

The Implementation of Competence Based Curriculum in Certificate Teachers Colleges in Tanzania

The Case of Two Teachers Colleges in the Mbeya Region

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A thesis submitted as a partial fulfilment for the requirement of the award
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Education

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Trykk: Reprosentralen, Universitetet i Oslo

Dedication

To my late Grandmother Asha Mussa Mkinda (Sempoma)

Who passed away at the mid of the study

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The contribution of various people and organisations has allowed this work to be successfully accomplished. I highly appreciate the role played by the individuals and organisations.

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Whatever weaknesses that are found in this dissertation should not be attributed to the people or organisations mentioned above; they are exclusively mine.

Abstract

This study aimed at investigating the implementation of competence-based curriculum in certificate teachers colleges in Tanzania. The study employed a comparative case design between two teachers colleges (public and private) located in Mbeya region of Tanzania. In order to achieve the study objective, two research questions were formulated. One: What is the knowledge of teacher educators concerning competence-based teaching approaches? Two: To what extent can teacher educators practice competence-based teaching approaches in teaching the subject of geography?

The study was guided by the Stufflebeam model and the theory of curriculum implementation. The study was qualitative in nature and employed qualitative data collection methods, comprising interviews, focus group discussions, classroom observation and review of documents. The study involved four teacher educators, twelve student teachers, two College Principals and one Curriculum Developer. These participants were deliberately selected, amounting to a total number of nineteen. Gender balance was observed in the selection.

In this study the findings indicated that teacher educators in public teachers college demonstrated a high level of academic qualification than their counter parts in private teacher college. Also teacher educators in both colleges showed that they were knowledgeable on participatory methods but the practice in the classroom was dominated by non-participatory methods contrary to the suggested competence-based teaching approaches. Observed challenges from both teacher colleges were shortage of teacher educators, overcrowded classes, inadequate teaching and learning resources and short time for teaching practice.

The study concludes that Competence-based curriculum was not implemented as it was intended at the classroom level. This phenomenon shows that policy makers have to consider the classroom reality in order to effectively reform teacher education curriculum by providing in-service training to teacher educators. Also the enrolment of student teachers have to consider the capacity of college in terms of availability of teaching and learning resources and number of teacher educators with qualified qualifications.

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Abbreviations/Acronyms

ACSEE	Advance Certificate of Secondary Education Examination
B. Ed	Bachelor of Education
BA. Ed	Bachelor of Arts with Education
BSc. Ed	Bachelor of Science with Education
CBC	Competence-based Curriculum
CIPP	Context, Input, Process and Output
EFA	Education for All
ETP	Education and Training Policy
GER	Gross Enrolment Ratio
KBC	Knowledge-based Curriculum
MA. Ed	Master of Arts with Education
MDG	Millennium Development Goals
MoEC	Ministry of Education and Culture
MoEVT	Ministry of Education and Vocational Training
NECTA	National Examination Council of Tanzania
NER	Net Enrolment Ratio
PEDP	Primary Education Development Programme
PSLE	Primary School Leaving Examination
RAS	Regional Administrative Secretary
SEDP	Secondary Education Development Programme
TIE	Tanzania Institute of Education
TSD	Teachers Service Department
URT	United Republic of Tanzania

Chapter One: Introduction

1.1 Background to the Study

Education reforms are inevitable in any country in the world in order to provide quality education. Education reforms can range from education management, education, finance, ownership of education institutions to curriculum reforms. Curriculum reforms in this sense play a great role in providing quality education. In recent years, sub-Saharan African countries experienced a review of their curricula in order to meet the developmental agenda of the 21st century, an agenda aimed at responding to the advancement of science and technology due to globalization forces (Kanukisya 2012; Kimizi, 2012; Mhaiki, 2009; MoEVT, 2009). In the review of curricula the emphasis has shifted from teacher-centred curriculum to learner-centred curriculum. Teacher-centred curriculum was referred to as knowledge-based curriculum (KBC), while learner-centred curriculum was referred to as competence-based curriculum (CBC).

CBC is the leading paradigm for innovation, both at the system level and at the level of the learning environment (Biemans *et al.*, 2004). CBC is the education and training approach which produces professionals who have the required competencies to be successful in their jobs. Competencies are needed for the effective application of available knowledge and skills in a specific context rather than acquisition of knowledge and skills only (Egodawatte, 2013).

In teacher education, various countries have developed competencies that are expected to be demonstrated by the end of the teacher education programme (Meena, 2009). For example, in Northern Ireland, the competencies include understanding the curriculum and professional knowledge, subject knowledge and subject application, teaching strategies and techniques and classroom management, and assessment and foundations for further professional development (Claul and Mc William, 2002 as cited in Meena, 2009:28). It has been further pointed out that Germany, England, France and Sweden have developed a list of competencies which are needed by teachers who are concerned with the technical application of education knowledge. In this connection, the student teacher is viewed largely as a passive recipient who is criticized from the perspective of CBC, a perspective requiring the student teacher to be active in the teaching and learning process (Hoogveld, 2003).

The recent trends of teacher education curriculum reform in Tanzania are characterized by the shift from KBC to CBC. CBC was introduced in primary and secondary education in 2006, and in teacher education in 2007 (Kafyulilo, Rugambuka & Moses, 2012; Meena, 2009). Thus, this curriculum has been in place for more than five years now. The aim of CBC is to provide student teachers with knowledge, skills and attitudes enabling them to recognize and solve problems in their domain of study and future work (Hoogveld, 2003). In this case, teacher educators need competencies to enable student teachers to master the knowledge, skills, abilities and attitudes needed by the teaching professional (Meena, 2009).

The goals of Education for All need to be met by the year 2015 by all nations, including Tanzania. It has been acknowledged that the quality of education in primary schools will be improved in developing countries by placing pedagogy and its training implications at the centre of teacher education (Hardman, Abd-Kadir & Tibuhinda, 2012). In this context, Tanzania introduced the Primary Education Development Programme (PEDP), which in turn increased the number of students in primary schools and created the demand for training more teachers (URT, 2008). Along with the need for qualified teachers, the curriculum was also reviewed for the purpose of providing quality education (Meena, 2009); it was reviewed so as to move from content-based curriculum to the CBC.

CBC requires student teachers to take more responsibility for their own learning process, which is initiated by the competence learning tasks. This calls for a review of teaching and learning methods as well as assessing learners and leaving behind the traditional instructional approaches and assessment (Kafyulilo et al, 2012). Despite the efforts of curriculum reforms and review, challenges remain to the implementation process where the desired outcome in many cases is considered a waste of resources, time and effort. This is due to poor translation into classroom reality (Rogan and Glayson, 2003, Altinyelken, 2010).

There are a number of studies which have been conducted in teacher education curriculum outside Tanzania (cf. Ismail, Al-Zoubi, Rahman & Al-Shabatat (2009). Similar studies have been conducted in Sri Lanka, where the focus was on secondary curriculum (Egodawatte, 2013). In Tanzania some important studies included Meena, 2009; Hardman, Abd-Kadir & Tibuhinda, 2012; and Mhaiki, 2009. The recent study conducted by Kafyulilo et al. (2012) investigated the implementation of the competence-based teaching approach in education in

Tanzania. All these studies focused only on diploma teachers colleges, they did not focus on certificate teachers colleges. In this regard the study investigated the implementation of competence-based curriculum in certificate teachers colleges. The study was comparative in nature between public and private certificate teachers colleges in the Mbeya region of Tanzania.

1.2 Statement of The Problem

The concern for quality education is of paramount importance in a country like Tanzania, whose vision is to have a learned society by 2025 (URT, 1999). Quality education is the kind of education which makes the recipient attain all its benefits in terms of earnings, productivity, reduced mortality rates, improvement of health, improved nutrition, poverty alleviation and attritional modernity (Omari, 1982). The Tanzania government has decided to improve primary education by introducing a series of education programmes which include primary, secondary and higher education. In primary education Tanzania launched the Primary Education Development Programme (PEDP) phase I (2000-2005) and phase II (from 2006-2011). Along with the PEDP, the Teacher Education Master Plan was also introduced to catch up with increased enrolment for the aim of providing quality education in primary schools.

Omari (1982) argues that quality of education is measured by what happens in the classroom in schools and colleges, how many instructors there are per learner, the qualifications of teacher educators, what kind of pedagogy is used, and how many text books and other equipment are used per learner. Teacher educators are the first to take such responsibility, due to their role in providing education which raises school standards (Mhaiki, 2009). In this connection, the preparation and development of teachers are critical aspects in the education system (Corcolan, 1995). Teacher education curriculum has been revised and put into practice from 2009, but there is little evidence supporting the contention that teacher educators are well equipped with a new curriculum (MoEVT, 2009). In CBC there is a pedagogical change, whereby teaching is considered as the facilitation of learning rather than mere transfer of knowledge. Learner-centred teaching and learning, knowledge construction and the building of skills, attitude and competencies in the student teacher receive greater emphasis (MoEVT, 2009). This curriculum is in place to be implemented in both public and private teachers

colleges. The question remains, to what extent are teacher educators able to implement the CBC?

There are some studies that have been conducted in the CBC in Tanzania that were focused on technical institutions not using the teacher education curriculum (cf. Mutarubukwa, 2007; Kerry, 2010). Studies that have been conducted in teacher education include Mhaiki, 2009; Meena, 2009; and Kafyulilo, et al., 2012. These studies focused on diploma teachers colleges rather than on certificate teachers colleges. These studies also were not compared between public and private teachers colleges. This indicates that research into the implementation of CBC undertaken since its introduction in certificate teachers colleges in mainland Tanzania is limited. This study therefore investigated the implementation of CBC in certificate teachers colleges, using the case studies of two teachers colleges' in the Mbeya region. Teacher educators need to prepare student teachers for teaching professionally, so they will be able to teach effectively in primary schools.

1.3 Purpose and Objectives of the Study

The purpose of this study was to investigate the implementation of CBC in teachers colleges and how that leads to the development of required competencies in teaching Geography to certificate student teachers.

Under this overall purpose, the objectives of the study were to:-

- i. Investigate the knowledge level of teacher educators on CBC teaching approaches.
- ii. Whether or not teacher educators, student teachers, College Principals and Curriculum Developers are practically implementing CBC in the teaching of geography.
- iii. Compare the implementation of CBC in teachers college in Mbeya region.

1.4 Research Questions

The purpose of this study was to investigate the implementation of CBC in teachers colleges in Tanzania. The focus of the study was on certificate teachers colleges. In Tanzania certificate teachers colleges are colleges that prepare student teachers to teach in primary schools. Two research questions were posed to guide the study:

1. What knowledge do teacher educators have of competence-based teaching approaches?
2. To what extent can teacher educators practice competence-based teaching approaches in the teaching of Geography?

1.5 Significance of the Study

As the issue of quality is a concern, preparation of teachers plays a critical role in the development of required competencies to teach in primary schools. These competencies are important in performing the role expected of them (Okwaput, 2013). In this way,

- The study provides the knowledge of conditions necessary for promoting effective teaching and learning of geography using CBC, thus improving the quality of teaching and learning in teachers colleges.
- Similarly, the study identified challenges facing teacher colleges in the practical implementation of CBC and provided suggestions for overcoming them so as to bring about more desirable learning meeting the needs of the teaching professional.
- The study in addition provides a base of information to policy makers and curriculum developers, helping them enforce effective implementation of CBC in teachers colleges.

1.6 Definition of key concepts

Bryman and Cramer (1990) argue that an operational definition specifies the procedures (or operations) which will allow differences between individuals regarding the concept(s) concerned to be precisely specified. Based on this observation, key terms are defined in order to communicate the same meaning and to avoid confusion. These terms are defined as follows:

Curriculum:- is a prescribed series of learning experiences within a course. It includes the content and learning experiences found in the competence-based curriculum.

Curriculum Implementation:- is putting into practice the officially prescribed curriculum.

Competence:- is the clear ability to successfully carry out some occupational activity. It is described in terms of skills, knowledge and aptitude or understanding, as well as by the typical context and level at which a person possessing such competence can work.

Teacher Competencies:- are the ability of an individual to meet the conditions deemed necessary for achieving specific goals or meeting important demands presented to the teaching professional. It concerns the knowledge, skills and attitudes necessary to enable teachers to perform teaching activities effectively or function in a way that meets or exceeds the standards expected of the teaching professional.

Teacher Educator:- is the teacher who teaches primary school teachers in the initial teacher education courses.

1.7 Limitation and Delimitation of the study

The study was confined to teacher educators, student teachers (Pre-service) and College Principals from two certificate teachers colleges in Mbeya region. Teacher educators, student teachers and College Principals in certificate and diploma teachers colleges in other regions have not been included in the study. In this sense it would be unsafe to transfer research results in other level of education because is based on a case study. However, being familiar with the situation else where in Tanzania and also in other developing countries one may assume that some findings might be relevant also for other teachers colleges.

Language issue pose a challenge in this study. Data were collected using Kiswahili language but transcription and writing was in English. This might affect the actual meaning of the data. To minimize the language problem I sent transcription to respondents to crosscheck their response if I capture the same meaning.

1.8 Structure of the Thesis

This study is structured into six chapters. Chapter one is the introduction. In this chapter the background of the study, its purpose and objectives, research questions, significance of the study, definition of key terms, and delimitation of the study and its structure are presented.

Chapter two presents the theoretical framework of the study, whereby the conceptual framework of curriculum theory, the Stafflebeam model and theory of curriculum implementation is presented.

Chapter three is the literature review. This chapter surveys the literature in order to identify the knowledge gap respecting CBC. Chapter four covers the research methodology. In this chapter, the research design, research settings and the level of education surveyed, population and samples included in the study are presented. Data collection methods and ethical considerations are also included in the chapter.

The presentation and analysis of research findings based on the research objectives and analytical framework are presented in chapter five. The last chapter is the conclusion and recommendations. In this chapter, comparisons on the major findings conclusion and recommendations are presented.

Chapter Two: Theoretical Framework

This chapter presents the theoretical framework for explaining the competence-based curriculum. The central question of the thesis is how the competence-based curriculum is implemented in certificate teachers colleges. The introduction of competence-based curriculum indicates the intention of the government to provide quality education in primary schools. Based on this intention it was necessary to reform certificate teachers curriculum from knowledge-based to competence-based.

To analyse the implementation of competence-based curriculum, the study used the theory of implementation of curriculum reforms developed by John M. Rogan and Dianney J. Grayson (2003) and the Stufflebeam Model (CIPP) (1971). Kanukisya (2012) argues that the theoretical framework is inseparable from any scientific study. So it was necessary to use these two theories to analyse the data gathered from the field on the implementation of CBC. Before going into the discussion of the theoretical framework, it is necessary to clarify the meaning of the term *curriculum*.

2.1 Defining Curriculum

Curriculum is a Latin word meaning race course (Connelly and Clandinin, 1988 as cited in Egodawatte, 2013). This is a narrow definition of curriculum but in a broader sense curriculum may entail a course of study under the auspices of a school or course of study (Miller and Seller, 1990). Other scholars like Remillard (2005) state that curriculum refers to an overarching framework which specifies what should be taught or what other resources teachers should use when preparing a particular lesson for a classroom. These definitions show that a curriculum only prescribes actions which have to be undertaken by teachers before going into a classroom.

Curriculum theorists define *curriculum* based on the curriculum categories. These are formal curriculum, intended, enacted and the hidden curriculum. The formal curriculum is the official document which specifies the goals and activities outlined by school policies (Gehrke, *et al.*, 1992; Remillard, 2005). In Tanzania, formal curriculum is developed by the Tanzania Institute of Education (TIE). The intended curriculum refers to the aims of teachers before

going to the classroom. The enacted curriculum refers to what actually takes place in the classroom. The enacted focuses on the students' experience in the classroom (Egodawaitee, 2013). The hidden curriculum includes any learning experiences that are not included in the formal curriculum, but even though they are not set in advance, students still experience learning. In most cases, a hidden curriculum pays attention to attitudes and values rather than knowledge and skills. Formal curriculum, intended curriculum, enacted and hidden curriculum together lead to the curriculum implementation.

Sources of curriculum objectives are also important to consider when designing and developing curriculum. Ralph W. Tyler posed four fundamental questions when developing any curriculum or plan of instruction. These questions are:

1. What education purpose should be attained?
2. What education experiences should be provided?
3. How to organise these educational experiences?
4. How to determine whether these purposes were attained?

These four questions raise the debate on defining the sources of educational objectives in designing and implementing curriculum. Yeshalem (2013) mentioned *essentialism*, which holds that cultural heritage should be used as the source of curriculum, due to the accumulated knowledge found in society. *Progressives*, on the other hand, hold that a child has to be considered in the formulation of curriculum objectives, because a child's future needs have to be anticipated. Yeshalem continues to argue that *sociologists* have to be considered, due to their knowledge of contemporary social problems. Tyler's view is that no single source of information is adequate to provide for wise and compressive decisions about the objectives of curriculum; therefore, each source should be given consideration in planning any comprehensive curriculum programme (Tyler, 1949., Egodawatte, 2013).

2.2 The Stufflebeam Model (CIPP)

The Stufflebeam Model (CIPP) is the model that was developed to provide evaluation information in decision making for the improvement of education (Stufflebeam, 1971). The choice of the CIPP model is due to the reason that it can evaluate and explain the quality of curriculum implementation for the purpose of further improvement.

The Stufflebeam Model (CIPP) is a programme comprising four stages of decision-making or evaluation, and is applicable to curriculum. These stages are context, input, process and product (Stufflebeam, 1971). The CIPP model asks questions in relation to the programme with intent to evaluate. These questions are What needs to be done? How should it be done? Is it being done? and Did it succeed? (Stufflebeam, 2007). Evaluation of context focuses on the learning environment where changes will determine the problems in which the programme was designed (Ibrahim, 2009). Input evaluation focuses on the resources available for decision making on how to achieve certain goals and objectives of the programme. With evaluation of the process, the focus is on the process used to achieve certain goals and objectives of the programme. Feedback should be available all the time in order to control the implementation of the programme. Lastly, with evaluation of the product the focus is on the outcome of the programme after it has been successfully implemented. The CIPP evaluation model helps with planning decisions, structuring decisions, implementation decisions and recycling decisions of the CBC.

The Stufflebeam Model fits in this study because it explains the four stages of curriculum implementation in the following ways: Stage one (the context) deals with identification of the environment in which the programme was designed and defines the sources of curriculum in which policy, goals and objectives of the syllabus are stipulated. The influence of different external support organs also determines the context of the curriculum. Moreover, the context defines the relevant environment for curriculum in terms of conditions for implementation of the programme and whether factors hindering the implementation of the programme have to be clearly stated. This clarifies whether or not the stated objectives of the CBC are effectively implemented.

Stage two: the input evaluation. This assesses the availability and utilisation of resources in terms of human, physical and financial factors necessary for achieving the desired and intended objectives identified in the context stage. The study assessed the qualification of teacher educators, student teachers, physical resources and financial resources that were needed in the implementation of CBC.

Stage three: the process evaluation. This examines the day-to-day running of the programme in terms of utilisation of identified resources at the input stage. Process evaluation shows how

well what was written in the policy documents has been realised. In the implementation of competence-based curriculum, the process assesses classroom interaction and facilitation methods to determine its effectiveness in development of competencies in student teachers.

Stage four: the product evaluation. This examines whether the desired objectives have been achieved or not. Based on the observation of the product, the decision to terminate, modify or abandon the programme is made. Product in this study refers to the competencies of student teachers and teacher educators in the implementation of CBC.

Although the Stufflebeam Model has been used as a theoretical framework for the study of the implementation of CBC, its limitations should not be ignored. One of its shortcomings is that the Stufflebeam Model is an evaluation based on modes dominated by methodological criteria rather than by the theoretical framework of the programme. Cooksy (et al. 2001) argues that modes which focus on the methodological evaluation tend to provide little evidence of a programme's effectiveness. An alternative is to find the modes that would identify and examine programme outcome; this is called a theory-driven approach. The Stufflebeam Model is useful in terms of thinking about the overall context and situation but may not be sufficient to present the dynamic interaction between the design of the curriculum and evaluation of the training (Eseryel, 2002). For this reason it was found necessary to blend the Stufflebeam Model and the Theory of Implementation of curriculum reforms in studying CBC implementation in certificate teachers colleges in Tanzania.

2.3 Theory of Implementation of Curriculum Reforms

Rogan and Grayson (2003) developed their framework based on the theory of implementation. They came up with three main constructs: support from outside agencies, capacity to support innovation, and the profile of curriculum implementation (Altinyelken, 2010; Babaci-Wilhite, 2013). Rogan and Grayson described support from outside agencies as departments of education, local and international developmental agencies which influence practice. In this construct there is both material and non-material support. Material support includes provision of physical resources and non-material support includes the form of professional development.

The capacity to support innovation is made up of factors which are likely to support or hinder the new implementation of curriculum. Important factors in the capacity are teachers, students,

support materials, infrastructures and school management (Babaci-Wilhite 2013, Altinyelken, 2010). School management is considered a critical factor for support innovation in schools. Fullan (1991) argues that the leadership role of the principal is critical in reform implementation. Teachers also have a great role to play in curriculum reform. Altinyelken mentioned the role of teachers supporting reform as including background, training, subject matter knowledge, commitment to teaching and attitudes towards proposed innovation. All these factors influence their capacity and willingness to implement change. Ignoring student factors may also cause resistance to curriculum reform. These factors include attitude to learning, home environment, and proficiency in language of instruction, health and nutritional status.

The last construct according to Rogan and Grayson (2003) is the profile of implementation, incorporating the plan for making the transformation from the old curriculum to the new curriculum. In this construct, the objectives of the reforms are put into practice. This construct assumes the notion of what constitutes good practice and how it is realised in the classroom. The profile for implementation acknowledges the role of teachers in curriculum implementation, since teachers are the ones to put curriculum into practice.

Therefore, CBC is expected to excel in the development of competencies in student teachers. But this depends on how teacher educators and student teachers actually translate the aims and the objectives of the curriculum in the teaching of geography. It is expected that competence-based curriculum will lead to the development of competencies in geography, and finally to teachers' professional development.

The profile of curriculum implementation has to identify the strengths and weaknesses of CBC. Curriculum developers will have a chance to account for the context and the capacity of teachers colleges to suggest better ways of curriculum implementation (Rogan and Grayson, 2003). This will make curriculum implementation a long term process and give it an iterative or cyclic character conducive to the better improvement of teacher education (Figure 2.1).

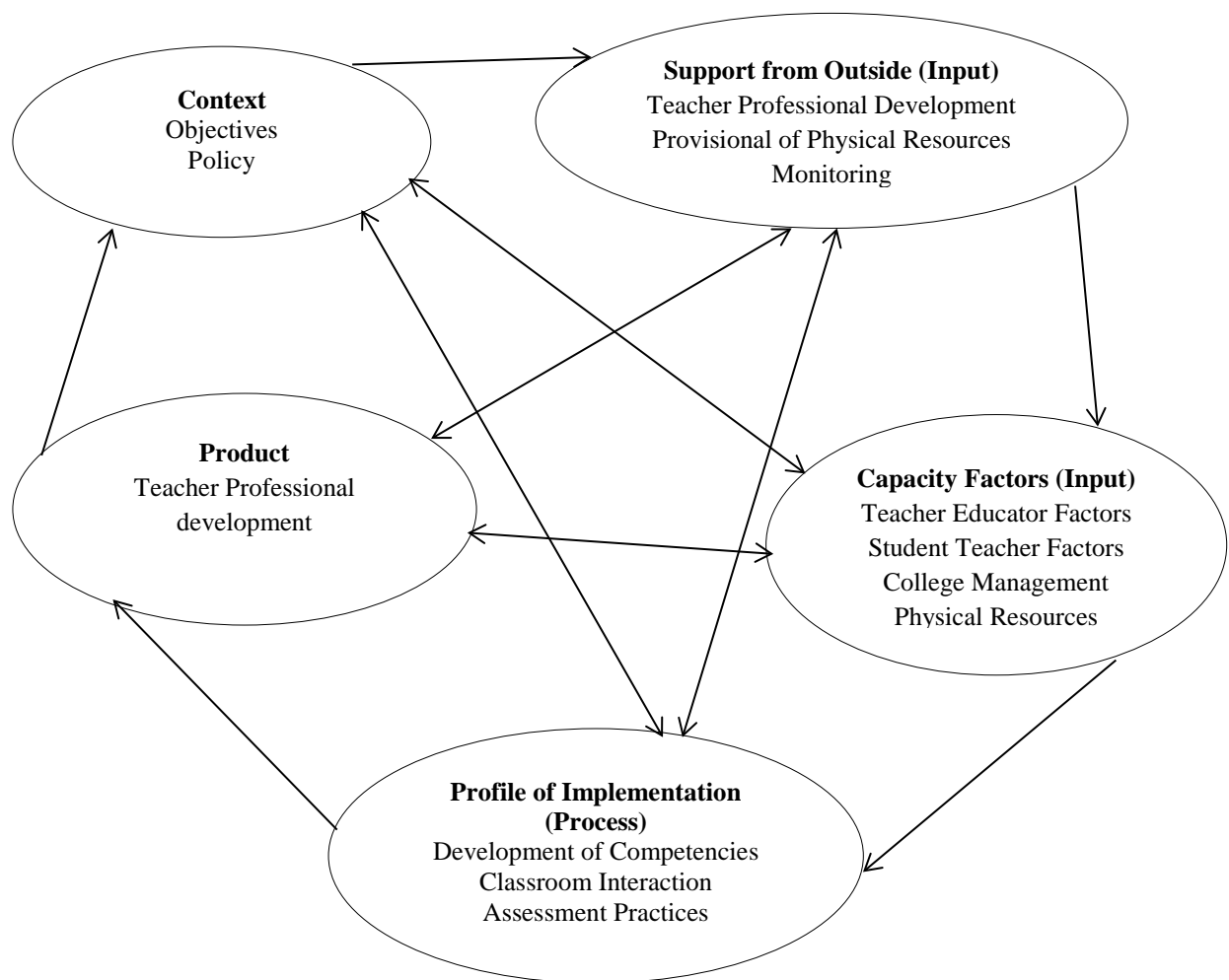


Figure 2.1: The Analytical Framework (Adopted from Rogan and Grayson, 2003 & The Stufflebeam Model, 1971)

2.4 Summary

This chapter presented the theoretical framework that was used in the study of the implementation of competence-based curriculum in certificate teachers colleges in Tanzania. The chapter defined the term curriculum based on its original meaning, adding categories in accordance with curriculum theorists. The chapter also presented the Stufflebeam model and the theory of curriculum implementation reforms. Blending the two approaches as the analytical tool for the study minimized the weaknesses of each approach. The analytical framework adopted from Rogan and Grayson and the Stufflebeam model shows that curriculum implementation is cyclic or interactive in nature, and therefore each construct or element has to be in place in order to provide feedback. The next chapter presents a review of related literature.

Chapter Three: Literature Review

This chapter presents a review of related literature on the theme of CBC in relation to teacher education. The chapter begins with an overview of the context of teacher education in Tanzania and CBC. Then it justifies the rationale for curriculum reforms in Tanzania. Finally empirical studies across the world, Africa and in Tanzania are discussed in order to show the research gap.

3.1 An Overview of the Teacher Education in Tanzania

Teacher education is a component of the education system. Before going into an overview of teacher education in Tanzania, it would be worthwhile to provide a profile of Tanzania in a nutshell.

3.1.1 Tanzania Geographical and Demographic Characteristics

Tanzania is a country which was formed in 1964 after uniting two independent states, Tanganyika and Zanzibar Island. Tanzania attained political independence on 9th December 1961 from the British colonial rule. Zanzibar Island attained her independence through revolution from the Sultanate regime on 12th January 1964. Tanzania is situated in East Africa. The country is surrounded by Kenya and Uganda in the north, Mozambique in the south, Zambia and the Democratic Republic of Congo in the west, while in the East the country borders on the Indian Ocean. According to a population and housing census report the population of Tanzania is over 44 million (URT, 2012). Eighty percent of the population is involved in agriculture, which contributes about forty percent of the gross domestic product.

3.1.2 Tanzania Education System

In Tanzania the formal education and training system is predominantly academic, especially below higher education. Levels of education range from basic, secondary and tertiary to higher education. The basic level comprises pre-primary education, primary education and secondary education (O-level and A-level). At the basic level, teaching of subjects is general and is not targeted to a specific career or occupation. The structure of the formal education and training is 2-7-4-2-3+. According to URT (1995), levels are described as two years of pre-primary education, seven years of primary education, four years of *ordinary* secondary

education, two years of *advanced* secondary education and a minimum of three years of university education (See figure 3.1). Examinations administered by the National Examination Council of Tanzania (NECTA) are used as selection criteria for admittance to the upper levels of education.

Chronological Age	School Age				
28	22				
27	21	PhD (3+ years)			
26	20				
25	19				
24	18	Master Degree			
23	17				
22	16	Bachelor Degrees (3 years) University	→	B.Ed	
21	15			BA. Ed	
20	14			Bsc. Ed	
19	13	Secondary Education (Advanced level)	Right	Diploma	
18	12			Teacher Education	
17	11	Secondary Education (Ordinary level)	Right	→	
16	10				Certificate
15	9				Teacher Education
14	8				(Grade A)
13	7	Primary Education	Compulsory Education	→	Adult Education
12	6				Vocational Education
11	5				
10	4				
9	3				
8	2				
7	1				
6		Pre-Primary	Right		
5		Education			

Figure 3.1: The Tanzanian Education System

(Adapted from Kanukisya (2012) p. 220.; Meena (2009). p.16)

Primary education is compulsory for all children from the age of seven. Trends show that there is an increase in enrolment of children aged seven years from 60 percent in 2002 to 75 percent in 2006. This increase is the result of the implementation of the PEDP. This increase also creates a need to increase the number of teachers in primary school. There were great changes in the year 2012 when the enrolment in pre-primary education dropped by 3.2 percent from 1,069,208 in 2011 to 1,034,729 in 2012 (MoEVT, 2012) (See table 3.1). This suggests that there is a need to sensitise parents to enrol children in pre-primary education. Pupils who acquire a minimum cut-off point of performance in the Primary School Leaving Examination (PSLE) are enrolled in public *ordinary* secondary schools. The remaining pupils enrol in vocational education and adult education programmes.

Secondary education in Tanzania has two circles. The first circle is *Ordinary* secondary education (Form 1-4), which lasts for four years. The second circle is *Advanced* secondary education (Form 5-6), which lasts for two years. In advanced level subjects are provided in combination. There are arts subjects and science subjects. Students who are able to complete the first circle with good examination results are qualified to join the second circle, but those who do not qualify are offered chances to enrol in teacher colleges and other professional courses at certificate qualification (See Section 5.5.2). Since this study is concerned with teacher education at the certificate level, those students are the student teachers in teachers colleges.

Table 3.1: Net Enrolment Ratios (NER) by levels and years in Tanzania

No	Level	2008	2009	2010	2011	2012
1.	Pre-Primary	36.2	37.2	37.5	42.4	39.9
2.	Primary	97.2	95.9	95.4	94.0	92.0
3.	Ordinary Secondary	24.4	29.1	30.8	34.5	36.6
4.	Advanced secondary Education	6.9	1.5	1.9	2.0	2.7

Source: Ministry of Education and Vocational Training (2012)

Both levels (secondary education and teacher education) follow centralised curricula developed by the TIE and sit for examinations administered by the NECTA. The responsibility of the MoEVT concerns the formatting, monitoring and improvement of the education system.

Higher education comprises university education and colleges. Higher education receives students from advanced secondary school for direct entry qualification and equivalent qualifications depending on the degree programme a student wants to pursue. The minimum time for higher education is three years.

Two languages are used in the Tanzania education system, Kiswahili and English. Kiswahili is used as the official and national language. Kiswahili is also used as a medium of instruction in the government primary school and the certificate teachers colleges. English is used as a subject in primary schools and as a medium of instruction in secondary and diploma teachers colleges (URT, 1995).

3.1.3 Teacher Education in Tanzania

Teacher education in Tanzania has a long history since the colonial period. German and British colonialists introduced teacher education in order to acquire teachers for Africans. During this period, teachers were prepared to adhere to western ideologies, as indicated in the curricular documents (Meena, 2009).

After independence in 1967, Tanzania introduced the philosophy of Education for Self-reliance which aimed at guiding the planning and practice of education (Buchert, 1994; Lindhe, 1999; Meena, 2009). Then the Arusha Declaration followed, which emphasized mass education at the primary school level and curriculum changes incorporating skills and strategies for teaching in order to produce high quality teachers for national development (Mushi, 2012). The target was also designed to prepare students to work productively in their areas and to better integrate educational values with work experiences. The school and teacher education curricula were changed to suit the new policies.

Global forces, the Structure Adjustment Programme and other changes in society that appeared in the mid-1980s geared the formulation of the Education and Training Policy in 1995. Its aim was to improve the quality of education provided at all levels for social economic development (URT, 1995). Education and Training policy stressed the increased role of the private sector and the introduction of cost sharing in the education system (URT, 1995; Lindhe, 1999). The provision of education and training identified critical areas such as the training of better teachers, broadening the financial base for education, streamlining the

management structure of education and increasing access to education by focusing on quality issues (Lindhe, 1999).

Teacher education is centrally managed under the Department of Teacher Education at the MoEVT Headquarters. There are 34 public teachers colleges and 71 private teachers colleges. Out of the 34 public teachers colleges, 21 offer certificate courses and 65 private teachers colleges offer certificate courses. As far as teacher education is concerned, the policy states its aims and objectives as follows:

- To impact student teachers with the theory and principles of education, psychology, guidance and counselling
- To impart to student teachers principles and skills of pedagogy, creativity and innovation
- To promote an understanding of the foundations of the school curriculum
- To sharpen the student teachers', teachers' and teacher educators' knowledge and mastery of selected subjects, skills and technology
- To impart skills and techniques of research, assessment and evaluation in education

(Source: URT, 1995:p.7-8)

Currently teacher education in Tanzania is offered in two modes, college-based and university-based teacher education programmes. The aim of college-based teacher education is to prepare student teachers to teach in pre-primary, primary, ordinary secondary education and certificate teachers colleges. University-based teacher education prepares student teachers who are going to teach advanced secondary school, diploma and certificate teachers colleges (Meena, 2009.; Bhalalusesa, Westbrook & Lussier, 2011).

According to Meena (2009), the college-based programme is offered to certificate teachers colleges (Grade A) and diploma teachers colleges. Student teachers in certificate teachers college follow seven years of primary education and four years of ordinary secondary school. Student teachers who want to become secondary school teachers and teacher educators in certificate teachers college fall under the category of college-based teacher education. These student teachers need six years of secondary education (URT, 1995.; Meena, 2009.; Bhalalusesa, et al. 2011). The time frame for college-based teacher education is two years. Formerly, college-based teacher education was provided in certificate courses for Grades C and B. Teachers grades B and C were phased out in the system because they attended in-service training through residential training and distance learning (Kajoro, Hillule and Simiya,

2013). Grades B and C were for primary school graduates wishing to teach in primary schools. They were in place since the 1970s due to the severe shortage of teachers at that time.

University-based teacher education is offered for three years, resulting in a Bachelor's degree in education. Student teachers who qualify to become teacher educators in teacher colleges (Grade A and Diploma) have to study for the Bachelor of Education (B. Ed) degree. For student teachers to qualify to teach in advanced secondary schools, they have to learn either a Bachelor of Arts with education (BA. Ed) or a Bachelor of Science with education (BSc. Ed). Formerly, university-based teacher education was offered by the University of Dar es Salaam alone for four years. The demand for graduate teachers in Tanzania has increased in the last ten years and the duration of the course is now three years. Private universities now offer university-based teacher education programmes for three years.

The curriculum for college-based teacher education is centralised in order to maintain uniformity of standards (Meena, 2009). The TIE is responsible for design and development of the certificate (Grade A) and diploma teacher education curriculum. The curriculum for the university-based teacher education is designed and developed by the university responsible for offering the education degree programme. The autonomy of the university in design and development of their own curricula created a problem between 2001 and 2007. At this period, college-based education programmes were offered on the methodological model only. The assumption was that student teachers had learnt the content from secondary school, so what they needed were methods for delivering the knowledge or content. The universities did not admit student teachers with equivalent qualifications from teacher colleges.

Again, the college-based curriculum receives a lot of criticism from the public about the way the curriculum was designed and developed. It is important to involve various stakeholders in curriculum development (Meena, 2009). UNESCO (2014) argues that consultation with all stakeholders in education would provide a new curriculum less vulnerable to accusations of political manipulation and more able to address the needs of teachers and students. Based on some of the criticism from the public, the TIE decided to change the curriculum from knowledge-based to competence-based.

3.2 Competence Based Curriculum

Education today experiences changes that focus on the aim of improvement in quality. At the international level various skills are needed for students to become global citizens. These are transferable skills including critical thinking, communication, problem-solving and conflict resolution (UNESCO, 2014). The current task of various nations is to include these skills in their curricula. Any attempt at curriculum review must reflect the development of various competencies needed at the national and international levels. In order to focus on CBC, let us turn the discussion to the evolution of CBC. Later the discussion will focus on the rationale for curriculum reforms.

In general terms, competence refers to the ability to do a particular activity based on prescribed standards (Tilya and Mafumiko, 2000). Egodawatte (2013) adds that competence is the effective application of available knowledge and skills in a specific context. In education, competence-based addresses what students are expected to do rather than what they know or are expected to learn (Weddel, 2006 as cited Egodawatte 2013; Tilya and Mafumiko, 2010). The concept of competence is more strongly associated with the ability to integrate skills, knowledge and attitudes in a complex situation. Competence is a complex in the sense that it covers a wide range of higher-order skills and behaviours. In relation to education, competence-based education enables students to prepare to become competent employees (Velde, 1999). The instruction system has to prepare students to demonstrate what they have acquired apart from mere academic qualifications. Brown (1989) argues that students should be trained in real life situations instead of academic disciplines.

Competence-based education emerged in the United States in the 1970s, advocating objectives to be measured in terms of knowledge, skills and attitudes a student possesses at the end of the programme (Weddel, 2006). The ultimate goal of competence-based education is the outcome of learning. The popularity of competence-based education was centered on vocational and higher education. Trends show that competence-based education can be applied to all levels of education (Tilya and Mafumiko, 2010). In teacher education, competence-based education holds that there are specific competencies to be acquired, with corresponding explicit criteria for assessing these competencies.

There are basic steps that have to be followed by a teacher enabling a student to master required competencies in the teaching and learning process. These steps are as follows:

- Specification of the learning tasks in a given lesson, developing precise objectives and reaching the standards, defined by criterion assessment.
- Breaking down the course or subjects into learning units closely aligned with the instructional objectives.
- Preparing lesson plans and instructional procedures so that deficiencies and learning difficulties can be identified earlier and corrective feedback can be given to students if they are not achieving the set of standards.
- Administering end of course or subject or term tests that evaluate whether each student has mastered all the tasks at an acceptable level.
- Using feedback from evaluations to improve mastery.

(Tilya and Mafumiko, 2010. P. 41-42)

When assessing competence-based curriculum in Tanzanian secondary schools, Tilya and Mafumiko (2010) argue that it focused only on behavioural competencies. There was no step by step mastery of learning of concepts, skills development and assessment of mastery of the competencies. If this happened in a secondary school curriculum, could anyone expect a different story in a teachers college curriculum? In Tanzania, is curriculum development centrally developed by one curriculum developer?

3.3 Rationale for Curriculum Reform

The concept of curriculum reform is used synonymously with curriculum change or curriculum innovation. To avoid confusion with the concept of curriculum reform, Schubert (1993) differentiated the two words curriculum and reform. Schubert defined reform as to change, to reconfigure, and to make different. On the definition of curriculum, Schubert argues that curriculum means whatever is advocated for teaching and learning.

Fullan (1991) distinguished innovation from change and reform. The argument put forward is that innovation goes beyond the change of subject to more comprehensive changes of the programme, while curriculum change involves the alteration of aspects of curriculum like its philosophy, objectives, teaching strategies, assessment and learning outcome. Meena (2009) contends that reform involves structuring of the school system and wholesale revision of the curriculum and it is initiated in the political system. *I bid* (2009) argues that there is endless

discussion among researchers in differentiating these terms (reform, change and innovation). Generally it would involve the issues of alteration of daily classroom organisation, pedagogical modification, content and teaching and learning resources. Based on these definitions, this study would argue that curriculum reform carries changes, innovation and alteration. The aim of these reforms is to improve the quality of education provided.

Teacher education curriculum reform in Tanzania has been influenced or dictated by various factors. As indicated by Fullan (2000), curriculum reform does and will always originate from different sources and combinations of sources. Mață (2012) considers that factors for curriculum reform in most cases are contextual, because the successes of curriculum reform and implementation require the application of a number of key features. Mață pointed to general factors which influence curriculum reform in teacher education. These factors are social and cultural, psychological, pedagogical, economic, technological and legal. Curriculum reform may be influenced by external factors due to international education policies or the internal needs and values of people. Mață then analysed the chronological perspectives of most relevant contributors to the factors of curriculum reform (cf. Mață, 2012, p. 3-5).

Teacher education curriculum reform should reflect cultural factors. Curriculum depends upon a set of cultural factors at the school and in the community at large. The norms and beliefs governing the curriculum implementation have to be consistent with society's norms. Mață (2012) argues that it is important to develop curricula to fit the needs of the community. In Tanzania, for example, the Education for Self-reliance policy was integrated into the curriculum in order to develop individuals to be self-reliant and play an active role in the community (Nyerere, 1967). Issues like religion, gender and ethnicity have to be considered in curriculum reform, because the school teaches people's culture. A place to start all these things is at the school in relation to home.

Political factors are considered to be among the factors influencing curriculum reform. Political factors dictate the acceptance or rejection of the curriculum in the implementation process (Mață, 2012). They mirror the educational ideas and intentions of a particular society. The curriculum is used to implement political intentions and the policies formulated and decided by politicians. In multiparty societies, the political parties will make their voices

heard in an attempt to have an impact on the aims and the content of the curriculum. In this regard curriculum will not merely be about the reproduction of knowledge, skills and values but also the desired changes in society (Lindhe, 1999). So the formulation of curriculum is one thing and the realisation of the curriculum is another thing. Curriculum implementation is the interpretation of the political decision in the form of a syllabus and guidelines based on the field implementation. The curriculum implementation is the work of teachers in schools and the classroom. To successfully implement it depends on other factors such as teacher professionalism and competence (Lindhe, 1999). In short, political factors define the goals, content, experiences and evaluation strategies of the curriculum. Buretta (1995) argued that education philosophy, goals and objectives have to reflect government policies and statements.

The aim of curriculum reform is to improve the quality of education offered and accommodate the technological changes that are happening in the world (Mhaiki, 2009). In order to meet the needs and demands of the labour market, economic factors influence curriculum reform to meet the current needs of the economy from a global level to the local level. For example in Tanzania from 2006 the shift from knowledge- based curriculum to competency-based curriculum, at primary and secondary levels and in teachers colleges, created a demand for human and financial commitment to support teachers, head teachers, and the provision of textbooks (Woods, 2007).

The psychological and pedagogical factors based on the research findings have an influence on curriculum reform of teacher education. Anderson (2002) contends that research results in teacher education have made a great contribution to restructuring the teacher education programme. The TIE conducted a study in 1991 to determine the quality of education at the basic education level. The curriculum of teacher education revealed that less time was allocated for professional subjects; there was a lack of qualified teacher educators, lack of books, as well as inadequate teaching time and poor teaching. The study proposed that teacher education should stop providing academic education as school subjects, teaching methods have to be emphasized more, student teachers have to pass teaching practice and the curriculum has to focus on teacher professional development (Meena, 2009; Buretta, 1995).

Mață (2012) mentioned the legal factor, which integrates the normative aspect involved in the implementation of curriculum reform. Issues like a professional code of conduct and rules

which govern educational institutions have to be considered. Due to the deterioration of professional codes of conduct, some education subjects have been emphasized in teacher education programmes.

Holistically, the factors that influence curriculum reform could be united into two dimensions such as external and internal (Mață, 2012). For example, cultural influence internally includes age, experience, gender and ethnicity, teaching of philosophy. External influence includes cultural appropriateness. Therefore literature surrounding curriculum reform assumes that change is difficult and painful and is complex. The complexity is due to the involvement of instructional, national, political and personal issues (Woods, 2007). So curriculum reform needs a systematic and coherent education system.

3.4 Related Literature from Empirical Studies

3.4.1 The Study of Egodawatte (2013)

Egodawatte (2013) conducted a study analysing the competency-based secondary mathematics curriculum in Sri Lanka. As part of education reform in Sri Lanka, the new curriculum was introduced in 2007 for grade 6 and the implementation was completed in 2010 for grade 11. The new curriculum was competency-based with the focus on the transformative role of the teacher. Egodawatte (2013) analysed the suitability of the new curriculum in order to tell if the curriculum had achieved its intended objectives.

Due to the transformative role of the teacher, Egodawatte (2013) selected curriculum orientation as the framework. These curriculum orientations comprise developmental approaches, subject discipline, social approaches, behavioural approaches, humanistic approaches, cognitive process and transpersonal approaches.

The findings of the study showed that the subject contents and teaching methods which were presented in the curriculum were better but it was difficult to translate them into the teaching and learning process under the umbrella of competency-based approaches. This indicated that the new curriculum had not achieved its objectives since the introduction of a new mathematical curriculum in Sri Lanka. The hindrance factor, according to Egodawatte, was the term *competency*, which had been brought artificially into the documents without

developing the ideas to suit the objectives of the curriculum. Also, the curriculum was not contextualised, in the sense that it did not deal with the real life experience.

This highlighted the fact that the study did not touch upon initial teacher preparation. The transformative role should start from the student teacher and later be implemented in the country.

3.4.2 The Study by Altinyelken (2010)

Altinyelken (2010) conducted a study to investigate the implementation of thematic curricula in Uganda from the teacher's perspective. The study was conducted after Uganda decided to review its primary school curricula in order to improve the quality of education, which was put in place for implementation since 2006. The curriculum was child-centred in the sense that child interest, experience and needs were put at the centre of the curriculum. Altinyelken conducted 44 interviews which included the teacher, deputy head teachers, head teachers, academicians, officials from the Ministry of Education and external supporters of Education in Uganda. Classroom observation was done during working hours.

The findings indicate that despite the efforts to orient teachers to a new curriculum, time was too short to deal with all of its aspects. Trainers did not have enough knowledge of the new curriculum. There was a severe shortage of teaching and learning resources due to budgetary constraints. Also, teacher absenteeism was significantly higher and affected the provision of quality education in Uganda as promised with this new thematic curriculum. Furthermore, the findings show that student teachers had not been provided with adequate support for the development of lower primary school. The curriculum was too theoretical with little pedagogical orientation. The issue of large class size also hindered classroom interaction for the implementation of participatory methods. The class size ranged from 30 to 70 students. It was impossible to organise small group discussions effectively.

In this highlight, the study concluded that thematic curriculum incorporates many good Ideas, but systematic problems need to be addressed. This indicates the study did not focus on the CBC in teachers colleges in Uganda.

3.4.3 The study by Shao (2006)

Shao (2006) investigated the effectiveness of the revised social studies curriculum for Grade “A” teachers in Tanzania. The study used the Stufflebeam’s CIPP model of curriculum evaluation to examine the context, input, process and output of the social studies curriculum under the revised teacher education curriculum. Two public teacher colleges and three districts were involved in the study.

The findings indicate that the reason for a revised curriculum was a product of countrywide research, various changes (global, social, economic and political) and the weaknesses of the previous curricula. The study revealed the following challenges of the social studies curricula: the curriculum change did not follow the proper procedures for curriculum design; teacher educators used trial and error techniques at the implementation stage because they had not attended any short course or in-service training; shortage of teaching and learning materials; and the planned curriculum was different from the enacted curriculum, since some teacher educators used teaching methods opposed to the planned curriculum because it required teacher educators to teach methods through content. Moreover, the majority of the observed primary school teachers were unable to design, develop and use teaching and learning aids.

The study suggested that for the curriculum change to be effective, there is a need to conduct in-service training for teacher educators and primary school teachers. The TIE has to follow the procedures of curriculum design and dissemination, teacher educators and primary school teachers have to be provided with adequate curriculum instructional materials and school inspectors have to be included in the curriculum change to conduct the quality through school inspection.

This study did not focus on the curriculum which was in place in teachers colleges from 2009.

3.4.4 The study by Meena (2009)

Meena (2009) investigated how teacher educators in Tanzania conceive curriculum innovation. In 2000 the new curriculum in diploma teacher education was introduced. The aim was to improve the quality of education with the focus on teacher education concentrating on the pedagogical aspect in the preparation of student teachers without academic content. So

the imposed curriculum was interpreted differently at this stage. Meena interviewed 30 teacher educators working in eight teachers colleges situated in various parts of Tanzania to generate data.

The study findings among other things show that there are variations in the way teacher educators perceive curriculum innovations. On the basis especially of curriculum teaching, the study shows that teacher educators interpreted teaching in terms of learner-centred orientation (competence-based) and content-based orientation. The learner-centred orientation focused on classroom interaction and engagement of students in teaching and learning, while the content-centred orientation taught by telling or transmission. Teacher educators used content orientation due to several constraints like large class size, assessment procedures and the use of modules in teaching and learning.

The study concludes that curriculum innovation did not succeed as expected by curriculum developers due to the constraints explained above. The study suggests that for the involvement of teacher educators in the introduction of curriculum, provision of teaching and learning materials and increased linkage or partnership between teachers colleges, universities, TIE and NECTA need to be accomplished.

This shows that the study focused mainly on the 2000 New Curriculum for Diploma teacher colleges and did not consider the CBC for certificate (Grade A) teachers colleges.

3.4.5 The study by Mhaiki (2009)

Mhaiki (2009) conducted a study in one public diploma teachers college to explore teacher educators' experience in the implementation of the 2007 Curriculum. The 2007 Curriculum has been introduced in teacher education because in 2005 the MoEVT reviewed primary and secondary education curricula. These curricula have changed from content-based to competence-based. Despite the new curriculum incorporating a paradigm shift from a teacher-centred model to a learner-centred model or a reflective practitioner inquiry-based model, little attention has been given to teacher educators' own knowledge and skills regarding this model.

In order to explore the experience of teacher educators, Mhaiki conducted an interview with four teacher educators with a varying range of experience. Classroom observation and document review were also used to supplement the information gathered from interviews.

The findings indicate that teacher educators understood the curriculum and had a positive attitude towards a new curriculum. Again, challenges are inevitable in curriculum implementation. Mhaiki observed the following challenges: lack of professional support, acute shortage of resources, large class size, heavy workload, lack of incentive and limited knowledge in some areas of the new curriculum.

Mhaiki suggests that professional support should be provided to teacher educators for effective implementation of education reform.

Indeed, the study is silent about CBC for certificate teachers colleges, and the comparative aspect between public and private teachers colleges.

3.4.6 The study by Bhalalulesa, Westbrook and Lussier (2011)

This was a research project on teacher preparation and continued professional development in Africa funded by William and Frola Helett Foundation. The aim of the project was to find out how initial and continued education of teachers impacts the practice of teachers through studies in Ghana, Kenya, Malawi, Senegal, Tanzania and Uganda. The report was compiled to show the trend in each country. This section shows the Tanzanian country report on the preparation of teachers in reading and mathematics and how it influences practice in primary schools. The study was interested in finding a solution to the problem of raising the quality of education in order to meet the global campaign for Education for All by 2015. Teacher education was considered to be among the solutions, by meeting the demand for teachers equipped with enhanced skills and competencies through continued professional development.

The study involved four teachers colleges (3 public and 1 private located in rural and urban areas). Data were collected by using interviews, observation, questionnaires, and student teachers focus group discussions.

The study findings show that both teacher educators and student teachers consider teachers colleges as the main source of knowledge. The syllabus is well aligned with the primary school curriculum since it covers the main topics taught in primary schools. One weakness observed was that the curriculum presented general knowledge without separation of the content between lower and upper primary schools. Moreover, the study revealed that teacher educators were not involved in the review of the curriculum, and this affected the implementation. Outdated books were used, due to lack of a clear textbook policy guiding curriculum implementation. Time spent for student teachers to practice mathematics and reading was relatively short for developing skills and experiences to teach in the lower classes. The study made the following recommendations:

- Student teachers have to spend more time during teaching practice to strengthen their teaching skills in lower classes.
- To ensure teacher educators have updated professional development in reading, theory and practice is needed with the model from the primary school curriculum.
- Teacher educators have to be informed about any changes in primary school curriculum and have to be involved in the review.
- The textbooks used in primary schools have to be aligned with the curriculum in order to reduce the risk of confusion between student teachers and teachers.

Therefore the study considered the preparation of student teachers in reading and mathematics, but did not consider the development of competencies in Geography for student teachers.

3.4.7 The study by Mlelwa (2012)

Mlelwa (2012) conducted a study to explore the implementation of learner-centred evaluation in the teaching and learning process in teachers' colleges in Tanzania. To achieve the above goal, Mlelwa examined the preparation of lesson plans, evaluation of lessons at the classroom level and the involvement of student teachers in the classroom, and finally identified challenges facing teacher educators in using learner-centred evaluation in teaching and learning Geography to diploma student teachers. The study was qualitative and involved four teacher educators, eight student teachers, and one academic master.

The findings of the study indicate that teacher educators did not fully engage student teachers in the evaluation process. Oral questions were used more often than cards and pieces of paper

as recommended in the literature. Some challenges revealed in the implementation of the learner-centred curriculum were little knowledge among teacher educators about learner-centred evaluation, limited time for lesson evaluation, large class size, lack of resources, overloading of the curriculum and the fear of teacher educators about losing confidence or control in the classroom.

The study suggests that in-service training for teacher educators has to be done with learner-centred evaluation approaches, and teacher educators need to accept challenges from student teachers regarding their evaluation practices and work with them for improvement of teaching and learning.

This study was about diploma teachers colleges. The study did not include the views of other important curriculum implementers such as Curriculum Developers and the College Principal, notably in the provision of teaching and learning resources needed in learner-centred approaches. Also the study did not focus on certificate teachers colleges where the current study was interested in sharing experiences with Geography lessons.

3.4.8 The study by Kafyulilo, Rugambuka and Moses (2012)

Kafyulilo et al. (2012) investigated the implementation of competence-based teaching approaches in Tanzania. A quantitative study was conducted on student teachers at Morogoro Teacher College to assess the competencies developed, in order to effectively implement them in secondary schools. Data were collected by using 78 questionnaires and a structured interview (46 among the student teachers).

The study findings indicate that theoretically, student teachers know competency-based teaching approaches, but practically they were not able to demonstrate competencies as stated in the lesson plans. In assessing the student teachers' ability to practice various competence-based instructional approaches, the study revealed that student teachers believed they had a good understanding of instructional practices which are competence-based. Based on the standard deviation, which was moderately large, this implied that some of the student teachers had a limited knowledge of competence-based instructional approaches. In assessing the implementation of competence-based practice, the findings show that though the majority of student teachers perceived their knowledge of implementing competence-based practice to be

high, in some cases there was disagreement. The implication of this is that student teachers are not well trained in the competence-based teaching approaches.

In this regard the study did not focus on the teacher educator's knowledge and understanding of competence-based teaching approaches. Also the study did not focus on certificate teacher colleges (Grade A). The current study is expected to shed light on these areas.

3.5 Synthesis and Knowledge Gap

This chapter presented the literature review of the theme of CBC. The review was focused on an overview of teacher education in Tanzania, CBC, factors for curriculum reform and empirical studies that are related to the study.

The empirical studies surveyed shows there are various studies that have been conducted on issue related to CBC. The study surveyed show that curriculum was reviewed in order to provide quality education in secondary and Diploma teachers college. The empirical studies surveyed show the intention of the curriculum reform was not achieved due to various constraints. The hindrance factors were defining the term competencies, lack of knowledge on competence-based teaching approaches, severe shortage of teaching and learning resources, large class size, assessment procedures, lack of professional support, short time for student teacher in developing of competencies.

In this regard these studies focused on the secondary school and Diploma teachers college, they did not touch upon the CBC implantation in certificate teachers colleges. Again the current study is expecting to shade light on the way teacher educators, student teachers, College Principal implement the CBC in public and private teachers college. The knowledge gap about the level of understanding on the competence teaching approach to teacher educators and the practice of CBC in the implementation stage will be filled.

The next chapter presents the methodology.

Chapter Four: Methodology

This chapter deals with the research methodology that was employed in data collection and data analysis of this study. The chapter covers the research strategy and the reasons for its choice in the study. Further, the chapter covers the area where the study was conducted, the target population, the sample and sampling procedures, data collection instruments as well as the data analysis plan of the study. The final section is the summary of the chapter.

4.1 Research Strategy

Bryman (2012) describes the research strategy as a general orientation to the conduct of social research. According to Frankfort-Nachmias and Nachmias (1996), a research strategy is the blueprint which enables an investigator to come up with solutions to the problem. It also guides the researcher in various stages of the research. Bryman (2012) maintains that there are two types of research strategy, qualitative and quantitative. Quantitative research strategy emphasises the quantification in the collection and analysis of data, entails a deductive approach to the relationship between theory and research and incorporates the practices and norms of the natural scientific model. In contrast, in the qualitative research strategy the emphasis is on words rather than quantification and statistics in the collection and analysis of data (Bryman, 2012; Berg 2007).

The qualitative approach was employed in this study, due to the nature of the topic and the objective of the research. The qualitative strategy was relevant to enabling the researcher to obtain information which is purposeful and compressive and which minimizes subjectivity. Creswell (2003) and Tilya (2003) view qualitative research as the approach which uses multiple methods that are interactive and humanistic, involving naturalistic and descriptive approaches. The approach views social phenomena holistically, rather than utilizing an experimental and quantitative approach. Bogdan and Biklen (1992) further maintained that qualitative research studies rely on observation, open-ended interviewing and documentation. The four methods of data collection were used so as to capture the voices of teacher educators, student teachers, the College Principal and Curriculum Developers.

4.2 Case Study Design

Yin (2009) describes research design as the logical sequence that connects the empirical data to a study's initial research questions and, ultimately, to its conclusions. This is not far from Kothari (2004), who considers research design as the conceptual structure within which the research will be conducted. Research design is used to structure the research to show all of the major parts of research project work together to address the central research question. The research design shows all stages a research study undergoes from the identification of the problem to the final presentation of the findings and conclusion relating to the research problem.

Case study design was employed because of its methods of data collection involving classroom observation, review of documents and interviews. Lewis (2003) states that a case study is strongly associated with qualitative research. Although it is used in a variety of ways; it sometimes appears to be used as a synonym for qualitative research. This approach enabled rich data to be obtained which was complete enough to portray a full picture in the implementation of competence-based curriculum in teachers colleges. The case study design was used in order to obtain relevant data, thus fulfilling research objectives and answering a set of research questions.

This study employed comparative case study design. Bray and Thomas (1995) describe a cube that is used as a framework for comparative analysis which includes geographical or location level, aspects of education and non location or demographical groups. Based on this framework the current study used two teacher colleges as the level of analysis, while the unit of analysis was the implementation of CBC as Bray and Thomas called the aspect of education.

The rationale was to provide description, interpretation and comparison between the two teachers college on how they implement CBC in certificate teachers' colleges. Where describing, collecting, analysing and interpretation of data, establishment of similarities and differences and drawing conclusion seems to be important aspects to put into consideration when conducting comparative studies (Bereday, 1964). In this sense it was paramount to find out the way CBC implementation was actually implemented between the two teacher colleges

and to be able to tell their similarities and differences due to the fact that one is public and the other is private.

4.3 Research Site

The study was conducted at two teachers colleges located in the Mbeya region. One college was a public teachers college (*College A*) and the other was a private teachers college (*College B*). Purposive sampling techniques were used to select these two teachers colleges. The reasons will be explained in the next section.

The Mbeya region is geographically located in the southwest of the country, commonly known as the southern highlands. The region has eight districts: Mbeya city, Rungwe, Mbalali, Ileje, Chunya, Kyela, Mbozi, and Momba. The regional capital is Mbeya city. The population of Mbeya is 2,707,410 (Males 1,297,738; Females 1,409,672) with a 7.6 percent annual population growth rate (URT, 2012). The borders of the Mbeya region are the Iringa region to the east, Rukwa region to the west, Singida region to the northeast and Tabora region to the northwest. To the south Mbeya is bordered by two countries, Malawi and Zambia.

Mbeya is a largely expanding region with rapid growth in the number of higher learning institutions such as Theophilo Kisanji University, Mbeya University of Science and Technology, Mzumbe University Mbeya campus and Tumaini University Mbeya campus. In addition to higher learning institutions, Mbeya is well endowed with pre-primary schools, primary schools, secondary schools, teachers colleges and vocational training centres which are both private and government owned. This makes Mbeya an important centre of study.

The study was carried out in one region for various reasons. First, the two teachers colleges employ CBC in their programmes. Second, the research area was chosen because it was accessible and familiar to the researcher. It was economical in terms of time, money and energy to collect data in the Mbeya region rather than elsewhere.

Moreover, the Mbeya region was among those areas less well studied and documented. The researcher believed that there may be interesting lessons to learn there. Certainly there was hope that it would lead to direct or indirect influence on the effective implementation of CBC. Clearly it would have been desirable to conduct a study for the whole country, comprising 21

regions and 105 (34 public and 71 private) registered teachers colleges, but as stated above, this was not an economic proposition.

Furthermore, teachers *College A* was the only public teachers college offering certificate courses in the region, so it was deliberately selected to be included in the study. As for teachers *College B*, only two teachers colleges were found in the Mbeya region that was private. The selection of teachers *College B* was based on the rapport that had been established between the researcher and the College Principal before the actual data collection began. So it was necessary to go to teachers *College B* more than any other in the region because that saved time. The two colleges were purposively selected in order to make comparison between them on the way CBC was implemented between public and private teachers college in Mbeya region. Map 4.1 shows the location of the Mbeya region where the two teachers colleges were selected.

Map 4.1: Map showing the location of Mbeya Region where College A and College B were selected.



Source: www.mapsofworld.com retrieved on 04th March 2014.

4.4 Population and Sample

4.4.1 Population

According to Bryman (2012), the term population refers to the entire group of individuals, plants or things that have one or more characteristics in common and which are of interest to the study. The target population for this study comprises teacher educators, student teachers, College Principals and Curriculum Developers who are involved in the implementation of CBC. The individuals who were selected from the whole population of teacher educators and student teachers reflect the diversity of ideas, experience and feelings about the general climate of implementation of CBC in teachers colleges. When considering financial and time

constraints, it was not possible to conduct this study in both teachers colleges in Tanzania and in the Mbeya region. There was a need to have representative samples, which is why one public teachers college and one private teachers college were selected.

4.4.2 Sample

Cohen *et al.* (2007) defines a sample as a smaller group or subset of a total population, from which the knowledge gained, is representative of the total population under study. Regarding sample size, Cohen *et al.* (2007) contend that there is no clear-cut answer to a question that often plagues novice researchers on how large their sample for the research should be. Patton (2002) recommends that sample size depends on what a researcher wants to know, the purpose of the inquiry, what is at stake, what will be useful, what will have credibility, and what can be done with available time and resources. In this study the total number of respondents was 19. The reasons for selection of each sample are explained in the next section on the sampling process. The sample is summarized in table 4.1.

4.5 Sample and Sampling Procedure

4.5.1 Purposive Sampling

Purposeful sampling was used in order to study a small number of selected teacher educators, the College Principal and Curriculum Developers. Patton (2002) emphasises that the logic and power of purposeful sampling lies in selecting information-rich cases for study in depth. Patton (2002) adds that in using purposeful sampling one might be able to get a deeper understanding of an issue rather than by making empirical generalisations.

Teacher educators were included in the study because they translate the CBC into classrooms and in this sense were key informants for the study. Teacher educators provided rich and in-depth information of implementation of the curriculum. Also teacher educators were selected because they are important to answer the research questions (Bryman, 2008). Teacher educators are directly responsible for implementing CBC so as to develop required competencies in student teachers. Along with the need of developing required competencies it was important to include teacher educators because their teaching and learning processes contribute to the teacher's professional development. Teacher education programmes among other things need knowledge, skills and attitudes required in primary education.

Principals of two teachers colleges were deliberately included in the study, due to the role they play in the day-to-day running of the colleges during the actual implementation of competence-based curriculum. The College Principal is the one responsible for all administrative and academic decisions. They coordinate teaching and learning activities at the college. On this basis they were included in the study because they were expected to provide information on the implementation of CBC in the teachers college. College Principals were helpful in the selection of Geography teacher educators to be included in the study.

One Curriculum Developer was included in the study because she was involved in curriculum change from KBC to CBC. As stated elsewhere in this report, curriculum development in Tanzania is designed and developed by the TIE as an agency of the MoEVT. Based on the study's objective, as the researcher wanted to interview the curriculum developer for geography, the Director General of Institutes deliberately selected a specific curriculum developer who was a specialist in these areas in teacher education.

4.5.2 Stratified Sampling

Stratified sampling was used to select student teachers who participated in the study. Student teachers were included in the study because they are the target group for implementation of the curriculum in developing required competencies. Only second-year student teachers were included in the study, because at the time of data collection first-year student teachers had had only two months of the study since they joined the college. In *College A*, there were four streams which comprise more than sixty (approximately 67) student teachers. It was not possible to include all of them in the focus group discussion, so simple random methods were used to get two student teachers from each stream. But in one stream, students were not ready to participate in the study so it was decided not to force them, because participation in the study was on a voluntary basis. From *College B*, students were selected randomly from the second year class and because the college had only one stream. In both teachers colleges, gender balance was observed. In both cases geography teacher educators were involved in the selection of student teachers to be included in the focus group discussion.

Table 4.1: Sample Size

Sn	Category of Respondents	College A			College B			Total		
		M	F	T	M	F	T	M	F	T
1	Teacher Educators	1	1	2	1	1	2	2	2	4
2	Student Teachers	3	3	6	3	3	6	6	6	12
3	The College Principal	-	1	1	1	-	1	1	1	2
4	Curriculum Developer	-	-	-	-	-	-	-	1	1
	Total	4	5	9	5	4	9	9	10	19

Source: Field Data (2013)

4.6 Data Collection Instruments

The selection of data collection instruments was influenced by multiple factors such as the type of research, time, finances and research participants (Yeshalem, 2013). Based on these observations, data were collected by using interviews, focus group discussions, observation and analysis of documents. This methodological triangulation in data collection helped the researcher to have several lines of sight on the implementation of CBC in teacher colleges. Methodological triangulation helps the researcher to understand the object of research in a complete way (Berg, 2007). Table 4.2 below shows the types of instruments employed during data collection in relation to the research questions.

Table 4.2: Matrix of Research Questions, Methods and Instruments

Research question	Respondents	Data collection methods	Data collection instrument
What is the knowledge of teacher educators on Competence Based Teaching approaches?	Teacher Educators Student Teachers College Principal Curriculum Developer	Interview Focus Group Discussion Observation Review of documents	Interview guide Focus Group Discussion Observation Schedule Documentary Review guide
To what extent can teacher educators practice Competence Based Teaching approaches in teaching Geography?	Teacher Educators Student Teachers College Principal Curriculum Developer	Interview Focus Group Discussion Observation Review of documents	Interview guide Focus Group Discussion Observation Schedule Documentary Review guide

4.6.1 Interviews

Interviews are verbal conversations with a normal purpose, the interviewer attempting to solicit information from another person (Creswell, 1998; Kvale, 2006). The interview guide is used as a tool for the live conversation. The study used unstructured interviews to elicit

information from four teacher educators, two College Principals and one Curriculum Developer.

The interview guide was developed before the actual data collection process (*Appendix A, C, and D*), in line with the theme of the research question. The interview session with teacher educators was administered in their respective offices on different dates at the agreed time. The interview session lasted 40 minutes with each teacher educator. It focused on the issues relating to how teacher educators develop required competencies in student teachers, their experience with the implementation of CBC and challenges they encounter in the implementation of CBC, with a view to providing solutions of the challenges mentioned. Follow-up questions were asked so as to clarify data obtained.

College Principals were also interviewed in their offices. The instruments assisted in exploring their perception and experience of the process of implementation of CBC (*Appendix C*). It was not possible to reach the Curriculum Developer in her office during the time of field work because she was out of Dar es Salaam where the office of the TIE is situated. The researcher reached her by phone from Oslo. In this way the researcher missed the face-to-face interview which might have provided an opportunity for eliciting sustainable attention information during the interview (Patton, 2002).

During the interview the conversation was recorded, but this was based on their consent to the researcher's need to record their conversation (*Appendix G*). The consent form was filled out after the researcher had briefly put forward the introductory note as a student from the University of Oslo in Norway. A teacher educator in one of the teachers colleges was interested in investigating the implementation of CBC. The researcher assured the participant that the information provided would be used for the purpose of research only (confidentiality and anonymity).

4.6.2 Focus Group Discussions

The study used focus group discussions to collect data from student teachers from two teacher colleges. The choice of this method was based on the view that interaction among participants may stimulate each individual to state his or her own feelings and perceptions (Okwaput, 2013). The expectation of the focus group discussion was that it would help student teachers

to express their experience of CBC and how it helps them to develop the required competencies as student teachers. The discussion basically was on how they implement CBC. Issues like preparation of a competence-based lesson plan, their opinion of the curriculum used and suggestions on how to effectively implement it were explored. There were 12 student teachers included in the focus group discussion, from whom six were selected from each teachers college. Gender balance was observed.

The focus group discussions from *College A* took place after class hours. It was convenient to conduct the focus group discussion at this time so as to allow concentration on the discussion rather than the class itself. In *College B* the discussion was done 30 minutes before students departed for home between 2:30 PM and 3:00 PM. *College A* is a boarding college while *College B* is a day college. Questions for discussion were posed to the group and an opportunity was given to all student teachers to participate. Before the discussion began, some rules were established to run the discussion smoothly with a view to valuing individual contributions. The discussion lasted 50 minutes. The researcher recorded all conversations of the focus group discussion after they signed the consent form. The group used the Kiswahili language so that student teachers could express themselves well in the language most familiar and convenient. Kiswahili is the language which is used as the medium of instruction in certificate teacher colleges in Tanzania (URT, 1995).

4.6.3 Observations

In this study, observation strategy was used to evaluate the context, input and process of implementation of CBC. It was necessary to use this method in order to gather first-hand information occurring in a natural setting. Silverman (2006) argues that observation is the data collection method aimed at collecting first-hand information about the social process in a naturally occurring context. To be able to record observable behaviours, the researcher developed an observational schedule (*Appendix E*) showing specific items covering the following: teaching and learning processes in the classroom, teacher education and student teachers' classroom behaviours, types of teaching and learning materials available in the classroom, and type of facilitation techniques used in the teaching and learning process.

In both teacher colleges visited there were four sessions of classroom observation. The researcher was given a chair at the back of the classroom. Before the teaching session started,

he was introduced by the teacher educator to the class. This was important to avoid discomfort during the teaching and learning process and encourage them to show their natural behaviour during the session. A tape recorder was also used during the session, together with the field note book. The combination of interview and observations helped to achieve the context of the process of development of competencies at the classroom level.

4.6.4 Analysis of Documents

Analysis documents formed the preliminary research process in which various documents in relation to the research question were referenced. As noted by Patton (2002), documents prove valuable not only because of what can be learned directly from them but also as stimuli for paths of inquiry which can be pursued only through direct observation and interviewing. This indicates that documents are a valuable source of information and therefore important to be considered as a data collection method. Yin (2009) contends that the most important use of documents is to corroborate and argue evidence from other sources.

In this study, various documents were collected and analysed. Relevant documents such as the scheme of work, lesson plan and syllabi were analysed. Other documents were Educational and Training Policy (1995), Tanzania Development Vision (2000-2025), Education Sector Development Program, Teacher Education Master Plan, Basic Education Statistics in Tanzania and programmes. These documents helped to gain a deeper understanding of the way CBC is contextualised and actually implemented. I assessed the Geography curriculum used to understand its aims, objectives, proposed content, suggested teaching and learning methods, teaching aids and assessment methods.

Furthermore, the review of the documents at the preliminary stage helped to identify the informants for the interview and to develop some probing questions during the interview session. The study used a checklist in analysing documents (*Appendix F*).

4.7 The Quality of the Study

Validity and reliability are the measures of quality of the study in qualitative research. Lincoln and Guba (1985) propose alternative terms and ways of assessing qualitative research, such as trustworthiness, with four parallel aspects of credibility, transferability, dependability and conformability. Bryman (2012) asserts that validity is concerned with the integrity of the

conclusion generated from a piece of research. In order to ensure the validity and reliability of study, several procedures were followed:

First was the use of multiple sources of evidence in the data collection. This method is called triangulation (Yin, 2009., Silverman, 2006., Brock-Utne, 1996). Data were collected using interviews, focus group discussions, observations and review of documents. Second, some of the informants were given a chance to listen to the audio recording. In this way it was easier for them to ascertain that the recorded conversation was correct and, if necessary, make some modifications. Third, time was spent on observation in order to observe the interaction between teacher educators and student teachers in the development of required competencies. At this stage it was easier to collect rich and detailed information.

The study was conducted in two teachers colleges (*A* and *B*). As a former teacher educator of the teachers *College A*, the researcher tried to prevent his own experience from influencing the findings. Patton (2002) asserts that no field work can ever be totally free from the ideas and thoughts of the researcher. For this reason, the focus was on the research objectives and direct questions related to the study, keeping free of the researcher's experience and awareness of the area.

4.8 Ethical Considerations

This study was conducted in Tanzania. Bryman (2008) asserts that ethical issues cannot be ignored as they relate directly to the integrity of a piece of research and the disciplines involved. Before data collection, the research project was registered with the Norwegian Social Science Data Services (*Norsk Samfunnsvitenskapelig Datatjeneste AS-NSD*). Then a clearance permit from the University of Oslo was obtained (*Appendix I*). The research clearance was presented to the MoEVT in Tanzania, and later to the Mbeya Regional Administrative Secretary (RAS) to obtain permission to carry out this study (*Appendix J and K*). To ensure informed consent, fair and full explanations of the objectives were provided along with the purpose of the study, and thereafter permission from participants was requested by signing the research consent form that was developed (*Appendix G*). Data were stored in a safe place so as to avoid the risk of invading respondents' privacy.

4.9 Data Analysis Procedures

The data obtained from interviews and focus group discussions were transcribed as deductively dictated by the associated research question and the theoretical framework. The goal of this transcription was to produce a detailed account of the implementation of CBC. Systematic coding was done fully after transcription in order to generate themes, topics, ideas and concepts related to CBC. Coding helped in making comparisons between public and private teachers colleges and how they implemented competence-based curriculum. In addition, literature review on the topic of CBC helped in analysis of the data.

In order to identify different types of respondents, names of respondents were categorically coded in abbreviated form. For example, there were two teachers colleges included in the study. The names were given as follows: *College A* and *College B*. Abbreviations were used to refer to the names of respondents. Conversations were also identified by the time and date of the interview at the end of the conversation. For more details refer to table 4.3.

Table 4.3: Names of Respondents

Category of Respondents	College A	College B
Teacher Educators	Teacher Educator (A-T1) Teacher Educator (A-T2)	Teacher Educator (B-T1) Teacher Educator (B-T2)
Student Teacher	Student teacher (A-S1) Student teacher (A-S2) Student teacher (A-S3) Student teacher (A-S4) Student teacher (A-S5) Student teacher (A-S6)	Student teacher (B-S1) Student teacher (B-S2) Student teacher (B-S3) Student teacher (B-S4) Student teacher (B-S5) Student teacher (B-S6)
College Principal	College Principal A	College Principal B
Curriculum Developer	Curriculum Developer	

4.10 Summary

This chapter has presented the whole process of data collection with the application of qualitative research methods. Rich and detailed data were collected, subjected to transcription, coding and categories, so as to be presented in a readable way. The following chapter presents and analyses the research findings.

Chapter Five: Data Presentation and Analysis

This chapter presents and analyses the data gathered through interviews, focus group discussions, classroom observation and document analysis. The process of presentation and analysis is guided by the concepts from the theoretical framework with the aim of answering the research questions.

The study investigated the implementation of competence-based curriculum in teachers colleges in Tanzania using a comparative case study between public and private teachers colleges located in the Mbeya region in Tanzania. Two specific objectives guided the empirical study. The first objective was to assess the level of understanding of teacher educators on the competence-based teaching approaches. The second objective was to assess teacher educators, student teachers, College Principals and Curriculum Developers as to whether they practically implement CBC in the teaching of geography. Data from two teacher colleges are presented and analysed together in order to show their similarities and their differences. This was done purposively in order to present an accurate picture of the implementation of CBC in the two teachers colleges.

5.1 Teachers College A and B

College A is located in a rural area and is a public teachers college, established before independence. Formerly it was a middle school during the colonial period. *College B* was a private teachers college located in an urban area. The college was established when Tanzania adopted the liberalization policy which allows private teachers colleges to be established in the country. The enrolment in *Colleges A* and *B* is presented in table 5.1.

Table 5.1: Student Enrolment in the year 2013/2014

Year of Study	College A			College B		
	M	F	T	M	F	T
Year1	339	199	538	41	24	65
Year2	164	106	270	34	22	56
Total	503	305	808	75	46	121

Source: Field data (2013)

Table 5.1 indicates that both teachers colleges have high enrolment of student teachers and there is an imbalance of gender. Various policies insist that gender balance has to be observed in every aspect of life socially, politically and economically. When the College Principal A was asked why there was gender imbalance, she responded that normally students are sent directly from the MoVET to public teachers colleges. The college principals have no say when it comes to the enrolment of the students in public teachers colleges. In private teachers colleges enrolment depends on their capacity to support student teachers. The trend of enrolment in public teachers colleges has an effect on the implementation of CBC because the enrolment did not consider the college's physical and human capacity.

At the time of the study, *College A* (See table 5.2) had forty teacher educators, among whom there were twenty-seven males and thirteen females. Academic qualifications varied between teacher educators. Six had diplomas in education; twenty seven had first degrees in education, while seven held master's degrees in education. Regarding teaching experience, it was revealed that twenty-two teacher educators had less than ten years' teaching experience, while eighteen had more than ten years' teaching experience.

College B had ten teacher educators at the time of this study. There were nine male teacher educators and one female teacher educator. There was no big difference in terms of academic qualifications. Four teacher educators had master's degrees and the rest (6) had bachelor's degrees. The notable difference between the academic qualifications is that all teacher educators had Bachelor of Arts degrees in education. Among teacher educators of *College B* it was found that one teacher educator had more that thirty nine years of teaching experience while the rest (nine) had less than ten years' experience. Table 5.2 compares the gender, academic qualifications and working experience of teacher educators at both Colleges.

Table 5.2: Teacher Educators Profile

Name of the College	Gender			Academic Qualification			Working Experience	
	M	F	T	Diploma	Degree	Masters	< 10	> 10
College A	27	13	40	6	27	7	22	18
College B	9	1	9	-	9	1	9	1

Source: Field data (2013)

Table 5.2 indicates that *College A* had qualified teacher educators to teach and work in a teachers college. According to URT (1995), diploma teacher educators had to be phased out, to be replaced by educators that have the first degree and above. Through an informal conversation with the College Principal A, it was found that teacher educators who had a diploma in education are now upgrading their academic qualifications through distance learning offered by the Open University of Tanzania, but some had also been enrolled in various universities to pursue their education degrees. This indicates that the gap will be filled in the near future.

College B may lack qualified teacher educators to teach and work in *College B*. The required qualification for teacher educator was bachelor of education, but the nine teacher educators had Bachelor of Arts in education, which is the secondary school category. In this case, *College B* had only one teacher educator who earned the bachelor of education and master of education with long experience in teaching at various levels. There is a need for the college to fill this gap in order to implement well CBC at *College B*.

It was found that there were eleven subjects that are taught at both colleges. The list of subjects is indicated in table 5.3.

Table 5.3: Teachers College Subjects Taught

Sn	Name of the Subject
1.	Civics
2.	Education
3.	Educational Media and Technology
4.	English Language
5.	Information and Communication Technology
6.	Kiswahili
7.	Mathematics
8.	Personality and Sports
9.	Science
10.	Social Studies
11.	Vocational Skills

Source: Field data (2013)

In examining the curriculum of certificate teacher colleges, it is found that some subjects are merged. For example, social studies comprises two subjects, geography and history; education comprises three subjects, educational psychology, guidance and counselling; education research measurement and evaluation and foundation of education. In allocation of periods each subject is taught separately because the syllabus that guides the delivery was also separate. In this case it was observed that the curriculum was overloaded with a lot of topics to be covered while the evaluation was based on a few topics only.

5.2 Characteristics of Respondents

The background information of the research participants was considered important in conducting research. Their information was gathered at the beginning of the interview session. It was necessary to describe the research participants in order to understand them in terms of their gender, academic qualifications and working experience. These are important items of information in the implementation of CBC. The study involved nine respondents from *College A*, whereby two were teacher educators, six student teachers and the College Principal. With *College B* the study involved nine respondents. Two were teacher educators; six were student teachers and the College Principal. Table 5.4 shows the general characteristics of the respondents from *Colleges A* and *B*. The information was gathered at the beginning of the interview session.

Table 5.4: Characteristics of Respondents Showing Gender, Academic Qualifications and Working Experience

Category	Gender			Academic Qualification			Working Experience	
	M	F	T	O-level	Degree	Masters	< 10 Years	> 10 Years
College A								
Teacher Educators	1	1	2	-	1	1	2	-
Student Teachers	3	3	6	6	-	-	-	-
College Principal	-	1	1	-	-	1	-	1
Total	4	5	9	6	1	2	2	1
College B								
Teacher Educators	1	1	2	-	1	1	1	1
Student Teachers	3	3	6	6	-	-	-	-
College Principal	1	-	1	-	-	1	-	1
Total	5	4	9	6	1	2	1	2

Source: Field data (2013)

5.2.1 Teacher Educators

Table 5.4 above shows that gender balance was observed in the study in both colleges. Education levels of teacher educators in *College A* were slightly different because one teacher educator had a degree in education and the other had a master's degree in education. Through interviews both demonstrated that they had the bachelor of education in their undergraduate studies. Regarding experience, both showed that they had less than ten years of teaching experience. In an interview with the female teacher educator, she added that she had been a secondary school teacher and later upgraded her qualifications to hold a bachelor's degree in 2008. This indicates there is a slight difference in teaching experience even though both fall under the category of less than ten years of teaching experience. Teaching experience is among the important aspects to observe in the implementation of CBC and even in curriculum reform in general.

In *College B* it was found that one teacher educator had a Bachelor of Arts in education and the other one had a Master's degree in education. The male teacher educator had less than ten years of teaching experience while the female teacher educator was a retired teacher educator with more than thirty nine years' teaching experience. Through an interview conducted with the teacher educator, this indicates that teaching experience was a resource in the curriculum implementation.

5.2.2 Student Teachers

Twelve student teachers were included in the study to participate through focus group discussions. Gender balance was observed in the selection of student teachers (three male student teachers and three female student teachers from each college). This helped to have both views represented on the way CBC was implemented at *Colleges A* and *B*. Academic background was the same for all students before joining teachers colleges. Student teachers had ordinary secondary education, which was the required qualification to join a teachers college. MoEVT set minimum entry qualification for student teachers to be ordinary secondary school with division four point twenty seven of national examination results. More explanations on the entry qualifications of student teachers is presented in student teacher factors (Section 5.2.2).

5.2.3 College Principals

College A was headed by the College Principal. Academically, the College Principal held a Master's degree in education and her specialty was teacher education. Her teaching experience was more than twenty years. Before she become a Principal at *College A*, she worked as an academic teacher educator and dean of students at one public teachers college. In this way she had long years of experience of teacher education in Tanzania which would help her as an administrator in the implementation of CBC.

College B was headed by a male College Principal. Academically, he held a Master's degree in education and had long years of experience in teachers colleges. He worked as a part-time College Principal because he was employed in one of the public teachers colleges in the Mbeya region. Based on his academic qualifications and experience of working in both private and public teacher colleges, he would help him as administrator to effectively implementation CBC.

5.2.4 Curriculum Developer

The study involved one curriculum developer from the TIE from Dar es Salaam. As stated elsewhere in this report, teacher education curriculum is centralised. The curriculum developer fell under neither the category of *College A* nor of *College B*. The Curriculum Developer had experience of more than ten years and formerly she worked as a secondary

school teacher for five years. Her main responsibility was to design and develop curricula for secondary schools and teacher colleges. Again, having this experience would help in the implementation of CBC.

5.3 The Context

Document review showed that CBC was introduced in the Tanzanian context in order to provide quality basic education for all. The sources of the curriculum objectives and goals were derived from the National Development Vision 2025, where education was seen as a tool or strategy and a requirement for economic development and poverty reduction (URT, 1999). The National Development Vision states clearly that:

Tanzania should have a well-educated learning society that provides the quantity and quality of educated people sufficiently equipped with the required knowledge to solve society's problems, meeting the challenges of development and attaining a competitive regional and global level.
(URT, 1999. p.5)

Based on this vision, education was seen as a strategy or tool for changing the mind set of Tanzanians. Education equips Tanzania with the knowledge and skills which enable them to compete and cope with national and international challenges. In translating the vision, the government formulated the Education Sector Development Programme (ESDP, 1997) so as to set directions on how to achieve national and international goals. At the international level Tanzania is a signatory of the United Nations Millennium Development Goals (MDG), and the Jomtien Declaration on Education for All (EFA) has been reaffirmed in the Dakar Framework for Action (URT, 2008). The international targets and goals also need to be translated into national educational policies and plans.

A series of education programmes was formulated, such as the Teacher Education Master Plan (2000-2005), PEDP I (2002-2006), PEDP II (2007-20011), SEDP I (2004-2009) and SEDP II (2010-2015). The key objectives of the PEDP were enrolment expansion, quality improvement, capacity building and effective utilisation of human and physical resources. In all these series of programs, teacher education preparation and supply were among the important aspects to be considered. In this sense, curriculum for teacher education was also the focus, because it considered the preparation of qualified teachers to teach in Tanzanian primary schools which is finally needed to provide Education for All.

In the year 2009 the CBC was designed and developed. The Geography syllabus was also included in the shift from knowledge-based to the competence-based. Geography is among the subjects taught at certificate teachers colleges, as was revealed through the documents and focus group discussions. Geography was subsumed under social studies, the other subject being history.

In assessing the number of subjects, it was seen that they cut across all areas needed to be taught by student teachers who were being prepared academically and pedagogically. As Meena (2009) commented, the previous curriculum focused on methodology only and was criticised because it did not prepare student teachers equipped with both academic and pedagogical competencies. In response to this observation, the current curriculum balances both academic and pedagogical competencies, as is recommended for teachers' professional development.

The objectives of the geography curriculum in certificate teacher education were formulated.

These objectives were:

- To develop the ability of student teachers to be able to handle geography subjects academically.
- To provide opportunities for student teachers to increase their knowledge and skills in geography subjects.
- To prepare teachers with skills and strategies of research, measurement and evaluation of geography subjects.

MoEVT, 2009. p.1

In assessing the Geography curriculum it was discovered that the curriculum was divided into two parts. Part one deals with the academic component, while part two focuses on the teaching of the geography component. In both parts, there are specific competencies that were needed to be acquired by student teachers at the end of their programme.

In the academic component, competencies expected to be developed were:

- To identify existing natural resources in Tanzania and to preserve the natural resource as an inheritance.
- To use knowledge and different approaches in solving problems facing environment in collaboration with local and external supporters.
- To use the skills of observing, researching, recording, analysing and interpreting geographical issues.

MoEVT, 2009. p.1

In the teaching subject competencies, the curriculum stresses the following competencies:

- To prepare, analyse and use the equipment and the tools for effective teaching and learning.
- Using learning methodologies that will help student teachers to be employed or self-employed.
- To measure and evaluate effective teaching of subjects on the cross-cutting issues in an integrated environment.
- Using participatory methods for effective teaching.

(MoEVT, 2009. p.1)

As stated earlier about the Geography curriculum, this indicates there was a balance between academic and pedagogic components.

5.4 Support from Outside Agencies (Input)

5.4.1 Teacher Educator Professional Development

Teacher educators were expected to implement the CBC. The study showed that the support for teacher educators was partially done by conducting training for teacher educators, College Principals and primary school teachers in public teachers colleges only. The first in-service training was held in 2007 and 2008. In-service training aimed at equipping teacher educators and the College Principal on competence-based teaching approaches. In 2009 another important in-service training was held at teachers colleges in various zones. This support was provided by the MoEVT through the teacher education department. All these efforts were directed at helping teacher educators to develop professionally. Private teachers colleges were not included in the programme. The trend affects the implementation of CBC because student teachers implement a centralised curriculum. *College B* needed to find other means of professional support from outside agencies for teacher educators.

Teacher educators from *College A* who attended the in-service training argued that the training was inadequate. The argument put forward was that the time for seminars was too short to cover all aspects of CBC. Teacher educators observed that trainers were suggesting using competence-based teaching approaches which fit small class sizes of 20 to 30 student teachers, but in reality teacher colleges had classes of more than 60 student teachers. This indicates that professional development was at stake. Similar observations were made by Altinyelken (2010) during curriculum evaluation in Uganda, that thematic curriculum suffered from short training time and inadequate knowledge of trainers. This trend in general affected the implementation of CBC, and hence teacher professional development.

5.4.2 Provision of Physical Resources

The role of curriculum developer was to design and develop CBC. Once the curriculum was ready, it had to be distributed to teachers colleges and other stakeholders interested in curriculum through the Ministry's website. Teacher educators and other stakeholders were able to download from the Ministry's website. There were not any books accompanying the curriculum. Teacher educators have the responsibility to find teaching and learning resources

including books. This indicates the supply of teaching and learning material was limited. It may also indicate that there are several books and repositories of electronic information that might be of relevance. The Ministry is probably not interested in imposing certain books on the colleges. The College Principal A revealed that sometime when the budget allows she would be able to buy some books and laptops for each department at the college. But generally the budget constraints affect the provision of teaching and learning resources.

College B had a link with non-government organisations from the United States which support the provision of teaching and learning resources. Once the capacity of the college was limited, sponsors provided support. The observed support comprised hundreds of desktop computers which were given to the college from the NGO. These NGO had no influence on CBC implementation.

College B receives Geography curricula through the Ministry's website as were other public teachers colleges. The sponsor from the United States provided books in this area. Based on classroom observation, the college needed teaching and learning materials to support the competence-based implementation.

5.4.3 Monitoring

Curriculum monitoring at the *Colleges A* and *B* was done at different stages of the college management. College boards through the principals ensured that the college was run according to rules and regulations. Among the main tasks was to provide teaching and learning resources and ensure that teacher educators and student teachers follow the college time table.

Documents show that the academic department and academic committee coordinate all academic activities in both colleges. To ensure that the college is running smoothly, both principals used the famous college council called *College Baraza* to discuss various matters with students. At *College Baraza* student teachers air their concerns on various issues affecting their studies. The *College Baraza* is held twice a year. This indicates that monitoring was carried out well because feedback was received from both sides. The College Principal B had this comment to make about the *College Baraza*:

Yes, as a leader I do meet with students. We discuss with students various matters including their academic affairs during College Baraza once per semester. I'm not waiting for College Baraza only, I am teaching in the classroom. So it is easy to get feedback on what is going on at the college. I go into the classroom and if there is a problem they tell me and if it's possible to solve I will solve it immediately. Because I told them waiting until the College Baraza is too late to tell me if something went wrong in relation to academics, while you have been here since July and the College Baraza is held in November. So you missed a lot of important things. This does not help (College Principal B: 10:00-03/10)

The College Principal B had the responsibility of checking student teachers' attendance, teacher's attendance and how they teach, and also getting feedback from student leaders. Based on this observation, the College Principal B is monitoring the implementation of the curriculum.

Monitoring of the curriculum was also the duty of the college inspectors. Usually the teachers college had to be inspected every two years. But the situation was different now at the teachers colleges. In *College A* the last inspection was in 2011, while *College B* had not been inspected for the last five years. For this reason, the regular and effective college inspections are considered to be inadequate. Observed challenges were budget to cover travelling costs to all teachers colleges and secondary schools in the Northern Highlands. Observing these budget constraints, the Inspectorate Department did not fulfil its role as the key link between development and delivery of the curriculum for quality of education (Altinyelken, 2010).

Monitoring of curriculum implementation was done by Curriculum Developers themselves. This was revealed during interview conducted to the Curriculum Developer. Curriculum Developers are responsible for curriculum design, development, monitoring and evaluation of curriculum. NECTA also was used to assess the curriculum through examinations conducted in the teachers colleges. Other stakeholders are college boards and college inspectors, as explained above.

This indicates that monitoring of the curriculum was done by different stakeholders. The questions could then be asked, to what extent were results shared among stakeholders, and how did they manage to plan implementing the observed challenges and their suggestions? Both parties involved in the monitoring of the curriculum have to sit together and reach a common understanding of the implementation of CBC. Studies show that the reports of the teachers colleges have never been shared. This is why the credibility of even the Inspectorate Department is at stake. Also professional subject boards make an impact on the respective

subjects, because they usually set standards to be met in a given period. Here the Geography Subject Association could serve this purpose.

5.5 Capacity Factors (Input)

Curriculum implementation depends on a number of factors that are important in the realisation of curriculum objectives. These factors pertain to teacher educators, student teachers, college management and physical resources. All these factors are interlinked in order to develop the required competencies in student teachers.

5.5.1 Teacher Educators Factors

In addressing the first research question on the issue of the quality of teacher educators' understanding of competence-based curriculum, it is worthwhile to provide their background, training, work experience and subject matter knowledge and commitment to teaching. Teacher educators are the most important factor in the provision of education. In this way, their experience and qualifications would contribute to effective implementation of CBC in teachers colleges.

Four teacher educators were teaching Geography at *Colleges A* and *B*, which means two teachers in *College A* and two teacher educators in *College B*. All four teacher educators were included in the study. It was found that teacher educators had different backgrounds and experience. In *College A*, teacher educator one (A-T1) had been a secondary school teacher and then later went for further training to become a teacher educator. Teacher educator two (A-T2) was a direct teacher educator from the university.

In *College B*, teacher educator one (B-T1) held a master's in education which had been acquired by undergoing professional training. She had been a primary school teacher, ward education coordinator, and, at the time when she retired, was a head of department in a certain district. Based on these experiences, teacher educator one (B-T1) had long experience as a classroom teacher and also as an administrator. Teacher educator two (B-T2) was a secondary school teacher with a diploma in education qualification, later upgraded himself to become a degree holder in Bachelor of Arts in education. Professional training to become a teacher educator in teachers colleges was also considered an important qualification. A-T1, A-T2 and B-T1 held Bachelor's degrees in education to qualify for teaching at college.

Recruitment procedures at *College B* differ greatly from those at *College A*. Recruitment of teacher educators at teachers college *A* was centrally managed under the permanent secretary of the MoEVT. According to the interview with the principal of *College A*, it was shown that teacher educators have to follow specific procedures to become teacher educators: An application letter and academic certificates are sent to the permanent secretary of the MoEVT; applications are approved and the names are posted on the ministry's website showing the location and the subject to teach at teachers colleges; reporting to the teachers college allocated; registration with the Teachers Service Department (TSD); supervision (mentor-ship) for one year and confirmation of teacher educator after one year of employment.

College B followed the following recruitment procedures: the candidate has to write an application letter with academic certificates and send them to the college boards through the College Principal; the employment committee approves the name of the candidate; the candidate has to attend an oral examination and prepare one teaching session to demonstrate mastery of the subject matter content and facilitation methods; once the candidate has passed then the teacher educator is employed.

Recruitment procedures for public teachers colleges are clearly specified, but one problem is that the competencies of teacher educators who are going to teach at the teachers colleges are not actually checked. The academic certificates submitted to the Permanent Secretary were taken into consideration while teacher educators at *College B*, required to demonstrate mastery of the subject matter. The College Principal A made this assertion about the recruitment procedures:

Procedures of recruiting teacher educators as I say is not good. What happens is that one may send a certificate that I had studied at a certain college? Then one could get a job only by providing certificates. This is not enough, because teacher educators are examined or assessed by using a paper and a pencil only (College Principal A: 09:40-8/10).

The above statement clearly shows that the competence of a teacher educator may be in doubt. The doubt is due to the nature of assessment from the university and the monitoring systems of the teachers as well as the mentorship and inspection of teachers. All these affect the implementation of competence-based curriculum.

The subject knowledge of teacher educators makes a positive contribution to the implementation of CBC. Data show that three teacher educators had specialised in geography

and teacher education as their subjects at the teachers colleges, while one teacher educator specialised in history as a second subject. Teacher educators were teaching in the first year and second year classes. In assessing the lesson plan, scheme of work and classroom observation of *College A*, it was indicated that the teacher educator demonstrated the mastery of subject matter. The question remains to what extent they are able to utilise the knowledge of geography to implement competence- based teaching approaches? Table 5.5 summarises the academic qualifications and work experience of teacher educators at *Colleges A* and *B*:

Table 5:5. Academic Qualification and Work Experience of Teacher Educators

Category	Gender	Academic Qualification	Teaching Experience	Registration by TSD
A-T1	F	Bachelor of Education	More than 5 years	2005
A-T2	M	Master of Education	Less than 5 years	2009
B-T1	F	Master of Education	More than 39 years	1979
B-T2	M	Bachelor of Arts with Education	Less than 10 years	2008

Source: Field data (2013)

Teacher’s workload is usually measured by considering the enrolment of students and the capacity of teaching staff (Bendera, 1991). Based on the enrolment at teachers *College A*, the teacher-student ratio was 1:20 which is lower than the recommended one of 1:30. In *College B*, it was found teacher-student ratio was 1:12. But when computed by considering the number of teacher educators that were used to teach geography, the teacher-student ratio was 1:60 which was double the standard.

Mosha (2000) argues that the increase of the teacher-student ratio at a given level affects the quality of education provided. In an interview held with the teacher educator at *College A*, it was found that the student-teacher ratio was high because there were only two teacher educators there who were supposed to teach geography subjects to all 808 student teachers enrolled at the college. Along the same lines, the teachers’ workload varied between ten and twelve periods per week. Development of competencies does not end in the classroom; it goes beyond the classroom to effectively develop the required geographical competencies. College Principal A on the issue of teachers’ workload made the following observation:

Teacher’s workload is the policy issue. Teacher educators have not to be considered as the same as the workload of a secondary school teacher. For example number of student teachers per class should be 30 students and the number of periods not more than 24. Teacher educators need to have 3 teaching hours a day and other hours to be left for study of portfolios, student journals in order to maximize teacher professional development rather than academics only. (College Principal A: 09:40-8/10).

Altinyilken (2010) argues that teachers' motivation is considered a crucial aspect in curriculum implementation and improvement in the quality of education. The study found that teacher educators were not motivated to implement CBC in teachers colleges. Issues like a heavy workload, remuneration, large class size, low provision of teaching and learning resources were mentioned. A-T2 made the following comment:

Here we have a big teacher's workload. That is why we need motivation. If you study Competence Based Curriculum and decide to follow it as was supposed, you will find yourself the whole day is on teaching preparation. It consumes a lot of time and it is tough. Therefore we need support for remuneration and promotion to encourage working hard. It is so complicated. (A-T2: 10:30-2/10).

Teacher educators' low salary was another factor facilitating the implementation of CBC under the capacity factors. A-T1 made this assertion:

No remuneration and promotion, this needs improvement. Low salary, life is expensive, salary cannot support life. Once a salary has increased it also motivates me to spare some money to buy books. Or I can travel to the neighboring teacher college to borrow a book, or I have seen a very useful book I'm able to make a copy. All these happened because my salary is high. If no motivation all these will not be done (A-T1: 09:00-8/10).

Commitment to teaching also contributed to the above-mentioned factor. If teachers had low salaries, no motivation and a challenging working environment, it was not easy for them to effectively implement CBC.

5.5.2 Student Teachers Factors

Student teachers at *Colleges A* and *B* had an ordinary secondary education to join the teachers college, as stipulated in the education and training policy. The minimum cut off point to join a teachers college was division four points 28 of the Certificate of Secondary Education Examination. In Tanzania ordinary secondary education grading system ranges from division one which is the best to division zero which is the fail. The score stands as A (81-100), B (61-80), C (41-60), D (21-40) and 0 (0-20). In this sense students who are selected to join teacher's colleges must have minimum pass of two D's in their academic performance. Students whose performance ranges from A to C are selected to join advance secondary education.

In assessing admission criteria it was observed that teachers colleges receive the weakest students, who are not able to go for further studies. One would expect that student teachers have to be selected from the best students in ordinary secondary schools, as in Japan and Singapore, where teachers are considered like fathers. They always select the best students to

become teaching professionals. Accordingly, in one way or another, the Tanzania selection criteria may affect the implementation of CBC.

Student teachers elicited various motivational factors which encouraged them to join teachers colleges. Personal motives counted the most for students, while parental influence and financial drives were considered to be the least motivating factors. This indicates that the attitude of student teachers to become competent teachers was a driving force in deciding to join the teaching profession. Having a positive attitude towards teaching will help student teachers to develop the required competencies under the umbrella of competence-based teaching and learning approaches.

Despite the positive attitudes and required qualifications student teachers possessed, there were some concerns that were raised in the focus group discussions under the capacity factor which are also important to consider in teaching and learning Geography. Their concern was on the class size, lack of teaching and learning resources, short time allocated to teaching practice, small numbers of teacher educators and time management. These factors of course affect other constructs of the model, as stated earlier that the constructs interact with each other.

5.5.3 College Management

College A was headed by the female College Principal while *College B* was headed by the male College Principal. The implementation of CBC was also considered to be facilitated by the College Principal through the provision of resources, motivation of teacher educators, creation of an environment for student teachers conducive to learning, and managing various approaches to minimizing challenges to the implementation of CBC.

College Principal A revealed that she had long experience in teaching (more than 21 years) and was knowledgeable in the characteristics of CBC. The College Principal A receives directives on how to manage the college from the MoEVT through the Teacher Education Department, while College Principal B receives directives from the College Board and college manager who is the owner of the college. But generally MoEVT is the responsible Ministry governing the policy of running both private and public teachers colleges.

College Principal allocates teacher responsibilities and ensures that the colleges are run accordingly to implement CBC by providing all necessary requirements. On the issue of provision of teaching and learning facilities, College Principal A said:

I provide teaching and learning resources as the environment allows. We have had a financial crisis since I came here in 2011. The Ministry did not send funds for college development. We have only tuition fees to buy food for student teachers (College Principal A: 09:30.08/10).

In order to minimize the challenges that teachers colleges were facing, College Principal A used a team building strategy to encourage teacher educators to work hard even when the College Principal was not around. College Principal A made the following comment on team building:

I need team building for both teaching and non-teaching staff. Everyone has to see that they have a responsibility or task to perform rather than looking only to the College Principal (College Principal A: 09:30-08/10).

College Principal B checks the attendance of student teachers and teacher educators and also encourages student teachers to pay their school fees on time, meeting with them during the *College Baraza*. An interesting fact about College Principal B was that he was a teacher educator teaching one of the subjects at the teachers college. In this way he was both an administrator and a teacher educator, which helped to solve some problems facing teacher educators.

Cooperation between the teaching staff and non-teaching staff was observed as an important aspect in the implementation of CBC. It needs the support and help from other teacher educators and from college workers in general. If this is secured, teaching and learning will more likely take place as scheduled.

5.5.4 Physical Resources

Competence-based curriculum encourages the utilisation of different teaching and learning materials. The provision of physical resources proceeds from the college level, head of department, and academic office to the teacher educators. Teaching and learning materials were not adequately provided to teacher educators. Teacher educators needed textbooks, wall maps, atlases, weather equipment, globes, internet services, charts, CDs, DVDs and pamphlets. Teacher educators commented on the usefulness of teaching and learning materials which simplify teaching and stimulate student teachers in the teaching and learning

process. Furthermore, the learning outcome may be secured in a long term perspective and contribute to their own future teaching profession.

On the role of teaching and learning materials, the teacher educator had this to say:

Teaching and learning material act as stimuli. They activate learning, by seeing student teachers are able to see, touch, smell and later store in their memory for a long time. Later student teachers are able to differentiate various things, explain its importance and finally prepare it (A-T1: 09:00-8/10).

It was observed that *Colleges A and B* suffer from a shortage of buildings such as a library, geography room and classroom. The enrolment of student teachers was high but the available rooms to accommodate all students were not in place. For example in *College A*, one class had 60 to 70 student teachers and *College B* had 57 to 65 student teachers while the capacity was only 45 student teachers. Class size affects the class organisation of group discussions and various sitting plans in the classroom to encourage active participation in the discussion under the CBC. To solve the problem of shortage of classrooms, *College A* converted the dining hall into a classroom.

The importance of the geography room is that it stores geographical materials like maps, charts, globes and models; it would be practically impossible to carry out all these things from one place to another. The geography room is like any other science laboratory whereby the room creates a congenial atmosphere, stimulates imagination and gives inspiration. The absence of a Geography room at the *Colleges A and B* hampers teaching and learning process.

College A had a small room for a library which was full of outdated books. Student teachers have not frequently made use of it despite the effort made by College Principal A to provide new books. This may indicate that the interest in using a library was affected by the small size and quality of the library, which is too small to accommodate large numbers of student teachers and hence creates a lot of limitations to their studies.

College B had a small library that was used by all student teachers at the college. The challenge that was observed was that most of the shelves were empty, which indicates there were not enough books. Besides the small size and shortage of books, there were other frustrating reasons which prevented student teachers from using the library effectively, which were found through focus group discussions. Student teachers had the following comment:

One day per week because of the restriction and college rules. The restriction is that when we have free periods and then decide to go to the library, a teacher educator may come in the class and find you are

not in the classroom and then you are in trouble. They tend to threaten us by saying they can chase us away, or write a letter as a warning and we have to sign in a disciplinary book (black book). So all these things affect me to have a regular visit in the library (B-S4: 12:00-27/09).

5.6 Profile of Implementation (Process)

The profile of implementation focuses on the actual teaching process that has taken place in the development of CBC approaches in teaching geography. The profile of implementation demonstrated the level of understanding of teacher educators and how student teachers practically implement CBC in teachers colleges. The presentation will explain the nature of interaction and assessment procedures. This study will focus on these constructs since they are the most important factors in curriculum implementation.

5.6.1 Development of Competencies

Development of competencies is a complicated process because it involves various stages in the teaching and learning process. It starts from the translation of curriculum objectives, teaching preparation and actual teaching in the classroom and ends finally in the assessment of competencies. In addressing the second research question on how teacher educators, student teachers, the College Principal and Curriculum Developers implement CBC, the data revealed that curriculum developers reviewed the curriculum in order to raise the quality of education in Tanzania.

On the issue of reviewing the curriculum, the Curriculum Developer had this to say when problems come:

When there is a problem in the society and we assume that these social problems might be solved by the education system then we revise our curricula. So the decision was made due to the deterioration of quality of education in primary levels. We had the experience that students complete primary circle without necessary skills like reading, writing and arithmetic. So in order to solve these problems we thought that we need to change the primary school curriculum and therefore it dictated to change even in teacher education (Curriculum Developer. 10:10-02/12).

The objectives of the geography syllabus were presented in the Context stage (Section 5.3). These objectives were designed and developed by curriculum developers. One would question to what extent teacher educators were involved in the formulation of the stated objectives. The objectives were expected to be translated by teacher educators into the teaching and learning process. Curriculum developers responded:

We have the tendency to include teacher educators in our development process of the curriculum (Curriculum Developer. 09:30-02/12).

In translating the objectives, teacher educators have to prepare the scheme of work and lesson plan and prepare teaching and learning materials. The review of documents showed that both teacher educators in *Colleges A* and *B* had a Geography syllabus. The difference was in the possession of a scheme of work and lesson plan. Teacher educators at *College A* had required schemes of work and lesson plans while their colleagues from *College B* possessed nothing. Schemes of work were prepared at the beginning of each term and the lesson plan was prepared before the teacher educator entered the classroom. In order to ensure that the schemes of work and lesson plan are regularly inspected, College Principal A responded:

Plan is needed every week at least. I have to inspect the lesson plan, but the scheme of work should be inspected at the beginning of the term to see what they have planned to teach and at the end of the term to see what they were able to teach. But in reality I can inspect the lesson plan once a month or even twice a month. I usually talk to them in a spirit of team building that the role of inspecting the lesson plan is not only Principal's work. Other people need to do this like the academic coordinator, head of department and my vice principal. And if possible the academic committee have to sit down and inspect the lesson plan. So what I see here is because the experience or the ways we have been working these procedures are not done (College Principal A: 09:30-08/10).

Based on the above observation, one could argue that teacher educators in *College A* prepare scheme of works and lesson plan well in order to develop the required competencies. These documents are very valuable because they always assist teacher educators in tracking progress in terms of time and even in preparing teaching and learning material, and finally conducting the assessment on what to examine at the end of the term. But the challenge remains that they are not always frequently inspected.

In *College B* teacher educators missed these valuable documents and it indicated the teaching and learning process is at stake. Reasons provided by teacher educators were that they did not have enough time to prepare schemes of work and lesson plans. The researcher's observation was that they are part-time teacher educators and for this reason it was difficult for them to prepare these documents because they are occupied with other activities in their permanent work station.

In order to assess the coverage of learning areas of CBC, the context of Geography was examined. It was found that the Geography syllabus had four topics in academic components and four topics in preparation of teaching. The summary of the learning areas and the time

allocated to topics and sub-topics are summarized in the table 5.6. Geography syllabi have to be implemented in both public and private teachers colleges.

Table 5.6 indicates that there was a balance between academic and pedagogic components, even though there were variations between the sub-topics. For example, the basis of teaching and learning geography consumed 16 hours, while preparation of teaching consumed 27 hours. One could argue that the aim of the course is to prepare student teachers to become competent teachers. So the allocation of time here has to be maximized. Time allocation in the CBC seems to be unrealistic. Teacher educators believed that CBC consumes a lot of time due to participatory methods suggested by the curriculum.

Table 5.6 Geography Subject Coverage of Learning Areas and the Suggested Time

No	Topic	Number of Sub-topics	Hours
<i>Academic</i>			
1.	Earth as a planet	4	26
2.	Our Country Tanzania	5	25
3.	Correct and contradicting skills of map and picture	4	17
	Sub-Total	13	68
<i>Preparation of teaching</i>			
1.	Basis of teaching and learning Geography subjects	3	16
2.	Preparation of teaching	6	27
3.	Teaching and Learning Geography	2	12
4.	Measurement and Evaluation	2	12
	Sub-Total	13	67
	Grand Total	26	135

Source: Field Data (2013)

5.6.2 Classroom Interaction

The documents reviewed showed that the CBC was learned-centred. The classroom interaction and all activities carried out in the teaching and learning process have to ensure that student teachers are learning. In explaining the characteristics of CBC it was found that it was learner-centred, it uses participatory methods and students were sources of the teaching and learning process. Teacher educators commented that:

CBC is learner centred in the sense that students are the main focus of teaching and learning process; it is more participatory in each stage of lesson development; it's a problem solving approach; students are the main source of teaching and learning material (A-T1: 09:00-8/10 & A-T2.11:00-02/10).

Also B-T2 added that:

In Competence Based students learn independently and the teacher is the facilitator or motivator or sometimes we say the class manager. It needs to develop specific competencies; It needs application of the skills here is the link between knowledge and actual life (skills) (B-T2: 11:00-27/09).

On the same line College Principal A commented that:

When we talk about CBC we expect teacher educators to be able to translate the syllabus or curriculum into practice. Or if a teacher educator is preparing a lesson plan, all ideas on how to demonstrate the understanding of competencies have to be seen in the stages of a lesson development of a lesson plan. In the first stage, student will do 1, 2, 3 or I will command my students to sing or I will demonstrate or whatever is the case. It should be like that. If you want to see there is a gap tell them to do and you have already taught them about lesson stages. Give them assignment so as they can put in a lesson plan. This is happening even to my teacher educators at this college. Because I was passing through their lesson plan it indicates we have a long way to go. Teacher educators cannot demonstrate what they have written in the lesson plan (College Principal A. 09:30.08/10).

The above three observations from teacher educators and College Principal A indicate that classroom interaction focused on the learner-centred or participatory approach. The interaction under CBC has to reflect the needs of learners, and the learners were considered as the source of knowledge in the teaching and learning process. In both colleges, it was found that learner-centred approaches were not practically implemented due to large class size. Teacher educators were not able to use it despite being knowledgeable. Lack of teaching and learning resources that encouraged or motivated student teachers to participate in the classroom discussions had implications.

5.6.3 Facilitation Methods

In order to facilitate the learner-centred approach, the facilitation methods that allow the constant interaction between teacher education and student teachers must be considered. The study found that teacher educators used various facilitation methods in the development of competencies of student teachers. These were group discussion, questions and answers, classroom presentation and individual assignments. Teacher educators declared that group discussion was among the simplest facilitation methods that were mostly used. The reasons provided by the teacher educator were that the method was simple to use and organise. It saves time compared to field work and classroom presentation. The group discussions were organised from 10 to 15 student teachers. In favour of the group discussion method, a teacher educator asserts that:

These are the methods that I know and I am capable to use in the classroom. These methods I have confidence in using and applying (A-T1: 09:00-8/10).

In addition to group discussions, data showed that classroom presentation was conducted in Geography teaching sessions in *College A*. Classroom presentations were organised by A-T2 by giving group assignments to student teachers. Student teachers divided the task between

the members of the group, then they were presented in the class while the teacher educator made final comments on the students' assignment.

Lecture method was also used by teacher educators as it was observed in the classroom. The teacher educator argues that the lecture method was also used in order to save time and because of the large class size. To organise classroom presentations and group discussions was sometimes difficult. This indicates that CBC insists on the use of learner-centred approaches, while the practicality of these approaches was not in place. Teacher educators were using knowledge-based teaching approaches. Teacher educators need more commitment to use participatory methods than non-participatory ones.

5.6.4 Assessment Practice

CBC suggests that continuous assessment has to be used in order to develop the required geographical competencies. It was found that continuous assessment was not actually carried out. Summary evaluation or assessment was dominant by administering terminal and annual examinations. At the end of the course NECTA was used to assess student teachers. Assessment of NECTA was considered as the final for student teachers to become competent teachers. Using NECTA results only creates a problem because it assesses few competencies. It was suggested that continuous assessment would be better than summary evaluation. But the challenge remains that the parents and other educational stakeholders use NECTA results as the final assessment of the student teachers.

College Principal A made the following observation on the issue of assessment:

CBC emphasizes the assessment that is needed in developing certain competencies. If you want to build student teachers with skills or competence to perform certain activities, but you assess by using paper and pencil, then it is difficult to measure competencies (College Principal A: 09:30-08/10).

The above quotation indicates that even NECTA has to use continuous assessment rather than relying on the final exams alone.

5.7 Product

5.7.1 Teacher Professional Development

The current trend in teaching is to consider teaching as a profession like other professions such as doctors, engineers, lawyers and so forth. The teacher's professional development starts in teacher colleges. The goal of CBC in Tanzania is to raise the quality of education. Teachers are considered to be the most important stakeholders in raising the standard. Teacher preparation and training are also considered to be the crucial aspect to consider for teacher professional development.

Focus group discussions showed that all student teachers wanted to become competent teachers in primary schools. Teacher professional development will not end by receiving a certificate at teachers colleges, but will go on through their lives as teachers. A student also commented that they need to go for further studies, indicating the philosophy of lifelong learning.

To assess the product of *College A*, the lesson plan and scheme of work of student teachers were evaluated. These documents were used by student teachers during teaching practice. Based on the lesson plan and schemes of work observed, it was indicated that student teachers were well able to prepare a scheme of work and a lesson plan, but student teachers did not state clearly the competencies that needed to be developed in the primary school pupils. Student teachers also did not state well the specific objectives. These two elements (competence and specific objectives) always need to be measured in every teaching and learning process. Through these observations one could argue that there is a need for the teacher educator to maximize these elements in their teaching and learning at the teachers college.

In *College B*, student teachers had neither schemes of work nor lesson plans, so it was difficult to state whether they were able to prepare a scheme of work or lesson plan under the umbrella of CBC.

5.8 Challenges Facing the Implementation of Competence Based Curriculum

CBC implementation encountered a number of challenges affecting the actual implementation of the curriculum. The challenges encountered were lack of knowledge of competence-based teaching approaches, shortage of teacher educators, large class size, lack of teaching and learning materials and insufficient time for teaching practice. The following paragraphs discuss in detail how these factors affected the implementation of CBC at *Colleges A and B*; later suggestions will be provided on how to minimize the challenges.

5.8.1 Lack of Knowledge of Competence Based Teaching Approaches

Teacher educator's expertise contributes greatly to curriculum implementation. The expertise of teacher educators is measured in terms of knowledge, skills and attitudes. As stated earlier, teacher educators were knowledgeable about subject matter content, but with the competence-based teaching approaches the study found that they were lagging behind. Teacher educators admitted that they had heard about competence-based teaching approaches from seminars organised by the MoEVT in 2009. The MoEVT organised in-service training for public teachers colleges after the introduction of CBC. Private teachers colleges did not participate in these seminars.

Despite the efforts of the MoEVT to conduct in-service training for teacher educators, the study findings show that teacher educators are still not able to use participatory approaches in teaching and learning. Teacher educators commented that:

At Teacher Educators Programme (TEP) we were talking about Competence Based teaching approaches and even the facilitator was not sure whether the Competence Based approaches can be applicable in a large class size (A-T1:09:00-08/10).

This indicates that teacher educators were not aware of the teaching and learning approach under the CBC. Classroom observation showed that the lecture method was dominant and was easy to use due to the size of the classes. Suggested teaching techniques like field trips, classroom presentations, cooperative learning, group work, tutoring and individual learning were not used in both colleges. The intensive use of lecture method affects the quality of teaching and learning (Mosh, 2000). The lecture method does not encourage student teachers to become critical thinkers, who fail to demonstrate the learned content; it only enables them to pass examinations.

It was suggested that in-service training should continue to be provided to teacher educators in both public and private colleges in order to effectively use competence- based teaching approaches. College Principal A admitted that she had a plan for conducting an in-house training for teacher educators. The advantage of in-house training is that it saves money and time.

5.8.2 Shortage of Teacher Educators

College A has only two teacher educators who were teaching geography to all 808 student teachers enrolled for academic year 2013/2014. In *College B* there were also two teacher educators, one of them a part-time teacher educator. Despite being Geography teacher educators they were also teaching other subjects like educational psychology and measurement and evaluation and history. Teacher educators also had to perform other administrative tasks such as registering student teachers. This series of activities creates a demand for recruiting more teacher educators on a permanent basis.

CBC suggests that teacher educators have to spend more time to ensure that student teachers acquire teaching competencies and also master the subject matter. In a situation where there are not enough teacher educators, the quality of education provided must be at stake. The shortage of teacher educators leads to poor preparation of lesson plans, frequent use of classroom hours for non-academic activities and minimum participation of teacher educators in the intellectual life of the college (Mosha, 2000).

An interview with College Principal A showed that the major suggestion was to use time effectively and guide students by giving individual and group assignments in order to do so. When the teacher educator is occupied with other activities, student teachers are busy doing their assignments. It may be suggested that there is a need to recruit more teacher educators so as to effectively implement the CBC.

5.8.3 Large Class Size

College A had high enrolment while the building to support the large number of students was not in place. *College A* had eight classrooms that accommodated 65-72 student teachers. The dining hall was converted into a classroom which accommodated more than 200 student teachers. The rest of the student teachers were using a hall which accommodated more than

150 student teachers. Based on these observations, the classes were so full that they affected the organisation of group discussion in the classroom. Teacher educators used lecture methods and classroom presentation. The situation was the same in *College B*; their classes were large too, with 56 to 66 student teachers, and this in turn affected the organisation of classroom discussion and other participatory approaches.

The suggested solution was to build more classrooms instead of reducing the number of students. Also the MoEVT and College Principal B have to consider the capacity of the college before admitting a large number of student teachers while the capacity to support them is not in place.

5.8.4 Lack of Teaching and Learning Materials

The study showed that there was a severe shortage of teaching and learning materials at the *Colleges A* and *B*. Teacher educators and student teachers were using primary school books. This indicates that no geography textbooks were provided specific to teachers colleges. Through focus group discussions in *College A*, it was found that student teachers used study modules. The study modules were outdated because they were designed specifically for Grade B and C teachers who upgraded through distance mode to Grade A, while this was phased out. The two colleges had few wall maps, and few models.

Curriculum suggests the use of the internet as a source of teaching and learning materials. *College A* had one computer laboratory. There were twenty desktop computers. The computer laboratory was not effective, due to power shortages and unreliable internet connections. The computer lab was used as the computer class instead of helping student teachers to use them as the source of teaching and learning resources. Support from an NGO of 100 desktop computers was observed at the time of study at *College B*. This indicates that for first time the college is now equipped with computers. It could take some time to ensure that the computer lab is installed with the computer.

To minimize the shortage of teaching and learning materials, it was found that teacher educator and student teachers need to be creative by using the immediate environment to improvise teaching and learning materials. Once the local environment had been explored enough then the college had to plan ahead (budget) to buy some of the teaching and learning materials like books, maps, CDs, DVDs, films and other related material needed for teaching

geography. Another measure that was suggested was borrowing from nearby colleges or schools and even asking committed teachers to buy the books by using their salaries.

5.8.5 Short Time for Teaching Practice

CBC suggests that student teachers had to undergo teaching practice for two months (8 weeks) in every academic year. It was revealed that student teachers participated in teaching practice for six weeks. Teaching practice was an opportunity for student teachers to demonstrate their competencies. Teacher educators assessed student teachers in the actual teaching and learning process during teaching practice. Teaching practice included all tasks that student teachers had to perform, that is from preparing lesson plans to actual teaching and evaluation.

Data shows that time for such professional development was too short. At both colleges time table was tight in such a way that it does not allow student teachers to engage fully in other professional development practice.

The suggested measure is to increase time for teaching practice to two months as was suggested by the CBC. Again the colleges have to organise classroom demonstrations; for example, *College A* had practising teaching primary school. Primary school pupils would be sent to the college and student teachers prepare some lesson for them. This would help student teachers to maximize their professional development.

Interviews with teacher educators revealed that the curriculum is overloaded and also teacher educators are overloaded with administrative tasks. Teacher educators suggested that the review of curriculum could be the best option because it would balance the time between actual teaching and helping student teachers to become competent teachers.

5.9 Summary

This chapter has presented the findings on the implementation of CBC to certificate teachers colleges using two teachers colleges as a case study.

The findings indicate that private and public teacher's colleges implement centralized curriculum. Teacher educators in *College A* had required academic qualifications but were faced with a number of challenges to be able to implement CBC. Teacher educators in *College B* missed the academic qualifications to work and implement CBC. Moreover, study

findings showed that teacher educators used non-participatory methods which retarded the development of Geographical competencies.

Observed challenges that affected the implementation of CBC and hence teacher professional development were as follows: teacher educators lack knowledge of competence-based teaching approaches, there is a shortage of teacher educators, large class size, lack of teaching and learning materials and insufficient time for teaching practice. It was suggested that for better implementation of CBC there is a need to reduce these challenges.

The next chapter is the conclusion and recommendation.

Chapter Six: Conclusion and Recommendations

This chapter presents the conclusion and recommendations of the study. A comparative discussion of the major findings is presented before conclusions are drawn. Finally some recommendations are made.

6.1 Competence Based Curriculum Implementation

This study investigated the implementation of CBC. The study was qualitative in nature and focused on certificate teachers colleges, using two teachers colleges as case studies. The main target of this research was to examine the knowledge of teacher educators of how they would implement CBC. In assessing teacher educators' knowledge it was found worthwhile to focus on how student teachers, College Principals and the Curriculum Developer practice the CBC.

The context in which the curriculum was introduced in the transition from KBC to CBC was examined. Curriculum reforms are inevitable in a country like Tanzania for the sake of improving quality education in primary schools in order to meet the demands and the needs of EFA. Curriculum reform was also considered by the Tanzania Development Vision 2025 as a source of reforms in which the objectives and goals of teacher education curriculum were considered necessary to provide quality education and hence raise teachers' professional development.

The study used the theory of curriculum implementation and the Stufflebeam model as guides to the way in which the CBC was implemented in Tanzania. The two models were blended to correct some weaknesses that were found in each conceptual framework, as presented and discussed in chapter two.

The available literature was surveyed concerning the factors that dictate the curriculum reforms, in order to identify the knowledge gap on issues related to CBC. The literature showed that various studies have been conducted related to curriculum but they did not touch upon certificate teachers colleges. The surveyed literature showed various studies were

conducted on diploma teachers colleges. For this reason it was necessary to investigate the way CBC was implemented in certificate teachers colleges in order to show how it helps student teachers to become competent teachers.

The findings of the study are explained using the theoretical framework (Stafflebean Model and the Theory of curriculum implementation) and discussed by taking into consideration the way CBC was implemented in the context of teacher education in Tanzania. Table 6.1 shows the comparative perspectives of teacher educators, student teachers, and College Principals between the two colleges with regard to the implementation of CBC in teachers colleges. Along the lines of these data, the core findings are discussed in the following sections.

Table 6.1: A summary of the Two Teachers Colleges

Aspect	College A	College B
The Context	Curriculum objectives were derived from national and international policies (eg. Tanzania Development Vision 2015, EFA and MDG)	Curriculum objectives were derived from national and international policies (eg. Tanzania Development Vision 2015, EFA and MDG)
Support from Outside Agency	Teacher educators attended capacity building seminars	Teacher educators were not involved
	Provision of physical resources depend on government budget	Provision of physical resources depend on user fee and support from abroad
Capacity Factors (Input)	Qualified teacher educators	Lack qualified teacher educator
Profile of Implementation (Process)	Centralized curriculum	Centralized curriculum
	Prepares scheme of work and lesson plan	No preparation of scheme of work and lesson plan
	Teacher educators used non-participatory methods	Teacher educators used non-participatory methods
	The use of summative evaluation in assessing student competencies	The use of summative evaluation in assessing student competencies

Source: Field Data (2013)

The Context

The context defines the sources of curriculum in terms of goals, objectives and aims (Stafflebeam, 1971). The findings indicate that both teachers colleges acknowledge that the context of CBC was the influence of national and international policies aimed at providing quality education to primary schools, for example National Development Vision 2025, EFA and MDG goals. The study found that teacher education in Tanzania reforms its curriculum in order to meet the needs and demands of these national and international policies. Professional teacher development was considered to be critical (Mhaiki, 2009, Bhalalusesa, 2011).

Support from Outside Agencies

Teacher educators in *College A* attended capacity building seminars that were organised at the MoEVT, but teacher educators from *College B* were not included in the capacity building seminars after the introduction of CBC. This trend affects the implementation of CBC as it was centrally developed by TIE, which needs to be implemented in both private and public teachers colleges. The role of in-service training has been acknowledged by various others because it help teacher educators to be equipped with the new knowledge and skills when it comes on the implementation of curriculum reforms (Mhaiki, 2009; Altinyelken, 2010; Mlelwa, 2012). Mhaiki mentioned it as a professional support to teacher educators.

Along with the provision of physical resources, it was discovered that *College A* received support from the central government through the budget, while in *College B* the story was different. Provision of physical resources was solely dependent on students' fees and support from abroad. The provision of physical resources affected the implementation of CBC due to the fact that there were severe budget constraints on the support of teachers colleges on related issues like buying books, atlases and wall maps. As stated earlier, *College B* receives its support of physical resources from abroad, which suggests that the quality of education provided by private teachers colleges might be better compared with that of public colleges. The involvement of private teachers college in the provision of education was due to the emphasis of the education and training policy to stress the need of broadening the financial base of education provision in the country (Lindhe, 1999).

Capacity Factors

Research question number one was interested in investigating the knowledge level of teacher educators of competence-based teaching approaches. In answering the research question it was found that teacher educators in *College A* had required academic qualifications for teaching at *College A*, while teacher educators in *College B* had limited academic qualifications to teach at teachers colleges. The issue of teacher educators knowledge have been emphasized in literature that it help to implement well curriculum reform, but when teacher educator are not knowledgeable it lead to poor practice of curriculum in the classroom level (Kafyulilo, 2012; Meena, 2009; Mhaiki, 2009 and Altinyelken, 2010). Putman and Borko (1998) in an effort to emphasise the importance of a good command of subject matter, argue that teacher educator with richer understanding of subject matter and tend to emphasis

conceptual, problem solving and inquiry aspects of their subject, whereas less knowledgeable instructors tend to emphasise facts and procedures. All these could be done when teacher educators are knowledgeable about competence-based teaching approaches.

Along the same line, findings showed that teacher educators in *College A* followed centralised recruitment of teacher educators in public teachers colleges, while *College B* had its own mandate for recruiting teacher educators. This latter would seem to be the best because teacher educators had to demonstrate their teaching expertise in actual teaching. This would appear to have a positive effect on the implementation of CBC.

It was observed that both Colleges had heavy teacher's workload, which impacts the effective use of Competence-based teaching approaches. The enrolment in both Colleges was high and thus encouraged teacher educators to use non-participatory teaching approaches which were not recommended in CBC.

Profile of Implementation

The second research question was interested in examining the extent to which teacher educators and student teachers practically implement CBC. In order to answer this research question, issues like development of competencies, classroom interaction, facilitation methods and assessment procedures were examined.

The study found that both colleges implement centralised curriculum. The aims and content were the same and have to be implemented in private and public colleges. In translating the aims and objectives of the curriculum in order to develop required competencies, teacher educators in *College A* prepared schemes of work and lesson plans, while their counterparts in *College B* did not have time to prepare these documents. Skipping the preparation of the scheme of works and lesson plans hampers the development of required competencies in student teachers.

Classroom interaction in both Colleges was guided by the learner-centred approaches. The classroom interaction has to consider the learners as active participants in the teaching and learning process, while teacher educators are considered as facilitators in the development of geographical competencies. It was found that teacher educators used lecture methods in the

classroom interaction and in general as the main teaching approach. The use of lecture methods was contrary to the suggested facilitation methods under CBC. None of the teacher educators used competence-based teaching approaches like classroom presentation, role play, demonstration and self-learning.

In assessing the competencies, the study found that teacher educators used summative evaluation in assessing student progress. Also in practice it was found that NECTA was the final evaluator at the end of the teacher education programme. Instead it was recommended to use intensive continuous assessment in order to develop student teacher's competence stage by stage.

In the course of answering the research question it was observed that the aims of CBC would not be achieved due to the various challenges observed. For example, the study found that there was a shortage of teacher educators, large class size, and teacher educators lacked competence-based teaching approaches; furthermore, there was a shortage of teaching and learning resources. These challenges affected the practice of CBC in both teachers colleges.

6.2 Conclusion

This study draws the following conclusions in spite of certain limitations it experienced:

Firstly, the study findings suggest that teacher educators in *College A* had the required academic qualifications (B.Ed and MA.Ed) to be able to teach at *College A*, but had limited competencies to facilitate the competence teaching approaches. In *College B*, teacher educators did not have the required qualifications to teach and work at the teachers college, except for one retired teacher educator who has the qualifications to teach and work there. Even though the recruitment procedures differed between the two colleges, *College B* still demonstrated better recruitment procedures which measure the competencies of teacher educators compared with those used in the public colleges.

Secondly, teacher educators in both colleges demonstrated that they are aware of competence-based teaching approaches which were learner-centred, but realization in actual teaching was hampered by various constraints and they decided to use lecture methods only, which was not recommended in CBC.

Thirdly, the study findings show that both Colleges experienced severe shortage of teaching and learning resources, overcrowded classes, lack of a Geography room, small library with outdated books and insufficient time for teaching practice. All these constraints affected the actual implementation of CBC. The use of summative evaluation suggests that it was difficult to develop geographical competencies needed for student teachers in their professional development.

At this point it must be concluded that CBC was not implemented as intended at the classroom level. This phenomenon shows that policy makers have to consider the classroom reality in order to effectively reform curriculum. The situation was the same even in other parts of sub-Saharan Africa, where curriculum reforms were not achieved due to the disregard of the school's capacity to support reforms. Issues like teacher factors, student factors and physical resources were inadequate or ignored in curriculum reform (Altikinyelken, 2010). In order to succeed in the implementation of curriculum reform, classroom practice and the capacity to support curriculum reform must be taken into consideration (Rogan and Grayson, 2003).

6.3 Recommendations

On the basis of the findings and conclusion, the study provides the following recommendations:

- The government has to provide recruiting more teacher educators, providing teaching and learning materials to teachers colleges and providing in-service training to teacher educators and College Principals for better implementation of CBC in both private and public colleges.
- Student teachers' enrolment should take into consideration the capacity of the college in terms of the number of teacher educators, availability of teaching and learning materials and the number of classrooms available. This will foster the development of competencies in student teachers.
- The greatest challenge to developing student teacher competencies was large class size. In order to facilitate CBC, it is important to rethink methods that will accommodate

large class sizes, because in most cases Tanzania and other developing countries suffer from this problem.

The purpose of the study was to investigate the implementation of CBC in two teachers colleges in the Mbeya region. Due to the fact that this study was a case study, the findings cannot be generalized. For this reason, all education questions related to curriculum cannot be answered in this research and therefore there is room for further studies. The approach to this study was qualitative and it focused on pre-service student teachers; further studies could focus on in-service training to primary school teachers to compensate the pre-service training as well teachers already working when the CBC was implemented, examining the product of CBC using larger samples and a more quantitative approach.

References

- Altinyelken, Hulya. K. (2010) Curriculum Change in Uganda: Teacher Perspectives on the New Thematic Curriculum. In *International Journal of Educational Development* 30 (p. 151–161).
- Andersson, C. (2002). What should govern teacher education? The impact of unclear governmental prescriptions: is there something more effective? *European Journal of Teacher Education*, 25(2 &3), 251-262.
- Babaci-Wilhite, Zehlia. (2013). *Local Languages in Schooling as a Right in Education: A Case Study of Curriculum Reforms in Zanzibar*. (Unpublished PhD Dissertation). University of Oslo: Oslo, Norway.
- Bendera, Stela. J. (1991). *Rural Transformation through Education in Tanzania: Implication of the Workload on Primary School Teachers in Hai District*. Unpublished M.A Dissertation. University of Toronto.
- Bereday, George (1964). *Comparative Method in Education*. New York: Holt, Rinehart and Winston.
- Berg, Bruce. (2007). *Qualitative Research Methods for the Social Sciences*. New York: Pearson Education Inc.
- Bhalalusesa, Eustella., Westbrook, Jo., Lussier, Kattie. (2011). *The Preparation of Teachers in Reading and Maths and its Influence on Practices in Tanzanian Primary Schools: Tanzania's Country Report*. Brighton: University of Sussex.
- Biemans, H., Nieuwenhuis, L. Poell, R., Mulder, M. & Wesselink. (2004). Competence-based VET in the Netherlands: Background and Pitfalls. *Journal of Vocational Education and Training*, 56 (4), 523-538. Retrieved on 24 June 2013 from <http://www.mmulder.nl/Biemansetal2004CompetencebasedVETintheNetherlandsbackgroundsandpitfalls.pdf>
- Bogdan, Robert. C. and Biklen, Sari. K. (1992). *Qualitative Research for Education: An Introduction to Theory and Methods*. Boston: Allyn and Bacon.
- Bray, Mark & Murray Thomas (1995). Levels of Comparison in Educational Studies: Differences Insight from Different Literatures and Value of Multilevel Analysis. *Harvard Educational Review*, Vol. 65, 3:472-490.
- Brock-Utne, Birgit. (1996). Reliability and Validity in Qualitative Research within Education in Africa. *International Review of Education*, Vol.42, 6. pp.605-621.

- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated Cognition and the Culture of Learning. *Educational Researcher*, 18 (1), 32–43.
- Bryman, Alan & Cramer, Duncan. (1990). *Quantitative Data Analysis for Social Scientists*. London: Routledge.
- Bryman, Alan. (2008). *Social Research Methods*. 3rd Edition. Oxford: University Press.
- Bryman, Alan. (2012). *Social Research Methods*. 4th Edition. Oxford: University Press.
- Buchert, Lene. (1994). *Education in the Development of Tanzania 1919-1990*. Dar es Salaam: Mkuki na Nyota.
- Buretta, B. N. V. (1995). “Tanzania”. In Postlethwaite T. Neville. (ed). *International Encyclopedia of National Systems of Education*. 2nd Edition, . Oxford: Pergamon Press. (pp.964-971).
- Claul, Leslie.,& McWilliams, Sandra (2002). Initial Teacher Education in Northern Ireland. *European Journal of Teacher Education*, 25, (2 & 3), 187-197.
- Cohen, Louis., Lawrence, Manion & Keith, Morrison. (2007). *Research Methods in Education*. London: Routledge.
- Connelly, F. M., & Clandinin, D. J. (1988). *Teachers as Curriculum Planners: Narratives of Experience*. New York: Teachers College Press.
- Cooksy, Leslie. J., Gill, Paige., Kelly, P. Adam. (2001). The Programm Logic Model as an Integrative Framework for a Multi-method Evaluation. *Education and Programme Planning*. 24. p.119-128.
- Corcoran, Thomas and Goertz, Margaret. (1995). Instructional Capacity and High Performance Schools.” *Educational Researcher*, 24 (9: 27-31.)
- Creswell, John. W. (1998). *Qualitative Enquiry and Research Design: Choose Among Five Traditions*. London: Sage Publications Ltd.
- Creswell, John. W. (2003). *Research Design, Qualitative, Quantitative and Mixed Approaches*. London: Sage Publications.
- Egodawatte, Gunawardena. (2013). An Analysis of Competency-Based Secondary mathematics Curriculum in Sri Lanka. *Education Research Police Practice*. Springer. DOI 10.1007/s10671-013-9145-5.
- Eseryel, Deniz. (2002). Approaches to Evaluation of Training: Theory & Practice. *Educational Technology & Society* 5 (2). Retrieved on 26.01.2014 from http://www.ifets.info/journals/5_2/eseryel.html.

- Frankfort-Nachmias, Chava. and Nachmias, David. (1996). *Research Methods in Social Science*. Great Britain: St. Martin's Press Inc.
- Fullan, Michael (2000) *The New Meaning of Education Change*. London: Cassell Educational Limited.
- Fullan, Michael. (1991). *The New Meaning of Education Change*. London: Cassell Educational Limited.
- Gehrke, Nathalie. J., Knapp, Michael. S., Sirotnik, K. A. (1992). In search of the school Curriculum. *Review of Research in Education*, 18 (1), 51–110.
- Hardman, Frank., Abd-Kadir, Jan., Tibuhinda, Audax (2012). Reforming Teacher Education in Tanzania. *International Journal of Educational Development*, Vol.32: 826–834.
- Hoogveld, Albert. W. M (2003). *The Teacher as Designer of Competency-Based Education*. PhD Thesis: The Open University of Netherlands. Retrieved on 06.05.2013 from [http://www.netwerkopenhogeschool.org/Docs/Expertise/OTEC/ %20hoogveld/Hoogveld-thesisgedrukte%20versie.pdf](http://www.netwerkopenhogeschool.org/Docs/Expertise/OTEC/%20hoogveld/Hoogveld-thesisgedrukte%20versie.pdf).
- Ibrahim, Mohamed. S. (2009). An Evaluation of the Smart School Teacher Training Programme and its Impact on Integrating Technology in Teaching and Learning Process in Malaysia. In *Sosio Humanika*. Vol.2.(.2)pp. 253-280.
- Ismail, Hairul. N; Al-Zoubi, Suhail.M; Rahman, Majdoleen. B. A. & Al-Shabatat, Ahmad. M. (2009). Competency Based Teacher Education (CBTE): A Training Module for Improving Knowledge Competencies for Resource Room Teachers in Jordan. *European Journal of Social Sciences-Vol. 10, No. 2.pp.166-178*.
- Kafyulilo, Ayoub. C, Rugambuka, Innocent. B, and Moses, Ikupa (2012). The Implementation of Competency Based Teaching Approaches in Tanzania: The Case Of Pre-Service Teachers at Morogoro Teacher Training College. *Universal Journal of Education and General Studies*. Vol. 1(11) pp. 339-347. Accessed on 2nd May, 2013 from <http://www.universalresearchjournals.org/ujegs>.
- Kajoro, Peter., Chirure, Hellen N., Simiyu, Irene. (2013). Educational Exigencies of the 21st Century: Implications for Teacher Education Programs in East Africa. *Journal of Teaching and Learning*. Vol.9.No1. Retrieved on 15th March, 2014 from <http://ojs.uwindsor.ca/ojs/leddy/index.php/JTL/article/view/3594>.
- Kanukisya, Blackson. (2012). *Globalization Impact on Adult Education: A Comparative Study of Adult Education Policies and Practices in Tanzania and Uganda*. (Unpublished PhD Dissertation). University of Oslo: Oslo, Norway.

- Kheiry, A. S. (2010). *An Assessment of Performance of Zanzibar's Technical Education Institutions: The Case of Zanzibar Institute of Finance Administration and The Institute of Public Administration Zanzibar*. (Unpublished Master Dissertation). University of Dodoma. Dodoma, Tanzania.
- Kimizi, Moshi. M. (2012). *Language and Self-Confidence: Examining the Relation ship between Language of Instruction and Student's Self-confidence in Tanzanian Secondary Education*. (Unpublished PhD Dissertation). University of Oslo: Oslo, Norway.
- Kothari, C. R. (2004). *Research Methodology. Methods and Techniques*. 2nd Edition). New Delhi: New Age International (P) Ltd.
- Kvale, Steinar (2006). Dominance through Interviews and Dialogues. *Qualitative Inquiry*. Vol. 12. (3). Pp.480-500.
- Lewis, Jane. (2003). Design Issues. In Richie, Jane & Lewis, Jane (eds.). *Qualitative Research Practice: a Guide for Social Science Students and Researchers*. London: Sage Publications (pp 24-46).
- Lincoln, Yvonna and Guba, Egon. G. (1985). *Naturalist Inquiry*. California: Sage.
- Lindhe, Valdy. (1999). *Greening Education: Prospects and Conditions in Tanzania*. PhD Dissertation: Uppsala University.
- Mățã, Liliana. (2012). 'Key Factors of Curriculum Innovation in Language Teacher Education'. *World Academy of Science, Engineering and Technology, International Science Index 66, International Journal of Social, Human Science and Engineering*, 6(6), 42-50. Retrieved on 24th March 2014 from <http://www.waset.org/publications/10423>.
- Meena, Wilberforce. E. (2009). *Curriculum Innovation in Teacher Education: Exploring Conceptions Among Tanzania Teachers Educators*. PhD Thesis: ABO Academic University Press. Also is available at: <http://doria17-kk.lib.helsinki.fi/bitstream/handle/10024/50597/MeenaWilberforce.pdf?sequence=2>.
- Mhaiki, Doroth. I. (2009). *Teacher Educators' Experiences in Implementing the 2007 Teacher Education Diploma Curriculum: A Case Study of a Public Teachers' College in Tanzania*. (Unpublished M.A Dissertation). The Aga Khan University: Dar es Salaam, Tanzania.
- Miller, J. P. and Seller, W. (1990). *Curriculum : Perspectives and Practice*. New York: Longmans.

- Ministry of Education and Vocational Training (MoEVT). (2012). *Basic Education Statistics: National*. Dar es Salaam: Author. Retrieved from http://www.moe.go.tz/index.php?option=com_docman&task=cat_view&gid=358&Itemid=619.
- Ministry of Education and Vocational Training (MoEVT). (2009). *Geography Syllabus for Certificate Teachers College*. Dar es Salaam: Author.
- Mlelwa, Severin. R. (2012). *A Study on the Implementation of Learner-Centred Evaluation in Teachers' Colleges in Tanzania: The Case of Geography Lessons in Songea Teachers' College*. (Unpublished Master Dissertation). University of Dar es salaam. Dar es Salaama, Tanzania.
- Mosha, Herme. J. (2000). Conceptualizing Quality of Education. In Galabawa, J. C. J, Senkoro, F. E. M. K and Lwaitama, A. F. L. (Eds) *The Quality of Education in Tanzania: Issues and Experiences*. Institute of Kiswahili Research. Dar es Salaam.
- Mushi, Paul. S. D. (2012). *Capacity Plunder in the Educational Reform Process in the Regional Africa: The Need for Intercession in Curriculum*. Available at <http://www.tie.go.tz/docs/PGDCDD%20NOV%202012/PGDCDD%20Reform%20Trends%20Paper%20Nov%202012.pdf>.
- Mutarubukwa, F. B. (2007). Practical Implication of Management of the Competence Based Education and Training Curriculum in Vocational Training Institution. *Journal of Issues and Practice in Education*. Vol.2. 1. p.85-98.
- Nyerere, Julius. K. (1967). Education for Self-Reliance. In J. K. Nyerere Freedom and Socialism. Uhuru na Ujamaa. *A selection from writings and speeches 1965-1967*. Dar-es-Salaam: Oxford University Press.
- Okwaput, Stackus. (2013). *Teacher Training for Inclusion of Children with Special Needs; Towards Achieving Communicative Interaction in Education in Uganda*. (Unpublished PhD Dissertation). University of Oslo: Oslo, Norway.
- Omari, Issa. M. (1982). *Psychology and Education in Changing Societies: New Perspectives From Tanzania*. Dar es Salaam: University Press.
- Patton, Michael. Q. (2002). *Qualitative Research and Evaluation Methods*. London: Sage Publications.
- Putnam, Ralph. T., & Borko, Hilda. (1998). Teacher learning: Implications of new view of cognition. In B. J. Biddle, T. L. Good, & I. F. Goodson (Eds.), *International*

- Handbook of Teachers and Teaching* (pp. 1223-1296). Dordrecht: Kluwer Academic Publishers.
- Remillard, Janine. T. (2005). Examining Key Concepts in Research on Teachers' Use of Mathematics Curricula. *Review of Educational Research*, 75(2), 211-246.
- Rogan, John M. & Grayson, Diane J. (2003). Towards a theory of curriculum implementation with particular reference to science education in developing countries. *International Journal of Science Education*. 25:(10), p.1171-1204.
- Schubert, William. H. (1993). Curriculum Reform. In Cawelti, Gordon, (Ed). *Challenges and Achievements of American Education: Yearbook of the Association for Supervision and Curriculum Development*. Retrieved on 18th March 2014 from http://www.project2061.org/publications/designs/online/pdfs/reprints/2_schubt.pdf.
- Shao, Enortha. N. (2006). *A Study on Effectiveness of the Revised Social Studies Curriculum for Grade A Teachers in Tanzania*. (Unpublished Master Dissertation). University of Dar es Salaam. Dar es Salaama, Tanzania.
- Silverman, David. (2006). *Doing Qualitative Research: A Practical Hand Book*. 2nd Edition. London: Sage Publications.
- Stufflebeam, Daniel. (2007). *CIPP Evaluation Model Checklist*. Accessed from www.wmich.edu/evalctr/checklists.
- Stufflebeams, Daniel. (1971). "The Relevance of CIPP Model for Education Accountability". *Journal of Research and Development in Education*. Vol.5, No1,p.35-40.
- Tilya, Frank and Mafumiko, Fidelis. (2010). The Compatibility between teaching Methods and Competence-Based Curriculum in Tanzania. In *Papers in Education*. Vol. 29. P.37-76.
- Tilya, Frank. (2003). *Teacher Support for the use of MBL in Activity-Based Physics Teaching in Tanzania*. PhD Thesis University of Twente: Print Partners Ipskamp – Enschede
- Tyler, Raph. W. (1949). *Basic Principles of Curriculum and Instruction*. University of Chicago.
- UNESCO, (2014). *EFA Global Monitoring Report. Teaching and Learning: Achieving Quality for All*. Paris: UNESCO.
- United Republic of Tanzania (URT) (1995). *Education and Training Policy*. Dar es Salaam: Institute of Adult Education Press.
- United Republic of Tanzania (URT) (1999). *The Tanzania Vision 2000-2025*. Dar es Salaam: The Planning Commission.

- United Republic of Tanzania (URT) (2008). *The Teacher Development and Management Strategy (TDMS) 2008-2013*. Dar es Salaam: Author.
- United Republic of Tanzania (URT) (2012). *National Population and Housing Census Report*. Dar es Salaam. Planning Commission.
- Velde, Christine. (1999). An alternative conception of competence: Implication for vocational education. *Journal of Vocational Education and Training*, 51(6), 437–447.
- Weddel, Kathleen. S. (2006). *Competency Based Education and Content Standards*. Northern Colorado Literacy Resource Centre. Retrieved on 15th March, 2014 from <http://www.d11.org/Transition/iep/Documents/CompetencyBasedEducation.pdf>
- Woods, Eric. (2007). Tanzania Case study. In UNESCO, *Country Profile Commissioned for the EFA global monitoring report 2008: Education for all by 2015, will we make it?* Paris: UNESCO.
- Yeshalem, Abraham. D. (2013). *Environmental Education about, in and for the Environment: The Case of Two Secondary Schools in Ethiopia*. (Unpublished Master Dissertation). University of Oslo: Oslo, Norway.
- Yin, Robert. K. (2009). *The Study of Research Design and Method*. 4th Edition. Los Angeles: Sage Inc.

APPENDICES

Appendix A: Interview Guide for Teacher Educators

University Of Oslo

Faculty of Educational Sciences

Department of Educational Research

This interview guide aims at seeking out information from teacher educators regarding competence-based curriculum (CBC). The aim of the study is to investigate the CBC implementation in teachers colleges in Tanzania. The main focus of the study is on teaching of geography in Grade A teachers colleges.

Dear Respondent,

Your participation is of paramount important so as to make this study fruitful and achieve the desired objectives. Your responses will be treated in strict confidence.

You are requested to respond to the following questions, by either filling in the blanks or ticking the appropriate response.

1. Gender
2. Age
 - (a) 21-30 years
 - (b) 31-45 years
 - (c) 46+ years
3. What is your education level?
4. Do you have professional training in Teacher Education? If *Yes*, show the highest level achieved.
5. What is your teaching experience?
6. How did you become a Teacher Educator in this college? Explain
7. Are you registered by Teacher Service Department (TSD) as a teacher?
If *Yes* when. If *No* give reasons.
8. What is your subject (s) specialisation?
9. In which year do you teach?
10. What are the subjects you are currently teaching at this college?
11. What is your teaching work load per week?
12. Do you have enough time to complete the syllabus (s) you teach? If not, what strategies do you apply to complete the syllabus (s)?
13. Do you recall how you first time you hear about CBC?
14. Do you have the following documents?

- (a) Scheme of work (b) Lesson plan (c) Geography syllabus? If no give reasons
15. Which facilitation techniques do you find most effective?
 16. Show whether or not the following need improvement to effectively implement CBC in your College. What sort of improvement is needed?
(*Course/Subject content, Method of course delivery, Assessment methods, Reference materials, Laboratory for practical, Management and administrative machinery, Remuneration and promotion*).
 17. Have you heard of other levels of education apart from your own that run a Competence Based Curriculum? If Yes, name these levels?
 18. What sort of teaching and learning materials or resources are needed in the facilitation of CBC?
 19. How do you obtain instructional material that influences you in teaching your subject (s)?
 20. In what way does the availability of teaching and learning material influence you in the facilitation of CBC implementation?
 21. Do you have Geography room at the college?
 22. Do student teachers use the Geography room for learning purposes?
 23. What are the characteristics of CBC?
 24. What are the Geographical Competencies are expected to be developed by student teachers at the end of their study programme?
 25. What do student teachers say about the CBC?
 26. What sort of help do they need in learning using a CBC approach?
 27. What is the general performance of your student teachers after studying using a Competence Based curriculum?
 28. Have you attended any seminar or short course relating to CBC in the last 12 months? If yes, when the seminar was held?, where? and the name of the seminar?
 29. (a) What sorts of challenge did you encounter in the teaching and facilitation of Geography under CBC in teachers' colleges?
(b) How can these challenges be solved?
 30. What is your experience regarding the use of current CBC in teaching Geography?
 31. What is your opinion about the Competence Based Curriculum?

Thank you for your participation

Appendix B: Focus Group Discussion with Student Teachers University Of Oslo

Faculty of Educational Sciences

Department of Educational Research

This guide aims to seek out information from student teachers regarding competence- based curriculum. The aim of the study is to investigate the competence-based curriculum implementation in teachers colleges in Tanzania. The main focus of the study is geography teaching in certificate teachers colleges.

Dear Respondent,

Your participation is of paramount important so as to make this study fruitful and achieve the desired objectives. Your responses will be treated in strict confidence. You are requested to discuss in groups the following questions.

1. Gender
2. What is your educational background before joining the teachers college?
3. What or who influenced your decision to join teachers college?
4. Which year are you studying?
5. Please mention all the subjects which you are studying at this college?
6. Which subject is difficult for you?
7. Why do you find them difficult?
8. Do you have a library in your college?
9. How often do you visit the library in a week?
10. Did you find the library useful in developing Geography Competencies?
11. What method of study do you find most effective?
12. Do you have a library in your college?
13. How often do you visit the library in a week?
14. Can you prepare Competence Based lesson plan?
15. In your opinion what are three major factors affecting your studies?
16. What are your expectations after you have completed your studies?
17. Which things could be done by a CBC at your College in order to make learning more desirable or meaningful?
18. Do you occasionally meet with your college boards or administrative organ to discuss various issues regarding your studies?
19. What is your opinion about the CBC?

Appendix C: Interview Guide for the College Principal

University Of Oslo

Faculty of Educational Sciences

Department for Educational Research

Time.....Date.....Place.....

1. Researcher's self-introduction, purpose of the study, motives, intentions and confidentiality.
2. Respondents brief history.
3. What type of curriculum is used in teachers colleges?
4. When the current curriculum was introduced?
5. What do you think CBC is all about?
6. What are the characteristics of CBC?
7. Do teacher educators and students teachers practice the CBC in teaching and learning processes?
8. Are teacher educators and students comfortable in implementing CBC?
9. Do you occasionally meet with your student teachers to discuss their programme? If yes how helpful are such meetings?
10. What are the recruitment procedures for teacher educators at your teachers college?
11. What is the quality and motivation of the teacher educators in implementing CBC?
12. Do you provide Teaching and learning facilities to teacher educators to facilitate the implementation of CBC at your college?
13. What are your views regarding the following:
 - (a) Teaching and learning facilities
 - (b) General performance of the learners
 - (c) The Competence Based Curriculum used
14. How many times do you inspect teacher educator's scheme of work and lesson plan?
15. What are the major challenges that affect the implementation of CBC at your college?
16. Suggest the best practical solution that can be used to address the problems and challenges facing the CBC implementation.

Thank you

Appendix D: Interview Guide for Curriculum Developers

University Of Oslo

Faculty of Educational Sciences

Department for Educational Research

Time.....Date.....Place.....

1. Researcher's introduction.
2. Respondent's brief history?
3. Please tell me, are you aware of a policy governing teacher education in Tanzania?
What is the name of the policy?
4. Which current curriculum is used in teachers colleges in Tanzania?
5. How was the decision to introduce a CBC in Teachers' College made?
6. What kind of information was the decision based on?
7. What are the objectives of Geography CBC?
8. How did you arrive at the stated objectives stated in the current Geography CBC?
9. How were materials evaluated in the production stage?
10. Was the new CBC tried out: If so how and where?
11. Were teacher educators were involved during the development of geography Competence based curriculum?
12. What methods do you use to monitor the implementation of the competence based curriculum?
13. Do you encounter any challenges in implementation of Geography CBC in teachers colleges?
14. How do you address these challenges?

Thank you

Appendix E: Classroom Observation Schedule

University Of Oslo

Faculty of Educational Sciences

Department of Educational Research

Name of the Teachers College.....Subject.....

Date..... Year of Study.....Topic.....

Sex.....

Number of Student Teachers..... Male..... Female.....Total.....

Introduction

Teacher educator's preparation and readiness to facilitate the subject

Sitting arrangement in the classroom

Learner's participation during teaching-learning process

Teaching aids prepared

Questions asked during the lesson

Developing New Knowledge

Content prepared

Explanation given in each stage

Classroom management

How to respond on learners questions

Interaction between teacher educator and students teachers

How to handle teaching aid prepared

Conclusion

How to make conclusion

How to make correction on the given assignment

How to give an assignment after the end of the session

Explanation to the learners on the given assignment

How the teacher educator make assessment on the subject taught

Instructor's characteristics

Managing learning outcome

Attaining specific learning outcome (Competencies)

Assisting student teachers

Subject management

Cooperative Learning

Appendix F: Documentary Review Guide

University Of Oslo

Faculty of Educational Sciences

Department of Educational Research

Name of the Teacher College.....

Documents are valuable sources of information. In this study the following category of documents are expected to provide information about the implementation of the Competence Based Curriculum in Teachers College in Tanzania.

sn	DOCUMENT	INFORMATION REQUIRED	COMMENTS
1.	Competence Based Curriculum	<ul style="list-style-type: none"> ▪ Objective of Teacher Education in Tanzania ▪ Objectives of Competence Based Curriculum ▪ Organisation of the contents ▪ Suggested teaching and learning strategies ▪ Assessment of student teachers progress. ▪ Instructional time 	
2.	Scheme of work	<ul style="list-style-type: none"> ▪ Teacher educators' activities ▪ Student teachers' activities ▪ Selected reference books ▪ Teaching and learning materials allocated 	
3.	Lesson Plans	<ul style="list-style-type: none"> ▪ Lesson Objectives ▪ Lesson plan and timing ▪ Teacher educators' and Student teachers' activities ▪ Competencies intended to be developed ▪ Teaching and learning strategies used ▪ Assessment procedures and assignment given 	
4.	Examination	<ul style="list-style-type: none"> ▪ Competencies assessed in the continuous assessment and terminal examination 	

Appendix G: Informed Consent Form

University of Oslo,
Faculty of Education,
Department for Educational Science,
Post Box 1092, Blindern,
0317 Oslo-Norway
Mobile Number: +47 9671 6623
E-mail: angelokavindi@yahoo.co.uk

Dear participant,

You are being asked to consent for your participation into a study that aims at examining the implementation of Competence Based Curriculum (CBC) to teacher colleges in Tanzania. You are asked to participate in this study because you are among the important CBC stakeholders thus a potential respondent in this study.

Study procedures

This study will involve seven in-depth interviews and Focus Group Discussion. In-depth interviews will be with four teacher educators, two College Principals and one curriculum developer. Focus group discussion will be used to collect data from student teachers that are using CBC. The decision to participate in this study is important and therefore you are requested to answer a few questions on your opinion, knowledge and experience.

Confidentiality

The information gathered will be confidential; your information will be accessed only by a researcher. In any way, information will not be linked to your individual name. Your name will not be mentioned in any paper or report of this study. Your identity to this study will base on the agreed identification item (ID).

Benefits

There is no direct benefit for your participation in this study. However, the information that you are going to provide to us will help in CBC policies and practices more responsive to student teachers' needs and the improvement of quality of education in teacher education and in primary schools. Additionally, your participation will assist in finding suggested solutions to the way CBC implementation to teachers colleges in Tanzania should look like.

Participation

Participation into the study is voluntary. You have the right to decline participation or withdraw from the study at any point of the interview. Your decisions whether to participate or not will not in any way interfere with your participation in teacher colleges. Equally important, you are not subjected to say why you are quitting the study.

If you agree to participate into the study, please, give your signature hereunder.

Signature of the respondent

Date

Signature of the interviewer (Angelo Edward Kavindi)

Appendix H: Time Schedule

S/ No	Activity	Time/Duration
1	Research Proposal Submission I	15 th May 2013
2	Research Proposal Submission II	31 th May 2013
3	Meeting with a Supervisor	03 rd June 2013
4	Literature Review	01 st June 2013 to 30 th June 2013
5	Developing Research Instruments	01 st July 2013 to 31 th July 2013
6	Meeting with a Supervisor	08 th August 2013
7	Research Instrument Submission I	16 th August 2013
8	Meeting with a Supervisor	30 th August 2013
9	Data collection	15 th September to 15 th November 2013
10	Consultation with Supervisor	20 th November 2013
11	Transcription of Data	21 th November 2013 to 20 th December 2013
12	Data Presentation and Analysis	25 th January 2014 to 25 th March 2014
13	Thesis Submission I (Supervisor)	01 st April 2014
14	Consultation with Supervisor	14 th April 2014
15	Thesis Submission II (Supervisor)	28 th April 2014
16	Consultation with Supervisor	30 th April 2014
17	Thesis Submission II (Supervisor)	18 th May 2014
19	Consultation with Supervisor	23 th May 2014
19	Thesis Submission Final-Student Web	25 th May 2014
20	Thesis Submission-IPED	02 nd June 2014

Appendix I: Clearance Letter from the University of Oslo

UiO : Department of Education
University of Oslo

To whom it may concern

Date: 21.06.2013
Your ref.:
Our ref.: kristi.barcus@ped.uio.no

Letter of Support for conducting field work

I hereby confirm that Angelo Edward Kavindi, born 02.03.1973, is a full time student in the Master of Philosophy in Comparative and International Education master programme at the Department of Education at the University of Oslo.

In the second year our students are required to write a Master Thesis of 80 to 120 pages. This thesis should preferably be based on field studies conducted in countries outside of Norway. The fieldwork may incorporate interviews with educational practitioners and decision-makers, classroom observation and documentary analysis. The type of data gathered should of course be discussed with the relevant authorities. It is our hope that the work produced by this student will not only benefit him in his academic career but also be of use in the future

Angelo Edward Kavindi is planning to do his fieldwork in Tanzania during the period of September 15th until November 11th 2013.

We kindly ask you to give him all possible assistance during his fieldwork in Tanzania.

Best regards,



Kristi Barcus
Senior Executive Officer
Department of Education



Department of Education
Postal addr.: PO Box 1092, Blindern, 0317
Oslo
Visiting addr.: Sem Sælands vei 7 Helga
Engs hus, 5. etasje

Phone: (+47) 22 84 44 75
Telefax: (+47) 22 85 42 50
postmottak@uv.uio.no
www.uv.uio.no
Org. no.: 971 035 854

Appendix J: Clearance Letter from the Ministry of Education and Vocational Training Tanzania

THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION AND VOCATIONAL TRAINING

Cable: "ELIMU" DAR ES SALAAM
Telex: 41742 Elimu Tz.
Telephone: 2121287, 2110146
Fax: 2127763



Post Office Box 9121
DAR ES SALAAM

In reply please quote:

Ref. ED/EP/ERC/VOL.IV/ 350

Date: Friday, September 13, 2013

Regional Education Officer
Mbeya Region

RE: RESEARCH CLEARANCE FOR MR.ANGELO EDWARD KAVINDI

The captioned matter above refers to.

The mentioned is a bonafide Masters student at the **University of Oslo** who is conducting research titled "**The Implementation of competence Based Curriculum in Teacher's Colleges in Tanzania**" as part of his course programme for the award of Masters degree.

For the purpose of accomplishing this study, the student needs to collect data and necessary information related to the research topic from your office.

In line with the above information you are being requested to provide the needed assistance that will enable him to complete this study successfully.

The period by which this permission has been granted is from **13th September 2013, to 11th November, 2013.**

By copy of this letter, **Mr. Angelo Edward Kavindi** is required to submit a copy of the report (or part of it) to *the Permanent Secretary, Ministry of Education and Vocational Training* for documentation and reference.

Yours truly,

A handwritten signature in black ink, appearing to read 'Erasmus J. Buretta'.

Erasmus J. Buretta
For Permanent Secretary

Appendix K: Clearance Letter from Mbeya Regional Administrative Secretary

**THE UNITED REPUBLIC OF TANZANIA
PRIME MINISTER'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT**

MBEYA REGION
TELEGRAM: "REGCOM"
Telephone No: 025-2504045
Fax No.025-2504243/4462



REGIONAL COMMISSINER'S OFFICE
P.O. Box 754,
MBEYA.

In reply please quote:

Ref. No. DA.75/228/01/50

23 SEPTEMBER, 2013

The Principal _____
Teachers College/
Teachers College,
MBEYA.

**RE: PERMISSION TO CONDUCT RESEARCH TITLED "THE
IMPLEMENTATION OF COMPETENCE BASED CURRICULUM IN
TEACHERS COLLEGES IN TANZANIA".**

The above heading is hereby referred. Reference is also made from the Ministry of Education and Vocation Training letter Re.No.ED/EP/ERC/VOL.IV/350 dated 13th September 2013. The letter introduced us Mr. Angelo Edward Kavindi who is a bonafide student of the University of Oslo – Norway.

The named student aims to conduct a research on above mentioned topic for the fulfillment of Master Degree in Philosophy in Comparative and International Education.

By this letter, I humbly inform you that permission to conduct research in _____ and _____ Teachers Colleges has been granted from 15th September to 11th November 2013.

Finally, I hope that you will cooperate with him while conducting his research.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Mpogole'.

Mpogole, P.J

**FOR: REGIONAL ADMINISTRATIVE SECRETARY
MBEYA**

Copy: Regional Administrative Secretary
MBEYA. – (See in the file cover.)