

**TEACHERS' STRATEGIES IN ADDRESSING CHALLENGES
OF IMPLEMENTING COMPETENCE-BASED CURRICULUM:
THE CASE OF SELECTED PUBLIC SECONDARY SCHOOLS IN
MOROGORO MUNICIPALITY**

By

John Hipolite

**A Dissertation Submitted in Partial Fulfilment of the Requirement of the
Degree of Masters of Arts in Education (MAED) of Mzumbe University**

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CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled **Teachers' strategies in addressing the challenges of implementing competence-based curriculum: The Case of selected Public secondary schools in Morogoro Municipality**, in partial fulfilment of the requirements for award of the degree of Masters of Arts in Education of Mzumbe University.

Dr, Athanas Ngalawa
Major Supervisor

Dr, Perpetua Kalimasi
Internal Examiner

Accepted for the Board of Faculty of Social Sciences

DEAN, FACULTY OF SOCIAL SCIENCES

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I, John Hipolite, declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

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DEDICATION

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LIST OF ABBREVIATIONS AND ACRONYMS

CBC	-	Competence-based Curriculum
ESR	-	Education for Self-Reliance
USA	-	United States of America
KBC	-	Knowledge Based Curriculum
ICT	-	Information and Communication Technology
HOD	-	Head of Department
HoS	-	Head of School
DAO	-	District Academic Officer
DSEO	-	District Secondary Education Officer
FGDs	-	Focus Group Discussions
URT	-	United Republic of Tanzania
MOEC	-	Ministry of Education and Culture
PBL	-	Problem-based learning

ABSTRACT

This study explored teachers' strategies in addressing the challenges of implementing competence-based curriculum (CBC) in public secondary schools in Morogoro municipality. Specific objectives were: to explore teachers' awareness on the challenges encountered in teaching CBC; to identify teachers' strategies used in addressing challenges of implementing CBC; and to study teachers' perception on how the strategies can be improved and scaled up for implementing CBC. The study was guided by constructivism theory. It employed a case study design and qualitative research approach. Data collection instruments were observation, interviews and focus group discussions. This study involved 36 participants. Both purposive and simple random sampling were used to select the respondents. Findings revealed that, teachers were aware of CBC challenges that included: overcrowded classes, unclear understanding of CBC, insufficient teaching and learning materials, and students' readiness towards adopting learner-centred approach. Teachers' strategies in addressing the challenges of implementing CBC included: the use of learner centred approach during classroom interaction, the use of problem-based learning, and the use of subject clubs towards self-learning among students. Regarding teachers' perceptions on how the strategies can be improved and scaled out, results included: reviving teachers' resource centres for exchanging ideas and developing their pedagogical skills in line with CBC and the introduction of motivational programmes towards appreciating teachers' efforts on handling the challenges of CBC. The study concluded that there was average success on the strategies used in addressing the CBC challenges since teachers were able to employ various teaching innovations to handle the problem. It is therefore recommended that teachers as the core implementers of CBC should be creative in employing several possible measures of eliminating the challenges of CBC because teaching profession requires potentials and innovations too. Furthermore, the research suggests that education policy makers before placing any directives to teachers, there should be in service training to all subject teachers with no favour to other subjects and for any curriculum review there should be inclusion of teachers so as they can know what is on the ground and expose their teaching methodologies as CBC requires.

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CHAPTER ONE

PROBLEM SETTING

1.1 Introduction

This study intended to explore the teachers' strategies of addressing the challenges of implementing competence-based curriculum (CBC) in public secondary schools in Morogoro municipality. Subsequently, the chapter presents the background of the study, statement of the problem, general objective, specific objectives, research questions, limitations of the study, scope and significance of the study as well as the summary of this chapter.

1.2 Background of the study

The concept of Competence-based curriculum happened to be a new concept in the most of countries in the world. The background of the CBC as an approach was the movement from content-based approach to the competence-based approach, which caused meaningful changes of curricular in particular sector of the educational systems in most countries including Australia, New Zealand and the United Kingdom, (DeiBinger and Hellwig, 2011). The emergence of CBC had much to do with the greater demands of accountability of education systems of countries like England, United State of America (USA), and Australia. In reviewing the various teaching and learning outcomes, CBC later spread much in USA in 1960-70s (Kliebard, 2004). The great reason of this recommended curriculum based much on the strong need for developing some competences and practical skills from learning outcomes of the graduates of the vocational training and colleges. The change from content-based to competence-based was seen as the solution to the meaningful education change. Generally, the origin of CBC was traced back to the period of rapidly industrial development around the world (Kouwenhoven, 2003). The need for improved efficiency and increased production in the industries led to a thinking about best ways to fulfil a task (Goodman, 2006). In particular, CBC traced its roots in Moscow in the 1860's when Victor Della Vos developed methods for task analysis. It later trailed into Americans interests almost in the middle of the 19th century. There were reforms in education which had a link to industrial models

focusing on specification of outcomes in behavioural objectives that took place (Kouwenhoven, 2003). This emphasis on behavioural objectives could also be seen in the social efficiency movement which came about after USA had faced a great economic depression in 1929. Americans behind this movement wanted a curriculum that would result directly out of the problems, issues, and characteristics of their changing society (Kliebard, 2004). Consequently, this view resulted in the first implementation of CBC in USA in 1960. From the mid-1960s onwards, the demand for greater accountability in education towards more community involvement in decision making gave a great motivation to the concept of CBC (Brundrett, 2000).

The concept of CBC therefore spread much in North America continent, whereby it was developed for the first time in 1960s in United States of America. The need for this curriculum was first seen in vocational oriented colleges. There were a number of reasons for introducing this concept of CBC because of several cases that had been reported as poor learning outcomes revealed by those who graduated from various vocational oriented colleges. The shift from objective oriented curriculum to outcomes oriented curriculum was seen as solution for this significant change and innovation in education. The changes of the curriculum also led to paradigm shift to suit the demands of the syllabus. From there, the knowledge based curriculum (KBC) was changed to CBC. These changes required the change of the teacher's centred to student's centred approach during teaching and learning process (Richard & Rogers, 2014). Therefore, CBC was a kind of an educational movement which defined educational goals in terms of accurate measurable descriptions of knowledge, skills, and behaviours students had to possess at the end of the course of study so as to become more productive people in terms of practical skills which were offered in the whole phenomena of CBC (Komba & Mwandangi 2015).

In African continent, this recommended curriculum was spread in countries like South Africa, Tanzania and Rwanda. In South Africa, Lucien and Ransminism (1998) viewed CBC as the most ambitious curriculum policy since installation of a Government national unity referred to as competence-based approach.

In Tanzania the history of Curriculum was traced back to the colonial era. But the curriculum which reflected the Tanzania education system started from the era of Education for Self-Reliance (ESR). The philosophy of ESR was a result of the Arusha Declaration which pointed out the weakness of the inherited colonial education system during colonial rule. This philosophy put emphasis on the need for curriculum reforms in order to integrate theory with the acquisition of practical life skills. ESR was a type of education which seemed to enable learners to be independent and creative thinkers with ability of combining knowledge with practice. The main purpose of this education was to enable a man to be in a position of mastering the environment and becoming more productive (Masyole, 2011).

The reviewed curriculum of Tanzania Secondary Schools in 1997 put much effort on the factual aspects with little emphasis on practical skills, which then were associated with two major curriculum problems. The first problem was that the curriculum itself was overloaded (Kitta, 2004). The second problem was that the curriculum was not relevant to students. URT (2004) acknowledged these problems and as a matter of policy, Tanzania had to review the entire curriculum depending on social, political, economic and technological transformations which was a result of the global demands. At that moment curriculum was offered based on the provision of the contents to a larger extent, in other words the curriculum offered was known as KBC with the little attention in practical skills which could help students to become more competent and independent towards mastering their own environment.

CBC represented a positive step in elevating education standards; challenges in Tanzania had to do with the effective implementation since its adoption. The necessary improvements in quality education especially student's achievement required effective implementation of CBC.

Kimario (2011) argued that the implementation of CBC in schools was complex since its introduction because majority of teachers still focused on developing content and use KBC to facilitate teaching with the hope that the students would develop the intended competences automatically by themselves.

Tilya and Mafumiko (2010) contended that some teachers were not implementing the new curriculum since there was lack of clarity among potential implementers as even some curriculum developers and book writers had yet to grasp the meaning of CBC. For effective CBC implementation to occur, there should be teachers' orientation and training, appropriate teaching and learning resources, proper teaching methodologies and adequate classrooms so as to employ effective implementation of CBC.

Therefore, currently in Tanzania education formal set up the revised curriculum emphasized much on the application of knowledge by stating that "student should have the ability to make appropriate use of obtained knowledge, concepts, skills, and principles in solving various problems in daily life (MoEC, 2005). Teachers were required to design learning tasks which were to be carried out in an authentic learning environment so as to develop the desired competences among students during daily classroom interaction (Tilya & Mafumiko, 2014).

In this regard after the adoption of the concept of CBC, majority of our education systems were improved. For example, there had been the use of ICT teaching in many schools especially those found in urban areas. Despite the slight success of implementing this new curriculum, there were still the existence of many challenges which were reported towards implementing this approach since it happened to be a new concept among many Tanzanian teachers who were still not familiar enough with the CBC and its implications (Makunja, 2016).

Essentially in related to this study the common challenges which delayed the effective implementation of CBC were, limited in-service training to teachers and overcrowded classes. Therefore, majority of teachers did not undergo trainings, seminars and workshops concerning CBC so that they could become more competent on solving those challenges of CBC and its implementation. Although to some extent the other teachers could be eager to implement CBC but they faced problems like lack of enough knowledge and they could not be in a position of understanding various concepts of CBC approaches that facilitated effective teaching and learning process (Makunja, 2016).

Moreover, shortage of teaching and learning resources and the willingness of the learners towards adopting learner-centred approach were among the challenges of CBC. Other challenges were overcrowded classes, the less involvement of teachers in decision making towards curriculum change, the mismatch between textbooks, reference books and the requirement of CBC (Mosha, 2012).

HakiElimu (2012) found that little understanding of implementation of policies and regulations is one of the biggest challenges that teachers face in implementing CBC because most implementers have no idea of what the policies entailed to do. Most of the time policies were set from higher levels with little understanding of what was happening on the ground.

HakiElimu (2012) argued that there was a frequent change of curriculum without adequate preparations in terms of the teaching and learning process. Curriculum developers did not consider teachers who are central implementers of CBC. Therefore, the existed challenges of implementing CBC happened to be the problem of this study. This can be evident by the number of challenges arose since the introduction of CBC. Majority of education stake holders including teachers are still struggling to have a clear understanding of CBC and its requirements. There had been numerous challenges emerged towards the implementation of this competence based approach in facilitating teaching and learning process. To the larger extent such confusion of CBC and its implications can lead to the occurrence of ineffective implementation of this recommended curriculum.

Generally, the main purpose of this study was to explore teachers' strategies in addressing challenges of CBC implementation. The essence of doing this is to add a knowledge to the teaching profession in way that, teachers would be exposed with various teaching methodologies. The findings of this study will help policy makers and other educational decision makers to understand the strategies employed by teachers in solving various challenges with regards to CBC implementation, so such education actors will find some good policy which will help to improve their strategies during implementing this new recommended curriculum.

1.3 Statement of the problem

In 2005 the government of Tanzania introduced CBC towards improving the provision of educational services by achieving quality education (URT, 2005). Despite the fact that the CBC was being implemented for more than one decade in Tanzania, still it appears that it is not effectively implemented due to the challenges teachers face in implementing CBC. A number of studies about the implementation of CBC were conducted in Tanzania. Such includes Makunja (2016), Komba and Mwandangi (2015) and Tambwe (2017) to mention but a few. Whereas these studies revealed that teachers still face a huge number of challenges in implementing CBC, there is a dearth of information on how teachers address the identified challenges. The studies end with enumerating the challenges as if teachers are helpless victims of circumstance with little or nothing to do with the challenges they face during implementing this suggested curriculum. My experience as a teacher contravene with this scenario. To the best of my knowledge, teachers are trained to be innovative and creative. Thus this study was set to explore the strategies used by teachers to address the challenges of implementing CBC using a case of two selected public secondary schools located in Morogoro Municipality. Essentially the study intended to attempt the question of how teachers in secondary schools address the challenges of implementing CBC in an effort to deliver what is expected of them. The purpose of this study was to unveil the innovations and creativity teachers use to overcome different obstacles of effective implementation of CBC. Generally, the essence is to know how best teachers can take various initiatives towards finding possible solutions of the emerging challenges of implementing CBC under their own teaching innovations. This is because teachers are expected to be creative and have potentials of facing various obstacles on the course of teaching. Expressing teachers as helpless victims in the course of implementing CBC invite questions and this study was designed to address such question by looking on what actually teachers do to overcome challenges posed to them by the CBC. The researcher was eager to explore measures which teachers were undertaking in handling the challenges which emerge during implementing CBC in public secondary schools in Morogoro municipality.

1.4 General objective

The main objective of the study was to explore the teachers' strategies which had been used in addressing various challenges facing them during the implementation of competence-based curriculum in public secondary schools within Morogoro municipality.

1.4.1 Specific objectives

- 1) To explore teachers' awareness on the challenges encountered in teaching competence-based curriculum in public secondary schools in Morogoro municipality.
- 2) To identify teachers' strategies used in addressing challenges of implementing competence-based curriculum in public Secondary schools in Morogoro municipality.
- 3) To explore teachers' perception on how the strategies can be improved and scaled up for implementing competence-based curriculum in public secondary schools within Morogoro municipality.

1.5 Research questions

- 1) Are the teachers aware of the challenges of teaching competence-based curriculum in public secondary schools in Morogoro municipality?
- 2) What strategies are used by teachers in addressing challenges of implementing competence-based curriculum in public secondary schools in Morogoro municipality
- 3) How can teachers' strategies be improved and scaled up for implementing competence-based curriculum in public secondary school within Morogoro municipality?

1.6 Significance of the study

The purpose of doing this study was to add a new knowledge on the area of curriculum implementation particularly in teaching profession. The results of this study will help teachers to be in the position of being capable on how to employ effective teaching methodologies towards addressing the challenges of CBC in teaching and learning process. Moreover, this work will help the school managers to take proper measures of addressing the challenges of CBC at a school level. It will also help policy makers and other educational decision makers to understand the challenges faced by teachers and students with regards to CBC, so such education actors will find some good policy which will eradicate this problem in connection to the teachers' innovations in addressing the CBC challenges. Furthermore, the research findings might help curriculum designers and policy makers on how best to introduce new and relevant syllabus in improving quality education within our country. Lastly, the study will be more significant to some future researchers as it will help to add new knowledge into the field of education specifically in curriculum innovations.

1.7 Limitations of the study

In conducting this study, the researcher faced some challenges. The first challenge was insufficient funds. The researcher used his self-sponsorship in doing this study. Therefore, the researcher did the best of his capacity in order to get minimal funds so as to continue with the study and to accomplish this work with the genuine report. The researcher also experienced the respondents' reluctance towards cooperating with him. This was evident in a data collection process, whereby some respondents were somehow difficult to give information as others were not ready to be interviewed or recorded. Therefore, to avoid this, the researcher established a good rapport with respondents before actual data collection. Finally, this helped the researcher to get the data needed.

1.8 Scope of the study

This study focused to explore teachers' strategies for addressing the challenges of implementing CBC in teaching and learning process particularly in Morogoro public secondary schools. The study was conducted in two selected public secondary schools in Morogoro municipality, namely Morogoro secondary school, and Tushikamane secondary school. The study involved subject teachers, heads of departments, academic masters/mistress, the heads of the schools, District secondary education officer (DSEO) and District academic officer (DAO). With respect to theoretical orientation, this study was guided by constructivism theory. Moreover, the study used interview, focus group discussions and non-participatory observation as data collection tools. However, the researcher involved only secondary schools' teachers and no other community members because teachers are the ones who happened to be core implementers of CBC so they were more suitable to be part of this study.

1.9 Summary of chapter one

In this chapter the researcher presented the background of the study which tried to problematise and build the foundation for conducting the study through stating the statement of the problem, general objective, specific objectives and research questions, and explaining the limitations of the study, setting the scope of the study, and explaining the significance of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the review of what has been done by other researchers relating to this research topic. It provides the theoretical literature review so as to show how the study had been derived from different theoretical points of view. Empirical literature review was also discussed in details to show what other researchers have already documented and contributed to identify the research gap as well as setting the conceptual framework. However, the reviews were done with the regard of the three specific objectives of this study.

2.2 Theoretical literature review

This part entailed to show theory which was used by the researcher so as to guide this study. The researcher also showed components of this theory and there was a clear justification on the relationship between the theory and the study.

2.3 Theory related to the study

This attempted to explore the teachers' strategies used in addressing various challenges of CBC towards teaching and learning process in several public secondary schools in Morogoro municipality. So in this regard the researcher decided to employ constructivism theory to study the problem because this theory fosters the students' intellectual competences, such as skills development, problem solving and analytical reasoning as CBC complies so it matched with the three specific objectives of conducting this particular study.

2.3.1 Constructivism theory

The foundation of this study was guided by of the ideas of constructivist theory. Essentially in this work, Constructivism is the view that people are in the position of constructing their own understanding of the world in which they live by reflecting on their own experiences (Brown and Green, 2006). Therefore, the constructivist learning theory can be defined as the active construction of new knowledge on the basis of the learner's prior experience. The main pioneers of this theory were Jean

Piaget, John Dewey and Vgotsky. Piaget was a great psychologist and philosopher whereby he provided a framework for understanding how knowledge could be taught. However, Piaget as the father of this theory also insisted on creating environment where learners could naturally be exposed to important concepts and ideas. According to constructivist views, learning occurs when individuals are actively involved in the learning processes and have the ability to integrate new knowledge with the existing one. Consequently, learning could be considered as an active process of constructing knowledge rather than receiving knowledge, and teaching is considered a process of supporting learners to construct ideas, rather than delivering knowledge.

Simply put, a teacher is a guide by the side-lines rather than the sage on the stage (Biggie and Shermis, 2004). In addition to that, constructivism is a type of theory based on observation and scientific study about how people learn. It articulates that people construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences. However, in the classroom, the constructivist view of learning can point towards a number of different teaching practices. In the most general sense, it usually means encouraging students to use active techniques (experiments, real-world problem solving) to create more knowledge and then to reflect on and talk about what they are doing and how their understanding is changing. The other major argument of constructivism theory is that it helps students to adopt collaborative learning in a way that teachers encourage the students to do more group work assignment so as to create good relation towards adopting collaborative learning among them.

In general, constructivist theory entails much on learners to participate more fully in learning individually rather than being spoon-fed by their teachers, who in their turn are supposed to act only as facilitators. Therefore, in this perspective Constructivism is often linked to the CBC, which happened to be a recent educational reform advocating the involvement of students in a meaningful learning during teaching and learning process occurs at the classroom level. So, it is meant to foster the students' intellectual competences, such as process skills, problem solving and analytical

reasoning. Learners must construct knowledge in their own minds (Gillies, 2007). Teachers only facilitate this process by using teaching methods that help in making the information meaningful and relevant to learners by giving students opportunities to discover and apply ideas by themselves. This study employed the constructivist theory because the theory supports the students in constructing ideas, rather than delivering knowledge. The theory is related to this study by involving the learners to participate more in learning and constructing their own knowledge. For this reason, constructivism theory and the CBC make the students more active in the learning process since CBC entails much on learner-centred approach through student's participation and involvement towards stimulating effective classroom interaction (Nyoni, 2018). Therefore, in this part, the theory aimed to guide the researcher to explore the strategies teachers employed in addressing the challenges of implementing CBC in secondary schools in Morogoro Municipality

2.4 Empirical literature review

This part describes various studies which were carried out by several researchers based on this research topic. There a number of studies which have been conducted by different researchers in the context of Tanzania. The empirical literature review of this study originated from various sources like master's dissertations both published ones and unpublished ones, research journals and different articles. However, many researchers have tried to undergo the issues related to competence-based curriculum at large. Such studies are by Mosha (2012); Komba and Mwandanji (2015), and Makunja (2016). All of these studies revealed that, there were still a lot of challenges in implementation of CBC in teaching and learning process which seemed not be given any possible solutions, thus the researcher desired to explore the various teachers' initiatives towards addressing the challenges they face during implementing this new suggested curriculum.

2.4.1 Empirical studies on CBC in Tanzania

There have been a number of studies that were done in Tanzania concerning the issue of effective implementation of CBC. These studies were vibrant for assisting this study towards finding the already identified facts from different existing literatures

on this research topic, and lastly the formation of its research gap. In this line, Tambwe (2017) did a study on the challenges for the implementation of the Competency-Based Education and Training (CBET) in Tanzania. In his study, a mixed research approach with an exploratory research design was applied. The results exposed numerous challenges facing teachers on implementing CBET in Tanzania. The challenges comprised low understanding of the CBET concept, insufficient facilities and resources to implement CBET successfully, overcrowded classrooms and low awareness of students towards CBET.

Paulo (2014) conducted a study based on the disjunction between policy and practice on curriculum reform in Tanzania exposed numerous challenges delaying actual implementation of CBC. The challenges were insufficient teaching and learning resources relate to CBC, focus on passing exams than competence development and application of knowledge among learners, and teachers' little awareness of the competence-based curriculum.

Makunja (2016) conducted a study on the implementation of competence-based curriculum in Tanzanian secondary schools. The study used qualitative research approach and case study research design. The findings of this study described some challenges which impeded active application of the CBC in secondary schools in Tanzania including; inadequate teacher in-service training on CBC, unsatisfactory teaching and learning materials, overcrowded classrooms, and student's willingness to admit learner-centred approach. Additional study was conducted by Komba and Mwandangi (2015) for the purpose of revealing the carrying out of CBC in Tanzanian secondary schools. The findings of this study showed that many teachers lacked proper understanding of CBC because of inadequate teacher in-service training.

Rwezaura (2016) conducted a study on implementation of in primary schools in Kinondoni Municipality in Dar es Salaam, Tanzania. The study employed descriptive research design and qualitative and quantitative research approach. The findings from this study revealed a lot of challenges in CBC implementation including most of teachers applying the traditional teacher-centred approach in teaching and learning

like using lecture methods which is contrary to the competence-based curriculum, the persistence of inadequate text books to suit the learner centeredness approach and among others.

Luhambati (2013) who conducted a phenomenological study on his study focused on exploring teachers' ideas of the curriculum change from a knowledge-based approach to competence-based approach in secondary education in Tanzania. The findings highlighted the fact that teachers seemed to know that the curriculum has changed but that they have a confused understanding about the change. Some believe their roles have been reduced at the same time as others regard the new textbooks as being irrelevant and scarce. Additionally, on the other hand, some participants conceived the curriculum as being complex and impractical. Therefore, the history of CBC in Tanzania originated in the era of ESR when there were some education reforms which had the purpose of turning the existed education which was content-based to more developing some competences among learners so as to help people developing self-learning, problem solving skills and learning outcomes so as to become active citizens.

Another study on competence-based curriculum was done by Muneja (2015) who applied the descriptive case study design, face-to-face interviews, non-participant observation and document analysis for data collection. The study findings mentioned several challenges that impede effective implementation of the competence-based curriculum. Those challenges among others include limited understanding of CBC by teachers, limited participation of teachers in curriculum design, lack of quality text books and lack of motivation for teachers to implement the CBC.

Therefore, from the results of all mentioned studies there was a common problem that existed whereby, to the larger extent the studies identified the existence of the challenges emerged in the active implementation of CBC to teachers without providing the solutions. This can be justified by numerous of findings from several studies which showed the occurrence of different challenges which had not yet been solved to help teachers in the process of teaching this new proposed curriculum.

In this regard the researcher was eager to explore how best teachers can employ their teaching innovations towards addressing the challenges of implementing competence-based approach using a case of two selected public secondary schools locate in Morogoro municipality.

2.4.2 Challenges facing implementations of Competence-based Curriculum

In the investigation made about the implementation of competence-based curriculum, HakiElimu (2012) found that poor understanding of implementation of policies and regulations was one of the biggest challenges that teachers faced because most implementers had no idea of what the policies entailed. Most of the time policies were set from higher levels with little understanding of what was happening on the ground, and they are not given feedback by the implementers. There were also a lot of directives from above which did not consider the existing policies that teachers implement in the classrooms. In other words, this was predominance of top-down approach or forward mapping perspective as advanced by Elmore (1985).

Furthermore, HakiElimu (2012) argued that there was a frequent change of curriculum without adequate preparations in terms of the teaching and learning process. According to majority of curriculum developers and the teachers, as the implementers of the curriculum were rarely involved in the whole process. Moreover, frequent changes in the type of books which students were supposed to read as well as frequency of change in examination formats also affect students. The frequent change of curriculum hindered Competence-based approach to be implemented.

Luwingu (2012) stated that classroom size hindered the implementation of CBC. In his findings he viewed that there was no correlation between the size of classes and number of the students. This becomes more difficult to the classroom having a large number of students. In order to solve this problem, teachers had been required to divide the number of students into groups, for example to make a class consisting of maximum number of forty (40) students in order to make the learning process more

efficient and enjoyable to every student. So in this context the issue of overcrowded classes resulted in the challenges of implementing CBC.

Komba and Mwandangi (2015); Kafyulilo *et al.* (2012); and Kimaryo (2011), viewed that the implementation of CBC in schools had been complex since its introduction because teachers still focused on developing content with the hope that the learners would develop the intended competences automatically. In their study they revealed that the concept of competence was not understood by some teachers.

Makunja (2016) in the study titled Challenges Facing teachers in implementing CBC in Tanzania revealed that teachers faced a huge number of challenges which impeded the effective implementation of CBC in teaching and learning. However, some of the challenges of CBC implementation are students' readiness in adopting learner-centred approach, insufficient teaching and learning materials like shortage of books which hinder the effective implementation of CBC. So basically, to a larger extent there was no clear evidence on how teachers can find some relevant strategies towards addressing some challenges of competence-based in relation to effective teaching and learning process. That is why there was a need to find out possible strategies which teachers employed towards addressing the challenges of CBC.

2.4.3 Strategies of addressing challenges of CBC

In this attempt, there had been a number of challenges which seemed to hinder the effective ways of using CBC during classroom interaction. Therefore, from this perspective it had been evident that there was a need to explore various strategies in order to address the challenges of implementing CBC in relating to the second objective of the study.

Students' awareness towards adopting the learner-centred approach. In light with this aspect the teachers decided to orient students towards on the significance of using learner-centred approach so as teachers can employ some teaching methodologies which are more students oriented towards facilitating effective implementation of CBC. The awareness of students towards adopting learner-centred was very crucial because it changed a learner from passive to autonomous learner (Mosha, 2012).

If the learner was not aware of what was taking place in teaching and learning process, automatically he/she would become merely passive recipient of instruction, attention-paying weak and unfocused. Lier (2013) attested that if the learner concentrates on what was taking place would be responsible and autonomous. Therefore, this helped teachers to employ relevant teaching methodologies which involved students' participation in line with CBC implementation.

In-service training was also referred as capacity building. In any innovation and curriculum change, the teachers as couches, instructors and facilitators should be well informed with new changes. If this is not done thoroughly it may change teachers' perception from positive to negative as well as if it is done it may change from negative to positive. Awareness and competence come from capacity building especially for the new reformation of curriculum (Mkonongwa, 2018). The role of in-service training and seminars was to equip the teachers with new skills and providing them with advanced ways of undertaking the curriculum innovation. Therefore, the essence of this aspect was to shape some teaching methodologies towards implementing CBC.

Teaching and learning environment: Teaching and learning settings play a great role in shaping both teachers and students perception in classroom interaction. CBC like any modern approaches of teaching and learning need a particular environment which is conducive to facilitate effective teaching and learning process. However, teaching and learning environment is a broad term which includes lots of things in it. These may include; proper arrangement of classroom, availability of desks, teaching and learning aids as well as materials. The accumulation of all these may influence perception in the process of implementation. The friendly environment improves learning while the unfriendly environment may disturb teaching and learning process. By so doing the implementation of CBC would be influenced by either friendly or unfriendly environment (Mushi, 2009).

Improvising of teaching and learning materials: The development of competencies among learners requires schools to have all the necessary teaching and learning resources. These resources include laboratory equipment, books, and wall maps, technological tools such as computers and other real objects. Therefore, due to the limited of such teaching materials, sometimes teachers go extra miles to the extent of improvising various teaching materials like they cut empty bottles of water then they use them as beakers towards conducting some experiments during teaching and learning process occur. As the students use these materials which have been improvised and they gain practical skills towards implementing CBC during classroom interaction (Mkonongwa, 2018).

The use of remedial classes. For the effective implementation of CBC to take place majority of teachers have decided to find an extra time towards helping those students who happened to experience some learning difficulties. In regard to this aspect, the essence of using this strategy was to help to lower achiever students towards solving their academic problems and developing their learning skills as well. This also helped students to gain problem solving skills and critical thinking which lead to active learning during classroom interaction. Therefore, in line with this study, teachers decided to employ remedial classes as one of their strategies towards teaching this new recommended curriculum (Mosha, 2012).

2.5 Knowledge gap

The effective implementation of CBC seemed to undergo a number of challenges since its introduction. Different researchers like Makunja (2016) developed insights on the gap that exists on the challenges impede the effective implementation of CBC in public schools. Moreover, there were limited researches done in Tanzania concerning how to solve the existed challenges so as to have effective implementation of CBC. Ally (2018) asserted the strategies of addressing the challenges of implementing CBC, but the study did not target the teachers directly. This is because teachers have been given a lot of directives to follow from various education actors, without considering them as creative as their profession requires. In line with this aspect, the study aimed to look on how best teachers can create various

teaching innovations and employ possible measures towards teaching this new recommended curriculum this is the knowledge gap that this study sought to fill. Therefore, this study explored the teachers' strategies in addressing the challenges of implementing CBC in public secondary schools in Morogoro Municipality.

2.6 Conceptual framework

The term conceptual framework contended a set of broad ideas, concepts and principles taken from relevant fields of investigation and used to structure a subsequent presentation. So in this study conceptual framework included essential aspects which are variables of CBC (Kombo & Tromp 2006). In this regard the researcher used conceptual framework so as to ensure and identify various variables which were part of this study.

Conceptual framework

Independent variable

Dependent variable

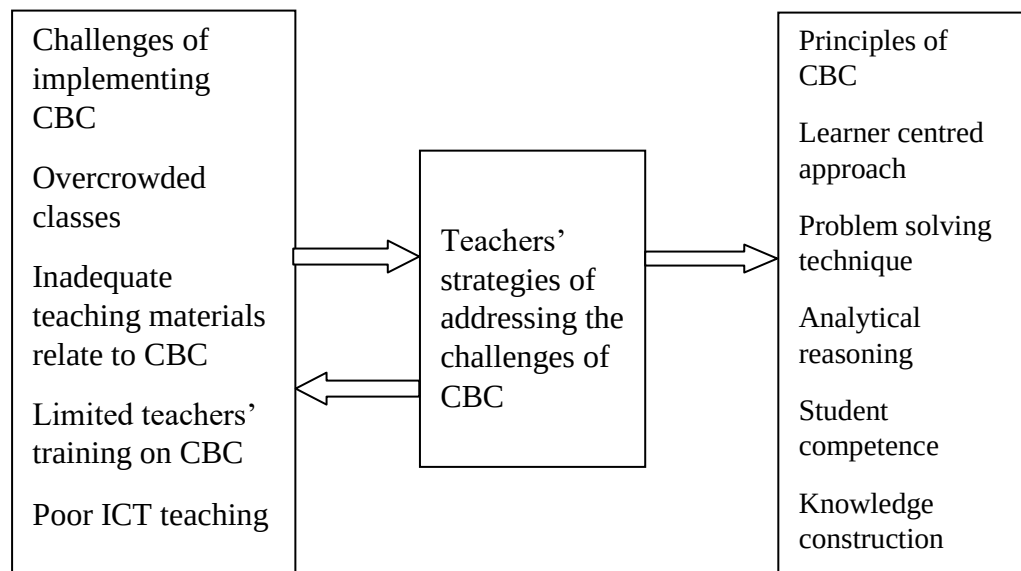


Figure 2.1: Conceptual framework

Source: Researcher's construction from reviewed literatures

From the above figure the principles of CBC occurred to be a dependent variable where it depends on the factors behind the successful implementation of CBC. The independent variable happened to be the challenges that hindered teachers towards the actual implementation of CBC during teaching and learning process.

From the existing challenges that hindered teachers to accomplish the actual implementation of CBC, the researcher aimed to explore how best teachers can employ various teaching creativities and innovations towards addressing the challenges of implementing CBC. Therefore, that being the case CBC was being affected by the number of factors which were more likely to impede the effective implementation of CBC. Essentially, in this study the challenges of implementing CBC included overcrowded classes, lack of teaching and learning materials, insufficient in-service training and insufficient usage of ICT (Makunja, 2016). In light with this aspect, this study aimed to explore the strategies used by teachers in addressing the challenges of implementing CBC in public secondary schools within Morogoro municipality.

2.7 Summary of chapter two

This chapter provided various literature reviews which were found in this part. There was theoretical literature review which showed the theory that guided the study and its relationship with this particular study. There was also the empirical literature review in relationship with the specific objectives of the study, followed by research gap which a researcher was eager to fill in and conceptual framework of the study which was drawn from various related literature reviews.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This part entailed much in showing how the study was conducted basing on the research approach, research design, study area, target population, sample size, sampling techniques, data collection tools, data analysis plan and ethical consideration. It also shows how data were collected and analysed. Generally, this chapter entailed to show the methodological part of the research work as described procedures that would be followed in conducting the study.

3.2. Research approach

The researcher employed qualitative research approach in carrying out this study. The study adopted qualitative research approach because the researcher wanted to obtain quality data collected through interviews, focus group discussions and observation. Qualitative research approach intended to help the researcher to understand people and the social cultural contexts within which they live. In qualitative research, designs are flexible rather than fixed. This allowed the researcher to be creative and make changes on the way the research was carried out (Maxwell, 2013). Patton (2002) argued that, the phenomenon of interest in qualitative research unfolded naturally because there was no predetermined established course. Therefore, that being the case this study employed qualitative approach because it intended to seek people's attitudes, opinions, feelings and experiences towards exploring strategies made by teachers in addressing the challenges of implementing CBC in public secondary schools particularly in Morogoro Municipality (Kothari, 2004).

3.3 Research design

The study adapted explanatory case study research design because the researcher wanted to have deep information focusing on the strategies used by teachers in addressing the challenges of implementing competence based curriculum. A case study is an empirical inquiry that investigated a contemporary phenomenon within its

real-life context especially when the boundaries between phenomenon and context were not clear evident (Yin, 2011). Cohen, Manion and Marrison (2007) asserted that case study design could be employed when the researcher wanted to observe the effects in really contexts, recognising that context was powerful in determining the cause and effect on the problem under investigation. Through case study design the researcher was able to capture a lot of information about some strategies which teachers employed in addressing the challenges of implementing CBC, the case of two selected public secondary schools in Morogoro Municipality.

3.4 Target population

In this study target population was the population whereby the sample was drawn from and the participants who the researcher wanted to deal with. (Omari, 2008). The targeted population for this study included subject teachers, heads of departments, Head of schools, District academic officer and the DSEO. They were targeted because teachers happened to be the main key implementers of CBC. So they were in position of providing the required information basing on the challenges of CBC, the possible measures in addressing such challenges as well how to improve such measures towards the scale up of CBC usage in teaching and learning process. This study did not involve community members like the parents and the students since these people were only the receivers of CBC compared to the teachers who happened to be more likely the core implementers of CBC.

3.5 Area of the study

The study was conducted in Morogoro Municipality. Morogoro region is bordered to the North by Tanga Region, to the East by Pwani and Lindi Regions to the South by Ruvuma Region and to the West by Iringa, and Dodoma Regions. Morogoro municipality was selected in this study because it practices CBC and there had been a number of challenges arose towards the implementation of this curriculum in which teachers remained as helpless victims towards finding various possible measures to address the problem. In this line, public secondary schools in Morogoro municipality do not perform well in form four national examinations. So, that shows the ineffectiveness of CBC implementation and this aspect was relevant to the researcher

to conduct this study in Morogoro municipality. The study dwelt on Morogoro Municipality public secondary schools a case study of two selected secondary schools to represent other public secondary schools in the country. In relation to this phenomenon, the study was conducted in Morogoro municipality because it was a follow-up study since Makunja (2016) conducted a study in Morogoro titled “Challenges of implementing CBC in public secondary schools particularly in Morogoro district.” Therefore, in this line the researcher wanted to look on how teachers can handle the challenges of implementing CBC. That is why the researcher came up with this follow-up study so as to explore possible strategies of addressing the challenges of implementing CBC in public secondary schools particularly in Morogoro municipality.

3.6 Sample size and sampling techniques

A sample is a representative subset of the population from which generalisations were made about the population. Sampling was simply stated as selecting a portion of the population, in the research area, which was a representation of the whole population (Michael, 2012). This study utilised a sample size of 36 participants and both purposive sampling and simple random sampling techniques were applied as it explained in sub section 3.6.1 and 3.6.3.

3.6.1 Sample size

As quoted from Adam and Kamuzora (2008), “the exact number of items selected from a population to constitute a sample is what we call sample size”, it was the exactly number of items selected from a population to form a sample.

The term sample size refers to number of units or individuals to be chosen for the purpose of gathering data from a study population (Phrasisombath, 2009). The sample size that was employed in this study comprised 36 respondents who included subject teachers, academic teachers, and Head of Schools. Heads of departments, District secondary education officer and District academic officer. The researcher chose this sample size because quality information’s were needed from right key informants.

The sample size and its composition was illustrated as follows:

Table 3.1: Sample size

Category	Male	Female	Total
Subject Teachers	06	06	12
Head of departments in schools	08	10	18
Academic Masters/Mistress	01	01	02
Head of schools	01	01	02
District secondary education officer	01	-	01
District academic officer	-	01	01
Sample Total	17	19	36

Source: Field data, 2019

3.6.2 Sampling

Sampling refers to process of taking a subset of subjects that was representative of the entire population. Sampling was done because it was impossible to test every single individual in the population. The sample in this study was drawn from two selected schools in Morogoro Municipality.

3.6.3 Sampling techniques

Sampling technique involved a process of selecting a number of individuals from the given population and the number of individuals selected from the population consists of elements representative of the characteristics found in the entire group (Orodho and Kombo, 2002). Participants in this study were selected using two sampling techniques, the purposive and simple random sampling technique.

Purposive sampling is a type of sampling technique used in this study in regard to position, occupation and the number of respondents available. Patton et al. (2002) argued that purposive sampling means participants are selected because they are likely to produce useful data. Similarly, Bamora (2010) hold that purposive sampling involves selecting respondents who can provide information that answers the research questions of the study. The sample of this study was drawn through purposive sampling which was, according to McMillan and Schumacher (2006), “selecting information-rich cases for study in-depth”. Purposeful sampling was done to increase the utility of information obtained from small samples.

Purposive sample sizes are often determined on the basis of theoretical saturation (the point in data collection when new data no longer bring additional insights to the research questions). Purposive sampling is therefore most successful when data review and analysis are done in conjunction with data collection. It is a non-random technique that does not need underlying theories or a set number of informants. The study applied purposive sampling to select 18 teachers who are head of departments in their respective schools, 02 Head of schools, the rest 02 academic teachers, 1 DSEO and 1 District academic officer. All these were obtained through purposive sampling because they are targeted due to their position in producing the needed information.

3.6.4 Simple random sampling techniques

Simple random sampling was used in order to sample teachers and other educational administrators who were part of this study. This technique is under probability sampling. The researcher employed this technique because every respondent in the study area had an equal chance to provide the required information. Gay (2006) stated that the most common method of sampling was simple random sampling; the researcher selected this method so as to get the respondents easily from his area of study. In this regard simple random sampling was done to subject teachers because all the subject teachers were the key implementers of CBC and had equal chance to fit in this study.

Table 3.2: Sampling table to indicate response and data collection methods

Sampling Techniques	Sample Size	Respondents	Data Collection Methods
Purposive sampling	02	Head of schools	Interview
	02	Academic teachers	Interview
	01	DSEO	Interview
	01	DAO	Interview
	18	HoD	Focus group discussion
Simple random sampling	12	Teachers	Focus group discussion

Source: Field data, 2019

3.7. Data collection process

Data collection process is very crucial stage after the problem has been defined. Primary data are original in character and fresh collected for the first time from the field by the researcher (Kothari, 2004). This study used primary data in order to obtain information which were not gathered before. That being a case data collection instruments refer to means through which relevant study's data were gathered (Futterman, 2012). This study used observation, interviews and focus group discussions in order to get various views, opinions and experience from the respondents basing on the teachers' strategies of addressing the challenges of implementing CBC.

3.7.1 Observation

In attempting to collect relevant information for this study the researcher applied observation checklist to gather information on teaching methodologies used, classroom arrangement, class size, lesson plans, teaching aids and availability of ICT devices. In this study it was vital to use this technique in data collection because the researcher wanted to observe directly the real situation of a classroom interaction on how CBC took place. The instrument used to guide the researchers' observation was checklist.

3.7.2 Interviews

Interview is a method of collecting information through oral or verbal communication between the researcher and the respondents (Bell, 1998). In addition to that, interview refers to the conversation between the interviewee and the interviewer. In the same light Kothari (2003) views interview as the method of collecting data which involves presentation of oral-verbal stimuli and reply in terms of oral-verbal responses. Therefore, this study employed semi structured interview as one of the instrument towards data collection process. The researcher wanted to capture the views from the teachers and other education administrators who were likely to be familiar with CBC. In this study in-depth interview was done to the 2 HoS, 1 DSEO, 1 district academic officer and 2 academic teachers.

3.7.3 Focus group discussion

The focus group discussion technique is preferred in qualitative studies as it facilitates quick information gathering and helps in the identification and exploration of beliefs, ideas and opinion (Kombo and Tromp, 2006). A potential benefit of using this approach was that informants may feel greater confidence in a group setting, which may encourage them to offer comments and discuss matters they would not say in a one-on-one interview (Axinn and Pearce, 2006). This method was used to elicit information and attitude from teachers who implement CBC. Two focus group discussions were conducted in every school to make a total of 4 focus group discussion for all selected schools. Each of the focus group discussion session composed of 9 teachers who were head of departments and 6 teachers who were subject teachers. The researcher was the one who lead such FGDs.

3.8 Data analysis method

Data analysis examines the data that have been collected and making deductions and inferences in relation to research objectives. Qualitative analysis is the analysis of words by collecting data from peoples' experiences (Kombo and Tromp, 2006). Essentially the researcher adopted content analysis as the method of analysing data. This was employed since content analysis helped to get feelings, attitudes and experiences from the teachers. In this regard the data were recorded by the using tape recorder; the researcher was very keen in transcribing them. Transcription involved careful listening and re-listening and summarizing in writing. It was from the summarized texts logical interpretations were drawn based on issues which arose by the study. In a nutshell, data coding was performed with the aim of generating some themes from the texts made and organised in relation to find the teachers' strategies of addressing the challenges of CBC in public secondary schools in Morogoro municipality.

3.9 Validity and reliability

Validity is defined as the extent to which a concept is accurate in the study while reliability is defined as a consistency of a measure (Twycross and Heale, 2017). Validity determined whether the instruments gathered the expected data or not. It is

the degree to which the instrument can provide accurate data as required by the researcher. Reliability is defined as the degree of consistency between two measures of the same thing (Mehrens and Lehman, 1987). It was the measure of how stable, dependable; trustworthy and consistent a test is in measuring the same thing each time (Worthen et al., 1993).

In this study, pretest was conducted to see if the same instruments could give the same results when applied to the same group over time. The study employed triangulation methods of data collection for the purpose of validating and improving reliability of findings. There was simple language used in questions. These were addressed through the use of various tools of data collection such as interviews, focused group discussions and non-participatory observation. Most measurements experts believe that every measurement device should possess certain qualities and the two common technical concepts in measurements are reliability and validity. Validity and reliability were the two most important quality control objects in research.

3.10 Ethical issues

In ensuring ethical consideration the followings were done: The letter that introduced the researcher and explaining the objectives of the study was sent to the targeted authorities. For this study letters were sent to the District Educational officer and Heads of schools where the study was conducted. In this study ethical matters were highly observed during the whole process. The respondents were informed on the voluntarily nature of the study to make them feel free during the process. They were asked if they were ready to be recorded and to ensure anonymity no one was forced to mention his or her name. Agreed-upon standards for research ethics help to ensure that the researcher explicitly considers the needs and concerns of the people they study, that appropriate oversight for the conduct of research takes place, and that a basis for trust is established between the researcher and study participants. Therefore, informed consent and confidentiality were used as ethical consideration in this work.

In this part, participants were also given an assurance of confidentiality and a description of the intended use of the data. The researcher promised to protect the individual's confidentiality from other people in the setting and from the general reading public since the determination of this study was mainly for academic purpose (McMillan and Schumacher, 2006).

3.11 Summary of chapter three

This chapter dealt with how and why several research methodologies were used and justified including research approach which was qualitative research approach, research design which was explanatory case study design, area of study was Morogoro municipality, sample size of the study involved 36 participants. Purposive and simple random sampling were used. Observation, interview and focus group discussions were employed to collect data. The data collected were analysed by content analysis. Validity and reliability were ensured and ethical considerations were highly considered.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.1 Introduction

This part in this study aimed at presenting what had been found in the field during data collection process in connection with the three specific objectives of the study. In this work the content analysis was employed towards analysing the data which were obtained from the field through observation, interviews and focus group discussions. Therefore, in this study the researcher also showed the effects of the demographic information of the participants.

Table 4.1: Demographic characteristics of the participants

Variable		Frequency	Percentage (%)
Sex	Male.	17	47.2%
	Female	16	52.7%
Education level	Masters	09	25%
	Degree	21	58.3%
	Diploma	06	16.6%
Teaching experience	05-10	11	30.5%
	11-15	14	38.8%
	16-20	09	25%
	21-25	02	5.5%
Working position	Head of the schools	02	5.5%
	Subject teachers	12	33.3%
	Head of department	18	50%
	Academic teachers	02	5.5%
	DSEO	01	2.7%
	DAO	01	2.7%

Source: Field data (2019)

4.2 Demographic characteristics of the participants

4.2.1 Sex of the participants

In this study all the participants were categorised by sex to avoid bias whereby the researcher involved both males and female respondents to be part of this study. However, many respondents of this study were the females compared to males. This indicated that female teachers who work in public secondary schools in Morogoro municipality were aware of the concept of CBC and its implications.

4.2.2 Education level of the participants

The reason of the categorisation of respondents by their education level was that the researcher wanted a well complete and satisfactory data so as to have valid information. In this section the study wanted to have the credibility in linking the level of the education from the participants and the findings of this study. therefore, many respondents in this study happened to be bachelor's degree holders, followed by the master's holders and the diploma holders to a smaller extent. This education level of the respondents was effective with the responses they provided in this study.

4.2.3 Teaching experience of the participants

The issue of teaching experience is very vital to be considered in this study because it happened to be very significant aspect towards providing educational information. In this regard the researcher categorised the respondents by their teaching experiences, which was ranging from 11-15 years of teaching. The essence of doing this was to get different views, opinions and experiences from both novice teachers and experienced teachers towards exploring their strategies of addressing the challenges of implementing CBC.

4.2.4 Working position of the participants

This study was dominated mainly by the normal teaching staffs who were the subjects' teachers. Therefore, the heads of departments, academic masters/mistress and subjects' teachers all of them were normal teachers who happened to be the key implementers of CBC. Consequently, they were in position to fit in this topic through providing right data. However, the study was also comprised of other education

administrators like the DSEO, HoS and DAO whereby, all of them were in position of supervising and assessing how CBC was applied ranging from the classroom level to the school level.

4.3 Teachers' awareness on the challenges encountered in teaching CBC

In this section the essence was to look on the challenges teachers experienced during implementing the Competence-based curriculum during teaching and learning process. Therefore, in this first research objective of this study, the teachers showed their awareness on challenges impeded the effective implementation of CBC.

4.3.1 Limited in-service training

Teachers, academic masters/mistress and other education administrators like the DSEO, District academic officer (DAO) and the heads of the schools complained that, shortage of teachers' in-service training basing and seminars on CBC delayed them to have a clear understanding of CBC and its requirements. Many teachers seemed not to have good pedagogical skills and knowledge towards teaching CBC. This aspect was revealed in the focus group discussions conducted in this study. Therefore, one of teachers said;

Teachers are willing to teach CBC but how can a teacher teach without being given some training and other skills? There is insufficient number of in-service training programmes which teachers attended, only few science teachers were the ones who underwent CBC trainings. Therefore, many teachers including arts subject teachers seemed not to be capable to implement CBC since they lack various pedagogical skills in line with CBC.

Another teacher had the following to say

I don't have a clear understanding of this new curriculum which has to do with competence-based approach because I have never attended any workshop or seminar consulting CBC. So to the larger extent, I really do not have a clear picture of it as I still use traditional methods of teaching through the use of lecturing method.

4.3.2 Overcrowded classes

During FGDs session many teachers who were the main respondents of this study tried to show the awareness of the overcrowded classes as one of challenges faced them in teaching CBC. This was evident after some teachers explained how such congested classes impeded them towards teaching CBC. So in this regard teachers were aware of the existence of this challenge. One of the teachers had the following to say during FGDs.

Many teachers faced the challenge of teaching the big classes where there is no a good teacher student ratio. In this school many students are over congested in a single classroom, so it is hard to a teacher to move around helping students who happened to experience some learning difficulties during teaching and learning process. Furthermore, it is hard to conduct discussion in a class because students are more overcrowded in a single room so it is hard to have teacher student interactions and students to student's interaction. This is because sometime teacher-students' ratio ranged up to 1:80 so this hindered a teacher to the effective implementation of CBC.

4.3.3 Insufficient teaching and learning materials

This was another challenge which impeded teachers towards effective implementation of CBC. In this study teachers agreed that there was a shortage of teaching and learning materials like text books and other reference books which referred to CBC and its implications. Through FGDs the teachers had the following to say;

It is hard to teach CBC because the school does not have quality library and there is a poor book student's ratio. Sometimes even the teachers themselves lack the text books which relate with teaching CBC especially arts subject books. So, it is hard for them to implement it. However, the textbooks are not enough compared to the increasing of student's enrolment in our school. The book student ratio sometimes ranged from 1:7-10.

Another teacher had the following to say too

On the issue of textbooks and reference books there is still a mismatch because there are some books which do not reflect the new recommended curriculum which has to do with developing of competences to students. There are also some books which reflect traditional methods of teaching so generally, this mismatch of books causes us some challenges in effective implementation of CBC because there are no common books which are relevant and enough to implement CBC.

4.3.4 Willingness of the students towards accepting learner-centred approach

Teachers agreed that many students were not willing to participate in learner-centred approach during teaching and learning process. This challenge existed in their respective schools. During data collection process through FGDs the Heads of departments had the following to argue.

Many students are not ready to accept learner-centred approach in teaching and learning process simply because they like being spoon-fed in everything. Therefore, it is hard to have effective implementation of CBC since students passively participation during teaching and learning process hindered students to construct knowledge towards having effective implementation of CBC.

Another HOD said the following;

Many students are exams oriented they study for the sake of passing their exams they do not bother in developing their competences so this remain as a challenge to us teachers because students themselves are not willing to accept the needs of this new curriculum.

4.3.5 Teachers' motivation

The programmes of teachers' motivation were very poor in teaching profession and this decreased their working morale. This issue had been evident because the teachers were aware of existence of this challenge. In data collection process through FGDs one teacher had the following to say.

In many cases the government tends to place a lot of demands to be implemented by teachers without considering teachers' incentives. This sometimes hindered the morale of teachers to the extent that we lose the commitments towards performing our daily tasks at the school level. However, even at the school level the HoS do not appreciate our efforts they do not give us even certificates of appreciation or any kind of motivation towards promoting our working proficiency. so this dispirited our teaching occupation towards implementing CBC.

4.3.6 Involvement of the teachers during curriculum amendment

This was another issue which was presented by the respondents whereby teachers as main implementers of CBC claimed not to be involved during any curriculum review. In the interview the academic mistress had the following to narrate

Teachers who are the main implementers of this curriculum are not involved during curriculum review; instead they are just given some directives to perform without being given part during such curriculum change and innovation. So it is hard for us as teachers to apply this CBC during teaching and learning process since we are not familiar with it as we were not involved during the review process of this curriculum.

4.4 Teachers' strategies in addressing challenges of implementing Competence-based Curriculum

This was the second specific objective of this study whereby observation, interviews and FGDs were carried out during data collection process in finding out the employed measures towards addressing the challenges of implementing CBC in public secondary schools in Morogoro municipality. The finding of this study exposed the existence of such strategies of addressing the challenges of CBC. Therefore, the revealed measures were presented hereunder.

4.4.1 The provision of feedback from those teachers who attended CBC training

Teachers came with this strategy so that they can give feedback to their fellow teachers who have not attended the CBC training; the essence of doing this was to raise awareness of CBC teaching to majority of teachers. In this regard many teachers will be in position of having the understanding of CBC and its requirements.

This will help teachers to acquire more pedagogical skills which could help them uplifting the teaching of CBC. Therefore, in FGDs teachers had the following to say.

Due to the limited CBC training, Teachers who have attended any in-service training, workshops or seminars consulting CBC use to share the knowledge and skills with other teachers who have not attended such training so as they can at least understand the requirements of CBC and apply it. This helps much in creating the environment of teaching CBC among teacher themselves.

4.4.2 The use of the available textbooks which relates to CBC

For any effective teaching and learning process to take place books have to be available with a good quality and quantity. Consequently, that being the case the school leadership and other education administrators have to consider the availability of textbooks and reference books which relate to CBC at large so that, teachers can use them towards facilitating the implementation of CBC. During the interview schedule the Head of school had the following to narrate.

The school leadership tries to some extent in buying some books through government fund (capitation fund) so apparently many public secondary schools had been receiving various numbers of books in current years. Science subjects seemed to have more books however there is still the shortage of books supply compared to enrolment of the students who join secondary school education. Therefore, teachers use the available books and syllabus towards teaching CBC.

4.4.3 The introduction of remedial classes

Teachers have decided to come with this strategy of using remedial classes to lower performer students in order to solve their academic problems. Consequently, the teachers practiced this strategy to compliment the effective teaching of CBC. This was evident in the interview schedule as the academic master had the following to say

Teachers are eager to implement CBC as they have tried to find extra time in order to teach students who happen to be low achievers so as to help them solving various academic problems which they face. for example, in this school there is remedial classes for form four students which start at 12:30am with the purpose of helping students mastering the subject matter under the line of CBC.

4.4.4 The use of ICT facilities

Due to the spread of science and technology the students have to be familiar with computer knowledge. This helps the occurrence of effective classroom interaction process to take place. In this line teachers try to teach using the available ICT devices like the projectors so that students can be in a position of observing real objects during teaching and learning process. This can be evident from the interview schedule as the HoS had the following to tell.

In this school there are number of computer sets and projectors which are used to facilitate teaching and learning process. The teachers also help the students to know various computer programmes as the students have the chance to go the computer lab and learn practically some subject matter relate to CBC. Therefore, that being the case the students are able to know the real objects of things that are taught in class. However, the few teachers who happened to be familiar and competence in usage of ICT facilities in facilitating teaching help to give skills and knowledge to their fellow teachers. The aim is to have more experts who can use several ICT facilities to implement CBC teaching.

4.4.5 The use of problem-based learning (PBL)

This was among the strategies which teachers used during classroom interaction for purpose of implementing the teaching of CBC. PBL act as students' pedagogy since it added problem solving skills and active self-learning to students. During FGDs one subject teacher had the following to say

Due to the needs of new recommended curriculum, I decided to teach my students by using PBL because it is participatory method and based on student approach. The essence of doing this is to create the environment of adopting learner-centred approach, accelerating active learning and collaborative learning.

4.4.6 Improvising of instructional materials

Due to the inadequate teaching and learning materials which are more important towards facilitating teaching and learning process, the teachers decided to improvise the teaching resources which act as real teaching and learning objects. This can be evident in science subjects for example due to the shortage of the apparatus so the

teachers improvised to get alternatives apparatus like beakers and proceed with the lesson. In FGDs conducted the science teachers had the following to tell.

In this school we have a laboratory but in most cases there is a shortage of apparatus like beakers and test tubes just to mention the few. Therefore, the teachers decided to improvise from their own environment so as to reduce the challenge of the shortage of teaching and learning materials during classroom session. For example, we cut some empty bottles of drinking water and use them as beakers through conducting various experiments. So, we enhance practical learning as CBC requires.

4.4.7 The use of subject clubs

This is also another strategy which teachers employed towards teaching this new recommended curriculum. The essence of using was to develop various students' talents, skills and to orientate students on the importance of using learner-centred approach. Subject clubs also help to provide problem solving skills to students through sharing of experiences and academic interaction. In the interview conducted one academic mistress had the following to say.

In this school teachers have established various subject clubs which aim at developing students' skills, talents and knowledge through sharing various academic interaction. Also, subject clubs help collaborative learning since students learn in teamwork. By so doing CBC will be implemented.

4.5 How the strategies can be improved and scaled up

This is the third specific objective of this study whereby it aimed at gathering the information on how the strategies can be improved and scaled to other areas for effective implementation of CBC. Basically, the researcher aimed at gathering various perceptions from teachers towards improving their strategies of addressing the challenges of implementation of CBC. The presentation of this objective was presented hereunder.

4.5.1 The revival of teachers' resource centres

Due to the shift of using knowledge based approach to competence-based approach, teachers have to be able to innovate various aspects in relating the needs of this new suggested curriculum. Therefore, teachers' resource centres seemed to be very useful in improving various strategies used by teachers. Through the interview conducted in this study the DSEO had the following to say.

The new suggested curriculum demanded teachers to be aware and updated with demands of CBC and its requirements. Therefore, teachers should revive their teaching clubs so that they can exchange ideas and develop more pedagogically skills regarding to the modern approach of teaching.

4.5.2 Emphasis in both formative and summative assessment

For the effective improvements of strategies used to address the challenges found in teaching CBC, the various examinations given in schools should reflect much on critical thinking as CBC implies and not memorisation. This will help to improve the strategies which teachers employ during classroom interaction. This was evident in the interview schedule as the District academic officer had the following to say.

Teachers are ready to implement CBC as they have tried to find several strategies of teaching CBC, therefore in order to improve their strategies there must a be a serious emphasis on both formative and summative assessment in order to get the feedback if the students can construct their own understanding towards critical thinking as CBC requires.

4.5.3 The advancement of various school infrastructures

CBC implementation faced a number of challenges to teachers during its implementation, so majority of teachers have tried finding possible measures towards addressing the challenges. Improvement of school's infrastructure can be one of the perceptions from teachers which can improve their strategies. In the FGDs one of the teachers had the following;

Teachers have tried to innovate various strategies in order to addressing the emerging challenges of addressing CBC; so, in order to keep on improving their strategies the school should try to advance some infrastructures like installing electricity to more classrooms so that ICT teaching could be done smoothly.

4.5.4 The introduction of a motivational programmes

Teachers as central implementers of CBC, they have tried to come up with their own innovations regardless of the limited training from the government. Therefore, in order to improve their creativities, their efforts need to be appreciated. In the interview conducted the academic mistress had the following to narrate;

Teachers innovated various strategies in addressing the CBC challenges. So, in order to improve our innovations our efforts need to be valued either by certificate of appreciation under the school leadership or monetary motivation so as to increase our morale.

4.5.5 Training on Competence-Based Curriculum should involve all subjects' teachers

Majority of teachers had not been exposed with CBC training, workshops and seminars. They just applied their own creativeness towards addressing the challenges of implementing CBC. In light with this aspect, for the improvement of teachers' strategies CBC training should be given to all teachers so that majority of teachers can be skilful and knowledgeable in improving their strategies and scaled up as well. In the FGDs one of the subject teachers had the following to say;

I have never attended any CBC training but I am able to innovate some possible strategies which I employ them during CBC implementation in a classroom interaction. So, if CBC training will be given to all subject teachers according to preference of all subjects, I think I could have more knowledge of improving and scaling up the strategies I employ in teaching CBC.

4.6 Summary of chapter four

Conclusively, this chapter presented the demographic characteristics of the participants followed by the presentation of findings from the respondents in regard with the three specific objectives of the study. Data collection instruments which were used to gather the information were interviews, FGDs and observation.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

This study aimed at exploring teachers' strategies of addressing the challenges of implementing CBC in secondary schools within Morogoro municipality. Therefore, this chapter targeted at discussing the findings which were presented in chapter four with the connection of various literature reviews from chapter two. Essentially, the discussion of findings was guided by the three specific objectives of this study as follows. To study teachers' awareness on the challenges encountered in teaching CBC. To identify teachers' strategies used in addressing challenges of implementing CBC in public Secondary schools located in Morogoro municipality. To explore teachers' perception on how the strategies can be improved and scaled up for implementing CBC in public secondary schools within Morogoro municipality.

5.2 Teachers' awareness on the challenges encountered in teaching Competence-Based Curriculum

This part aimed much on examining the existed challenges which impeded teachers in effective implementation of CBC particularly in public secondary schools in Morogoro municipality as presented in chapter four. This as the first specific objective of this study; observation, interview and FGDs were employed as data collection instruments. Therefore, the research findings were analysed and discussed hereunder.

5.2.1 Limited in-service training to teachers

Both teachers and other education administrators like DSEO and HoS confirmed that there was still a problem of provision of workshops, trainings and seminars to the teachers who happened to be the key implementers of CBC. The trainings given were very limited and to the few teachers. Therefore, majority of teachers had little understanding on the CBC and its implications and others had a mixture understanding of this curriculum. For example, during a non-participatory observation the researcher observed the predominance use of traditional ways of

teaching and a very partial use of modern approach in facilitating teaching and learning process. This showed to what extent teachers were not familiar enough with CBC especially in employing effective teaching methodologies consulting competence-based approach. The findings therefore corresponded with those of Komba and Mwandangi (2015) who conducted a study to teachers and found that majority of teachers were not knowledgeable and competent enough towards the concept of CBC and its implications. Also, Tilya and Mafumiko (2010) conducted a study in teachers and found that teachers were not given orientation and in-service training on what CBC required. However, the fewer teachers who tried implementing CBC they had a mixture understanding of it.

5.2.2 Overcrowded classes

This was one of the challenges that were reported by teachers in this study. Teachers claimed to teach overcrowded classes which were not direct proportional to CBC requirements. In this regard teachers claimed that there was no proper teacher students' ratio because many students were congested in a single room, so it hindered the teacher to handle the students through moving around the class helping the students who face some learning difficulties. In relation to this aspect the use of discussion as one of CBC requirements was hard to be implemented. Therefore, these findings were similar to those of Mosha (2012) who asserted that the size of the class was excessively big to the extent that it was not supportive towards implementing CBC in public secondary schools.

5.2.3 Insufficient teaching and learning materials

The shortage of teaching and learning materials were specified by the respondents as one of the challenges that teachers face towards implementing CBC. Textbooks as one of the teaching and learning materials play a great role towards implementing CBC at the classroom level. In this regard both textbooks and reference books were still insufficient whereby there was no proper student book ratio because to the larger extent the student book ratio was not supportive towards the implications of CBC. However, recently after the inception of CBC the textbooks which were available did not clearly clarify the new syllabus and the requirements of CBC. So, to the larger

extent such textbooks were of low quality as they entailed much on questions and answers which influenced the students to stick on memorizing rather than participating on actively learning and building of knowledge among them. Therefore, these findings were similar to those of Makunja (2016) in which he found that the inadequate teaching and learning materials and the mismatch of books towards the new recommended curriculum hindered the teachers to implement well CBC.

5.2.4 Readiness of the students towards adopting learner-centred approach

Many teachers claimed that to the larger extent students were not willing to accept the new syllabus which entails the use of learner-centred approach. Students were not ready to actively participate during teaching and learning process occurred, because majority of secondary students prefer spoon feeding as they were used of it since they were in primary school level. So, this limited teachers in their teaching methodologies towards facilitating CBC. Only few science subject takers who happened to be interested in practical learning adopted problem-based learning which involved student centred approach. Subsequently, that being the case the total implementation of CBC was hard to be achieved because the students were not ready to involve themselves in self-learning as CBC needs. This aspect was evident after the classroom non participatory observation whereby one teacher was found using lecturing method to teach. This was because once the teacher decided to use participatory method the students think the teacher was not fair with them and they started complaining. Therefore, these finding matched with those of Makunja (2016) and Mosha (2012) whereby they found that there was a poor willingness of students in adopting the new syllabus which required the use of learner-centred approach during classroom interaction. By so doing the implementation of CBC become difficult since students as one the beneficiaries of it seemed not to be ready to participate.

5.2.5 Teachers' motivation

The programmes of teachers' motivation are very poor in teachers and this reduced their working morale. This issue of teachers' motivation was reported from the teachers themselves and other educational administrators like DSEO and HoS that

teaching field lacked motivation among its people therefore, it led the teachers to loose working morale because they happened not to be motivated in terms of not being given various certificates of appreciation and well paid salaries. This is because teacher motivation played a key role factor towards promoting teaching and excellence education (Nyakundi, 2012). Therefore, these findings happened to be similar to those of Mkonongwa (2018) where he asserted teachers devoted a lot their efforts towards facilitating effective teaching and learning process but their initiatives were not appreciated in promoting their working morale. So this resulted in low working morale in taking initiatives referring implementation of CBC.

5.2.6 Involvement of teachers during curriculum amendment

For any effective curriculum implementation to take place curriculum amendment should involve all education stakeholders' teachers in particular. Many teachers who happened to be the core implementers of the curriculum claimed that, they were not involved in any curriculum review occurred in a country. This impeded them to know exactly what the new syllabus requires; so, it is very obvious that they would not be able to comprehend the requirements of this curriculum. In a nutshell, to a larger extent majority of teachers were not prepared and involved in any curriculum change made by the government and education stakeholders. In this line, teachers became only the receivers and implementers of the directives from the top education actors without considering teaching innovations. Therefore, in this regard it was obviously hard for the teachers to implement this suggested curriculum at the classroom level because they lacked some clues on what CBC required. These findings concurred with those of HakiElimu (2012) whereby there was poor involvement of teachers during curriculum review and this led teachers to be unfamiliar on what is on ground as CBC requires.

5.3 Teachers' strategies of addressing challenges of implementing Competence-Based Curriculum

This is a second specific objective of this study whereby it had the purpose of looking on the initiatives which teachers took towards finding some relevant strategies that can be employed by teachers ranging from the classroom level.

Therefore, the various teachers' strategies that were used in addressing the challenges of implementing CBC were discussed hereunder.

5.3.1 The sharing of feedback from those teachers who are exposed with Competence-Based Curriculum

Due to the limited number of CBC trainings and seminars, the teachers under their own eagerness of implementing CBC decided to take their own initiatives of sharing knowledge from those few teachers who have been attending various workshops basing on CBC. This helped them in developing their pedagogical skills towards elevating various teaching methodologies. In light of this, the teachers were creative enough of searching the feedback from their fellow teachers who were exposed to CBC and its requirements. Therefore, the findings of this study concurred with those of Muneja (2015) who proclaimed that, teachers who were exposed with CBC can share their skills with other teachers in order to raise various pedagogical skills towards employing relevant teaching methodologies which relate to effective implementation of CBC.

5.3.2 The use of syllabus and textbooks that relate to Competence-Based Curriculum

Both teachers and HoS proposed that the effective use of textbooks tend to be very vital strategy in addressing the challenges of implementing CBC. The school leadership should keep in touch with the teachers so as to revise the syllabus during preparing teaching and learning process. The appropriate use of syllabus can enhance teachers to reach the success implementation of CBC because it helps them to prepare and develop their teaching methodologies and teaching aids in line with CBC. The syllabus can also help the teachers to know what to teach, whom to teach, how to teach and when to teach it. However, doing this would help the teachers to effectively implement CBC in the classroom, because for the quality education to occur in the light of CBC, books played a key role factor on the active implementation of CBC. These findings were supported by those of Muneja (2015) as he suggested that implementation of CBC could be active if there were effective

use of the available books which relate to this new recommended curriculum. Also with the aid of syllabus the teachers could be able to prepare and employ teaching methodologies which go hand in hand with CBC.

5.3.3 The use of problem-based learning

This is among of the components of CBC because it has to do with student centred pedagogy, whereby students get a chance to learn about a subject matter through the experience of solving an open-ended problem. In light with this aspect, the teachers employ the use of problem-based learning (PBL) as among their teaching methodologies towards ensuring the implementation of CBC. The essence of this is to help students developing their additional skills such as critical thinking, active self-learning and enhancing collaborating learning since students learn in smaller groups under the minimal control of teachers. Therefore, the finding of this study corresponded with those of kafyulilo (2012) where he asserted that the use of PBL was very crucial towards implementation of CBC because it was an instructional approach that offered potential to help students develop flexible understanding and learning skills through knowledge construction.

5.3.4 Proper use of ICT

In this study the respondents suggested that for effective implementation of CBC to take place, teachers should be knowledgeable towards applying various ICT facilities in teaching and learning process. However, apart from the knowledge and skills to the teachers, the issue of power plays a key role factor towards facilitating ICT teaching in Public secondary schools: In connection to this aspect of power there was still a challenge in which many schools lack proper installation as some the classrooms were not installed with electricity. So the HoS asserted that they were working on proper installation of power so that many classes could be installed electricity so as ICT usage in education occurred in a conducive environment. These finding matched with those of Ndibalema (2014) whereby ICT teaching and learning process was very crucial helping students solving out their various learning problem, also the teachers can facilitate easy teaching process by projecting real objects. So,

many teachers tried to have knowledge on ICT teaching so as to apply it for the betterments of effective implementation of CBC.

5.3.5 The issue of improvising various teaching resources from the environment

This study revealed that teachers improvised various instructional materials from their natural environment. This was evident by the fact that teaching resources happened to be scarcity sometimes so instead of complaints of teachers, they have find some alternative ways which were useful towards facilitating teaching and learning process in the classroom. For example, science subjects teachers; they use the empty bottles which acts like beakers and they can be used by students conduct several experiments at the laboratory. This was supported by one of science teachers who had the following to say

However, there are few seminars on CBC, but sometimes I just use my normal environment towards finding some teaching resources which seemed to be scarcity. I can take some empty bottles of drinking water and I cut them after that I use them as beakers then we proceed with classroom session with students. Through this I enhance practically learning to students which is among the implications of CBC.

In attempting this, teachers implement CBC through enhancing practical learning to the students which was among the requirements of CBC. Therefore, these findings were similar to those of Mosha (2012) whereby he asserted that teachers can improvise the teaching resource from their own environment and facilitate active learning hence the proper implementation of CBC.

5.3.6 The use of subject clubs

This occurred to be the one of the tactics that teachers used in attaining the effective implementation of CBC. The essence of using this strategy was that, teachers wanted to develop competences and self-learning culture to the students, also to orient the students on the importance of adopting students' oriented approach through participatory method of teaching. This would help the teachers to revive and share several skills to students. However, the proper use of subjects clubs could develop the active and collaborative learning to students. Therefore, the finding of this study

were similar to those of Mosha (2012) because the purpose of using subject clubs was to create good academic interaction and sharing of experiences among learners which encourages collaborative learning and developing of skills and talents among students towards attaining active self-learning as CBC entails.

5.3.7 The use of remedial classes

For the effective implementation of CBC to take place majority of teachers have decided to find an extra time towards helping those students who happened to experience some learning difficulties. In regard to this aspect, the essence of using this strategy was to help to lower achiever students towards solving their academic problems. This also helped students to gain problem solving skills and critical thinking with led to active learning during classroom interaction. Therefore, the finding of this study matched with those of Wangeleja (2010) due to the existence of extra time which was dedicated towards low performing students under the teaching of CBC through the provision of problem solving skills to students and developing their skills and knowledge as CBC entails.

5.4 How the strategies can be improved and scaled up

This marked the third specific objective of this study whereby it aimed at gathering of the information basing on how the teachers' strategies can be improved and scaled for implementing CBC. The essence was to gather various perceptions from the teachers themselves on how their strategies of addressing the CBC challenges can be improved and be scaled up so that they might be useful to other areas where necessary. Therefore, teachers' perceptions on the improvements of those strategies are described hereunder.

5.4.1 The advancement of schools' infrastructures

Teachers proposed that, various school infrastructures should be improved in order to create a good environment for them to teach well the new recommended curriculum. For example, for the effective ICT learning to occur, there must be a reliable installation of power so as to run various ICT devices like projectors and computers. Laboratory apparatus should be improved for the purpose of attaining practical

teaching and learning process. Therefore, teachers suggested that such strategies can be improved when the schools' infrastructure are well developed. Finding matched with those of Mosha (2012) where he claimed that for improving several teachers' strategies of addressing the challenges of implementing CBC, the school infrastructures should be well upgraded so that to encourage teachers keep on innovating more strategies for the purpose of teaching effective CBC.

5.4.2 The introduction of motivational programme

From the finding of this study, majority of teachers have tried to come up with various strategies which were employed towards addressing the challenges of implementing CBC. In light with this aspect, teachers claimed their efforts should be valued towards increasing their working morale, so that they can keep the same spirit of creating more strategies towards handling various challenges which emerge during the implementation of this new suggested curriculum. So teachers' perception on this aspect based on the school management for example the heads of schools could at least provide some certificates of appreciation to subject teachers who deserve since they did a great job of being creative towards attaining the effective implementation of CBC. The finding of this study were supported by those of Nyakundi (2012) where he claimed that appreciating their efforts towards finding various strategies, motivation factor plays a great role towards quality and excellence teaching of advocated new curriculum. So once teachers are motivated they will develop more working spirits towards improving their strategies and scaling up to other education formal set ups.

5.4.3 The CBC training should include all subject teachers

For about more than one decade in our country teachers have been told to use the new recommended curriculum which entails to participatory method of teaching. In this line the student is centre of knowledge. To a larger extent majority of teachers did not receive any training or attending any seminar which concerned CBC. The science teachers were the ones who were somehow exposed to CBC and its implications; that was why they were more knowledgeable and skilful than other subject teachers. In this regard the essence of including all subject teachers to get CBC training was to

make them informed with the current curriculum towards improving various strategies of implementing CBC easily. The findings of this study were supported by Kamugisha (2010) where he established that for improving strategies of addressing the challenges of CBC, all subject teachers should be given some training and seminars so that they can be exposed to the new curriculum and keep on improving the strategies they employ in teaching CBC.

5.4.4 Reviving teachers' resource centres

Due to the demands of the new recommended curriculum, teachers are among the central implementers of CBC. Teachers should keep on reviving their resource centres so as to elevate different teaching skills and knowledge towards finding various strategies of addressing the challenges of implementing this new curriculum. The essence of reviving the teachers' resource centres which currently were not that much existing fully, was to share several teaching experiences, knowledge and skills towards accomplishing quality teaching skills in line with the requirements of the new curriculum. Therefore, teachers' perception was that those teachers' resource centres could help much in improving the strategies of addressing the challenges which emerge during implementing effective teaching of this suggested curriculum. The finding was supported with those of Mosha (2012) whereby, teachers resource centres are useful in exchanging of ideas and sharing of different exposures consulting the improvements of teachers' strategies in implementing CBC.

5.4.5 Emphasis in both formative and summative assessment

For the effective improvements of strategies used to address the challenges found in teaching CBC, the various examinations given in schools should reflect much on critical thinking as CBC implies and not memorisation. This will help to improve the strategies that teachers employ during classroom interaction. The essence of doing this is to get feedback from the students if they are able to learn through student-oriented approach hence to have problem-solving techniques, knowledge construction and critical thinking. The finding of the study corresponded with those of Mosha (2012) in which it was recommended that assessment should be done in accordance with the requirements of the new suggested curriculum. The aim was to

observe if the students are familiar with learners' oriented instruction, so as teachers can keep on improving the strategies they employ in teaching CBC.

5.5 Summary of chapter five

This chapter mainly presented the discussion of findings which were presented in chapter four. The researcher tried to discuss and interpreted the findings critically in connection with various literature reviews from chapter two which relate with the three specific objectives of the study.

CHAPTER SIX

SUMMARY, CONCLUSION, RECOMMENDATIONS AND POLICY IMPLICATIONS

6.1 Introduction

This chapter presents the holistic overview of this study. In which it based on presenting the summary of the study, conclusion, policy implications and the recommendations in relating to the specific objectives of the study. Basically the significance of this chapter is to summarize the findings of the entire study, in showing the conclusion which was drawn from the findings of this study and finally it recommends some educational areas which needs a further research work.

6.2 Summary

6.2.1 General summary of the study

The main purpose of this study was to explore teachers' strategies in addressing the challenges of implementing competence-based curriculum. The case of two selected public secondary schools in Morogoro municipality. The researcher employed qualitative research approach due to the exploratory nature of this study. The data collection instruments were non participatory observation, interviews and focus group discussions. This study involved 36 respondents, in which it comprised of teachers who were subject teachers, teachers who are heads of departments, academic masters/mistress, heads of schools, district academic officer and district secondary education officer. The researcher also employed both purposive sampling and simple random sampling technique to sample the respondents. The study was guided by the Constructivism theory which entails much on the development of students' intellectual competences as CBC imply. The data analysis method used in this study was content analysis because this type of analysis enabled the researcher to get feelings, attitudes and experiences from the respondents.

6.3 Summary of the findings

This study aimed to explore the teachers' strategies in addressing the challenges of implementing Competence-based curriculum in public secondary schools in Morogoro municipality. The entire of this study specifically aimed to achieve the three specific objectives as prescribed hereunder.

6.3.1 Teachers' awareness on the challenges encountered in teaching

Competence-Based Curriculum

The study exposed the awareness of challenges which teachers faced in teaching CBC during classroom interaction. Majority of teachers seemed to be aware of the existing challenges as they were able to identify them. This was evident during data collection process whereby, interviews, FGDs and non-participatory observation were employed as data collection tools.

The teachers were able to mention and explain several challenges which hindered them in the implementation of CBC. So, the challenges which teachers encountered in teaching CBC included; overcrowded classes, inadequate teaching and learning materials which relate to CBC, insufficient teacher in-service training on CBC, lack of teachers' motivation towards promoting their working morale, the less involvement of teachers in curriculum review and the poor readiness of students towards adopting learner-centred approach and its implications as among the ways of facilitating teaching and learning process.

Therefore, with the existence of these challenges that teachers faced in teaching CBC, the effective implementation of CBC happened to be difficult because teachers as among the central implementers of this proposed curriculum were aware of the challenges they face which hinder them to implement CBC effectively as it is required.

6.3.2 Teachers' strategies in addressing the challenges of implementing Competence-Based Curriculum

Teaching this new curriculum seems to have many challenges which result the ineffective implementation of CBC. The teachers have tried to come up with different strategies in order to provide possible measures of handling the challenges they face in implementing CBC. This was evidenced during data collection process whereby, interviews, FGDs and non-participatory observation were employed as data collection tools. The teachers were somehow in a position to find out different strategies in addressing the challenges of implementing CBC. So, the measures which teachers took in addressing the challenges of implementing CBC included: the use of syllabus and few available text books and reference books which reflected CBC and its requirements. Teachers used such textbooks in order to prepare what to teach in accordance with the requirements of the new proposed curriculum.

However, some teachers even went extra miles of photocopying the books which were scarce so that they could use them in facilitating teaching and learning process. Introduction to remedial classes to students who happen to be lower performers and get some learning difficulties, the use of environment to teachers in improvising some teaching and learning materials which happened to be insufficient, orienting students towards adopting learner-centred approach, the effective usage of subject clubs towards developing students' competences and active practical learning and the use of problem-based learning as among teaching methodologies to students towards enhancing collaborative learning and self-learning among students who learn in smaller groups under the little assistance of teachers. In line with this aspect, the theory of this study which was constructivism theory happened to accept the findings of the study. Through the use of the strategies employed by teachers in teaching CBC, students were probably being in a position of constructing their own knowledge and experiencing critical thinking as CBC entails.

The essence of using these strategies was to reduce the number of challenges which occurred during the implementation of this recommended curriculum during classroom interaction. Therefore, there were some strategies which seemed to be relevant towards meeting the effective implementation of CBC.

6.3.3 Teachers' perceptions on how can their strategies can be improved

There have been some challenges which teachers experienced in teaching this curriculum. Majority of teachers tried to come up with numerous measures in order to employ the possible strategies in addressing the challenges of implementing CBC. The main key aspect in this part is to look on how those strategies can be improved and scaled up. In regard with this phase, there were some teachers' perceptions from the findings of this study which based much on improving their innovated strategies as follows; the restoration of teachers' resource centres. The essence of this is to collect teachers together in order to exchange some ideas and knowledge towards developing their pedagogical skills and acquire some new teaching methodologies which relate to CBC as the main recommended curriculum to follow.

The second perception was the introduction of motivational programme. Majority of teachers claimed that their efforts were not valued so they proposed the motivation agenda. For example, at the school level the head of school should even award them certificates of appreciation for the innovations they bring towards teaching this new curriculum. By so doing, this will help to increase a working morale towards improving the strategies and to scale up to other areas. The third teachers' perception on improving the strategies of addressing CBC challenges was the provision of CBC trainings to all subjects with no favour of science subjects only. This is because, majority of teachers were aware of the challenges of implementing CBC, then they were in position of innovating some strategies for addressing the challenges but they had not undergone any CBC training. They just took their own initiatives. So, for improving and adding more spiriting of upgrading more strategies, teachers must be given some CBC training regardless of subjects preferences so as they can have a clear understanding of CBC and its implications.

The other teachers' perceptions on how their strategies can be improved based on emphasis of having both formative and summative assessment whereby the examinations should stick on critical thinking, creation of knowledge and not memorisation. This will help teachers to get feedback from the students through innovated relevant teaching methodologies which reflect the new curriculum.

The last perception of improving the teachers' strategies was the improvement of school's infrastructure like power installation towards improving ICT teaching during classroom interaction.

6.4 Conclusion

Basing on the findings of this study, the actual application of competence-based curriculum in our education systems experienced numerous challenges which impeded teachers to implement it properly. This is due to the fact that majority of subject teachers experienced the scarcity of CBC training and orientation. The teachers as the central implementers of this proposed curriculum have tried to come up with several measures through their own teaching innovations and potentials towards overcoming the challenges of teaching competence-based curriculum in the teaching and learning process. In connection to this, the effective teaching of competence-based approach still remained challenging. However, this can be justified through the average success of the teachers' strategies, in reaching the effective implementation of competence-based curriculum towards our education formal systems.

To the larger extent majority of teachers lacked enough exposure to CBC, as some of them still struggle on having clear understanding of the requirements of CBC. Generally, the average achievement of the teachers' strategies in addressing the challenges of implementing CBC was affected by the number of reasons for example, the less involvement of subject teachers during curriculum review which lead to the failure of teachers to know what is on the ground as CBC requires. The less teachers' motivation in developing their working morale. However, there were teachers' strategies that seemed to be very useful in addressing the challenges of

CBC implementation. The use of subject clubs happened to be a relevant strategy because it entailed problem-based learning which referred to student-centred approach and enhancing the students to develop the competences and skills through constructing knowledge from their experiences. The second strategy that was relevant towards improving the effective implementation of CBC was teachers' improvisation under the use of their environment. Teachers have to be creative towards finding relevant measures of facilitating teaching as CBC imply. In this line, science subject teachers enhanced practical teaching through the use of various improvised teaching resources like the experiments which are done by science teachers with the use of such improvised resources. The other success strategy that was the effective was the use of remedial classes towards helping low performer students and the use of syllabus, textbooks and other teaching materials which relate to CBC. Therefore, in a nutshell the majority of teachers especially art subject teachers seemed to lack CBC training and orientation but still they were able to use their own teaching innovations through teaching this recommended curriculum during classroom interaction. Such teaching innovations were useful in fostering students' analytical competences such as logical reasoning, problem solving skills and knowledge construction as CBC implies.

6.5 General Recommendations

Basing on the findings of this study, it is authoritative that, the curriculum change should go hand in hand with the inclusion of all required educational stakeholders, teachers in particular. Teachers are the ones who are more likely to be the core implementers of any curriculum recommended and very creative when it comes to teaching career as teaching profession requires. In line with this aspect, the researcher recommended that, before placing some directives to be followed by the teachers, the government as the main organ of the country should provide some funds to the education actors so that they can conduct teachers' in-service training to all subject teachers as well as other education administrators like the head of the schools so as they can be in a position of assessing and supervising on the effective implementation of CBC. Therefore, in this line all subject teachers should be involved and consulted when curriculum review occurred. Though the CBC trainings

seemed to be inadequate to all teachers but the study also recommended the teachers' initiatives towards improving their various strategies in addressing the challenges of CBC. The essence was that, teachers should stop the complaints of scarcity of CBC trainings and need to be creative towards employing various possible measures and keep on improving them in order to meet the effective implementation of CBC during daily classroom interaction.

6.5.1 Other recommendations for some educational stakeholders

Teachers as the central implementers of the competence-based approach should try to be creative as the world of today needs people with solutions and not complaints. So, some few teachers who were exposed to competence-based curriculum should share their CBC skills and boost their fellow teachers in the use of environment so as to improvise some teaching materials which happened to be insufficient. By so doing the attainment of effective implementation of CBC could be possible.

However, teachers also should have self-preparation before teaching and learning process occurs. Teachers should know what to teach, whom to teach, how to teach and when to teach it. This can help them been competent in selecting relevant teaching procedures towards implementing this new suggested curriculum.

Students are also the education stakeholders. These are beneficiaries and implementers as well of this new curriculum. Therefore, they should be given some orientation on the adoption of learner-centred approach. Majority of students in secondary seemed to have little understanding on competence-based curriculum and its requirements simply because they are used to be spoon fed by their primary schools' teachers. However, the teachers have tried much to provide some orientation on the significance of using students' centred approach. So, for the effective implementation of this curriculum students should be oriented so as to cope with learner-centred approach and undergo self-learning as CBC required.

The government as one of the educational stakeholders should keep on improving different schools' infrastructures so as to create a room for inevitable effective implementation of CBC. This will help teachers to get conducive environment for

them to teach this new curriculum. However, the government should consider teachers' motivation towards increasing their working morale, because it has been placing a lot of demands to them without considering their incentives. Therefore, for effective implementation of CBC to occur the teachers' motivations and the improvements of schools' infrastructures programmes have to be actively implemented.

Through the board responsible for education service in Tanzania such Tanzania institute of education. There should not be a mismatch of books to be used in our education system. This board should supervise the kind of books which are been published both textbooks and reference books in way that they should match and meet standards on the requirements of the new suggested curriculum. By so doing, this will create a room for both teachers and students in implementing CBC during classroom interaction.

6.6 Policy implications

From the findings of this study various policy implications have been drawn for the achieving of effective implementation of competence-based curriculum in our education system. Firstly, the curriculum change should include all subject teachers as they are central implementers of this recommended curriculum and they know what is on ground. Secondly, there should be enough workshops and seminars which aim at exposing teachers to CBC and its implications towards our education systems. Then teachers' motivation is more likely to affect the actual implementation of this competence-based approach. This is because the government placed a lot of directives to teachers and without considering their incentives. So, this led to low working morale to them but if the government could consider teachers' incentives and even increase the salaries and provide their promotions on time majority of teachers could have higher working spirits. They could fight harder to achieve the proper implementation of CBC. Therefore, there must be a number of policy programmes that suggest the liveliness of teachers' incentives in assessing them if there are actively implemented.

6.7 Recommendations for further studies

This study aimed at exploring the teachers' strategies of addressing the challenges of implementing competence-based curriculum in public secondary schools in Morogoro municipality. Therefore, it calls upon other researchers to conduct a study in private schools so as to know the kind of measures they employ towards overcoming the challenges of implementing this curriculum. However, this study calls upon further studies to be conducted in an area of other education stakeholders like the students to study on how they can overcome the challenges of implementing this suggested curriculum. Also the researcher suggested that further studies can be done on the effectiveness and impacts of the strategies used by teachers in addressing the challenges of implementing competence-based curriculum.

6.8 Summary of chapter Six

This chapter presented the summary of the study in accordance with the three specific objectives of the study, followed by the conclusion of the study basing of findings relating to the specific objectives of the study, policy implications which arose from this study, general researcher's recommendations and recommendation for further areas of study.

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APPENDICES

Appendix 1: Interview guide for District secondary education officer, District academic officer & Head of schools

Age.....

Sex

Working position.....

Working experience.....

Educational level.....

1. What do you understand by the concept of Competence-based Curriculum?
2. Are the teachers familiar enough with the clear understanding of CBC and its implications?
3. Do you face any challenges in implementing Competence-based Curriculum in your school? If yes explain what are the challenges?
4. What measures do you employ to tackle these challenges?
5. How to improve the teachers' strategies in implementing Competence-based Curriculum?
6. Are the teaching and learning materials recommended adequate in the secondary school syllabus?
7. If the teaching and learning materials are inadequate what have you done to eliminate this problem?
8. Are there any in-service courses that you have ever attended based in Competence-based Curriculum?
9. What are the strategies that have been planned in your school to encourage teachers to do well in teaching?
10. What is your perception on the strategies used by teachers to scale up CBC?

Appendix 2: Focus Group Discussions to the heads of departments

Age.....

Sex.....

Educational level.....

Teaching experience.....

1. Are you familiar with the concept of competence-based curriculum?
2. If yes to what extent.... Briefly explain
3. Are you familiar with the emerging challenges of competence-based curriculum?
4. Briefly explain some of the challenges which exist in this school?
5. Do you think as a teacher which strategies can be used to address such challenges?
6. Do you think a teacher can be in a position of finding means of addressing the challenges of implementing CBC? If yes explain.....
7. Why is it necessary for a teacher to be creative towards finding possible measures in addressing the challenges of CBC?
8. Do you think is it necessary for a teacher to undergo on job training in order to create the strategies of addressing the challenges of implementing competence-based curriculum? If yes explain?
9. What is your perception on those strategies that teachers employed?
10. How can you improve them?

Appendix 3: Interview guide for academic teachers

Age.....

Sex.....

Educational level.....

Teaching experience.....

1. Are you familiar with the concept of competence-based curriculum?
2. If yes to what extent.... Briefly explain
3. Are you familiar with the emerging challenges of competence-based curriculum?
4. Can you explain some of the challenges which exist in this school?
5. Do you experience such challenges in this school?
6. As a teacher which strategies do you employ towards addressing such challenges of implementing CBC in this school?
7. Which teaching methodologies are common used to facilitate teaching and learning process?
8. How do you rate the strategies of addressing the challenges of implementing CBC, which are used by teachers of this school?
9. As academic teachers what is your perception on improving the strategies towards attaining the effective implementation of CBC?

Appendix 4: Focus Group Discussions for subject teachers

Age.....

Sex.....

Educational level.....

Teaching experience.....

1. Are you familiar with competence-based curriculum?
2. Did you learn it in collage/university or elsewhere?
3. Are you aware of any existed challenges teachers face in implement competence-based curriculum?
4. Can you mentioned and explain those challenges teachers faced in this school?
5. How do they hinder you in implementing CBC?
6. As a teacher which strategies do you employ to overcome such challenges?
7. Do you think as a teacher you are in position of solving those challenges?
8. What is your perception of strategies that are in employed by teachers of this school towards addressing the challenges of CBC?
9. How can those strategies be improved and becoming more useful?

Appendix 5: Observation Checklist

Name of the school.....

S/N	Area of observation	Remarks
01	Teaching methodologies used	
02	Classroom arrangement	
03	Class size	
04	Lesson plans	
05	syllabus	
06	Teaching aids	
07	Availability of ICT devices	