforms. Nevertheless, the uncertainty among the tutors might be a reflection of the competing ideas about this question, as discussed above. Uncertainties in this regard may have practical and political implications, too. Practically, it may mean that less attention will be directed to the educational change, for which reason the tutors (especially those who viewed its introduction as due to external influences) would retain the traditional way of doing things, maintain the status quo. The situation might result in sending unclear messages to the student-teachers in that regard, leading to multiple effects in terms of less attention to the educational change. From a political point of view, it would mean that the educational desires may not be realized as intended. The situation found in the current study points to the need to make the reasons for the introduction of the CBC reform in Tanzania clear to these important actors.

The current study brought out tutors’ understanding of the pedagogical skills required for teachers to effectively implement CBC in schools. The tutors mostly referred to the skill of mastery of content (subject matter knowledge), the skill at identifying learners’ needs, and the skills of using different teaching methods (repertoire of teaching methods). In very few instances they referred to the category of sociology, which concerns the skill of knowing the social context appropriate for learning a particular skill. As
presented earlier, the category of sociology insists that learning should be embedded in authentic situations. Important principles associated with this dimension include situated learning, a culture of expert practice, promoting intrinsic motivation, and exploiting cooperation. Sequence did not strongly feature in the interview accounts. Overall, tutors’ understanding is consistent with the cognitive apprenticeship model (Collins, et al., 1989), which emphasises the importance of considering such dimensions as content, teaching methods, sequence, and sociology in designing a powerful teaching and learning environment, which in turn will enable learners to integrate and use knowledge in solving realistic problems. As Seezink and Poell (2010) argue, such dimensions are relevant in the context of competence-based education and can be said to have strongly informed the normative theory of teaching and learning that has dominated CBC over the last few decades.

The findings of the current study partly concur with findings of a different but similar study by Seezink and Poell (2010) investigating the extent to which teachers had already incorporated the normative theory of CBE into their individual action theories. Although this study comes from a context different from Tanzania (i.e., the Netherlands), its findings also showed that teachers referred to all the four elements of the cognitive apprenticeship model – teaching methods, sociology, content and sequence. However, the findings of the current study differ from Seezink and Poell’s findings with respect to the emphasis seemingly placed by the teachers. In their study, teachers placed more emphasis on teaching methods and the sociological context of learning than on content and sequence. Contrariwise, in the current study, tutors placed more emphasis on content and teaching methods than on sociology. These findings might be partly explained by the nature of current curriculum documents such as syllabuses. These place much emphasis on content and teaching methods. Thus, the tutors were more focused on teaching methods and learning content because they felt these elements were most insisted on by the syllabuses. It is also possible that the sociological context of learning and sequence is simply not prominent to the tutors, who were themselves not educated within that system. It might also be due to their education, as most of them seemed still struggling to understand while moving towards the new roles and tasks associated with competence-based education.

The skill of ‘sociology’ is perhaps among of the most important to be possessed by teachers in the context of CBC, whose emphasis was missing in the former content-based curriculum. It is a skill to identify or design an appropriate realistic environment for learning a particular competence. It concerns embedding the learning process in authentic situations/environments. The sociology dimension has received increased attention by scholars in the recent past (e.g., Kouwenhoven, 2003; Seezink & Poell, 2010; Tilya & Mafumiko, 2010; Wong, 2008; just to mention a few). For example, Wong (2008) explains that what is central to CBE is not only setting clear learning objectives around which all learning process is focused but also establishing the conditions and opportunities that would facilitate the achievement of those
essential outcomes for all students. Speaking of establishing conditions and opportunities implies considering the context or the environment appropriate for the teaching and learning of particular skills and for the development of attitudes of the appropriate kind.

The current study brought out new dimensions of pedagogical skills which, according to some of the tutors, are also relevant and thus important for teachers to possess in the context of CBC. They include: tolerance, hardworking, and reading beyond student requirements; as well as the skill of flexibility towards adopting changes. These are understood as important teachers’ skills in accordance with CBC demands: giving the learners enough time to practise what they are learning, hardworking, reading beyond student requirements, and flexibility to adopt and try new ideas and practices. However, what was missing in the tutors’ statements was the role of assessment skills, particularly those of formative assessment. This may mean either that they were unaware, place little importance, or do not see the significance of assessment as an integral part in the context of CBC. Educationists (e.g., Wolf, 1995) suggest that, since the ultimate goal of CBC is on learning and the application of educational experiences in real-world problem situations, assessment becomes an important component. In the following part, I discuss findings about the tutors’ instructional practices.

7.2 Tutors’ instructional practices when training student-teachers to implement CBC

Despite tutors’ interpretations of CBC in ways that suggested a curriculum promoting a pedagogic practice based on implicit or blurred power relations as well as weak framing, findings about their instructional practices gave a different picture. As it was presented in the results chapter, the findings revealed lecture-dominated instructions, characterised by explicit hierarchical power relations. The tutors maintained the authoritarian kind of instructions. In most lessons the tutors controlled the regulative rules (e.g., rules or norms of social order/conduct) in the classrooms, and student-teachers were to follow what was directed by the tutors. The majority of the tutors (except one) retained control over most of the pedagogic aspects, e.g. the selection of content, sequence and pacing of instructions as well as the criteria of evaluation. These instructional practices could be described as characterised by strong classification and framing, suggesting more visible pedagogic practices as opposed to invisible pedagogic practices, which seem to be emphasised by the CBC and its embedded learner-centred pedagogy. We also learn from the findings that practical learning experiences or ‘experiential learning’ in authentic environments were largely lacking. This shows that most of the training is theoretical and takes place within classrooms.
It would be fair to say that the tutors’ understanding of the CBC and its normative theory did not correspond to their actions. For example, while the tutors’ understanding regarding relevant teaching approaches for CBC echoes what Fox (1983) calls developed personal theories of teaching, i.e., travelling & growth theories (cf. earlier discussion on tutors’ understandings) their actions reflect simple theories of teaching, i.e., the transfer theory, which treats knowledge as a commodity to be transferred from one vessel to another, or at least the shaping theory, which treats teaching as a process of shaping or moulding students into a certain predetermined pattern (cf. Fox, 1983). According to Fox, the essential element of simple theories is that the teacher is in total control of the commodity (knowledge, skills and attitudes) being transferred (e.g., transfer theory) or of the shape and size of the finished product (e.g., shaping theory). The important difference between simple and developed theories is that the latter recognise that students make significant contributions not only to the process and pace of their own learning, but also to the direction and the objectives of learning.

The inconsistency between understanding and practices was in accordance with a similar previous study in the Namibian context by Nyambe and Wilmot (2008), which found that although the interpretations of learner-centred pedagogy held by teacher educators were rooted in the essential rules of an invisible pedagogic practice, classroom observations data contradicted their views. The study found overall instructional practices which were underpinned by strong classification and framing relations over the regulative and instructional aspects. Based on Bernstein (1990, 1996/2000), strong classification and framing are unlikely to encourage better learning (deep learning, in particular), as students are not given much freedom and opportunities to explore, investigate, test and construct their own knowledge and meanings. Accordingly, strong classification and framing do not provide opportunities for students to take control of and contribute to their own learning. However, the lessons of one newly qualified tutor in the current study were characterised by student-teachers having control over the pacing and sequencing of the teaching-learning process. Consequently, a weak procedural framing allowed several parallel interactions in the classroom. This fact is consistent with the suggestions of other scholars (e.g., Bernstein (1990, 1996/2000; Lindblad & Sahlström, 1998) that a weakened procedural framing allows for increased possibilities of interaction for the students. Similarly, Morais and Neves’s (2001) study found that weak classifications and framings are essential conditions for learning, especially in aspects of the pedagogic process such as selection, sequencing and pacing. The specific instructional practices of this newly qualified tutor could be explained by the tutor’s personal resources, such as motivation. This shows that the personality of the teacher makes a significant contribution and is thus important.

The strong classification and framing depicted in the tutors’ instructional practices could be partly explained by the social structure that characterised the educational process in the Tanzanian society for many years. The
The educational process in the Tanzanian school system could be described as one where the social structure is based on the rule ‘things must be kept apart’, characterised by authoritarian principles, leaving the teacher with power and control in the pedagogic interaction. Arguably, this could be traced across different levels of education in Tanzania and thus, could be considered as the traditional pedagogic practices. In his analysis, Bernstein (1990, 1996/2000) relates the concepts of classification and framing to two ideal types of social structure. One is based on the ‘things must be kept apart’ rule. The stronger this rule, the stronger the classification and framing which control the transmission. In this case, control is explicit and appears to be inherent in a formal position. The other type of social structure is based on the rule that ‘things must be kept together’. In this case, the control is implicit and appears inherent to a person and not to a formal position (ibid.). According to Bernstein, socialisation within this rule encourages spontaneous behaviours, the manifestation of social relations and their questioning, but the social types produced are not strong or well marked. The structure of socialisation reflects, therefore, the given classification and framing relations. The majority of the tutors in the teachers’ colleges in Tanzania were socialised into a society characterised by an education process based on the rule that ‘things must be kept apart’. Therefore, it is possible that the form of socialisation they received translates into the given values of classification and framing depicted in their instructional practices, and that the tutors are having difficulties in adjusting to the new rule based on ‘things must be kept together’, which seems to be emphasised by the new CBC curricula in Tanzania. Although this point was not mentioned explicitly by the tutors, it could exist implicitly. Bernstein (1996/2000) makes it explicit that, depending on the social structure that underlies a given society, given principles of the distribution of power and social control are generated, which will, in principle, translate into given values of classification and framing in pedagogic practices.

Further, the strong classification and framing depicted in the tutors’ instructional practices could be partly explained by syllabus overload and by insufficient instructional time allotted in the college’s teaching timetables. The majority of the tutors complained about having many things to teach but little time to do so. This contributed to the tutors’ tendency to tightly control different aspects such as selection, sequencing, pacing and evaluation in order to finish the syllabuses on time.

In the context of CBC, formative assessment is given prominence. Emphasis is put on school-based assessment, rather than on the use of externally set examinations (Wolf, 1995). Not only that, but also, in the context of CBC, the assessment is made more realistic as it involves real-world tasks (actual practice or performance) (Kitta & Tilya, 2010). Contrariwise, the results of the current study showed that the assessment practice in colleges was chiefly theoretically based on written work or traditional paper and pencil work. For example, infrequent written assignments in groups, mid-term tests and terminal examinations were found
to constitute the predominant assessment strategies employed by the tutors. This shows that the assessment of student-teachers’ teaching competences is conducted mostly in a theoretical manner, emphasising the reproduction of knowledge. There was, furthermore, little evidence of the use of assessment data to improve subsequent instruction and student-teachers’ learning, as the majority of the tutors preferred to give group assignments only to be collected as portfolios and marked at the end of college term. Assessment practices like these may also imply that ‘competence’ is viewed as nothing but the possession of a series of desirable attributes in someone’s head. Thus, assessment is made to check whether someone possesses such mental attributes or not. As Hager and Gonzi (1996) observe, this kind of conception has a weakness, because it distinguishes between the possession of attributes and the application of the same in actual practice. Owing to this observation, an implication of these findings is that teaching and/or assessing student-teachers’ teaching competences in isolation from actual practice may create a further problem concerning how student-teachers will learn to transfer that learning to real teaching situations in classrooms.

Moreover, it appears that the major focus of assessment lies more on the preparation of student-teachers for their final examinations than on improving training and student-teachers’ learning. This practice is not consistent with what is suggested by scholars (e.g., Wolf, 1995) that in the context of CBC, school/college-based assessment (meaning continuous assessment during college training) should be the point of emphasis, as it would help tutors to identify instructional weaknesses and diagnose individual student learning problems. Looking from Bernstein’s (1975, 1996/2000) perspectives, assessment is one of the important components forming the ‘three message system’ (curriculum, pedagogy, and assessment) acting as an important agency of socialisation in any formal education programme. Following this, one would argue that if student-teachers are to be trained to implement CBC in schools, then formative assessment should involve the performance of real teaching. This might be an important cornerstone for nurturing desirable teaching competences in the student-teachers.

A possible explanation for the uniformity in the tutors’ assessment practices could be contextual factors such as the scarcity of resources, the number of student-teachers, tutor training and exposure on CBC. Apart from these factors, which were described by the tutors themselves, the tutors’ assessment practices might also be influenced by the nature of the documents containing official pedagogic texts such as syllabuses. The syllabuses seem to exert great influence on the tutors’ pedagogic practices, both on the teaching and assessment strategies employed. For example, as Table 7 shows, the biology pedagogy syllabus (MoEVT, 2009, p. vii) shows that practical assessment procedures (e.g., projects, practicals, and micro-teaching) are given less weight. They occupy only five per cent of the total assessment procedures recommended by the syllabus. The rest is occupied by theoretical assessment types such as tests, terminal and final examinations.
Table 7: Assessment procedures and the weighting for the biology pedagogy syllabus

<table>
<thead>
<tr>
<th>S/N</th>
<th>Assessment type</th>
<th>Frequency</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Test</td>
<td>4</td>
<td>05%</td>
</tr>
<tr>
<td>2.</td>
<td>Project/practicals/micro-teaching</td>
<td>3</td>
<td>05%</td>
</tr>
<tr>
<td>3.</td>
<td>Portfolio</td>
<td>2</td>
<td>05%</td>
</tr>
<tr>
<td>4.</td>
<td>Terminal examination</td>
<td>3</td>
<td>10%</td>
</tr>
<tr>
<td>5.</td>
<td>Final examination</td>
<td>1</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>50%</td>
</tr>
</tbody>
</table>

*Source: Biology pedagogy syllabus for diploma in secondary education (2009, p. vii).*

The syllabus for biology pedagogy contradicts the diploma curriculum document (MoEVT, 2007a), which emphasises a greater use of practical assessment strategies such as microteaching, SLTP, seminar presentation, practical session and projects. This observation further suggests that things are not compatible even in the curricula documents themselves.

The tutors’ instructional practices further demonstrate that the linking of college-based learning to its realistic application contexts in classrooms in schools is an exception rather than a rule. The results are generally in line with other previous studies of pre-service teacher education in Tanzania and in Sub-Saharan Africa in general (Hardman, Abd-Kadir, & Tibuhinda, 2012; Lewin and Stuart, 2003; Nnko, 2013; O’Sullivan, 2010; Paul, 2012; Vavrus, 2009), which found similar pedagogical practices among tutors. The findings show that the general model of teaching the student-teachers were being presented with was essentially transmission-oriented and thus inconsistent with the normative theory espoused by CBC. What are missing in the teachers’ colleges are situated learning opportunities that could give student-teachers opportunities for experiential learning and also link college-based learning to its realistic application contexts in schools. This further shows that few or no suitable models on which novice teachers can base their practices are provided. One important implication of the findings is that the tutors’ instructional practices might be sending contradictory messages to the student-teachers.

Lave and Wenger (1991) emphasised that learning is socially situated in practice. They claimed that “the important point concerning learning is one of access to practice as a resource for learning, rather than instruction” (p. 85). A similar view is given by Putnam and Borko (2000), who contended that teacher learning also has a social and situated dimension. They suggested that teachers learn a great deal from the social interaction and also learn in context as they experiment with practice in classrooms. These views are not very far from Bernstein’s (1996/2000) suggestion that weak framing within the pedagogic relation allows for students’ participation in practice, an important condition for the effectiveness of learning.

The findings revealed no significant differences in teaching approach from the discipline of teaching. Tutors from the discipline of natural and social
The same experience was revealed when data was scrutinised in relation to tutors’ academic status (e.g., between Master and Bachelor degree holders), teaching experience or age. The findings are in line with Stes, Gijbels and Petegem’s (2008) results, which showed no relationship between, e.g., teaching orientation and field of study, academic status, and experience. However, the findings contradict prior research by Lindblom-Ylänne, Trigwell, Nevgi, and Ashwin (2006) and Nevgi, Postareff, and Lindblom-Ylänne (2004), which showed consistent evidence that the disciplines affected teachers’ approaches to teaching. A general lack of differences in teaching approaches between the tutors from different disciplines in the present study could be explained by the relatively small sample involved in the study, compared to the large samples and quantitative methods employed in other studies (e.g., Lindblom-Ylänne et al., 2006 and Nevgi et al., 2004), which made it impossible to see the differences. The lack of differences in teaching approaches found in the current study may also be the result of the teaching culture that dominated the country. Regardless of disciplines, student-centred approach to teaching was not common in Tanzania, although the curriculum reform has embraced the concept of student-centred teaching. As Lindblom-Ylänne et al. (2006) observe, student-focused approach seems to be most sensitive to contextual influences. The standardised practices found among the tutors in the present study could be explained by the context of scarcity of resources, and the large number of students.

While the inconsistency between understanding and practices found in this study concur with some previous studies (e.g., Nyambe & Wilmot, 2008), it contradicts the findings of others. They (e.g., Fox, 1983; Kember, 1997, 2008; Kember & Kwan, 2000; Marton & Booth, 1997; Prosser & Trigwell, 1994; Trigwell, Prosser, & Waterhouse, 1999) suggest that teachers hold fairly stable epistemological beliefs about teaching and that such conceptions correspond to their teaching approaches. In other words, whichever theory teachers use to help them think about the process will affect the strategies they use and colour their attitudes to students (c.f. Fox, 1983). However, the mismatch between the tutors’ understandings and their actions in the current study raises a further question: to what extent, and under what circumstances can teachers’ individual action theories actually influence or predict their performance or actions on the job (see also Seezink & Poell, 2010). This, indeed, remains an open question. However, several possible explanations might be associated with the tutors’ instructional practices. As is discussed in the next section (section 7.3), the contextual cues are possibly more powerful factors explaining tutors’ instructional practices in the current study than their individual action theories are. In the following section, the findings about the third research question on contextual factors influencing tutors’ instructional practices are discussed in earnest.
7.3 Contextual factors influencing tutors’ instructional practices

The study identified several possible contextual factors that influenced the tutors’ understanding and their instructional practices. The contextual factors are what are referred to in this study as frame factors. These factors were organised into three broad categories – administrative frames, pedagogical frames, and physical and ecological frames. Administrative frames included the number of student-teachers admitted, the total time allocated for teaching, the interference of the teaching timetable, the college leadership, macro politics, demands by circulars, and the nature of national examinations. Regarding pedagogical frames, the findings revealed factors such as the availability of instructional resources, student-teachers’ negative attitudes towards learner-centred methods, the knowledge about CBC, the syllabus organisation, and the imbalance between the theoretical and practical parts. Physical and ecological frames included class size, the structure of some college buildings used as classrooms, college culture, and cooperation with external institutions. These findings reflect what Lundgren (1979) referred to as goal, frame, and formal rule systems, which, according to the author, are also important aspects to be considered in the implementation of change in the educational system.

According to the findings, the established frame factors did not operate in isolation but in complex interconnections, which together influenced the tutors’ practices. For example, the administrative frames such as the total time allotted for teaching were in a way connected with pedagogical frames, as they influenced the classroom teaching process in terms of, for instance, the amount of content to be taught, i.e. the degree of explicitness or details with which the information was offered to student-teachers, the pacing of instructions, teaching and assessment strategies to be employed, and possibly how the student-teachers learned.

Overall, the state of affairs regarding the administrative, pedagogical, and physical and ecological frames was disappointing to the tutors in their daily activities in the colleges. Findings such as the limited knowledge about CBC, the lack of instructional materials and the large class size were consistent with observations in previous relevant studies (NNko, 2013; Paul, 2012), which found that the implementation of CBC in teachers’ colleges was adversely affected by the same factors. For example, the findings indicate that most of the tutors felt that they only had a limited knowledge about CBC, which also gave them little confidence to talk about CBC in the classrooms. This also influenced them to feel less confident about the appropriateness of their practices. This suggests that tutors have a low pedagogical self-efficacy, which could be attributed to little or no training and professional support. This was evident when they expressed that they lacked the proper and adequate training in CBC which could have made them confident in training student-teachers in this regard.
The current study also reflected some findings by previous studies in Tanzania related to teacher training in general (e.g., Anangisye, 2010; Kitta & Fussy, 2013), especially on the issue of the low motivation among student-teachers admitted into teachers’ colleges and the negative attitudes towards both the teaching profession and the use of learner-centred methods. This acted as a stumbling block for the tutors against engaging in pedagogical practices inclined to using learner-centred approaches. This might also suggest that both tutors and student-teachers have a low motivation with regard to the use of learner-centred methods, which could be attributed to the unspecific socialisation into CBC, which was due, in turn, to their school experiences or educational background. Nevertheless, the findings echo previous international research and discussions about frame factors influencing the teaching process (e.g., Broady, 1999; Dahllöf, 1978; Linne, 1998; Lundgren, 1972, 1979; Raza, et al., 2012), even though the magnitude of the problem may vary with the context where the current study was undertaken. I will not dwell on describing the above frame factors, as that was done in the results chapter. The point is, according to the findings, that the factors exerted great constraints on the daily teaching activities of the tutors in the colleges. Overall, the frames were not yet in tandem with the demands of the new curriculum reform. Consequently, the frames limited rather than facilitated such pedagogical practices as the use of learner-centred teaching methods as well as other situated learning opportunities.

The findings further revealed that the tutors’ reliance on preferring teacher-centred, transmission-type teaching strategies to practical-oriented or experiential teaching strategies can be chiefly explained by such factors as the large numbers of student-teachers, the inadequate time allocated for teaching (and of course for tutors’ space for professional development) by the college teaching timetables, demands placed on them by circulars to finish a certain number of topics in the syllabuses within a certain period of time, and the availability of instructional resources. Such factors might also explain the continuous assessment practices of the tutors. Most of the tutors admitted to using oral questions in the classrooms, and, if possible, they gave group assignments to be marked at the mid-term or end of term. This was evident during the review of their teaching plans, as the majority of the tutors had very few or no records of assignments. This suggests that the tutors are too preoccupied to cover the content and meet demands on time, and that there is very little or no use of assessment data for improving teaching and learning. This tendency further reflects the substandard nature of frame factors and teaching processes in teachers’ colleges in Tanzania, on the one hand, and the dissatisfaction of the tutors, on the other. However, looking closely, some of the factors referred to by the tutors, for example, the inadequate time allocated for teaching might be difficult to accept at face value, but triggers many questions. For example, is the use of a particular method a question of time or skills?, or How can time, teaching method, and content be balanced? This
suggests that there might be other reasons at play that also strongly influence the tutors’ instructional practices, such as low motivation.

The current study brought out more issues which had not been raised explicitly by many previous studies of the CBC reform in teachers’ colleges in Tanzania but are nevertheless crucial frames to be considered on the basis of theoretical and other empirical evidence. These factors constitute the intangible components of the environment where teaching takes place, and whose effects can be indirectly seen in teaching and learning. They include the nature of national examinations, the college culture in general, relations with external institutions, and college leadership. Regarding the issue of national examinations, it was reported that questions in most of these examinations were still knowledge-based, measuring primarily reproduction of knowledge. Consequently, this influenced the tutors to preferably employ theoretical assessment strategies such as traditional paper and pencil tests and written assignments that were also knowledge-based so as to enable student-teachers to pass their final examinations. The finding reflects what was reported by Alphonce (2011), even though her study focused on secondary schools. She found that national examination papers in Tanzania were to a large extent still knowledge-based, assessing mostly lower order cognitive skills such as remembering. This implies that, like in secondary schools, examinations at teachers’ colleges are knowledge-based, indicating that national assessments are not yet aligned to CBC assessments. This sounds interesting and, in fact, difficult to understand. How come that the curriculum has been reformed in accordance with CBC but that national examinations are still content-based? The situation suggests that even NECTA is having difficulties in shifting from content-based to competence-based examinations. Perhaps this reflects a contradiction embedded in introducing CBC in general education, which raises a crucial curriculum question – how to align assessment with content and competence goals.

In line with Lundgren (1979), national examinations can be considered as part of the administrative frames or formal rule system, as they steer and regulate the way knowledge is assessed and demonstrated. Similarly, based on Bernstein’s (1975, 1990, 1996/2000) ideas, assessment forms part of the three message systems of schools (curriculum, pedagogy, and assessment/evaluation) that act as primary ‘social control’ agencies. Assessment defines what counts as valid realisation of knowledge. In that sense, it is apparent that they influence the selection of content and approaches as well as the effort and time devoted to teaching and learning. As the pressure on passing final examinations increases, college teaching becomes increasingly oriented towards preparation for the examination in the final year, which is knowledge-based. As a frame factor, national examinations exert significant power and control on tutors as well as student-teachers on the way they teach, assess and learn. Further, it appears that the nature of national examinations chiefly support the performance rather than competence mode of pedagogic practice. In brief, within the performance mode students are
required to reproduce a pre-specified knowledge and are assessed on the
deficit in their output (Bernstein 1975, 1996/2000). Competence modes,
Bernstein (1996/2000) points out, are expensive in terms of material
resources, extended teacher training, and the hidden time demands on
teachers. An implication of this finding is that it points to the need for NECTA
to reconsider the nature of examinations to make them consistent with the new
curriculum and pedagogy.

Nevertheless, the findings revealed such frame factors as the college
culture in general and the relation between the colleges and external
institutions. They revealed unhealthy conditions within these frames.
According to the findings, there was lack of shared beliefs and values among
tutors concerning CBC change. As reported in Chapter Six, there were mixed
feelings among the tutors as some of them received the change positively and
were trying to cope with it, while others received it in a critical way and did
not seem willing to change. Consequently, the lack of shared beliefs and
values hindered collaborative relationships and activities among them. This
situation could still be explained in the data by the manner in which the reform
was introduced, where the tutors were neither adequately involved in decisions
nor sufficiently educated in that regard. The issue of shared beliefs and values
has been pointed out by different scholars (Bascia & Hargreaves, 2000; Fink,
2000; Fullan, 1993; Hoban, 2002) as an important change frame in terms of
establishing a collaborative relationship among teachers. However, according
to these authors, this may be difficult to sustain when different subcultures
exist within an institution. Guskey (2009) argues that, however powerful the
curriculum may be, it will make no difference if shared in a context
unprepared to receive and use it. Nevertheless, the findings revealed a lack of
good professional cooperation and coordination with institutions external to
the colleges such as higher education ones. This seems to be a persistent issue
as the same is reported by Babyegeya (2006), Kitta and Fussy (2013). This
suggests that there a need to rethink the relation between these institutions
sharing a common goal.

The findings further revealed that the college leadership (the principals)
did not provide appropriate attention and support to tutors, e.g. by promoting a
shared vision for change as well as initiating and supporting the process.
Instead they were working hard to control the tutors and make things go as
planned or required. Consequently, such acts caused some tutors to make the
‘latent practical inference’ that the reform was not important and thus
refrained from dealing with it. These findings echo previous studies that have
demonstrated that a control-oriented political approach to school reform on the
part of the principals (e.g., preventing power sharing through unwillingness to
facilitate shared leadership and practising favouritism and exclusion has been
a major impediment to successful school reform (e.g., Cooper, Ehrensal, &
Bromme, 2005; Datnow & Costellano, 2003; Finnan & Meza, 2003; Scribner,
Sawyer, Watson, & Meyers, 2007). In contrast, successful school reforms
have been strongly associated with principals’ facilitative leadership and
specific political practices including empowering teachers, team building, challenging teachers to transform schools, and the like (Blase & Björk, 2010). In line with Zembylas (2010), change is not about forcing actors (e.g. tutors) to subscribe actively to new ideas, but rather a reform process needed to allow tutors to create space for themselves in order to work individually and collaboratively and find the best ways to reflect on their practice.

To sum up, the findings showed that the tutors’ instructional practices were largely explained by the various frame factors established. The findings are well in line with the idea built around the Frame Factor Theory. Based on Lundgren (1972, 1979, 1999), teaching does not depend merely on the discretion of the teacher. It is limited and regulated by forces such as administrative/organisational, pedagogical, e.g., the curriculum, as well as other social and structural frames. These frames, taken together, influence the teaching process and make teachers perform accordingly (Lundgren, 1999). What we learn further from the Frame Factor Theory is that reforms are often connected with changes in goals as well as other frames (Dahllöf, 1971; Lundgren, 1972, 1999). From these theoretical and empirical considerations of the findings of the current study, it appears that with regard to CBC reform in Tanzania, changes were considered more as part of the goal system (e.g., revising and issuing new curricula materials, especially syllabuses, issuing circulars and other directives requiring teachers to implement the reform) rather than to holistically consider the context within and outside the colleges, as discussed before. Further, in line with Henshall and Fontanez (2010), the government uses a strategy of imposing curriculum reforms to adapt to educational change, expecting that a curriculum change alone will be adequate to improve teaching. This further implies that the complex interconnections between different frames was not given due attention by educational policy makers and planners in Tanzania. Similar to the Frame Factor Theory, the complex interconnection of contextual factors has also been acknowledged by other authors (e.g., Datnow, et al., 2002; Fink, 2000; Fullan, 1993; Hargreaves, 2010) who observe that in the change process everything depends on or undermines everything else. The current study revealed that the contextual factors act collectively, not individually, to influence the tutors’ understanding of CBC and their instructional practices. In the next section, I discuss the findings with regard to the conditions that, according to the tutors’ perspectives, would help to establish a framework for long-term tutor learning to improve their instructional practices.
7.4 Conditions for establishing a framework for long-term tutor learning to support educational change

The very last question of the study was set out to explore, from the tutors’ perspectives, the conditions that would help to establish a framework for their long-term learning to support the educational change. In line with Hardman et al. (2012), this was in cognisance of the new reform that tutors would be responsible for both pre-service and in-service teacher training; they thus needed a sustainable framework for learning how to go about their new roles and tasks. The findings revealed that the tutors had various perspectives on this. According to the findings, the important conditions that were lacking in the teachers’ colleges, and thus needed to be established and strengthened included: i) establishing strong coordination and collaboration between educational institutions such as higher education institutions that offer teacher education and teachers’ colleges, and schools in the areas of research, as well as training and consultancy; ii) the issues of reflections/reflective practices; iii) collaborative learning activities within colleges; as well as iv) the establishment of an institution dealing with matters of educational change. The findings are consistent with ideas suggested by prominent scholars and researchers from the perspective of professional development (e.g., Hoban, 2002; Schön, 1983, 1987; Shulman & Shulman, 2004; Wenger & Snyder, 2000).

Regarding the issue of establishing strong collaboration between educational institutions, the findings showed that there has been a huge gap in communication between universities, teachers’ colleges and schools. Thus, to bridge the gap, it was suggested that collaborative action research should be established regarding important matters dealing with the current curriculum change and any other changes that will occur in the future, which should involve tutors, university scholars and school teachers. The tutors thought that collaborative action research could help in their learning to broaden their knowledge of new ways of acting and to acquire practical evidence of how different teaching/training strategies can be put into practice. The findings (e.g. on the need to establish collaboration) echo the idea of ‘communities of practice’ (Wenger, 1998; Wenger & Snyder, 2000). Communities of practice are groups of people informally bound together by shared expertise and passion for joint initiative, who deepen their knowledge and expertise in this area by ongoing interactions (cf. Wenger & Snyder, 2000). These groups may have regular meetings in which they share their individual experiences, discuss them and gain new knowledge of and new ways to organise their practice in a free-flowing manner. They may also be connected by e-mail networks. Communities of practice differ from other forms of organisations by being informal. They are informal in the sense that, they organise themselves, i.e. they form their own agenda and establish their own leadership (ibid.).
Membership in a community of practice is self-selected. Communities of practice differ from, for instance, a team, as the latter is often created by the management to complete specific tasks, and the group often disperses when the tasks have been finished (ibid.). Such communities can offer many advantages to individuals and their organisations by generating new lines of ideas, solving problems quickly, promoting the spread of best practices as well as developing people’s professional skills (Wenger, 1998; Wenger & Snyder, 2000; Wenger, McDermott, & Snyder, 2002).

Similarly, the idea of community has also been suggested by authors on teacher learning as an important condition for long-term teacher learning in the context of educational change (e.g., Hoban, 2002; Shulman and Shulman, 2004). According to Hoban (2002), in order to establish long-term change efforts, it is important that educators form a community to meet regularly and share ideas about teaching practice. He argues that when participants share their ideas with colleagues and listen to different perspectives, they gain a deeper understanding of the meaning of their own personal experiences. Therefore, in the context of the current study, the idea of communities of practice may complement the existing structure of depending on an unreliable ‘one-step workshop model’, which, according to the tutors, seemed unworkable. As we have seen, the idea of communities of practice primarily entails informally bound groups. The spontaneous and informal nature of these communities may sometimes make them resistant to supervision and interference. It is therefore, as Wenger and Snyder (2000) suggest, important for college management teams to formally recognise them and give them appropriate support, e.g. bringing the right people together and providing an infrastructure (e.g. time, and space and facilities) in which their communities can thrive.

The issue of collaboration through action research revealed in the findings might suggest that the tutors proposed learning by actions in authentic contexts. Thus, the situated learning perspective seems to be valued and proposed. The idea of situated learning will be discussed later in connection with the suggested collaborative learning activities within colleges. Nevertheless, the suggested collaboration with agents external to the colleges (e.g., universities and schools) through action research implies that the tutors recognise and value conceptual inputs as an important condition for their learning to support the educational change. ‘Conceptual inputs’ as referred to by Huberman (1995) imply the alternative ideas of or perspectives (usually from outside the group) on the way participants within a setting can frame their practice. Although reflections, the sharing of ideas and putting those ideas into practice help to gain a deeper understanding of what one does, the thinking may in this light be limited to the group and to actions within their own settings. To move beyond this, the group needs new ideas to extend their understanding of their practice – in other words, conceptual inputs (Hoban, 2002).
The findings also revealed that the tutors proposed the need to establish a culture of reflections or reflective practice among themselves in their daily teaching activities. Reflection was proposed mostly by experienced tutors. This could be due to their long experience in teaching; for this reason they have evidence of the value of making reflections about developing a greater understanding of teaching and improving one’s teaching performance. Generally, this finding might be interpreted to mean that the tutors not only recognise that reflection can serve as a personal strategy to improve teaching practice but can also be a source of knowledge for others, if there is a culture of sharing experiences. The tutors’ perspectives on the need for learning from experience through reflecting are well in line with educators such as Schön (1983, 1987) as well as Shulman and Shulman (2004). Based on Schön (1983, 1987), reflection involves rethinking about one’s own and other people’s practices to learn from their experiences, and it helps to cope with similar situations in the future. Schön (1983, 1987) identified two types of reflection. It can take the form of ‘reflection-in-action’, in which professionals make almost subconscious decisions about the best use of knowledge accrued from previous experiences, or ‘reflection-on-action’, which involves deliberate reflection after the experience. Similarly, Shulman and Shulman (2004) recognise reflection as an important condition in their model of ‘teacher learning communities’. They argue that accomplished teachers are those who are, for instance, “capable of learning from their own and others’ experiences through active reflection in and on their actions and their consequences” (p. 259). In general, in the context of educational change, reflection has been emphasised by many scholars. For example, Fullan (1993, 1999) argued that it is only through reflection at personal, group and organisational levels that teachers will begin to question their practice and think differently about teaching and learning.

Moreover, the findings revealed the need to establish collaborative learning activities within the college settings. Accordingly, these may include, e.g., demonstration lessons, documenting and sharing with colleagues, and discussing concrete examples of what worked well and in what situations or circumstances. As pointed out earlier, taken together with the issue of action research, the findings entail that the tutors proposed learning by actions in authentic contexts - situated learning. This proposal is also consistent with the idea of ‘teacher learning communities’ (cf. Shulman & Shulman, 2004), which stresses the whole idea of conceiving teacher learning and development within communities and contexts. Within the idea of teacher learning communities, Shulman and Shulman (2004) argue for the importance of a communal cluster that includes deliberations, collaboration, reciprocal scaffolding, and distributing expertise. Nevertheless, the tutors’ proposal of collaborative learning activities within the college settings echoes, in a general sense, situated learning perspectives (e.g., Lave & Wenger, 1991), which view workplaces as basic learning environments, and that the construction of
knowledge occurs through the active participation or engagement of learners in a social learning community.

The idea of learning communities and situated learning has been turned to use in the Tanzanian context, too. A recent study by Anney (2013) found that licensed science teachers in selected secondary schools learned and improved their understanding and practice of learner-centred pedagogy by participating in authentic teaching activities in school contexts as a community of learners with the help of a professional development intervention (PDI) that was developed (in collaboration between the teachers and an expert) and implemented in those schools. Licensed teachers in the context of Anney’s study entailed university graduates who after training in a non-accredited teacher education programme were licensed or certified to teach in secondary schools. Thus, the tutors’ ideas of establishing strong collaboration with external educators such as experts from universities, TIE, and even school teachers through action research as well as establishing collaborative learning activities within colleges seem to be possible alternatives to helping them to learn and improve their practices to support educational change in a long-term perspective. Collaboration with external agents may enhance expert support as well as conceptual inputs, whereas collaborative learning activities within colleges may enhance communities of practice and situated learning.

The above conditions proposed by the tutors are grounded on different perspectives on teacher learning. Some of them (like reflection) derive from a cognitive perspective in which participants rethink their practice to learn from their experience, while others, e.g., collaboration, which suggests learning communities, derives from a situated perspective. Arguably, it is possible to combine both perspectives and benefit from the advantages they offer. Hoban (2002) suggests a systems thinking approach that incorporates the central tenets of both perspectives by focusing on the relationship between and among personal, social and contextual conditions for teacher learning. Based on Hoban, we can summarise the revealed perspectives of tutors in a framework constituting a combination of such conditions as reflection, community, conceptual inputs, action, and institutional dealing with education change. The framework is represented in Figure 5.
This framework proposes that for tutors to learn to support educational change in a long-term perspective requires them to be reflective about their practices, to participate in regular conversations and experience sharing (e.g., by documenting and sharing concrete examples of what worked well and in what situations) with their peers as a community of learners, to seek alternative ideas from outside the group (e.g., from facilitators/experts from the Tanzania Institute of Education, universities, schools) through activities like collaborative action research, and from the institution dealing with the educational change in the form of conceptual inputs, to try out the new ideas in action and use experiences gained from such actions and feedback from peers to improve subsequent practices. Arguably, it is the interplay among these conditions that could establish continuity in the tutors’ learning process and improve their practices (see also Hoban, 2002 for a similar suggestion).

**User generalisability of the findings**
It is important to reflect on the question concerning the generalisation of the study findings. The issue of generalisability in qualitative research has often been viewed by researchers as something inappropriate or unwarranted (Eisenhart, 2009). In interpretive qualitative research, for example, generalisation has been constrained by the view of knowledge as context-based (Green, 1998). However, Eisenhart, (2009) makes the case that generalisations from a qualitative inquiry are not only possible but also
important. Several possibilities have been discussed by researchers, through which transferability or generalisability in qualitative studies could be achieved (cf. Eisenhart, 2009; Larsson, 2009). Following Eisenhart (2009) such possibilities may allow both internal (e.g. within the setting or group studied) and external generalisation (beyond the setting or group studied). For example, as discussed earlier, Larsson (2009) identifies three possibilities through which findings from qualitative research can justifiably be generalised or transferred. They include: generalisation through maximum variation of the sample, generalisation through context similarity, and generalisation through the recognition of patterns.

As reported earlier, in the current study a variation in the sample was considered. The study involved tutors with a diverse range of teaching experience (demonstrating varying stages of a teaching career), from the disciplines of science, social science, and languages. My experience as a Tanzanian and as a teacher educator, and my interaction with the literature and this research suggests that the tutors who participated in this study and the study contexts were fairly typical examples (in terms, e.g., of qualifications, teacher education and training received, resources available, classroom conditions, time available for teaching, budget allocation) or representative of government-owned teachers’ colleges and tutors in Tanzania. I have also provided a somewhat detailed description of the college contexts in which the study was undertaken. In this line, I am convinced that the findings generated are relevant and can be generalised not only to the teachers’ colleges involved in this study but also across different similar contexts in Tanzania. Moreover, I have provided a detailed description of the findings, warranting a possibility for the readers to generalise the knowledge claims through their recognition of patterns. Nevertheless, I leave it to the readers of this report to judge the generalisability or transferability of the generated knowledge to other contexts. The small sample involved may be a possible weakness of the study. Future research may also wish to take a large scale research approach and draw considerable attention to the random sampling technique to maximise the possibilities for generalisability.

### 7.5 Chapter Summary

This chapter discussed and interpreted the findings of the study. As we have seen in the discussion, in certain respects (e.g. regarding the meaning of CBC, its intentions, and reasons for its introduction) the tutors in teachers’ colleges understand the official pedagogic text (CBC) in relatively different ways and give it different meanings. Among other things, the recontextualisation of CBC in that ways might be explained by the little lack of orientation they had received. However, to a large extent the interpretations held by the majority of the tutors, particularly of teaching approaches relevant to CBC, seem to be consistent with the inner logic of CBC.
The discussion of findings with regard to tutors’ instructional practices showed that these tended to reflect pedagogic practices that contradicted their understanding of CBC, e.g. as a curriculum emphasising invisible pedagogical practices in general. This situation could possibly be explained by the several frame factors coined as administrative, pedagogical, and physical and ecological frames that revealed the unsatisfactory situation. As we have seen in the discussion, the above-mentioned factors served more as limits than facilitators of the training process of student-teachers. In addition, the social structure in which the tutors were socialised might be one of the explanatory factors. The chapter concluded with the discussion regarding the conditions for establishing long-term tutor learning to support the educational change. The discussion revealed that the tutors’ proposals seem plausible and are closely related to what other scholars are suggesting as the current thinking about strategies for teacher professional development. Most of the proposals lie within their realm, but for the strategies to exist and thrive they need to be nurtured and strongly supported by leaders in universities, teachers’ colleges and schools. The next chapter concludes the dissertation.
CHAPTER EIGHT: CONCLUSION AND IMPLICATIONS OF MAJOR RESEARCH FINDINGS

8.0 Overview

This final chapter constitutes the conclusion of the study. It presents concluding remarks in relation to major research findings, the implications of the findings (e.g., for decision makers, curriculum developers, principals and tutors in teachers’ colleges), and limitations and suggestions for future studies. In the following part, I begin with concluding remarks in relation to major research findings.

8.1 Concluding remarks in relation to major findings

8.1.1 Tutors’ understanding/interpretations of CBC

The findings revealed that in certain respects (e.g. the meaning, its intentions, and reasons for its introduction) the tutors in teachers’ colleges understood the official pedagogic text (CBC) in relatively different ways and thus gave it different meanings, e.g. CBC as an application-oriented curriculum and CBC as an activity-based curriculum. For example, the findings revealed that some of the tutors interpreted CBC just as an activity-based curriculum, in the meaning discussed in Chapter Seven. The emphasis on the transfer or application of experiences gained to the new problem situation beyond classroom and subject contexts did not seem important to them. These results tell us that CBC is recontextualised by the tutors in different ways. The apparent disagreements among the tutors in terms of the understanding/interpretation of some issues regarding CBC, e.g. its meaning and the intentions behind and reasons for its introduction in Tanzania could be attributed to the relatively little external (e.g., from the MoEVT through TIE) and internal support (e.g., from the college administration) the tutors had
received in terms of education to comprehend and go about CBC in training student-teachers. In addition, the mixed feelings revealed by the findings, e.g. that some tutors received CBC positively while others did not, might be a contributory factor. The reason could be that some tutors were uninterested and did not take time to read and reflect on the meaning of CBC. The findings also reflect the wider international debate on why countries around the world adopt global education ideas into their education systems, which shows competing ideas that yet seem to provide partial answers.

As discussed in Chapter Seven, the apparent disagreements might be partly explained by the fact that not even the official curriculum documents define CBC explicitly, but are relatively implicit, leaving room for various interpretations. These findings are remarkable and further confirm that an important reform in the national curriculum was introduced, while the important implementers at the local/practice level received little or no education about it. On the other hand, the results also show that the recontextualisation process is not as linear as policy makers seem to assume. There might be a diversity of interpretations, especially when the policy is introduced in an ad hoc fashion. The findings of this study highlight the possibility for the existence of various interpretations of the curriculum policy by tutors in teachers’ colleges in Tanzania. An overall implication of the differences in understanding the CBC meaning as revealed by the study (especially the understanding of CBC as just activity-based curriculum) is that the primary CBC meaning assumed in the official curriculum documents may be transformed from focusing on what the student is becoming as a person and a functioning member of the society into emphasising nothing but ‘learning the subject matter through activities in the classroom’. In addition, these findings echo the idea that re-contextualisation and, more specifically, re-interpretation takes place as the curriculum ideas move between actors such as policy makers, curriculum developers, and teachers in colleges and schools. Each group may perform the role of agency and autonomy. This challenges the implicit assumptions by policy makers and curriculum developers in Tanzania, who tend to assume a linear and top-down line of thinking in the implementation of the curriculum policy.

Despite these differences, the understandings held by all the tutors, particularly of teaching approaches relevant to CBC, were to a large extent not only rooted in the inner logic of CBC but were also consistent with rhetorical assumptions and recommendations included in the official pedagogic texts such as the curriculum for diploma in teacher education in Tanzania (MoEVT, 2007a). This may imply further that, theoretically, the majority of the tutors are conversant with CBC in that regard. Therefore, it can be concluded that the majority of the tutors in this study were able to recognise the features and demands of CBC.

Finally, the findings showed that the pattern of understanding in almost all investigated respects does not follow teaching experience, the teaching discipline/subject of specialization (e.g., between natural and social sciences),
academic status, or age. The most likely reason for this could be the scarcity of orientation in terms of the education that all the tutors had received. This could also be explained by the fact that the study involved few participants (only twelve tutors), which may be considered a limitation of the current study. However, in terms of tutors’ understanding of CBC, the current study brought out new interesting knowledge which had not been reported by previous similar but different studies conducted by Nnko (2013) and Paul (2012) in Tanzania. Arguably, this is an original knowledge contribution in the context of Tanzania. Nevertheless, the findings could be useful in other countries and systems as lessons from Tanzania.

8.1.2 Tutors’ instructional practices
The findings with regard to the majority of the tutors’ instructional practices tended to reflect pedagogical practices that contradicted their understanding of CBC, e.g. as a curriculum emphasising practices based on weak power and control relations between agents, or invisible pedagogical practices in general. Conceived of as a continuum, the tutors’ instructional approaches could be described as more, although not exclusively, teacher-centred, theoretical, and maintained authoritarian kind of instruction than the student-centred approach which the new curriculum seems to emphasise. Lecture-dominated instructions characterised by strong framing and classification were paramount in the training process. Following Bernstein (1990, 1996/2000), strong classification and framing may not provide opportunities for student-teachers to take control of and contribute to their own learning. Conversely, a weakened procedural framing might allow for increased possibilities of interaction among student-teachers and thus contribute to successful teaching and learning (see also Lindblad & Sahlström, 1998; Morais and Neves, 2001). Overall, the formative assessment strategies employed by the tutors were theoretical, involving mainly traditional paper and pencil. There was little evidence of the use of assessment data to improve subsequent teaching and student-teachers’ learning. This means that most of the training happens theoretically inside classrooms within the college environments. The general model of teaching that the student-teachers were being confronted with was essentially transmission-oriented.

The results are an important contribution towards our understanding of how teaching is handled by tutors in diploma teachers’ colleges in Tanzania where CBC policy is promoted. The inconsistency between understanding and instructional practices found by this study was explained in the data via several frame factors, coined as administrative, pedagogical, and physical or ecological frames. This further suggests that while tutors’ abilities to interpret the official pedagogic texts (CBC) and train student-teachers may depend on their possession of appropriate recognition and realisation rules (e.g. knowing the context and demands of CBC), the macro and micro contexts within which tutors operate regulate the extent to which they can train student-teachers. The context, therefore, seems to be a powerful factor influencing the tutors’
instructional practices and thus need to be accorded due attention. The findings supported the theoretical assumptions about frame factors and teaching processes advanced by the frame factor theory.

Furthermore, as we have seen in the discussion, the tutors’ instructional practices which were characterised by strong framing and classification might as well be explained by the very nature of the social structure based on the rule ‘things must be kept apart’ (cf. Bernstein, 1990, 1996/2000) into which the tutors had been socialised (see the discussion part for clarification of this point). This might then trigger a further question of the cultural relevance of the pedagogic approaches that seem to be emphasised by the new CBC curriculum, which principally is based on the rule ‘things must be kept together’.

8.1.3 Contextual factors influencing the tutors’ instructional practices

The findings revealed that there was an interplay of numerous contextual factors which exerted great constraints on the daily instructional practices of the tutors. The factors were categorised as administrative frames (the number of student-teachers admitted, the total time allocated for teaching, interference with the teaching timetable, college leadership, macro politics, e.g. demands by circulars, and the nature of national examinations), pedagogical frames (the availability of instructional resources, student-teachers’ negative attitudes towards learner-centred methods, the lack of knowledge about CBC, syllabus organisation, and the imbalance between the theoretical and practical parts), as well as physical and ecological frames (class size, the structure of college buildings used as classrooms, the college culture, and cooperation with external institutions).

These findings tell us that there are factors originating both from outside the colleges – the macro level – i.e., factors due to the government/education system, and others from within the college and classroom contexts. For example, such factors as the large number of student-teachers admitted, macro politics, e.g. demands by circulars, and the nature of national examinations could be understood as macro level issues, as they originate directly from the central government through its agents (e.g., MoEVT, TIE, and NECTA) and influence the tutors’ practices in colleges. For instance, the findings revealed that the nature of national examination questions seemed to greatly influence the tutors’ assessment strategies, as they were still knowledge-based, i.e., requesting the reproduction of knowledge. This steered the tutors to employ mostly theoretical assessment strategies like traditional paper and pencil tests as well as written assignments that were also knowledge-based and aimed to make student-teachers pass their final examinations. Though the issue of the nature of national examinations had not been raised explicitly by previous similar studies in teachers’ colleges in Tanzania (e.g., studies by Nnko (2013) and Paul (2012)), it constitutes another important frame to consider. The findings suggest that even national examinations are inconsistent with CBC. This question, however, needs further exploration.
As can be seen from the above frame factor categories, some of these factors prevailed within the colleges. However, factors such as the large number of student-teachers, the inadequate time allocated for teaching (and of course for tutors’ space for professional development) by the college teaching timetables, demands by circulars to finish certain elements of the syllabuses within a certain period of time, and the availability of instructional materials were reported to have greatly influenced the tutors’ overreliance on employing mostly teacher-centred, transmission-teaching strategies rather than practical-oriented or experiential training strategies.

Some of the frame factors which emerged in the current study may not be surprisingly new but are important as they enable us to understand the reasons why the tutors acted the way they did. Further, they enable us to understand what and how contextual factors influence teacher training processes. This may also be helpful in the future when similar reforms are introduced in Tanzania. It can be concluded that, overall, the findings in this regard revealed the unsatisfactory situation of these contextual factors (frame factors). From theoretical and empirical considerations, it appears that with regard to the CBC reform in Tanzania, changes were made at least in the goal system (e.g. only changing the curriculum and issuing new syllabuses) rather than in other important frames as well.

8.1.4 Conditions for establishing a framework for long-term tutor learning to support educational change
With respect to this question, findings have indicated that the important conditions that were lacking in the teachers’ colleges, and thus may need to be established included: i) establishing strong coordination and collaboration between educational institutions such as higher education institutions offering teacher education, teachers’ colleges, and schools in the areas of research, training and consultancy; ii) the issues of reflections/reflective practices; iii) collaborative learning activities within colleges; as well as iv) the establishment of an institution dealing with matters of educational change. These findings were consistent with ideas suggested by other scholars and researchers (e.g. Hoban, 2002; Schön, 1983, 1987; Shulman & Shulman, 2004; Wenger, 1999; Wenger & Snyder, 2000). Based on Hoban (2002), the tutors’ ideas could be theorised in a framework forming a combination of such conditions as reflection, community, conceptual inputs, action, and institutions dealing with education change. The tutors’ ideas seem relevant and, as noted earlier, are closely related to what other scholars suggest as the current thinking about strategies for teacher professional development.
8.2 Practical contribution

From the practical applicability standpoint, the findings of the current study are of particular importance for educational development in Tanzania. The findings have several implications to educational stakeholders in Tanzania, particularly educational planners and decision makers at MoEVT, curriculum developers at TIE, teacher educators in universities, and principals and tutors in teachers’ colleges. However, the findings of the current study reveal that most of the happenings in the teachers’ colleges were connected to the context. Several practical implications can be drawn from the findings as given below.

8.2.1 Implications for decision makers and curriculum developers

The findings of the current study reveal that numerous contextual factors cited by the tutors have a bearing on their instructional practices. The factors limited rather than facilitated their daily teaching activities. The findings also reveal that the frame factors did not operate in isolation but in complex interconnections, which together influenced the tutors’ understanding and instructional process as a whole. Thus, taken together, the findings reveal the interdependence between context and practice. This means that these factors may need a holistic approach towards addressing them. Therefore, as for now and the future, policy makers at the MoEVT and curriculum developers at the TIE may need to consider and address the contextual factors unfolded in this thesis holistically, not simply technical dimensions such as preparing and issuing new syllabuses and circulars enforcing the implementation of the change. This is in line with other scholars’ (e.g., Bascia & Hargreaves, 2000; Fink, 2000; Hargreaves, et al., 1997; Hoban, 2002, Lundgren, 1999) observations as we have seen in the discussion Chapter.

I would like to mention some specific issues that need attention by decision-makers. The findings revealed the issue of the large number of student-teachers admitted into teachers’ colleges, which does not match the resources available in colleges, such as classrooms and other facilities. The implication of this is that the government should observe through the MoEVT the carrying capacity of the colleges. For example, the curriculum document for diploma in teacher education (MoEVT, 2007a) recommends 35 student-teachers per class. It also establishes standards required for the implementation of the diploma in the teacher education curriculum. It is high time for the MoEVT to enforce these policies strongly. This is in observance with the fact that when the number of student-teachers admitted is reduced, tutors may refrain from using other buildings like assembly or dining halls whose structure were not meant for teaching. Generally, cutting down the enrolment would help to minimise the challenges and effects of large classes on tutors’ instructional practices. The government, through the MoEVT, should remember that quantity compromises quality.
Some matters emerged in the current study concerning the actual curriculum. For example, most of the tutors lamented the unrealistic time suggested by the curricular documents, such as the relation between the syllabuses and the prescribed content/topics and recommended teaching approach. Further, as reported elsewhere, the vagueness and imprecision of the official curriculum documents in defining CBC might partly explain the differences in tutors’ understanding of it, as revealed by the findings. These observations point to the need for curriculum developers at TIE (or any institution that will be responsible for curriculum development for teacher education) to revise the curriculum documents so that they clearly and consistently describe CBC and its underlying assumptions (e.g., meaning, intentions, and reasons for its introduction in Tanzania). This would minimise even the cost of curriculum developers for conducting in-service training only to tell tutors what CBC is. Moreover, in consultation with course tutors in teachers’ colleges, they should adjust the curriculum documents to create a constructive alignment between content, methods, and the time recommended. However, as discussed elsewhere in this thesis, the question of teaching approaches is very complex. This means that in revising the curricula, curriculum developers should reconsider avoiding a polarization of teaching approaches, i.e., emphasising one approach at the expense of the other.

The findings of the current study suggest that the final examinations for diploma teacher education prepared by NECTA were still more knowledge-based, emphasising mainly the reproduction of content. Consequently, during their continuous assessment the tutors employed mostly theoretical assessment strategies like traditional paper and pencil tests, as well as written assignments that were also knowledge-based to ensure that student-teachers would pass their final examinations. Further, the nature of national examinations seemed to exert a great constraining influence on the way tutors approached teaching. The practical implication of these findings is that they point to the need for NECTA to rethink this traditional way of assessment. However, as pointed out earlier, a crucial curriculum question to consider is: How is assessment aligned to the content and competence goals?

8.2.2 Practical implications for principals and tutors in teachers’ colleges

To principals
Time was one of the major frame factors constraining the training process, as revealed in the findings. The suggested conditions for establishing a framework for long-term tutor learning also imply that time needs to be structured in the college timetables for tutors to reflect on and share their insights. In line with Hoban (2002), such conditions are strongly dependent on time to operate. To consider providing space in the college timetable for tutor learning is indeed a challenge to administrators (principals) in teachers’ colleges in Tanzania.
Furthermore, the college leaderships (the principals) did not seem to accord appropriate attention and support to the tutors in facilitating the training of student-teachers to implement CBC, for example by promoting a shared vision for change as well as initiating and supporting the process. Instead they were working hard to control the tutors and make things go as planned or required. An implication of this finding is that principals should acknowledge the significance of facilitative leadership and provide opportunities for the tutors to create their own space for coping with change or adopt an inquiry stance to their work. As discussed in Chapter Seven, principals’ facilitative leadership contributes to a successful reform (cf. Blase & Björk, 2010). It should be noted by the college principals that change is not about forcing actors (e.g. tutors) to subscribe actively to new ideas, but a reform process needs to allow tutors to create space for themselves in order to work individually and collaboratively and find the best ways of reflecting on their practice (cf. Zembylas, 2010).

Moreover, the findings revealed that the tutors proposed collaboration, both with external agents and collaborative learning activities within colleges. The implications of these results in practice is that there is a need to initiate collaborative action research and tutor learning communities so as to benefit from the advantages offered by such strategies. These strategies are within the realm of tutors, but they need support from college administrations. For the strategies to exist and thrive, leaders (management teams) in universities and schools are to be involved, too.

To tutors
The proposed conditions for establishing a long-term framework for learning to support the educational change reported earlier are quite relevant, and most of them are within the realm of the tutors themselves. This means that tutors need not wait for someone from outside to initiate them. If they wish to, they should organise themselves and start implementing such strategies. In addition to this, to enhance such practices, as Hoban (2002) notes, tutors need to embrace a common purpose for change and adopt a conception of teaching as an art or profession that will make them aware of the complex nature of their practice and provide a perceived need to learn more about the training of student-teachers.

Along with implementing the proposed conditions such as collaborative learning within the colleges, tutors may need to consider the idea of ‘learning studies’ suggested by previous studies such as a study conducted in a Tanzanian context by Msonde and Pang (2012). Through the idea of learning studies, tutors may form small learning study groups and share their experiences of the best ways to improve instructional practices when training student-teachers to implement CBC. In their learning study groups they can choose an object of learning (e.g. in terms of what training strategy they want to learn), design and implement lessons based on the desired object of learning, and then share the experiences gained from such lessons. Learning
studies have been found to improve teachers’ pedagogic practices in many respects (Msonde & Pang, 2012).

In line with Guskey (2009), tutors in teachers’ colleges are advised to remember that although time may be vitally important, simply adding more time for teaching and for tutor learning may not always make things better. What matters most is how that time will be used. This implies that even if time for regular conversations and the sharing of experiences will be organized for the tutors in colleges, an effective use of that time for that particular purpose is of the highest importance.

Other pedagogic transformations needed among the tutors may include a consideration of the ideas suggested by scholars such as Kitta and Tilya (2010), Wolf (1995), and Hager and Gonzi (1996) indicating that in the context of CBC, continuous assessment, which should be made more realistic, involving actual performance, is more important than relying on theoretical assessment strategies only. Thus, tutors may need to consider practical assessment strategies such as observing actual performance/practice. Assessment data should be used effectively to improve subsequent instructions and student-teachers’ learning. Tutors also need to take into consideration the suggestion that experiential learning strategies are vitally important for developing the desired teaching competences of some of the student-teachers.

Generally, the study provides useful insights for decision-makers at the policy development and enforcement level, curriculum developers, and principals and tutors in teachers’ colleges. Using the theoretical ideas from Bernstein’s pedagogic device and Lundgren’s frame factor theory, the study stimulates further research, discussions and reflections on curriculum issues and teaching in teacher education colleges in Tanzania. The study also forms a contribution to the international research field of curriculum reforms and teaching in teacher education, by bringing in more insights and lessons from Tanzania. For example, to those interested with comparative curriculum studies.

8.3 Study limitations and direction for future research

Although the current study may have yielded some interesting and potentially valuable findings, further research is indispensable, particularly in the context of Tanzania, due to the need to broaden the knowledge and understanding of the issues involved in this study. Further research is particularly important due to the limitations emerging from methodological and theoretical setbacks discussed as follows.

8.3.1 Limitations

First, the findings are limited by the choice of sample. For reasons of feasibility, the study involved twelve purposively and conveniently sampled
methodology tutors. Thus, the sample size can be criticised for being small. Although it was selected from the disciplines of natural and social sciences, the ability to draw generalisations from this study might somehow be limited because of the purposive and convenience sampling strategies utilised.

A few comments need to be made about the findings. The study spanned one term of the college year. A possible weakness is that tutors were observed on a few occasions in one term of the college year. This might have limited the findings about tutors’ instructional practices, regardless of the possible influences of contextual factors. This is undoubtedly a limitation that might have contributed to, for example, not finding differences in teaching approaches among the tutors. I acknowledge that the information generated would have been richer had the study spanned a relatively long time, e.g. one or even two years to cover the whole teacher training cycle, including field-based training. Moreover, given the importance of using multiple sources of data for obtaining better information and cross-checking findings (cf. Bryman, 2012), I aimed to review as many tutors’ teaching plans as possible. However, as reported elsewhere, there were some difficulties in obtaining enough records of assignments to analyse, as the tutors possessed a limited number of the same. Nevertheless, I believe that using multiple methods of data generation such as interviews, observations, and document reviews, as well as considerations of other quality aspects discussed in Chapter Five, minimised the effects of the limitations discussed.

The thesis can also be criticised for using limited previous research on the context of the study. Such research would have contributed a greater understanding of the complex issues involved in the study as well as a greater understanding of the findings. It may, for example, be criticised for presenting the previous curriculum reforms in a harmonious way and not sufficiently problematised in relation to teacher education. This lack of inclusion was mainly due to the limited research on curriculum reforms and teacher education conducted in Tanzania. The findings of this study may thus inform education practitioners and future research in this regard.

Nevertheless, the theoretical perspectives motivated in this study had some limitations, as they fell short of addressing some of the issues which were investigated in this study, e.g. the question about conditions for establishing a long-term framework for tutor learning. Thus, they had to be complemented by other relevant literature on teacher learning perspectives (e.g. Hoban, 2002; Shulman & Shulman, 2004; Wenger & Snyder, 2000). Nevertheless, this limitation is partly due to the question being added later on as the study progressed. Given these limitations, it is important to acknowledge that there might be alternative or more plausible ways of interpreting the findings obtained. Possible avenues for future research are recommended hereunder.
8.3.2 Direction for future research
On the basis of the findings and the limitations in the present study discussed above, I recommend future researchers and studies to engage in exploring and extending current findings. Future research might take different directions including the following.

First, even though the current study has yielded important and interesting results, further research of a much longer duration, covering observations of college-based and field-based training and involving many tutors, might be needed to generate a complete picture of tutors’ instructional practices in diploma teachers’ colleges.

Secondly, since the current study focused on diploma teacher education alone, future directions in related research might take a different approach by replicating a similar study but involving all levels of teacher education in Tanzania – a cross-sectional study (e.g. certificate level, diploma and university teacher education). This would help to gain a much broader understanding of how teacher education deals with curriculum reforms, the CBC reform in particular. The writing of this thesis has aroused curiosity and triggered questions about and dilemmas involved in this transnational curriculum idea in the school context of Tanzania. I plan to continue to problematise this issue in order to reach further understanding of what consequences have emerged in the Tanzanian education system.
REFERENCES


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APPENDICES

Appendix A: Sample Research Permit Letter

UNIVERSITY OF DAR-ES-SALAAM
OFFICE OF THE VICE-CHANCELLOR
P.O. BOX 35091  •  DAR ES SALAAM  •  TANZANIA

Ref. No: AB/3(B)
Date: 12th September, 2013
To: The Regional Administrative Secretary,
Morogoro Region.

UNIVERSITY STAFF AND STUDENTS RESEARCH CLEARANCE

The purpose of this letter is to introduce you Mr. Ibrahim Nzima who is bonafide member of staff of the University of Dar es Salaam and who is at the moment conducting research. Our staff members and students undertake research activities every year especially during the long vacation.

In accordance with a government circular letter Ref. No. MPEC/R/10/1 dated 4th July, 1980 the Vice-Chancellor was empowered to issue research clearances to the staff and students of the University of Dar es Salaam on behalf of the government and the Tanzania Commission for Science and Technology, a successor organization to UTAFITI.

I therefore request you to grant the above-mentioned member of our University community any help that may facilitate him to achieve research objectives. What is required is your permission for him to see and talk to the leaders and members of your institutions in connection with his research.

The title of the research in question is “Enhancing Competence-Based Curriculum (CBC) through Teacher Education in Tanzania: An Investigation of Tutors’ Knowledge of CBC and their Classroom Practices”.

The period for which this permission has been granted is from October, 2013 to May, 2014 and will cover the following area: Morogoro Region.

Should the area be restricted, you are requested to kindly advise him as to which alternative areas could be visited. In case you may require further information, please contact the Directorate of Research Tel. 2410500-8 Ext. 2067 or 2410743.

[Signature]

Prof. Rwakaza S. Mukandala
VICE-CHANCELLOR

Direct: +255 22 2410700
Telephone: +255 22 2410500-8 ext. 2001
Telefax: +255 22 2410078

Telegraphic Address: UNIVERSITY OF DAR ES SALAAM
E-mail: acrs@ujasa.tz
Website address: www.adms.ac.tz
Appendix B: Information for Participants Form

Would you like to participate in this study? My name is Ibrahimu Nzima, an assistant lecturer at the University of Dar es Salaam. Currently I am a Ph.D. student at Linnaeus University, Sweden. I am conducting a research about tutors’ understanding of Competence-based Curriculum (CBC) and the strategies they employ to train the student-teachers on how to implement CBC in actual classroom situation in ordinary level (O-level) secondary schools in Tanzania. This study is very important for the findings may have implications for policies and practice in that regard. Among other things, this study is expected to serve this purpose.

The study will involve interviews, direct classroom observations, and document review as methods of data collection. Interviews will be audio recorded and classroom observations will be video recorded. These will later be transcribed and stored in soft and hard copies, and will then be analyzed and put together completely anonymous. Information from all data sources will be handled confidentially and will not be accessed by anybody else, except the researcher, and will be used for the purpose of this research only. All audio and video recordings as well as interview transcripts will be kept until analysis and final report writing have been completed. For research purposes, this data will continue to be kept preferably for at most ten years so that reference can be made if need be. You can access your own data if you would like to. I am aware that audio and video recordings may make you feel uncomfortable, but I would like to assure you that these are just used to facilitate the process of data collection. Audio recording, for example, will help to smoothen interviews and avoid unnecessary disruption during our discussion. Video recordings will help our post-observation interviews for it may help us to recall important events during the teaching episode. Data collected will be reported in a Ph.D. thesis (and possibly in scientific journals) where individual responses cannot be identified. All identity data will be removed in this final report. The interviews are expected to last for forty minutes to one hour.

You have been selected from the methodology tutors at this college to participate in the study. Your participation into this study is completely voluntary, and you have the right to withdraw from the study at any time and rejoin the study if you wish. However, your participation is very valuable and will be appreciated because you are an important person who can provide relevant information to the study. You are free to ask questions on any aspect of the study that you think you need more clarifications and I will be happy to answer your questions. If you have read and understood all the information provided, and you agree to participate in the study, please sign a consent form attached.

Please you can contact me through the following address:
Email: ibranzima@yahoo.co.uk or ibrahimu.nzima@lnu.se
Appendix C: Consent Form

I confirm that I have been given information about the researcher, purpose, procedure, risks and benefits of the research and my rights to participate or not; and I have understood them. I have been given opportunity to ask questions and received answers to them. I hereby declare that consent is given to participate in the study.

Place: __________________________ Date: __________________
Name: __________________________ Signature: ____________

Appendix D: Interview Guide (Prior to classroom observations)

Part A: General Questions
1. Age _______ Sex _______ Education _________
2. When did you start teaching?
3. Which subject/course are you teaching?
4. When did you start teaching this course/subject?
5. Have you ever attended any course/seminar/training related to CBC?

   (a) If your answer is yes, where? When? For how long was the training?
   
   (b) What did the course cover?
   
   (c) How did you find it?
6. How often are you getting on-the-job training regarding CBC?

Part B: Questions on Conceptual and Procedural Knowledge of Tutors Regarding CBC
1. How do you understand the concept of CBC (e.g., its meaning, etc.)?
2. What does CBC intend to do when it comes to students’ learning?
3. What do you think are the reasons why CBC was introduced in the Tanzanian education system?
4. What teaching methods are appropriate and effective for facilitating learning under this curriculum framework and why?
5. Which pedagogical skills do you think teachers need to be able to effectively facilitate learning in the context of CBC?
6. If you have a problem understanding some components of CBC, who do you turn to for help?
Part C: Questions on Actual Teaching Methods used by Tutors
1. What teaching method(s) do you use to support student-teachers to learn the knowledge, skills, values and attitudes required of them to implement CBC effectively in schools?
2. What kind of materials do you use to prepare and facilitate your lessons (e.g., textbooks, charts, films, projectors)?

Part D: Questions on Assessment Strategies used by Tutors
1. Which assessment strategies do you often use? (e.g., tests, assignments, etc.)
2. What do you think of the assessment methods you are using? Are they sufficient in training for CBC implementation? Fair? Easy to administer?

Part E: Questions on Constraints and Opportunities
1. What factors influence your instructional practices when training student-teachers for CBC?
2. What support do you get from the institution and colleagues in resolving this?
3. What could be done to improve your own learning to training student-teachers for CBC implementation?

Thank you for your willingness to participate in this interview session.

Appendix E: Classroom Observation Guide

Section I: Background Information
Name of College (Code)…………Class………Name of Teacher (Code)…………………Date………………… Time…………………………..
Number of Students: Male: ……… Female: …………. Total: ………….
Topic……………………………………………………………
Sub-Topic…………………………………………………

Section II: Areas to be Observed
A: Description of the classroom environment: (This involves a description of: room arrangement, seating arrangement, displays and other physical features of the classroom worthy noting)

B: Content and lesson structure: (Content, e.g. which of the following are considered in the lesson? - Knowledge of, Skills of, Values of, Attitude towards. How is the sequence of the content and progression?)

C: Pedagogy: (this involves description of teaching methods/strategies used and teaching-learning materials used, if any, and how they are use)
D: Tutor behavior and learner behavior: (describe how does the tutor interact and communicate with student-teachers, what students do, do they engage in the lesson, allowance to ask questions, etc.)

E: Assessment strategies used: (describe the nature of assessment strategies used, what is assessed, when, etc.)

F: Other activities/practices: (any other emerging issues in the classroom discourse, e.g. classroom disruptions, etc.)

Appendix F: Post-observation Interview Guide
Most of the questions depended on the lesson observed and video watched. Thus, the following questions were just few leading questions.

1. What were the objectives of the lesson?
2. Would you please explain why you used this/these method(s) and materials?
3. Do you remember any aspects of the situation that might have caused/affected what you did in this session?
4. What alternative strategies could have been used and bring about better knowledge of, skills and experiences of implementing CBC in schools? Why didn’t you use such strategies?
5. What specific skills and experiences of implementing CBC do you think student-teachers have learned during this session?

    Thank you for your willingness to participate in this interview session

Appendix G: Document Review Guide
(The following guiding questions were used)

Questions on lesson plans/schemes of work:
1. What were the lesson objectives?
2. Which were the planned strategies and resources to be used?
3. Did the objectives, methods and resources have any focus on enabling student-teachers develop relevant skills and knowledge of implementing CBC? How?

Questions on assignment records:
1. What is/was the nature/form of assignment? (e.g., paper work? practical activity?)
2. What was the purpose and scope of the assignment? Does it have any relation to learning to implement CBC?
3. How often are the assignments of this nature given?
Appendix I: Example Teaching Competences

List of general teaching competences to be developed to student-teachers from the Biology and Geography pedagogy syllabuses for the Diploma in secondary teacher education

<table>
<thead>
<tr>
<th>Biology pedagogy syllabus</th>
<th>Geography pedagogy syllabus</th>
</tr>
</thead>
<tbody>
<tr>
<td>By the end of two years the student-teacher should have the ability to:</td>
<td>a) Guide learners to create their own Geographical knowledge through a variety of methods.</td>
</tr>
<tr>
<td>a) Use relevant educational media and information technology in teaching and learning of Biology</td>
<td>b) Select, prepare and organise appropriate teaching and learning resources.</td>
</tr>
<tr>
<td>b) Apply learner-centred approaches, strategies and techniques in the teaching and learning of Biology to learners including those with special needs</td>
<td>c) Apply appropriate instructional media and technology.</td>
</tr>
<tr>
<td>c) Analyse and interpret correctly Biology curriculum materials</td>
<td>d) Guide and counsel learners for their personal developments, adjustments and learning.</td>
</tr>
<tr>
<td>d) Develop supportive skills for dealing with contemporary/crosscutting issues and new technologies</td>
<td>e) Operationalize geographical research and demonstrate subject dynamics.</td>
</tr>
<tr>
<td>e) Use appropriate assessment instruments for effective assessment of students’ performance in Biology</td>
<td>f) Guide learners to develop and practice geographical knowledge, skills and attitudes in their real life situations.</td>
</tr>
<tr>
<td>f) Prepare appropriate teaching-learning aids using locally available materials</td>
<td>g) Implement geography curriculum to learners with all learning needs.</td>
</tr>
<tr>
<td>g) Apply appropriate laboratory skills in maintaining a biology laboratory</td>
<td>h) Apply appropriate theoretical and practical knowledge in teaching geography.</td>
</tr>
</tbody>
</table>


NB: As it can be discerned from the list of competences, it appears that the syllabus documents themselves are not consistent when it comes to teaching methods that student-teachers should develop ability in. For example, in item (b) the biology syllabus specify that student-teachers should have ability to apply learner-centred approaches, strategies and techniques; whereas the geography syllabus is not specific, for it only focus on ability to guide learners to create their own Geographical knowledge through a variety of methods.
<table>
<thead>
<tr>
<th>College/Tutor</th>
<th>Classroom environment/setting</th>
<th>Content and lesson structure</th>
<th>Pedagogy (methods &amp; materials)</th>
<th>Tutor instructional behavior</th>
<th>Learner behavior</th>
<th>Overall interpretive comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>College A Biology</td>
<td>-movable chairs and large tables</td>
<td>-structured lessons</td>
<td>-Qns &amp; Ans</td>
<td>-seems a bit calm -interacts through Qns &amp; Ans -communicate with both males and females though selects more males to answer questions</td>
<td>-listen -take notes -respond to directives from the tutor -talk when allowed</td>
<td>-the lesson generally characterized by direct teaching -tutor controlled selection, pacing, sequencing of the lesson -assessment used was oral qns</td>
</tr>
<tr>
<td>tutor (68 students)</td>
<td>-some displays on walls</td>
<td>-simple to complex</td>
<td>-direct teaching</td>
<td></td>
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<tr>
<td></td>
<td>-generally clean room</td>
<td>-group work</td>
<td>-chalkboard</td>
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<tr>
<td>Gegr Tutor Biology</td>
<td>-generally clear room, well ventilated</td>
<td>-simple to complex</td>
<td>-Qns &amp; Ans</td>
<td>-interacted and communicated mainly through Qns &amp; Ans -questions coming</td>
<td>-discuss in groups -listen and talk when allowed -write notes -communicate with peers when allowed -only boys present</td>
<td>-though engaged students in the lesson through questions for discussion, the control was still with the tutor, but the tutor was not very strict</td>
</tr>
<tr>
<td>(83 students - 64M, 19 F)</td>
<td>-students sit on movable chairs and desks, others sit on benches at the back</td>
<td>-T/L materials</td>
<td>-desk work in groups of 8-9 students</td>
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<td></td>
<td></td>
<td></td>
<td>-chalk board and chalks only</td>
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<tr>
<td>College B Biology</td>
<td>-no displays</td>
<td>-teaching pollution</td>
<td>-Qns &amp; Ans</td>
<td>-quiet and concentrate on taking notes</td>
<td>-tutor dominated the discourse -all directions came from the tutor</td>
<td></td>
</tr>
<tr>
<td>tutor</td>
<td>-movable desks and chairs arranged in</td>
<td>-simple/kno</td>
<td>-group discussion</td>
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<td></td>
<td></td>
<td></td>
<td>-power point</td>
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**Summary classroom observation findings by colleges and tutors**
<table>
<thead>
<tr>
<th></th>
<th>students</th>
<th>columns</th>
<th>wn to complex</th>
<th>projector</th>
<th>from the tutor</th>
<th>-interact with tutor through Qns &amp; Ans, interact with peers in a discussion</th>
<th>-tutor controlled pacing, sequencing, selection</th>
</tr>
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<tbody>
<tr>
<td>(50 students</td>
<td>-30M, 20F)</td>
<td>-room surrounded by cupboards</td>
<td>wn to complex</td>
<td>-chalkboard -chalks</td>
<td>-communicates with both male and females</td>
<td>-formal talks were allowed in a discussion</td>
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<td></td>
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<td>-room is big enough</td>
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<tr>
<td>Gegr Tutor</td>
<td>(89 students</td>
<td>-movable desks and chairs</td>
<td>wn to complex</td>
<td>-complex</td>
<td>-lecture -Qns &amp; Ans -group discussion of some sort</td>
<td>-tutor dominated the communication -all directions and decisions come from the tutor -interaction through Qns &amp; Ans.</td>
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<td></td>
<td>-19F, 70M)</td>
<td>-arranged in rows and column,</td>
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<td>-only chalkboard and chalks -no real objects or</td>
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<td>but closely packed, one cannot</td>
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<td>models</td>
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<td>easily move -some displays on</td>
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<td>walls, e.g. lesson plan format</td>
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<tr>
<td></td>
<td></td>
<td>-no cupboards</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>College D</td>
<td>Biology tutor</td>
<td>-some displays around the</td>
<td>wn to complex</td>
<td>-teaching Mendelian sex-linked</td>
<td>-Qns &amp; Ans -call student to draw something on the</td>
<td>-listen, answer questions and follow directions -copying notes from the chalkboard -few asked</td>
<td>-lesson controlled by the tutor, e.g., decided pacing, progression of the</td>
</tr>
<tr>
<td></td>
<td>(Approximately</td>
<td>wall -desks &amp; chairs</td>
<td></td>
<td>patterns</td>
<td>chalkboard</td>
<td>the tutor questions -interacted with each other when directed to discuss something</td>
<td>lesson could be described as characterized by strong framing and classification</td>
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| College C Biology tutor (54 students -48M, 6F) | -the lesson conducted in a lab, -trainees seated on stools -lab furnished with equipments such as cupboards, long stools, water tapes -no displays | -Biological lab skills (preparation of biology chemicals & reagents) -simple to complex | -Biological lab skills | -direct students to finish the task and collect for marking | -awareness and attending to diverse needs of learners was not vividly seen. This was the case to all tutors -control was under the tutor -control of selection of content was still under the tutor -power was still with the tutor -eg. “please don’t make unnecessary noise” -at least framing | -more interaction was vivid in the lessons, active involvement -but control of selection of content was still under the tutor -power was still with the tutor -eg. “please don’t make unnecessary noise” | -at least framing | -more interaction was vivid in the lessons, active involvement -but control of selection of content was still under the tutor -power was still with the tutor -eg. “please don’t make unnecessary noise” | -at least framing |

| Gegr Tutor (68 students) | -some displays on the wall, eg. Lesson plan format -movable desks and chairs arranged in rows & columns -tutor table in front | -assessment in geography -simple to complex, eg. From definitions to examples, -short lecture -Qns & Ans -discussion in pairs -think-pair & share -chalk board & chalks -manila sheet | -short lecture -Qns & Ans -discussion in pairs -think-pair & share -chalk board & chalks -manila sheet | -a bit calm -interacted through Qns & Ans -as with other tutors, boys were more engaged in the conversation than girls -end up with some reflections on the lesson by asking qns to trainees | -listen -take notes -talk loudly when allowed -follow tutor directions -stand up when answering or asking questions | -awake and interacting with the tutor and peers -engaged in activities like making chemical solutions | -interaction was vivid in the lessons, active involvement -but control of selection of content was still under the tutor -power was still with the tutor -eg. “please don’t make unnecessary noise” | -at least framing |

| 49 students | -direct teaching -chalk board | -direct students to finish the task and collect for marking | -direct students to finish the task and collect for marking | -quiet, talk when allowed -few ask questions | -given -quiet, talk when allowed -few ask questions | -given -quiet, talk when allowed -few ask questions | -given -quiet, talk when allowed -few ask questions | -given -quiet, talk when allowed -few ask questions | -given -quiet, talk when allowed -few ask questions |

49 students | -direct teaching -chalk board | -direct students to finish the task and collect for marking | -direct students to finish the task and collect for marking | -quiet, talk when allowed -few ask questions | -given -quiet, talk when allowed -few ask questions | -given -quiet, talk when allowed -few ask questions | -given -quiet, talk when allowed -few ask questions | -given -quiet, talk when allowed -few ask questions | -given -quiet, talk when allowed -few ask questions |
| Gegr Tutor | big recreation hall -no displays -trainees seated on chairs but no desks -no sitting arrangement-seated randomly | preparing lesson plan-the new format (CBC) -simple to complex | lecturing, -Qns & Ans -demonstration -chalkboard, chalks | tutor dominate the communication, -all directions come from the tutor -use questions to interact with trainees -tutor interacted with males mostly, eg., call them to answer questions or write something on blackboard -a lot of code switching | listen and take notes from the blackboard -answer questions when asked to do so, choir answers -seldom ask questions -most of the communication between students and tutor | was weak -more participatory -big class size -tutor maintains power and control of everything in the lesson, highly teacher-centered -communication and interaction is between tutor and student only -teaching students in a big group is typical practices because of big class size, no enough rooms, tutor is alone in the subject |

Key: Qns & Ans – Questions and answers; T/L – teaching-learning
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