



Primary School Teachers' Instructional Competences in the Implementation of Competence-based Curriculum: A Case Study of Mpwapwa District Council

William H. Ndimbo^{a*} and Hyasinta Kessy^b

^a *Mpwapwa Teacher College, P.O. Box-34, Mpwapwa, Tanzania.*

^b *Tudarco College, Tumaini University, P.O. Box-77588, Dar es Salaam, Tanzania.*

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JESBS/2023/v36i51222

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/97669>

Original Research Article

Received: 26/01/2023

Accepted: 28/03/2023

Published: 31/03/2023

ABSTRACT

Teachers' understanding of the concept competence-based curriculum, competences demonstrated in preparing of competence-based curriculum materials, competences in integrating competence-based curriculum materials with actual classroom teaching, and teachers' competences to address challenges in the implementation of competence-based curriculum were the objectives of the study. The study investigated on teachers' instructional competences in the implementation of competence-based curriculum. Mpwapwa District Council was a case of this study. The study sample size was drawn using purposeful techniques. A total of 24 participants from 6 primary schools were involved in this study. 18 out of 24 participants were classroom teachers, and 6 were Head-teachers. The study used qualitative approach to capture participants' views. Document review, observation, and interview methods were employed for data collection. Data were analyzed through thematic and content techniques. The findings revealed that teachers

*Corresponding author: E-mail: ndimbowilliam@gmail.com;

understand competence-based curriculum as activity and application oriented curriculum. Further, the findings showed that teachers use inappropriate verbs in preparing scheme of works and lesson plans. Moreover, the study found that teachers possess adequate instructional competences however, large classes and shortage of text books hindered them to effectively integrate the curriculum materials; lesson plans with actual classroom implementation of the curriculum. Additionally, it was found that teachers have reasonable competences to overcome challenges in the implementation of competence-based curriculum. The study concluded that despite the noted disparities, teachers possess and use instructional competences effectively to implement the curriculum. However, for higher adeptness in the implementation of competence-based curriculum it is recommended that formal trainings should be given to all teachers in the District. Also schools should be provided with adequate text books. Importantly, the present teachers should be redeployed equally to all schools.

Keywords: Competence; instructional competences; curriculum; competence-based curriculum.

1. INTRODUCTION

Being a teacher at any level requires possession of a significant amount of competence to effectively practice a curriculum. Among others instructional competence is vital for teachers in the implementation of a curriculum [1].

This study investigated on teachers' instructional competences in the implementation of competence-based curriculum. Literature [2] terms instructional competences as knowledge, skills and attitudes that teachers must hold for effective teaching and learning. It is also explained as the prerequisite ability which helps teachers to plan, prepare, organize, and practice curriculum materials in classroom situations to achieve lesson objective [3].

Literature (Kanon, 2021) claims that a teacher with adequate and relevant instructional competences is able not only to effectively practice competence-based curriculum but also maximize students' knowledge and skills development.

However, it is argued that the fruitfulness of teacher's knowledge, skills, and attitudes to effective teaching and learning is like a plant that often needs intensive care; watering, weeding, and applying manure [4].

In this regard, Mosha suggests that teachers regularly upgrading their knowledge, skills and attitudes inevitable.

For all that, the researcher through his experience as teacher and teacher educator had the doubt whether primary school teachers in Tanzania in general and Mpwapa District Council in particular, were exposed to such

important knowledge, skills and attitudes for effective implementation of competence-based curriculum.

The researcher's doubt was based on the fact that Mpwapa District is among the peripheral districts in Tanzania. Further, the findings from some studies in Tanzania show that most teachers are not adequately aware of competence-based curriculum.

The study by Kanon (2021) for example, discloses that primary school teachers have limited awareness and understanding about instructional competence required for teaching Social Studies subject. The study was conducted in Rungwe District, Mbeya Region Tanzania.

Further, Mayahi [5] asserts that most teachers have insufficient knowledge and skills pertaining competence-based curriculum implementation. The reason displayed by Mayahi is that teachers have not been given formal training about competence-based curriculum.

This study therefore, focused specifically on teachers instructional competences in conceptualizing of competence-based curriculum, and planning and preparing of lessons included scheme of works and lesson plans. Integrating curriculum materials with classroom implementation of competence-based curriculum, and strategies used by teachers to overcome challenges in competence-based curriculum implementation were also the pinpoint of the study.

1.1 Concept of Competence-based Curriculum

Competence-based curriculum has been given meanings by various world literatures.

Kouwnhoven [6] for example, explains competence-based curriculum as the curriculum that creates more opportunities for pupils to acquire, develop, and demonstrate optimum ability in the area of studies. Unlike Kouwnhoven, Makunja [6] views competence-based curriculum based on theoretical and practical perspectives. Based on theoretical perspective, competence-based curriculum is referred to as a form of curriculum that emphasizes on activity-based pedagogy (participatory methods).

On the practical basis, competence-based curriculum is perceived as the curriculum that develops learner's skills to do than to know only the content. It is the curriculum that emphasizes more on a person to be able to apply what s/he learns in classrooms with the real life situations [7,8]. This meaning is related to the intention of competence-based curriculum to be adopted and used as a tool for education delivery in Tanzania. The intention of competence-based curriculum to be adopted and used for education delivery is stipulated in Tanzania Educational Policies of 1967, 1995 and 2014. Generally, the policies emphasize that the given education should prepare learners to be functional in society, applying the acquired skills to create their own income (self-employment) as well as becoming competitive in the world of work.

Primarily, competence-based curriculum is characterized as the curriculum that enables a learner to acquire, develop and demonstrate the outcome of the learning process. In classroom implementation of competence-based curriculum, the focus is on facilitating an individual learner until demonstrated mastery of the learned competence/activity. This marks that learning through competence-based curriculum, a learner cannot move ahead unless s/he demonstrates mastery of the learned competence.

It is claimed that competence-based curriculum attained different names and popularity in different contexts because of its effectiveness and promising results. In South Korea for example, the curriculum is known as man-power based curriculum, while in South Africa it is called outcome-based learning [6,9].

Literature classifies competence-based curriculum into two types; Traditional competence-based curriculum and Non-traditional competence-based curriculum (Ford, 2014). The former offers the same course to every student. The courses are aligned with

defined competences whereby students are required to attain on completion of the courses. Awards are normally given to a student at the end of course of study (Ford, 2014).

The latter is more individualized. It is sometimes called "flex" or "direct assessment" curriculum hence characterized by assessments as learning, and assessments for learning (formative assessments). A student is frequently assessed through tests, assignments, portfolios, project and the like [10]. If a student demonstrates mastery of the learned competence, s/he is awarded with partial or full course credit for the area [10].

The researcher found these meanings necessary to be presumed by primary school teachers because they act as a milestone in effective implementation of the curriculum. This is also supported by Bakhru [11] explaining that it is significant for teachers to understand concept of a curriculum. According to Bakhru [11] teachers' understanding or being able to conceptualize an educational curriculum helps them to identify important curriculum aspects including curriculum principles, goals/objectives, and its intent to be adopted and used as a tool for education delivery. It is believed that through knowing these aspects, a teacher could be able not only to prepare the curriculum materials but also to integrate or practice them in the implementation of the curriculum [12]. Still the question was whether primary school teachers in Mpwapa District Council were aware of these concepts, and considered them as vital aspects in classroom implementation of competence-based curriculum.

1.2 Designing and Planning of Lessons

Designing and planning of lessons are among the significant activities teachers need to do before entering the classrooms. The activities involve passing through subject syllabus, preparing scheme of works, and lesson plans, preparing lesson notes, assessment schedule as well as preparing of teaching and learning materials commonly known as teaching Aids.

The process of preparing all these competence-based curriculum materials needs teacher to possess sufficient instructional competences. This is because the preparation of competence-based curriculum materials specifically lesson plans differs from other curricular. Zeiger [1] and Ewell [13] for example, notify that lesson plans

under competence-based curriculum focus mainly on an individual learner. This means that lesson objectives particularly statements for specific objective(s), teaching activity, and assessments, all these focused on an individual learner. According to Tanzania Institute of Education [14], statements for specific objectives in lesson plans under competence-based curriculum should observe measurable aspects included *Specific* aspect, *Measurable*, *Attainable*, *Realistic*, and *Time bound* in short (SMART).

Further, action verbs in scheme of works and lesson plans under competence-based curriculum should be of those providing learners with freedom to use prior knowledge to construct new knowledge/meaning [14,15]. TIE suggests among others “facilitate” as a relevant and meaningful verb to be used to describe teacher’s activity hence teachers’ roles play as facilitator in classroom implementation of competence-based curriculum.

In respect to all these competence-based curriculum requirements, this study was interested to know to what extent primary school teachers in Tanzania context particularly, Mpwapwa District Council possess and utilize instructional competences in the implementation of competence-based curriculum.

1.3 Integrating Curriculum with Classroom Teaching and Learning

A curriculum consists of several components such as objectives, content, time, classroom activities, materials, study skills etc. Integrating curriculum with classroom teaching and learning means that combining or employing two or more curriculum components for effective students’ knowledge and skills development [16]. Unlike Fraster, Button [17] views integrating curriculum with classroom as combining different subject areas and then teaching them in relation to a singular theme or an idea. Button [17] adds that despite integrating subjects or parts of different subjects, a competent and innovative teacher can integrate curriculum materials of the curriculum with actual classroom teaching and learning. Button notifies the important point that what is described in the curriculum materials to be reflected meaningfully in classroom teaching and learning.

According to Button [17], the point is that sometimes what is prepared or described in curriculum materials specifically scheme of works

and lesson plans is not the one reflected in actual classroom teaching and learning. For example, a teacher might have planned to use group discussion method followed by presentations but in actual classroom teaching and learning, the teacher employed only group discussion.

Researcher’s experience as teacher and teacher educator concur with what Button [17] has disclosed. This situation sometimes happens due to factors included teachers’ poor time management. However, this study was interested to learn teachers’ instructional competences in integrating subject syllabus, scheme of works, and lesson plans as important curriculum materials with actual classroom implementation of competence-based curriculum following the report that most classrooms in Mpwapwa District Council were overcrowded (Mpwapwa Educational Report, 2020).

1.4 Challenges Faced in the Implementation of Competence-based Curriculum

Literature has notified various challenges facing the implementation of competence-based curriculum. The nature and the way challenges hinder the implementation of competence-based curriculum differ from one context to another [6]. It is contended that there might be the context where teachers have adequate competence-based curriculum knowledge and skills but they fail to effectively implementing the curriculum because they lack teaching and learning resources. It is also explained that there are contexts where all necessary teaching and learning resources are available but teachers whose job is to implement the curriculum lack knowledge, skills, and attitudes for the implementation of the curriculum (Ogondi, 2022).

Further, it is found that sometimes teaching and learning resources, and teachers’ competences are all realized but the context runs a shortage of infrastructures (classrooms) to the extent that classes are crowded. With these different perceptions of challenges, it can be believed that it is possible to find a country with challenges facing the implementation of a curriculum including competence-based curriculum rather than a country with no challenges [18]. However, most world literatures have dealt with challenges facing the implementation of competence-based curriculum rather than the way forward to overcome the challenges.

In Tanzania context for example, studies have stipulated a number of challenges emerging in the implementation of competence-based curriculum. The challenges included among others lack of instructional support, teachers and students' educational background, low students' cooperation, large class size, insufficient teaching and learning resources, and lack of teachers' on job training [19-22].

In respect to those studies, the researcher was inquisitive to learn how primary school teachers specifically in Mpwapwa District Council employ their competences to overcome challenges facing them in the implementation of competence-based curriculum.

1.5 Statement of the Problem

The history of competence-based curriculum in Tanzania can be traced back to 1967 when Educational for Self-reliance Policy/Philosophy was initiated. The general purpose for this policy/philosophy among others was to prepare learners to actively and creatively participate in national development. The focus was to provide learners with knowledge, skills, and attitudes so as to become self-reliant, and also compete in the world of work [23-26].

This not only necessitated the curriculum shift from content-based curriculum to competence-based curriculum but also equipping teachers with adequate and appropriate instructional competences. This is because the new curriculum; competence-based curriculum emphasizes on merging of theory and practice.

Literature (Kanon, 2021) informs that with adequate and appropriate instructional competences, a teacher is able to properly conceptualize a curriculum, and provide reason and purpose for the curriculum to be used in education delivery. Goden [27] further discusses that planning and preparing important competence-based curriculum materials included scheme of works and lesson plans needs a competent teacher. It is also explained that teacher with plenteous instructional competences is able to integrate curriculum materials, and address challenges in competence-based curriculum implementation [28,21, 18].

Generally, it can be said that effective implementation of competence-based curriculum enhanced by among other things teachers'

possession of commensurable instructional competences.

However, the question was whether primary school teachers in Tanzania particularly, in Mpwapwa District Council had such discussed instructional competences, and used them effectively in the implementation of competence-based curriculum. Kanon's study (2020) for example, revealed that most primary school teachers in Tanzania have limited instructional competences in teaching of Social Studies subject. The study was conducted in Rungwe District, Mbeya Region.

Further, Wilson [29] found that teachers are recruited based on possession of more subject knowledge than pedagogical instructional competences (Knowledge and skills). According to Wilson [29] this results into teachers lacking of competences in not only preparing curriculum materials but also employing them in classroom teaching and learning.

Furthermore, it is claimed that even though teachers are the key implementers of competence-based curriculum in Tanzania, they have little knowledge and skills of competence-based curriculum implementation (Tilya, 2014).

Moreover, Mayahi [5] argues that no matter where a teacher teaches his/her duty-bound to expand competences to meet the recurring curriculum challenges. Mayahi clarifies that most teachers are faced by insufficient competences to overcome the contemporary challenges included crowded classes in the whole process of teaching and learning.

It is also disclosed that teachers in Teacher Colleges in Tanzania showed little competences in conceptualizing and employing competence-based curriculum approaches [30]. The study was conducted in Morogoro Teacher College, Morogoro Municipality.

With regard to these studies, and Mpwapwa District Council being one of the peripheral districts in Tanzania, it was deemed necessary to investigate on primary school teachers' instructional competences in the implementation of competence-based curriculum. The focus was on how teachers understand the concept of competence-based curriculum, teachers' instructional competences in preparing curriculum materials specifically lesson plans, integrating the curriculum materials with actual

classroom implementation of the curriculum, and teachers' competences in overcoming challenges in the implementation of competence-based curriculum.

1.6 Purpose of the Study

The main purpose of this study was to investigate on primary school teachers' instructional competences in the implementation of competence-based curriculum in Mpwapwa District Council, Tanzania.

Specific Objectives:

- i. Assess teachers' understanding of the concept competence-based curriculum.
- ii. Explore teachers' instructional competences demonstrated in preparing of competence-based curriculum materials.
- iii. Examine teachers' instructional competences in integrating competence-based curriculum materials with actual classroom implementation of the curriculum.
- iv. Determine primary school teachers' competences to overcome challenges in the implementation of competence-based curriculum.

Research Questions:

- i. How do primary school teachers understand the concept of competence-based curriculum?
- ii. To what extent do primary school teachers demonstrate competences in preparing of competence-based curriculum materials?
- iii. How do primary school teachers integrate competence-based curriculum materials with actual classroom implementation of the curriculum?
- iv. To what extent do primary school teachers use their competences to overcome challenges in the implementation of competence-based curriculum?

2. LITERATURE REVIEW

This section provides theoretical and empirical review related to the study. Constructivist theory of teaching and learning was chosen to guide the study. The section also highlights empirical literature review related to this study.

2.1 Theoretical and Empirical Review

As introduced above, constructivists' theory of teaching and learning was chosen to guide this study. The reason for choosing constructivists'

theory of teaching and learning is that the theory is related to the idea of a competence-based curriculum. The works of Dewey, Montessori among others for example, provide the historical models of constructivist learning theory where competence based learning falls [31].

Constructivists' theory of teaching and learning underpins a variety of aspects pertaining effective teaching and learning. It is believed that teachers' instructional competences are among the essential aspects for classroom implementation of competence-based curriculum. The competences enable teachers to conceptualize the curriculum, preparing the curriculum materials, integrating the curriculum materials with actual classroom teaching and learning. The competences also assist teachers to interact with learners and managing classroom challenges as well [17]. Constructivists' theory of teaching and learning maintains learner-centered as an appropriate and meaningful teaching and learning approach. The theory fosters learners' development of knowledge and skills through prior knowledge/experience [32].

To make learner-centered teaching and learning approach relevant, constructivists' theory describes teacher's role as facilitator. In this regard, the theory contends that a competent teacher is able to prepare lessons focused on facilitating individual learner to develop new knowledge through his/her prior knowledge [33]. In addition, constructivists' theory of teaching and learning believes that knowledge is constructed by learners. Thus, a teacher is needed to actively involve learners through interactive instructions/methods, acknowledge the dynamics, local and global activities on learners' learning. Similarly, a teacher is compelled to establish teacher-pupil relationship that based on the idea of guidance not instructions. Likewise, a teacher needs to creatively and critically think of how to manage contemporary challenges emerging in classrooms [18].

Generally, the constructivists' theory of teaching and learning explains that people actively construct their knowledge in a meaningful learning environment that entails a number of aspects amongst teachers' instructional competences.

2.2 Instructional Competences

These are essential abilities that teachers must master for effective practices of any educational

curriculum to maximize students' development of knowledge and skills [34]. Research reveals that in classroom teachers play the critical role in student learning and achievement. However, the process of classroom teaching and learning is preceded by a number of activities. The activities include passing through subject syllabus, preparation of curriculum materials, and teaching materials, selecting of teaching and learning strategies and techniques etc (Kanon, 2021).

Instructional competencies offer practical strategies, practices, and rules to guide teachers in ways to effective implementation of a curriculum. To maximize competence-based curriculum practice, teachers must have expertise in a wide-ranging array of competencies in especially complex environment where hundreds of critical decisions are required each day [3].

Literature [2] claims that effective implementation of competence-based curriculum demands the integration of not only instructional competences but also professional judgment and the proficient use of evidence-based competencies. It is believed that instructional competencies help teachers to interpret and understand a proposed curriculum for education delivery. It also enables teachers to analyze subject syllabus, preparing curriculum materials, and integrating the materials with classroom teaching and learning. Further, it is contended that teachers' with adequate instructional competences are able to tackle some challenges emerged in classroom practice of the proposed curriculum [2].

2.3 Teachers' Conception of Competence-based Curriculum

Any education curriculum emerges with its own purposes and intention. Literature [6] stipulates that it is important for teachers, the key classroom practitioners of the curriculum to understand the curriculum in terms of its meaning, purpose, and intention for adopted and used as a tool for education delivery. It has been evidenced that competence-based curriculum attains different meanings from different scholars. However, the meanings are mostly determined by active involvement of learners through participatory methods, and application of the learners' developed knowledge and skills in the real world life situations.

The study by Nzima [35] for example, found that most teachers' meaning of competence-based

curriculum is related with participation of students in teaching and learning process through participatory methods. However, Nzima cautions that to such teachers the focus and emphasis in the practice of the curriculum could be on using various participatory methods/techniques to enable learners only acquire knowledge.

In contrast, Tilya and Mafumiko [36] conceive competence-based curriculum meaning as a type of curriculum that aims at enabling learners to develop and apply the desirable competences to daily life challenges. It is further claimed that competence-based curriculum intends to put students in realistic situations under which they should demonstrate problem solving or perform a particular activity [36].

In this view, the practitioners of competence-based curriculum need to understand that the curriculum focus and emphasis is not on the absorption of cognitive knowledge as content-based curriculum does but, is rather on the application of this knowledge to solve realistic daily life problems [6].

2.4 Teachers' Instructional Preparation Competence

Instructional preparation is one of the important aspects of instructional competences that enable teachers to analyze and prepare activities prior to classroom implementation of the curriculum. A teacher with adequate instructional competences before going to classroom to teach a subject matter he/she ought to pass through a subject syllabus reflecting on objectives and subject content. In other words, when passing through a subject syllabus, a teacher interprets a curriculum through sensitive understanding of curriculum objectives, motives, and curriculum materials ready for preparing curriculum materials included scheme of works and lesson plans.

In preparing lesson plans under competence-based curriculum is where teachers' instructional competences needed. This is because instructional competences help teachers to determine for example, what to teach, and how to teach or how to effectively implement the curriculum [37].

Mgaiwa (2018) informs that effective classroom practice of competence-based curriculum is dependent on teacher's preparation of curriculum materials specifically lesson plans. This is

because lesson plan is essential document that guides the whole process of classroom implementation of the curriculum. It is in the lesson plan where competences to be developed by a student, objectives to be achieved, teaching-learning resources or techniques, teaching-learning activities, assessment and evaluation procedures etc are stipulated.

However, some of these elements included teaching-learning resources, and techniques are described in competence-based curriculum subject syllabus. This is not only simplifies teachers' planning and preparation of scheme of works and lesson plans but also maintains teachers' uniformity of planning and preparation of the documents. The planning and preparation of curriculum materials prior to classroom teaching and learning is cascaded. It means that it begins with curriculum subject syllabus analysis followed by scheme of work preparation, and finally lesson plan [14].

However, Papa-Gusho and Cekrez's [38] study titled "Factors affective effective planning skills of classroom teaching found that teachers sometimes instead of using curriculum subject syllabus to prepare scheme of works and then lesson plans, they use text books and teacher guide books. According to Papa-Gusho and Cekrez [38] this situation may directly or indirectly affect the successful classroom practice of the curriculum.

2.5 Teachers' Instructional Competence versus Classroom Practice of Competence-based Curriculum

This part focuses on teachers' ability to integrate curriculum materials with classroom teaching-learning. As noted above, integrating curriculum materials with classroom teaching and learning means that teacher assimilates what he/she has prepared in a scheme of work to lesson and then, using it effectively to facilitate students' development of knowledge and skills. According to Miller [39], teachers with sufficing instructional competences, find this process of transferring subject content stipulated in the curriculum materials specifically, scheme of works and lessons plan to student's classroom learning easier. Similarly, it is claimed that pupils learn and achieve learning goals/objectives effectively in the practice of any curriculum when a teacher prepares and uses a well organized lesson plan [40]. It is from lesson plans where teachers need to focus on for example, competences required

to be developed by individual learner, techniques used to facilitate pupils' learning, and strategies for pupils' assessment. More importantly, in classroom practice of competence-based curriculum, teachers compelled to understand and connect what is described in lesson plans to the actual classroom pupils' doing.

However, some literature shows that connecting what is described/prepared in scheme of work to lesson plan with actual learners' doing in classroom context needs not only teachers' high mastery of planning and preparing the documents but also convenient classroom learning environment [41]. The study by Kanon (2021) on the other hand, found that some teachers neither prepare scheme of works nor lesson plans. According to Kanon, such teachers use subject syllabus and pupils' text books to conduct lessons. Unfortunately, the study has not addressed why the teachers do not prepare the documents (scheme of works and lessons) regardless their requisite in classroom pupils' teaching and learning.

2.6 Teachers' Mastery of Challenges in the Implementation of Competence-based Curriculum

In this contemporary world where teaching and learning or classroom practice of any curriculum faces a number of challenges, it is important for teachers not only to be able to identify challenges but also to look forward to combat the challenges. Currently, it has been realized that many studies reveal challenges facing teachers in the implementation of competence-based curriculum rather than ways to overcoming the challenges. Apondi's study [21] for example, pointed out lack of teachers and students' educational background, low students' cooperation, large class size, insufficient teaching and learning resources, and lack of teachers' on job training as major challenges facing teachers in the implementation of competence-based curriculum.

Further, Tambwe (2017) through her study titled Challenges Facing Implementation of Competence-Based Education and Training (CBET) System in Tanzania Technical Institutions found low understanding of competence-base education concept, lack of motivation to some teachers due to unfavourable working conditions, and scantiness of teaching and learning facilities as major challenges facing

teachers in the implementation of competence-based curriculum.

Furthermore, Kanon (2021) revealed teachers' inability to integrated child-centered teaching methods, use of improper teaching-learning methods, and lack of teachers' time for preparing lessons as challenges faced teachers in teaching Social Studies under competence-based curriculum. Other challenges in accordance with Kanon's study included overcrowded classes, absence of teaching-learning resources, and heavy workloads as challenges faced teachers in teaching Social Studies Subjects under competence-based curriculum.

Moreover, Nkya [19] found lack of In-service Training to teachers on competence-based curriculum, insufficient teaching and learning resources, overcrowded classrooms, low ability of students joining secondary education, and students' readiness to accept learner centered approach as challenges faced teachers in the implementation of competence-based curriculum.

Unlike those studies, Education Quality Improvement Project of Tanzania [EQUIP-T] [42] suggested few strategies which could be used by teachers to overcome challenges in the implementation of competence-based curriculum. According to EQUIP-T, the strategies are dependent on the kind of challenges at hand. For example, in the context where classes are overcrowded, EQUIP-T [42] suggests two teachers; expert-ant teacher in collaboration with his/her assistant to teach the class. The process involved dividing the class into two major groups whereby at the time the expert-ant teacher is teaching one group, the other group is under the supervision of the assistant teacher.

Regarding to this little literature that shows ways to address challenges faced teachers in the implementation of competence-based curriculum this study therefore, was planned among other things to add knowledge over that area.

3. METHODOLOGY

The study employed an interpretive approach with the use of qualitative case study. The reason for choosing and using qualitative case study was to help the researcher to explore the phenomenon (teachers' instructional competences in the implementation of competence-based curriculum) within Mpwapwa District Council. Literature [43,44] inform that

qualitative case study as a research method helps in exploration of a phenomenon within some particular context through various data sources. On the other hand, interpretive approach maintains that there are multiple, socially constructed realities in which the researcher's judgments are considered in interpretation of data [45].

The study involved twenty four (24) participants from six (6) primary schools in Mpwapwa District Council, Dodoma Region Tanzania. However, a name of particular school was avoided in this study for the confidentiality purposes. Therefore, schools were identified through pseudonyms; school "A" to "F". Eighteen (18) out of twenty four (24) participants were classroom teachers selected by purposeful techniques. Purposeful technique was used to obtain only classroom teachers teaching class IV Swahili subject. Six (6) participants were head-teachers involved in this study by virtual of their administrative positions.

Document review, observation and interview methods were employed by the researcher for data collection. The reason for choosing document review method was to explore teachers' knowledge and skills in the preparation of competence-based curriculum materials included subject syllabus, scheme of works and lesson plans. Observation method was chosen because it allows the researcher to observe the situation at the source rather than relying on second-hand information. The method also enables a researcher to seeing and hearing things from the original setting (Frankael & Wallen, 2001). Moreover, the researcher used interview method because of its flexibility to allow the discovery and elaboration of participants' in-depth information. Again, the method provides a researcher with a wide chance of engaging follow-up questions that expand participants' original information, thoughts and views [46].

Evaluative or scheduled guidelines, observation check list and interview guide questions as tools for data collection were prepared and used by the researcher to obtain information from participants.

Data were analyzed through thematic and content methods. Data gathered from interview for example, was analyzed in-depth using thematic method aiming to obtain the emerging themes. Initial coding revealed a number of basic themes that were organized to form themes.

Subsequently, organizing themes were interactively discussed between authors and were renegotiated when differences existed.

Content analysis method was used by the researcher to analyze data from the reviewed documents and observations. The reviewed documents included standard IV Swahili subject syllabus of 2016, scheme of works, and lesson plans. The reason for reviewing the documents was to explore classroom teachers' competences in the preparation of such documents in relation to competence-based curriculum requirements. The information obtained through the reviewed documents helped the researcher to understand how classroom teachers prepared and integrated the curriculum materials; subject syllabus, scheme of works and lesson plans with the actual classroom teaching and learning under competence-based curriculum.

Research ethical issues were observed by the researcher because they are important in protecting both researcher and participants from harm [47].

3.1 Participants' Profile

This part displays preliminary interview information of twenty four (24) participants who involved in this study. These included eighteen (18) classroom teachers and six (6) Head-teachers. The purpose of the preliminary interview was to obtain information on the participants' education level and teaching/professional experiences. With this information, it was expected that data collected from the participants would bring real picture of teachers' instructional competences in the

implementation of competence-based curriculum. The findings are presented in the Table 1 below.

The Table 1 shows that twelve (12) classroom teachers out eighteen (18) which are equal to 66% are Grade "A" possessing Certificates. Six (6) classroom teachers equated to 33.3% are Diploma holders. This is above the minimum qualification for teachers to teach primary school pupils. On the other hand, the education credentials of Head-teacher varied from Diploma to Bachelor Degree. With regard to this level of education, four (4) Head-teachers out six (6) which are equal to 66.6% were possessing Diploma, and two (2) 33.3% was a Bachelor Degree holder. Thus, this findings concur with Education Training Policy of 1995 which stipulates that the minimum qualifications for a teacher to teach in primary schools is the possession of Grade "A" certificate, and all managers or administrators at the level of primary school should possess the minimum qualification of Diploma. It is believed that possessing of such qualifications, the individuals will be capable to appropriately handle all activities carried out at primary school included teaching, management and administration. In terms of working experience, the table indicates that classroom teachers' experiences range from five (5) to thirty (35) years whereas, Head-teachers' work experience is between fifteen (15) and thirty five (35) years. In this regard, all classroom teachers involved in the study had adequate education and experience in teaching and managing activities carried out at the level of primary schools. With these findings, it was expected that data collected from the participants would bring real picture of teachers' instructional competences in the implementation of competence-based curriculum.

Table 1. Categories of participants according to education levels and experiences

Participants	Categories				Total
	Education Level				
	Grade A	Diploma	Undergraduate	Masters	
Classroom Teachers	12	6	-	-	18
Head Teachers	-	4	2	-	6
Total	12	10	2	-	24
Working Experiences in Years					
	5-15	15-25	25-35	35-45	
Classroom Teachers	6	7	5	-	18
Head Teachers	-	2	4	-	6
Total	5	6	7	-	24

Source: Field data, 2021

In addition, the findings are in line with the study by Dickmann [48] which stipulates that relevant level of education and long experience of workers lead to effective performance. This is because the workers have acquired more knowledge and skills as they are working for long time. Further, constructivism theory for teaching and learning cements on the assumption that experience is a vital aspect for an individual to understand and construct new meaning or knowledge [32].

4. FINDINGS AND DISCUSSION

This study aimed to investigate on teachers' instructional competences in competence-based curriculum implementation. The study entailed four specific objectives; assess teachers' conception of the term competence-based curriculum, explore teachers' instructional competences demonstrated in preparing of competence-based curriculum materials, examine teachers' instructional competences in integrating competence-based curriculum materials with actual classroom teaching and learning, and determine primary school teachers' competences in overcoming challenges faced them in competence-based curriculum implementation.

4.1 Teachers' Conception of the Term Competence-based Curriculum

Under this theme, the study intended to respond to the first question: *How do primary school teachers conceptualize the term competence-based curriculum?* Through interview, the findings revealed two basic conceptions which were condensed into two major themes: (i) Competence-based curriculum as an activity-based curriculum, and (ii) Competence-based curriculum as an application-oriented curriculum.

4.2 Competence-based curriculum as an activity-based curriculum

The findings revealed that some classroom teachers understand the term competence-based curriculum as a form of curriculum that emphasizes activity-based pedagogy only. This means that competence-based curriculum facilitates more on the active involvement of learners in the lesson. This means that learners are given more opportunity for hands-on activities during the teaching and learning process. In other words, the teachers view

competence-based curriculum just as a curriculum emphasizing on the use of participatory teaching and learning methods. This view is depicted in the following data extracts from the interviews:

Competence-based curriculum is the kind of curriculum that uses participatory methods, and it was introduced to primary schools in 2015 (One classroom teacher from school B).

Competence-based curriculum is the method of teaching which allows learners to participate more than a teacher. The curriculum emphasizes that the learners should be more actors on what they are learning than the teacher (A classroom teacher from school E).

Competence based curriculum is a kind of curriculum that gives chance to both teacher and learners work cooperatively so that everybody has a chance to say something before the class (A classroom teacher from school C).

According to the above quotes, teachers' understanding of competence-based curriculum is that learners should be the main actors rather than a teacher during the teaching and learning process. Although it is true that in teaching and learning under competence-based curriculum, learners are main actors (learner-centered). However, the teachers' understanding or interpretation of the curriculum does not seem to extend the meaning to the application of what is learned by pupils beyond the classroom context. It means that in classroom implementation of the curriculum, this category of classroom teachers might have put more emphasis on pupils' engagement and doing various activities to develop more knowledge than skills contrary to competence-based curriculum intention. In so doing, it is difficult for pupils to complete primary education with useful ability (competences) to master everyday life challenges, and even to compete in the world labour market.

This perception or understanding of competence-based curriculum contradicts literature [23,25] that stipulates one intention to adopt the curriculum as to prepare learners to be functional in society, applying the learned skills to create their own income-generation activities as well as to become competitive in the world of work in general.

4.3 Competence-based curriculum as an application-oriented curriculum

It was also found that other teachers understood competence-based curriculum as a curriculum whose emphasis is on developing learners' ability so that they become practical and creative, applying the skills they acquire in classrooms to solve problems in everyday life situations. It is a curriculum that emphasizes creativity and the application of the learned experiences in solving day-to-day problems. As quotes from a few classroom teachers indicate:

Competence-based curriculum is a curriculum that develops learner's skills to do things than to know only the content without its application. It emphasizes more on a person to be able to relate what he/she learns in the classroom with the real life situation where they live (A classroom teacher from school A).

Competence-based curriculum is a curriculum which planned to prepare learners to be practical and creative and who use their brain to solve different problems but not to use brain to cram what they learn (A classroom teacher from school F).

Competence-based curriculum is a teaching and learning of specific skills which are to be demonstrated later by a learner when executing work (A classroom teacher from school E).

The teachers who interpreted competence-based curriculum as an application-oriented related their interpretations with the curriculum intentions that to prepare learners to be functional in society through applying the learned skills to create their own income (self-employment) as well as to become competitive in the world of work. This view is in support of Tanzania Education Police of 1967 and 2014 which briefly emphasize education for self-reliance. Both educational policies (1967 and 2014 policies) inform that a learner completing at any defined level of education in Tanzania should possess adequate knowledge and skills to become self-independent and master his/her daily life situations. Such interpretation is also in line with constructivists' views that a learner must actively construct knowledge using his/her prior experience, and use the knowledge critically to solve daily life challenges [1].

Nevertheless, the key difference between the former category of teachers and the latter category is that in classroom implementation of competence-based curriculum, the former category of teachers will focus more on pupils' development of knowledge but fewer skills. In turn, the latter category's focus will be on pupils' development of more practical skills. This focus is supported by the reforms and changes of Education policies included Education for Self-reliance 1967, and Education and Training Policy 1995 that resulted into the adoption of competence-based curriculum in Tanzania. The two policies through competence-based curriculum generally, aimed to provide a learner with practical knowledge and skills so as to become a self-reliant person.

The implication of the two themes of teachers' conception in relation to classroom implementation of competence-based curriculum is that the former category of teachers might have been considered that they are still employing teacher-centered pedagogy in classroom implementation of competence-based curriculum. Consequently, it can be assumed that some pupils would have completed the course of study with full package of practical skills to master their daily life challenges while others with little skills.

However, to some extent the two categories of teachers' understanding of the concept competence-based curriculum seem to be related in certain aspects like involvement of pupils in the classroom practice of the curriculum.

4.4 Teachers' Instructional Competences Demonstrated in Preparing CBC Materials

Under this theme, the study was planned to answer the second question: *to what extent do primary school teachers demonstrate competences in preparing of competence-based curriculum materials?*

The findings were gathered through document review method. The reviewed documents included Class IV competence-based Swahili Subject Syllabus, Scheme of works, and Lesson plans. The study findings revealed that most teachers before they had prepared scheme of works and lesson plans were thoroughly passing through the subject syllabus. This was evident through the essential elements embedded in the

scheme of works and lesson plans as originated from the subject syllabus.

The findings also showed that teachers demonstrated reasonable ability in preparing competence-based curriculum materials particularly scheme of works and lesson plans. Teachers' ability in preparing the materials had been clearly shown in the course of stating specific objectives. For example, one of the prepared lesson plans by the teacher from school "A" described a statement for specific objective as:

"Ndani ya kipindi cha dakika 40, kila mwanafunzi wa darasa IV aweze kusoma hadithi kwa ufasaha kwa kuzingatia alama za uandishi kama vile nukta, mkato, alama ya kuuliza n.k."(Within a period of 40 minutes, every class IV pupil should be able to read a story appropriately taking into account punctuation marks such as full stop, comma, question mark etc.).

This statement for a specific objective derived, and manipulated from Swahili syllabus of 2016. According to Tanzania Institute of Education [TIE] [14], this statement for specific objective has attained all necessary qualities. TIE [14] explains that a statement for specific objective(s) in competence-based curriculum lesson plan must adhere to five elements included Specific, Measurable, Attainable, Realistic, and Time bound (SMART).

Further, through document review, the study found that teachers used various action verbs such as *help*, *guide*, *direct*, and *lead* in stating teacher's activity in both scheme of works and lesson plans. One classroom teacher from school "D" in his lesson plan under the section titled Lesson Development, sub-section Teacher's Activity, he predominantly used action verbs; *lead* and *guide* to explain teacher's activity. All the same, the use of such verbs is not supported by literature [14]. Literature under competence-based curriculum suggests that verbs such as *lead*, *guide*, *help*, *direct* and the like should be abandoned. The reason is that the verbs do not provide learners with adequate freedom to construct new knowledge/meaning through their prior knowledge/experience. The finding is also supported by constructivists' views that in classroom implementation of competence-based curriculum, teacher's role is of facilitator. Regarding to this view, it is suggested that teachers should use the verb *facilitate* rather than *guide*, *lead*, *direct* etc [49].

However, when the researcher wanted to know through interview why teachers predominantly used such action verbs. Most teachers explained that they used the verbs to describe teachers' activities through their own experience. In addition, teachers explained that they were not sure which action verbs were appropriate to be used to describe teacher's activity. This is because the teachers had insufficient knowledge about competence-based curriculum and its requirements.

4.5 Teachers' Competences in Integrating CBC Materials with Classroom Teaching and Learning

Under this theme, the study sought to respond to the third question: *How do primary school teachers integrate competence-based curriculum materials with actual classroom teaching and learning?* The main focus was on lesson plans as one of the important curriculum materials used for actual classroom implementation of competence-based curriculum.

The findings showed that classroom teachers used different styles to integrate lesson plans with actual classroom implementation of the curriculum. The difference in styles could be viewed through two scenarios particularly in teaching Reading Lessons.

The first scenario was that only two or three pupils were selected by a teacher to read a story from Swahili text books loudly while others were listening to. The second scenario; teachers themselves had been reading stories from Swahili text books while pupils listening to. These two scenarios were interpreted by the researcher that the three pupils and the teachers were reading the stories for the pupils. For example, in school "A", the Swahili subject classroom teacher selected only three pupils to read the story loudly for others. Similarly, in school "E", only two pupils were chosen by the teacher to read the story, followed by questions from the classroom teacher.

This style used by some classroom teachers to select two or three pupils to read stories for other pupils contradicted their statements for specific objectives in the lesson plans. The statement for specific objective(s) in the lesson plans directed every pupil to be involved in learning activities. The point was evidenced by one of the statements for a specific objective written by the teacher from school "A" stated that:

“Ndani ya kipindi cha dk 40 kila mwanafunzi wa darasa la nne aweze kusoma hadithi kwa ufasaha kwa kuzingatia alama za uandishi.” (Within a period of 40 minutes, every class IV pupil should be able to read a story appropriately taking into account punctuation marks).

This statement for specific objective specifically the phrase “kila mwanafunzi” (every pupil), it means that every pupil would have been given chance to read the story from the text. This was contrary, in the actual classroom implementation of the curriculum only two to three pupils were chosen by teachers to read the story for other pupils.

However, through interview with classroom teachers, the study found that teachers selected two or three pupils to read stories from text books, and sometimes teachers themselves had to read the stories for their pupils because the classes faced shortage of pupils’ text books. As the quote below shows:

I teach my pupils in a difficult situation. In this class I have more than hundred pupils. It is unfortunately that we have only ten Swahili pupils’ text books, and it was a reading for comprehension lesson. To teach this lesson, I used demonstration technique where two pupils were selected to read the story loudly for others (One teacher from school “E”).

Researcher’s perception and experience as teacher and teacher educator is that the style used by teachers to integrate lesson plans with actual classroom implementation of competence-based curriculum was against not only the curriculum needs but also world literature. Kouwenhoven [6] for example, contends that the effective classroom practice/implementation of competence-based curriculum for pupils’ better learning requires every individual learner to develop and demonstrate learning competence/activity.

However, it is argued that in order for every learner to be effectively involved in a learning activity included reading activity, appropriate learning environment included availability of adequate teaching and learning resources is inevitable [50].

Similarly, Sengimana (2020) studied the implementation of competence-based curriculum in Rwanda focused on opportunities and

challenges. The findings revealed that the schools with adequate teaching-learning facilities such as text books, and qualified teachers were effectively implementing the curriculum as the result they yielded students’ better academic performance.

4.6 Primary School Teachers’ Competence to Overcome Challenges in the Implementation of CBC

The intention under this theme was to respond to the question: *How do primary school teachers overcome challenges facing them in competence-based curriculum implementation?*

Prior to this question, this study through various literatures found that implementation of competence-based curriculum faced by a number of challenges. The challenges included among others teachers’ little knowledge and skills of competence-based curriculum, overcrowded classes, lack or shortage of textual and non textual teaching and learning resources, teachers’ rigidity towards adoption of learner-centered approach, shortage of teachers, and insufficient infrastructure specifically, classrooms (Kanon, 2020); [28,51,30]. However, as it was noted above that the study under this part sought to explore teachers’ competences used to overcome challenges facing them in the implementation of competence-based curriculum.

Through interview with Head-teachers and classroom teachers, the findings revealed the following strategies used by teachers to overcome challenges:

4.7 Established School-based Indoor Training

It was explained by the participants that during the introduction of competence-based curriculum to Mpwapwa primary schools, few teachers about two to three from every school were selected to attend seminars pertaining competence-based curriculum. This conformity left behind a number of teachers without adequate knowledge and skills of competence-based curriculum. Consequently, the implementation of the curriculum became difficult especially to those teachers who didn’t attend formal training. To ensure that at least all teachers become aware of competence-based curriculum, some schools introduced School-Based Indoor Training whereby the teachers who

attended seminars had to share knowledge and skills of competence-based curriculum with other teachers who didn't attend the seminars. One Head-teacher from school "A" for example, explained that:

When we discovered that only few teachers attended seminars pertaining competence-based curriculum, we decided to conduct informal school training to enable those teachers who didn't get opportunity to attend formal seminars. These local seminars carried out at the level of school to some extent have helped our teachers to be aware of the curriculum.

In my school only two teachers teaching Swahili and mathematics standard one and two had the opportunity to attend seminars concerning competence-based curriculum. After the teachers had come back from the seminar, we considered necessary to share what they got at the seminar with other teachers (Head-teacher from school "D").

Similar quote was given by the Head-teacher from school "F" that:

.....because competence-based curriculum is a new approach of teaching and learning but most teachers in our school have not got formal training about the curriculum, we conduct school-based training at the end of each month. These trainings have reduced the challenge of teachers' unawareness of the curriculum. However, I think there is a need for the government of Tanzania to provided formal training to all teachers concerning competence-based curriculum.

The researcher's experience as teacher and teacher educator concurs with the findings that sometime it is wise for schools not to wait for formal teachers' training. Where possible they can even invite experts (Teacher College Tutors) whom they believed to possess adequate knowledge and skills pertaining competence-based curriculum to share their knowledge with school teachers. Further, the accord of the schools to conduct school-based indoor training is also supported by EQUIP-T [42]. EQUIP-T suggests that schools should use inside and outside school experts to share knowledge and skills concerning any subject areas found difficult rather than waiting for formal trainings from the government.

4.8 Introduced Teaching and Learning Shift

As noted above, one challenge facing the implementation of competence-based curriculum is shortage of school infrastructures specifically, classrooms. This challenge also faced teachers in competence-based curriculum implementation in Mpwapwa District Council. However, in overcoming this challenge, the findings revealed that some primary schools adopted teaching and learning shift. It was explained by the participants that the classes with large number of pupils attended lessons on shift [52-54]. This means that classes were divided into streams for example, class IV was divided into two streams; A and B then, one stream attended morning session while the other stream attended afternoon session. According to participants, this class shifting helped teachers to at least afford implementing competence-based curriculum as one Head-teacher from school "C" asserted that:

.....this situation is a result of Fee Free Education. That being a case, we thought it was better to find the solution rather than keeping on lamenting. Therefore, we decided to have class shifting.

You know, teaching hundred pupils at ago is not possible. So, we thought to divide pupils into two sessions, morning and afternoon session. This system has enabled teachers to at least conduct their lessons effectively (Head-teacher from school "E").

4.9 Established Partnership between Schools and Parents

Further, the findings showed that some primary schools established partnership with parents whereby both schools and parents contributed funds to enable schools purchase teaching and learning resources particularly, pupils' text books. It was explained by participants that one of the competence-based curriculum needs is to have classroom library. The classroom library assists pupils to access, and practice reading lessons at their own pace [55-57]. Thus, it was considered important to establish contribution from schools in collaboration with parents to fill in the shortage of textual materials. As the quote shows that:

.....school leadership in collaboration with School Committee, we agreed to establish partnership with parents. One main objective of the partnership is to have a fund

that can be used as subside of the expenses for textual materials buying (A Head-teacher from school "B").

Similar quote was provided by Head-teacher from school "D"

In our school, we collaborated with parents through School Committee to get fund for purchasing some necessary teaching-learning materials included pupils' text books. However, this does not mean that the government is not providing us with funds. We just do this as subside for what is provided by the government.

4.10 Hired the Retired Teachers

Under this sub theme, the findings showed that some primary schools hired the retired teachers to sequel the shortage of teachers. Participants explained that it was found difficult to effectively implement competence-based curriculum in the situation where teachers were very few. The participants exemplified that some schools in Mpwapwa District had about seven (07) teachers with more than thousand (1000) pupils [58-60]. It was added that the seven teachers had to teach from standard one to standard seven. This resulted into overloaded teaching periods consequently, ineffective classroom competence-based curriculum implementation. It was further, explained that in order to help teachers afford implementing the curriculum, schools in collaboration with school committees decided to hire teachers who had already retired to at least reduce the teaching load. The quotes below exemplify this exercise:

.....in collaboration with the school committee, we decided to request some retired teachers to help us fill in the shortage of teachers. We pay them little amount of money from our school projects under Education for Self-reliance fund (Head-teacher from school "B").

We thought that it is not wise to wait until the government employs teachers while shortage of teachers is a critical issue in our school. Thus, we presented the concern of hiring the retired teachers before the school committee. We agreed to get two retired teachers to assist the few present teachers to teach our pupils (Head-teacher from school "F").

You know! Competence-based curriculum implementation needs a teacher facilitating

every individual learner until he/she demonstrates mastery of the learned competence. In this case, you need a number of teachers to be proportional to the number of pupils. In this school, there are nine (09) teachers but, we have one thousand and two hundred pupils. Therefore, we have hired four retired teachers. However, the shortage of teachers in our school is not completely overcome (Head-teacher from school "D").

4.11 Established Classes within a Class

Moreover, the study findings revealed that teachers used to form classes within a class as a strategy to combat pupils' overcrowded challenge. The participants clarified that for the class which had many pupils for example, hundred pupils, teachers tended to divided the pupils into groups. The number of groups depended on the number of pupils in the class. For example in the classrooms where pupils were about hundred, it was divided into two main groups. Both groups were taught the same content but teacher's main focus was on one group. The other group was mainly given tasks to be discussed in small study groups under the supervision of the class monitor. In the next period, the teacher had to make sure before introducing a new lesson he/she made thoroughly clarification of what he/she had taught in the previous day to the tasked group. As the following quote shows that:

Sometimes in such a difficult situation, we have to think of our own ways to move forward. Teaching a class of hundred pupils at a time is not easy. So, I divide my class into two classes. One class is given some tasks to be discussed by pupils themselves in small study groups while my big concentration remains on the other group (A classroom teacher from school "A").

In a class where number of pupils exceeds normal ratio of forty five (45) pupils, I divide my class into two small classes. While my main focus is in one sub-divided class, the other sub class is given task(s) to be discussed by pupils themselves sometimes under the supervision of the class monitor (A classroom teacher from school "C").

Significantly, the following Table 2 exemplifies important points resulted from document analysis, observations, and interviews:

Table 2. Results from document analysis, observations and interviews

Theme	Important points from Document analysis	Important points from Observation	Important Points from Interview
Teachers' understanding of the concept competence-based curriculum			CBC as activity oriented and as practical oriented.
Teachers' instructional competences in preparing of CBC materials (scheme of works & lesson plans)	Using inappropriate action verbs to state teacher's activity in scheme of works & lesson plans; <i>guide, lead, direct & help</i>		Teachers' lack of formal training pertaining competence-based curriculum.
Teachers' competences in integrating CBC materials with actual classroom implementation of CBC		Adequate competences. However, sometimes the competences are affected by shortage of text books	Teachers' competences affected by large classes & shortage of pupils' text books.
Teachers' competence in addressing challenges in the implementation of CBC		Adequate and reasonable competences	Strategies; school-based indoor trainings, established school& parents partnership, hired retired teachers, established class teaching & learning shift, and classes within a class employed to overcome challenges.

Source: Field Data 2021

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

The study was guided by four specific objectives: assess teachers' understanding of the concept competence-based curriculum, explore teachers' instructional competences demonstrated in preparing of competence-based curriculum materials, examine teachers' instructional competences in integrating competence-based curriculum materials with actual classroom teaching and learning, and determine primary school teachers' competences to address/overcome challenges in the implementation of competence-based curriculum.

In line with the study findings and the ensuing discussions the following conclusions can be made:

To the large extent, primary school teachers in Mpwapwa District Council understand the concept of competence-based curriculum. However, the teachers' understanding is perceived in two scenarios that as activity oriented curriculum, and as application oriented curriculum. This difference in understanding of

the concept of competence-based curriculum might have affected pupils' learning in the implementation of the curriculum that some pupils may develop and demonstrate more skills than others [61-62].

Most primary schools in Mpwapwa District Council have adequate instructional competences in preparing of competence-based curriculum materials specifically scheme of works and lesson plans. It seemed that the teachers before preparing scheme of works and lesson plans are thoroughly passing through subject syllabus something very important. The point of evidence was the connection of essential elements from the Swahili subject syllabus to scheme of works, and finally to the lesson plans. However, there were slight mismatch of the use of action verbs included *lead, guide, help, and direct* in both scheme of works and lesson plans in stating teacher's activity in accordance with TIE [14].

There is the challenge in integrating competence-based curriculum materials specifically lesson plans with actual classroom implementation of competence-based curriculum. What is indicated by teachers in lesson plans particularly statements for specific objective(s) is

not reflected in the actual classroom teaching and learning though reasons were given out. For example, the described statements show “every pupil” to be involved in learning activity but in actual classroom practice of the curriculum only “two to three” pupils are engaged.

About strategies for overcoming challenges in competence-based curriculum implementation, teachers and schools in general showed high competences. Several strategies included establishment of school-based indoor trainings, introduction of teaching and learning shift, established partnership between schools and parents for fund raising, hiring the retired teachers, and established classes within a class used by teachers to overcome challenges exhibit teachers’ possession of high competences. However, it is important to take into account the underpinned recommendations.

5.2 Recommendations

Given that primary school teachers in Mpwapwa District Council differ in understanding of the concept competence-based curriculum something that might have affected pupils’ learning in the implementation of the curriculum, and since most teachers in the District Council use inappropriate action verbs included *lead*, *guide*, *help*, and *direct* to describe teacher’s activity due to lacking of adequate knowledge and skills, it is recommended that the government of Tanzania should provide all teachers with formal training(s) pertaining competence-based curriculum.

Knowing the importance of competence-based teaching and learning materials specifically pupils’ text books for teachers effective integrating curriculum materials; lesson plans with actual classroom implementation of competence-based curriculum, it is recommended for the government of Tanzania to provide schools with sufficient text books so as to enable teachers employ their instructional competences effectively.

Since conducive learning environment is vital aspect for effective classroom implementation of competence-based curriculum, it is important for educational stake-holders particularly the government of Tanzania to extend infrastructures included classrooms, and also maintain teacher pupils’ ratio of 1:45 to enable teachers skillfully integrate competence-based curriculum materials specifically lesson plans with actual classroom implementation of the curriculum.

Given that primary school teachers and schools in general, in Mpwapwa District Council have shown reasonable efforts in addressing/overcoming challenges facing them in competence-based curriculum implementation, support is need by educational stake-holders specifically the government of Tanzania to employ or redeploy the present teachers to those school with acute shortage of teachers.

ETHICAL APPROVAL AND CONSENT

Before going to the field for data collection, the researcher asked permission from Mpwapwa District Council Officials to undertake the study in the District Council. Further, at the field consent between the researcher and the participants of this study was made

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Zeiger S. Core Instructional competences for education enhanced classroom teaching; 2018.
2. Knight J. High-impact instructions. A framework for great teaching. Thousand Oaks, CA: Corwin Press; 2012.
3. Arccher AL, Hughes CA. Explicit instructions efficient and effective teaching. Gulford Publications; 2011.
4. Mosha HJ. Learning Materials Used to Deliver Knowledge and Skills in Competency-Based Curricula (in Tanzania) [dissertation]. Dar es Salaam; 2013.
5. Mayahi N. Isn’t our fault? Teachers’ language knowledge and skills. International Conference on Current Trends in English Language Teaching; 2014.
6. Kouwenhoven W. Competence-based curriculum development in higher education: A globalised concept? In: Lazinica A, Calafate C, editors. Technology, education and development. 2018;1-22.
7. Nsengimana V. Implementation of competence-based curriculum in Rwanda. Opportunities and challenges; 2020.
8. Mwandangi M. Implementation of competence-based curriculum in Tanzania secondary schools; 2015.

9. Epstein RM. Developing a competence based curriculum. A journal of Defining and Assessing Professional Competence. West Virginia University of Valencia; 2002.
10. Ruiz P 2016. Competence-based learning. An Approach for learning.
11. Bakhuru KM. Competences for effective management teaching: Perception of teachers and administrators of Indian B-School. *J Econ Manag.* 2015;2(7):1-7.
12. Lukindo JJ. Exploring competence-based education in rural secondary schools in Tanzania. English language teachers' conceptions and experiences. *J Educ Pract.* 2016;7(29):62-7.
13. Ewell PT. Implication for assessment. National institute of learning outcomes assessment. The Lumina degree qualifications profile; 2013.
14. TIE. A guideline for the improved competence-based curriculum practice. Standard. 2014;I & II.
15. Gulker J. Models and Principles for Designing Competence-based curriculum, teaching, learning and assessment; 2017.
16. Fraster D. What does integrated curriculum really mean? MAPPEN; 2022.
17. Button L 2021. Curriculum integration-curriculum essentials. A journey to effective practice of Competence-Based Curriculum.
18. Jallow SS. Competence-based curriculum. Teaching and assessing students' competences. UNESCO BREDIA; 2011.
19. Nkya HE. Implementation of competence-based curriculum in Tanzania: perception, challenges and prospects. A case of secondary school teachers in Arusha region; 2021.
20. Tambwe M. Challenges facing implementation of competence-based education training (CBET) system in Tanzania technical institutions; 2017.
21. Apondi A. Challenges facing teachers in the implementation of competence-based curriculum in Tanzania. The case of community secondary schools in Morogoro Municipality; 2016.
22. Adrian S. The Implementation of Competence-Based Curriculum in Primary Schools and its Challenges in teaching and learning process in Muheza District [Unpublished dissertation]; 2012 for Master of Arts (Education: University of Dar es Salaam.
23. URT. Educational for self-reliance. Dar es Salaam; 1965.
24. URT. Education and training policy. Dar es Salaam; 1995.
25. URT. The report on the Effectiveness of Competence Based Curriculum for Primary Education. Tanzania; 2014.
26. URT. Education policy for free education; 2014.
27. Goden LT. Influence of school heads' instructional competences on teachers' management in Leyte division. Philippines. *Int J Eng Sci Res Technol.* 2016;5(7):513-30.
28. Heafner TL. Elementary ELA/social studies integration: challenges and limitations. *Soc Stud.* 2018;109(1):1-12.
29. Wilson CD. Teachers' Pedagogy Content Knowledge Practice, and Students achievement. *Int J Educ.* 2019;41(7):944-63.
30. Kafyulilo A. Implementation of competence based teaching approaches in teacher education in Tanzania [dissertation]. University of Dar es Salaam; 2012.
31. McLeod SA. Constructivism as a theory for teaching and learning; 2019, July 17. Simply Psychology [cited on Jul 15, 2020]. Available:<https://www.simplypsychology.org/constructivism.html>
32. Coldwell-Neilson J. Constructivist learning: understanding and experience in IT tertiary education. *J Curriculum Teach.* 2013;2(2): 140-6.
33. Oliver PF. Developing the curriculum. 5th ed. Boston: Addison-Wesley; 2001.
34. Selvi K. Teachers' competences. *Int J Philos Cult Axiology.* 2010;7(1): 167-75.
35. Nzima I. Competence-based curriculum in Tanzania. Teachers' understanding and their instructional Practice. Linnaeus University Press; 2016.
36. Mafumiko FMS, Tilya F 2010. The capability between teaching methods and competence-based curriculum in Tanzania. Papers in education and development.
37. Ben-Peretz M. Teacher Knowledge: what is it? How do we uncover it? What are its implications for schooling? *Teach Teach Educ.* 2011;27(1):3-9.
38. Papa-Gusho L, Bakaku-Cekrez R. Factors that affect effective planning skills of teachers in the classrooms. *Acad J Interdiscip Stud.* 2015;4(3):560.
39. Miller M, Veatch N. Teaching literacy in context: choosing and using instructional strategies. *Reading Teach.* 2010;64(3): 154-65.

40. Abocejo FT. Lesson planning competence of English. Major University Sophomore students. Eur J Educ Stud. 2018;5(8).
41. Crifford OE. Social Studies learners' competence need for effective implementation of Universal Basic Education Programme. J Soc Stud Civic Educ. 2013;3(1).
42. EQUIPT T. A guideline for Implementation of the Improved Competence-based Curriculum. Standard. 2014:I, II & III.
43. McCombes S 2019. What is a case study? Definition, examples & methods.
44. Jack SM 2008. Qualitative case study methodology. Study design and implementation of novice Resaechers.
45. Shah SR. Research paradigms: researcher's worldviews, theory frameworks and study design. Arab World Engl J. 2013;4(4):52-264.
46. Cohen L, Manion L. Research methods in education. 7th ed. London and Routledge; 2018.
47. Creswell JW. Research design: Qualitative, quantitative and mixed methods approaches. 3rd ed. SAGE; 2012.
48. Dickmann E. Participants' experiences of Qualitative interview: considering the importance of research paradigm. Qual Res. 2015;15(3):351:372.
49. Haney N. Constructivist beliefs about the science classroom learning environment: Perspectives from teachers, administrators, parents, community members, and students. Sch Sci Math; 2013.
50. Ilomo O. The availability of teaching and learning facilities and their effects on academic performance in ward secondary schools in Muheza, Tanzania. Int J Educ Res. 2016;4(6):571-81.
51. Jones KA. Six common lesson planning pitfalls-recommendations for novice educators. J Educ. 2011;131(4):3-31.
52. Bartram D 2013. The. Great Eight competencies: A criterion-centric approach to validation.
53. Bruce A. Teaching and learning in competence-based education. Fifty International Conference on e-learning; 2014.
54. Edwards M 2015. Achieving competence-based curriculum in Engineering Education in Spain (INGENIO (CSIC-UPV), Working Paper Series. Polytechnic.
55. Hager P. Competence-based education. Understanding Adult education and training; 2020.
56. Hasegawa K 2019. Instructional competences on the teaching force. Their relationship to the students' performance.
57. Jasnani P. Top 6 challenges in the implementation of competence-based training curriculum; 2022.
58. Kessy H. Differential effectiveness of plain and multimedia enriched sex education Instructional materials on secondary school students. A Thesis submitted in fulfillment of the requirement for the degree of doctor of philosophy of the open university of Tanzania; 2016.
59. Khan KS. Formative self-assessment using multiple true-false questions. The teaching and learning through competence based curriculum. Macmillan; 2011.
60. Makunja G. Adoption of Comptence-based curriculum to improve quality of secondary education in Tanzania. Is it a dream or Reality; 2015.
61. Tanzania educational policies of 1967; 1995 & 2014.
62. UNESCO. A decade of progress on Education for Sustainable development. Reflections from the UNESCO Chair Programme; 2014.

© 2023 Ndimbo and Kessy; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/97669>