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Teacher Perspectives on the Implementation of the Competency-Based Curriculum in Kenya



Brian Mugendi Micheni

St Cross College

University of Oxford

Supervisor: Dr David Johnson

Dissertation submitted to the University of Oxford in partial fulfilment of the requirements for the Degree of MSc in Education (Comparative and International Education)

ACKNOWLEDGEMENTS

First, I wish to express my gratitude to God for his grace and blessings in my academic journey. Second, I wish to show appreciation to my supervisor, Dr. David Johnson, for his guidance, and to my family and friends for their support.

ABSTRACT

This mixed methods study was conducted to explore teacher views on the implementation of the Competency-Based Curriculum (CBC) in Kenya, specifically the support availed to them. The study employed a closed-ended Likert scale questionnaire, open-ended interviews and a written test, which was used for triangulation. Purposive sampling and snowballing sampling techniques were used to recruit 53 teachers who participated in the study. The data was analysed through thematic analysis process, and the use of deductive and inductive coding processes.

The study revealed that teachers were positive that professional development programs helped them to implement the CBC in classrooms. However, when the professional skills and capabilities of the said teachers were tested objectively, a majority of them fell short of satisfying the minimum quality standards. The data further revealed that, while an adequate number of textbooks were availed to facilitate teaching and learning, the quality of textbooks was substandard. Further, there was inadequate Information Communication Technology infrastructure and laboratories to support teaching and learning activities. Schools were understaffed, thus, teachers handled heavy teaching workloads and large class sizes. There was also the view that school leaders had built a culture of fear in teachers and did not offer them guidance or motivation. Nevertheless, teachers were satisfied with the peer support they received. Parental support to teachers and learners was also of concern as a motivating factor for teaching and learning. Finally, teachers felt that the support they received from the Teachers Service Commission and the Kenya National Union of Teachers, which is the national teachers trade union, was inadequate.

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LIST OF ABBREVIATIONS

A	Agree
AfDB	African Development Bank
BERA	British Educational Research Association
CBC	Competency Based Curriculum
CUREC	Central Research Ethics Committee
D	Disagree
EAC	East African Community
ICT	Information Communication Technology
KICD	Kenya Institute of Curriculum Development
KNUT	Kenya National Union of Teachers
OECD	Organisation for Economic Cooperation and Development
PISA	Programme for International Student Assessment
QASO	Quality Assurance and Standards Officer
SA	Strongly Agree
SADTU	South African Democratic Teachers Union
SD	Strongly Disagree
SIDA	Swedish International Development Cooperation Agency
TPAD	Teacher Appraisal Performance and Development
TSC	Teachers Service Commission

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Teachers are key agents in the delivery of the curriculum (Lochner et al., 2015; Makewa & Ngussa, 2015; Mandukwini, 2016; Nevenglosky, 2018). Indeed, as Fullan puts it, "Educational change depends on what teachers do and think – it's as simple and as complex as that" (Fullan, 1991, p. 117).

Given the agency of teachers in curriculum implementation, robust research, particularly in the African context, is essential in order to gain a better understanding of curriculum reform and to serve as the basis for enhancing curriculum implementation procedures (Davis, 2009). This study seeks to shed light on teachers' views on the support they get in implementing the Competency-Based Curriculum (CBC) in Kenya. Furthermore, a key ingredient that improves teachers' experiences in curriculum reforms is the support availed to them in building and improving their capacity to implement the same (Alsubaie, 2016; Huizinga et al., 2019). On this account, my study examines various dimensions of implementation support. These include curriculum support, practicalities of the implementation, in-school support, and external support. By exploring teachers' views on CBC implementation support structures, the findings of this study are advantageous in pragmatically guiding policy implementation. These findings are instrumental in mitigating the problems that Kenyan teachers face when implementing the CBC, which will improve their practices and consequently lead to a successful curriculum reform, improving learning. The results of the study will also influence the State Department for Implementation of Curriculum Reforms' assessment of the successes and challenges of the CBC in Kenya.

1.2 Rationale of the study

It is widely argued that teachers' voices have often been neglected in global discourses around educational change (Bailey, 2000; Gozali et al., 2017; Mullick, 2013). Often, education reforms are overly prescriptive, silencing teachers' authoritative voices. In a study conducted by Lee and Yin (2011, p. 42), one teacher maintains, "There is no channel to convey our dissatisfactions about the reform implementation to the decision-makers at all. We, teachers, have no way to show our

concerns about the reform . . . I think the biggest deficiency is that we cannot involve [sic] in our own reform." Arguing against such absence of teachers' voices in curriculum policy discussions, Kirk & MacDonald (2001) propound that improvement of teachers' sense of ownership and agency towards curriculum change can be enhanced by bringing their voices to the forefront of curriculum reform discourse. This, they further posit, helps to understand issues of curriculum change from conception to implementation in improving policy outcomes. Such sentiments against the passivity of teachers on matters of curriculum reforms and the importance of teacher perspectives in the same, guides the study by anchoring it on teachers' views on the CBC implementation in Kenya. Unwrapping and understanding teachers' views on the CBC's implementation will ultimately help teachers to adequately implement the curriculum and maximise the benefits to learners (Altinyelken, 2013; Nevenglosky et al., 2019; Tabulawa, 1998).

1.3 Motivation of the study

The motivation of this study is two-fold. Firstly, it is driven by my observations based on my professional experience as a teacher and research associate. Secondly, the study aims to fill the lacuna that exists in academic literature on this topic. Prior to my master's program at the University of Oxford, I had earlier been engaged in numerous teaching positions in Kenya and Uganda. In addition, I worked as a research associate in the education section of Afrijob, a human capital start-up in Kenya. In my experience as a teacher, I grappled with the reality that, while teachers have a wide range of views on their practice, their voices often go unheard and rarely make it to the decision-making table. Acknowledging this reality, my work at Afrijob's education section mainly involved engaging with educators to understand their perspectives and share these with policymakers. It was hoped that this would meaningfully contribute to the discourse on improving teachers' teaching experiences. Most importantly, my work at Afrijob was driven by the view that teachers' perspectives had to be regularly featured in the public domain to help shed light on the complexity of curriculum delivery practices, given that teachers have a massive role to play in curriculum policy implementation. It is against this background that I seek to analyse and make sense of teachers' perspectives on the implementation of the CBC, particularly the support they receive in its delivery.

Finally, tied to filling the gap that exists in this area, as a researcher and an agent of change, I examine the CBC policy implementation in Kenya. I do this from the lens of the complexities that

have led to its failure in other African countries (Jansen, 1998; Rutayuga, 2014), which I will deeply delve into in section 2.3 of the literature review. Orafi & Borg (2009) suggest continuous examination of the implementation process through engagement with stakeholders like teachers for the monitoring of the implementation process. Such engagements provide evidence to close gaps in the policy process. My role as a researcher is to evaluate the CBC's implementation by unpacking the strengths and gaps in the support structures through teachers' perspectives. This will provide valuable insights to different CBC policy actors like the Ministry of Education, the Kenya Institute of Curriculum Development (KICD), the Teachers Service Commission (TSC), trade unions, school leaders and parents, to help keep track of the implementation process. These insights, at an early stage of the CBC's implementation, are important in directing the future of the policy. They will also help in averting threats that crippled the implementation of the CBC in other African countries.

1.4 Dissertation outline

The structure of the dissertation is as follows. The second chapter reviews critically relevant literature related to the competency-based education model and looks at CBC implementation in Africa, through a case study of South Africa and Tanzania. Chapter three covers the methodological approach in the study by looking at the research aim and the research question, research design, population and sampling, research instruments, data analysis procedures, ethical considerations, limitations of the study and the researcher's positionality and reflexivity. Chapter four draws from the study's findings to answer the research question. Chapter five provides a summary of the study's results, limitations of the study and future implications in policy and research.

CHAPTER TWO: LITERATURE REVIEW

The implementation of the Competency-Based Curriculum (CBC) is a relatively new area of study in Kenya. A review of the scant literature on the same, in addition to the literature on the CBC's implementation in other African countries is pertinent in helping frame this study's research question. In this chapter, I explore the literature on the origin and conceptualisation of the competency-based education, the internal and external pressures that led to the introduction of the CBC policy in Kenya and a comparative case study of the experiences of other African countries in implementing the CBC.

2.1 Competency-based education

The competency-based education model began as a movement in the 1960s and the 1970s in the United States of America (Hodge & Harris, 2012). It gained global prominence as an education model particularly in the Organisation for Economic Co-operation and Development (OECD) countries like Finland, Korea, Canada, New Zealand, Australia and Singapore. These countries now boast of running a robust CBC policy over decades, evidenced by the high performance of learners in international assessments like Programme for International Student Assessment (PISA) (OECD, 2011). The success of the CBC model in the OECD's education systems has greatly influenced several African countries move to adopt the CBC policy (Ruth & Ramadas, 2019), for example, South Africa—which was the first country in Africa to adopt the CBC policy framework in the late 1990s—and most recently Kenya, in 2019.

The competency-based education model, unlike the traditional approach which is input driven, is a learning model that is appreciative of individual learner outcomes, emphasising on them in relation to the learner's needs (Bowden & Masters, 1993). The traditional model focuses on the 'what' in learning which encompasses the knowledge accumulated (Serdenciuc, 2013). Conversely, the competency-based model stresses on the learning outcomes, that is, the acquisition of competencies which is denoted by the application of knowledge and skills (Sistermans, 2020).

Due to the reflective nature of the competency-based model, particularly in ascertaining whether competencies have been acquired (Hill & Houghton, 2001), measurement is a key practice which is conducted through formative and summative assessments (Mulder, 2012). Unlike the traditional approach which leans towards assessments to evaluate mastery of knowledge, competency-based model assessment is aimed at providing individualised feedback to learners in order to improve the acquisition of competencies (McEvoy et al., 2005). Nevertheless, critics question the logic of how the competences are arrived at in the competency-based model. Ashworth & Saxton (1990) argues that the process by which the competencies are attained is disregarded. While different competencies require different mental processes, the competency-based approach is vague on specific mental processes involved in attaining specific competencies. This makes it difficult for teachers to choose appropriate teaching methods to build each competency (Nzima (2016).

The competency-based model is emphatic on skills-based pedagogy, which is experiential and project based, allowing learners to learn by doing (Hill & Houghton, 2001). This is a shift from the traditional model instructional methods which are input driven. In the traditional model, teachers monopolise learning by being the centre of the curriculum, without recognising learners innate abilities (Mulder, 2012). This is because the model follows a knowledge-based pedagogy that positions the teacher as a custodian of knowledge (Hill & Houghton, 2001). Conversely, the competency-based pedagogy embodies learner centred classroom practices. They include "modelling", which involves learning through imitation and identification, "coaching", which involves guiding learners through tasks and providing feedback regarding the processes to perform a task and "scaffolding and fading," which involves the teacher transferring the responsibility to perform tasks to the learners (Janssen, 2009, p. 27). Nevertheless, the practicalities of the learner centredness approach of the competency-based approach has been highly criticised. Critics argue the that applicability of a learner centred approach depends on the nature of the subject, as different subjects require different approaches (Nzima, 2016). Indeed, this is a compelling argument, because for example, in sciences a learner centred approach is easily applicable through practical experiments and less appliable in several humanities subjects. The learner centred approach has also been criticised for being time consuming, limiting the amount of teaching that a teacher can conduct and the amount of work that they can cover (Nzima, 2016).

Unlike the traditional model whereby knowledge is not directly related to the relevant practical settings, the competency-based model is emphatic on bridging the gap between competences and their practical settings (Janssen, 2009). This is through offering an integrated approach to knowledge and skills, that is, "acquisition" and "participation" (Sfard, 1998, p. 6). Acquisition, which is a more cognitive learning model, involves passing on to learners knowledge from the outside world while participation involves inculcating in learners knowledge and skills that enable them to participate in their communities (Seezink & Poell, 2010). This is particularly geared towards meeting the industry's needs. However, critics like Bates (1995) posit that we need to be cautious of the participatory lens attached to the competency-based approach, specifically the positive impact of the approach to the industry. He postulates that further empirical evidence is needed to substantiate the claims on the relevance of the competency-based approach "training inputs" to the industry's performance (1995, p. 54).

2.2 Curriculum policy reform in Kenya

In unpacking the implementation of the CBC in Kenya, it is pertinent to position the policy within the historical, economic and political context, establishing the relationship between the policy reform and the dominant pressures that shape state policy development. Nevertheless, scholarly work in the recent years fails to recognise, and is detached from these variables, yet they explain the similarities and differences in education policy across states (Bell & Stevenson, 2006). This background provides a framework to answer the following question: What internal and external pressures led to the shift towards the CBC policy in Kenya?

2.2.1 Historical shift

A historical lens reveals the Kenyan government efforts to erase the Eurocentric and colonial legacies entrenched in Kenya's education system. This is one of the underlying motivations that inspired system-wide reform through the introduction of the CBC policy. In 1984, the Kenyan government introduced the 8-4-4 education system, whose aim was to subvert the prevailing Eurocentrism in the previous 7-4-2-3 curriculum that was claimed to preserve elitist colonial structures in the country (Wellings, 1980). Nevertheless, since the inception of the 8-4-4 curriculum, it was criticised for further sustaining the colonial legacy. Critics argue that the 8-4-4 curriculum suffered from "colonial hangovers" by leaning towards teacher centred pedagogies prevalent during the colonial era, evidenced through the asymmetrical power relations between the

dominant teacher (colonizer) and the disempowered learner (African) (Murungi et al., 2019, p. 305).

Moreover, the 8-4-4 curriculum was described as foreign and alienating to the majority of the learners and teachers in the Kenya (Nyaga, 2017). For instance, the history curriculum was criticised for propagating Eurocentric views of history and ignoring the African cultural histories (Nasibi, 2015). Writing against Eurocentrism, Mazama (2001, pp. 387, 388) argues that by grounding ourselves on Eurocentric approaches, "we do not exist on our own terms but on borrowed, European ones. We are dislocated and having lost sight of ourselves . . ."

It is against the backdrop of the above-mentioned sentiments against Eurocentric and colonial ideals embedded in the 8-4-4 curriculum that debates on Afrocentricity dominated discourses on curriculum policy reforms in Kenya over decades (Bunyi, 2005; Koech, 1999; Wa Mberia, 2016). Demands on decoloniality in curriculum policy led to the inception of the CBC in 2019, a curriculum that is emphatic on the representation of the Kenyan identity in its content. For instance, the new learning areas emphasise on the revitalisation of indigenous languages in the curriculum (Mandillah, 2019). They also emphasise on the embedment of African philosophies like *ubuntu,* through the community service learning programmes aimed at enhancing learners' sense of responsibility towards the community (KICD, n.d.).

2.2.2 Labour market needs

Kenya's CBC policy is a by-product of the country's ambition to steer up economic development. Economic competitiveness is a strong structural force that drives education policy (Bell & Stevenson, 2006). Kenya's Vision 2030, which is a development plan, recognises education as a pillar towards maintaining a competitive economic edge (Amukowa, 2013). Nevertheless, the high unemployment rates (40%) in Kenya (Statistica, 2017), sparked off concerns on the inefficiency of the 8-4-4 curriculum in aiding the attainment of Kenya's Vision 2030. The high unemployment rates are associated with the mismatch between education and the labour market (Masika & Thinguri, 2017). Consequently, a popular debate in the public domain was that the curriculum was flawed, which would stifle the realisation of Kenya's Vision 2030 (Fomiškina et al., 2021). This is because, rather than following skills acquisition approach to teaching, pedagogy leaned towards exams thus was oriented to recitation and memorisation (Akala, 2021). Moreover, the 8-4-4 curriculum was regarded as rigid and with "limited opportunities to align basic education with

children's career interests, aptitudes, and abilities" (Kabita & Ji, 2017, p. 6). In addition, the curriculum was considered content-heavy for the learners and less practical in its content (Milligan, 2017; Unger, 1993), thus leading to inadequately skilled workforce to gear up the country's development (Sirera, 2014). Hence, the 8-4-4 curriculum faced much backlash with scholars like Amutabi (2003, p. 136) holding that it was the most "mindless" curriculum reform in Kenya since independence which resulted to "great devastation" in the system, such that its damage to the country would be endured years after it has been replaced.

The above-discussed concerns on the inadequacy of the 8-4-4 curriculum to help drive the country's economic growth incited debates that pushing for the restructuring the curriculum. The debates were centred around the introduction of a more robust curriculum to close the gap between schooling and the world of work, for the realisation of Kenya's Vision 2030 (Munyasia & Olel, 2020). These concerns led to the introduction of the CBC. The CBC embodies a more practical and relevant content focusing on the 21st Century skills for the labour market (Ruth & Ramadas, 2019). For instance, it emphasises on the integration of Information Communication and Technology (ICT) in classrooms (Akala, 2021). This is driven by the technological revolution in Kenya evidenced by the mobile technology penetration and the dreams of the silicon savanna through the development of Kenya's technology city, Konza. These changes have influenced the perception of the education system as incongruent with the future technophilic vision for Kenya. To build a workforce to service the vision, new demands have been placed on pedagogical practices, specifically grounding them on the learning process rather than performance. This is to ensure that learners master the relevant skills. For instance, the new CBC policy is emphatic on "assessment for, and as learning" rather than "assessment of learning" (Inyega et al., 2021, p. 16).

2.2.3 Politics of policy uniformity

Global pressures play a key role in influencing education policy, leading to heterogeneities or uniformities of education policies across states (Bell & Stevenson, 2006). Supranational organisations in particular are key players in shaping state education policy (Vega, 2013). A key influence of the CBC policy in Kenya is the East African Community (EAC) efforts to harmonise the curriculum among partner states, in order to strengthen political ties.

The practices of policy harmonisation and regional convergence began after World War 2 (Woldegiyorgis, 2018), due to scepticism in the new political landscape on the legitimacy of

nationally drawn and administered policy (Cini, 2013). Up until 1977 when the political ties broke between the EAC member states, composed of Kenya, Uganda and Tanzania at the time, member states had a harmonised education policy. Teacher training, school curriculum and assessment was coordinated by regional bodies like the East African National Council of Examinations and the Inter University Council for East Africa (Ssentamu, 2014). With the disbandment of the regional cooperation, each country took charge of its education policy. Nevertheless, the EAC was revived in July 2000 following extensive negotiations and the ratification of the treaty of establishment by the three member states. The community's main objective was to maintain a "political federation" among East African countries, an aim institutionalised through the EAC treaty (East African Community, 2002, p. n.p.). This placed demands for members states to pass on some degree of sovereignty to the EAC (Oppong, 2006), to enable the community develop policies that would help maintain cooperation between member states (Aloo, 2017). The CBC policy is one of the reforms that evidences the community's political influence in East Africa.

In the year 2014, EAC member states, Burundi, Kenya, Rwanda, Tanzania and Uganda reached a consensus to harmonise the curriculum. EAC's policy on this agreement stipulated that member states would adopt an "increasingly networked and interrelated group of curriculum and examination systems, linked in such a way that these systems possess overlapping, interconnected, incomparable logics that are capable of influencing each other across the partner states" (East African Community, 2011, p. n.p.). Member states proposed the CBC as the main curriculum among EAC countries. The East African Community (2014, p. 17) policy document for the harmonisation of the curriculum notes:

> The curriculum framework of the EAC shall mainly be competence-based since competencies provide an effective platform for experiential learning and achievement of the 21st Century skills such as critical thinking, innovativeness and problem solving, among others. This provides a sound basis for socioeconomic development as well as shaping the child into a productive citizen.

The harmonization of the curriculum among EAC member states through the adoption of the CBC was aimed at fostering cooperation between partner countries (Kabita & Ji, 2017). This was by reviving deeper relations among member states than its predecessor before the collapse in 1977 (Masinde & Omolo, 2017). Curriculum harmonisation through the CBC was thus aimed at promoting exchanges across partner states by steering teachers' and students' mobility, as well as the movement of relevant skilled labour for the East African market (Mohamed et al., 2016).

2.3 Comparative cases of the CBC experience in African countries

Over decades there have been notable curriculum shifts towards the CBC policy by several African countries like Burundi, Cameroon, Gabon, Kenya, Mali, Rwanda, Senegal, South Africa and Tanzania. However, the implementation of the curriculum in several African countries has not been successful (Nsengimana et al., 2020). Considering that the CBC policy is a relatively new reform in Kenya, a review of the literature on the policy's implementation in other African countries provides a basis for understanding and avoiding the pitfalls that other African countries fell into, in implementing the policy. Hence, this section will answer the question: Why has the implementation of the CBC policy in several African countries been an unsuccessful undertaking? To answer this question, I will look at a case study of two African countries, South Africa and Tanzania. These cases are not necessarily a replica of the Kenyan situation. I pick them as case studies because they were among the first African countries to shift the entire education system towards the competency-based model, hence have much experience compared to other African countries in running the curriculum. The literature will be presented and analysed within Jie (2016) framework of education policy analysis which proposes the following areas of focus in analysing policy implementation, (a) actors (b) content, (c) context and (d) process. I adopt this framework because it enables me to systematically and comprehensively map out different influences within an implementation system that shape policy outcome. Thus, I look at four key variables in the implementation of the CBC in South Africa and Tanzania: actors, content, context and process.

2.3.1 Actors

The pressure exerted by different interest groups on policy process shapes the delivery of the policy, which partially influences policy implementation outcome (Viennet & Pont, 2017). This section seeks to answer two questions, (a) Who were the key stakeholders in South Africa's and Tanzania's education that could have contributed to the failure of the implementation of the CBC? and (b) In what ways did the actors impede the implementation of the CBC in South Africa and Tanzania?

The realisation of curriculum policy reforms heavily relies on the policy actors (Alsubaie, 2016). Nevertheless, literature on the CBC's implementation in South Africa indicates that teachers were the key implementors, jeopardised the implementation of the CBC due to their non-compliance with the reforms. A study in 13 schools in Western Cape province involving 34

participants shows that teachers resisted the CBC's reforms because they felt alienated from the policy process (De Waal, 2004). This was due to their non-involvement in curriculum planning (Williamson, 2000). A study of 38 participants in 7 schools in Eastern Cape province further shows that teachers were dissatisfied about the CBC's implementation process, which they perceived that it disempowered them and challenged their identity as teachers (Stofile, 2008). Thus, the CBC's implementation felt like pure instrumentalism, reducing teachers' enthusiasm towards the new curriculum (van Niekerk & Killen, 2000). Indeed, a study conducted by Moonsamy (2011) in a school in KwaZulu-Natal province shows that teachers were not ready to implement the curriculum as they felt de-motivated and frustrated due to the prescriptive nature of the policy process and the inadequacy of the support that was availed to them.

For the case of Tanzania, literature suggests that the state was the primary actor that impeded successful implementation of the CBC policy. The supremacy of the state to drive education policy reforms is undisputable (Kingdon et al., 2014). Nevertheless, inadequate political will by the Tanzanian government to support the CBC's implementation hindered the policy process (Rutayuga, 2014). While the CBC's implementation necessitated significant financial commitment, the Tanzanian government did not prioritise this during budgetary allocations. Hence, the ministry of education was grossly underfunded, thus paralysing its activities (Woods, 2007). While low level inputs to support a curriculum impedes its delivery in the classrooms (Telli, 2013), Tanzania's government low financial investment in the CBC policy had a disastrous sequel on teaching and learning. A study by Makunja (2016) in 6 schools in Morogoro involving 114 participants shows that schools received inadequate teaching and learning materials aligned with the CBC. Consequently, teachers often used the previous curriculum textbooks for instructional purposes.

2.3.2 Content

In considerations of content, a key area of focus is the framing of the policy (Jie, 2016). The articulation of a policy makes a difference in the way the implementers understand the policy. This then shapes how different agents respond to the policy (Ericson & Kessler, 2016). Referring to Jie (2016) framework on teaching and learning policy content at classroom level, this section seeks to answer one key question, (a) Was the CBC's content in South Africa and Tanzania explicit enough for adequate comprehension by implementation agents to allow seamless implementation?

Literature the CBC's implementation in South Africa shows that the policy was not straightforwardly articulated, hence it was not comprehensible to many teachers. It is argued that many teachers grappled with the language of the curriculum (Mason, 1999), with Jansen (1998, p. 323) further positing that it was "too complex and inaccessible for most teachers to give these policies meaning through their classroom practices." Studies show that school management members like principals also had limited understanding of the curriculum, hence teachers did not rely on them on matters regarding the CBC (Mandukwini, 2016). Nevertheless, there were minimal efforts to initiate teacher professional development programs to enhance their understanding of the new curriculum (Potenza & Ball, 1994). A study by Joseph (2002) in 51 schools in Gauteng province indicates that most teachers did not receive training on the CBC. Another study in 3 schools in Eastern Cape province shows that where training was provided, it was of poor quality hence relied on peer curriculum support (Mandukwini, 2016), a practice that helps teachers create collaborative learning communities to exchange knowledge and develop each other capacities (Leithwood & Steinbach, 2003; Stoll et al., 2012).

For the Tanzanian case, literature on the implementation of the CBC indicates that teachers, teacher trainers and headteachers did not have a concrete grip on the policy content due to its complexity. A study conducted by Makunja (2016) involving 114 participants in 6 schools in Morogoro shows that due to teachers limited understanding of the CBC's pedagogical knowledge, the continued to utilise traditional pedagogical methods in classrooms. Another study by Komba & Mwandaji (2015) of 136 teachers across 13 schools in Mbeya region that assessed teacher quality—through examining their knowledge on the CBC, assessment and pedagogical practices—shows that teachers had limited understanding of the curriculum. The study shows that teaching documents like lesson plans were also not aligned to the CBC standards. Studies further show that the new curriculum content also presented challenges to teacher trainers due to inadequate subject, pedagogy and assessment training (Rutayuga, 2014). As well, headteachers had limited understanding of the curriculum (Komba & Shukia, n.d.). Despite the complexity of the new curriculum, most educators were not provided with adequate in-service training to facilitate their understanding of the new curriculum (Mosha, 2012; Nyoni, 2018), to enable them develop adequate competencies aligned with CBC policy practices (Kanyonga et al., 2019).

2.3.3 Context

Context refers to the nuanced structural and systemic factors that influence education policy (Jie, 2016). Concerning the context of policy implementation, deLeon & deLeon (2002) maintain that there is no template for policy implementation due to heterogeneity across systems. This is due to the distinct social, political and economic underpinnings across education systems. To emphasise the influence of context, Christie (1997, p. 55) contends that education reforms cannot be "straightforwardly read off from international debates or the experiences of another country." It is then inadequate to interrogate curriculum reforms without examining how these contexts come into play during curriculum implementation. Thus, this section answers two questions, (a) What are the contextual factors that hindered the implementation of the CBC in South Africa and Tanzania and (b) In what ways did the contextual factors impede the CBC's implementation in South Africa and Tanzania?

To begin with, this section examines the political landscape in the implementation of the CBC in South Africa and its influence on the failure of successful implementation. The interaction of education systems with the political contexts they operate in influences curriculum reforms (Wales et al., 2016). It is widely argued that education in South Africa is highly politicised (Kota et al., 2018; Teleki, 1994; Tomlin, 2016). While it is a prerequisite for aligning different parts of the system during policy implementation, mainly by tackling political complexities that hamper curriculum reform (Shrestha et al., 2019), uncontrolled political complexities surrounding education obstructed successful implementation of South Africa's CBC. A key political issue was the misalignment between South Africa's trade union interests and the country's education need.

Traditionally, trade unions have been at the forefront of education reforms (Chambers-Ju, 2017; Han, 2019). Similarly, South African teachers' trade unions, particularly the South African Democratic Teachers' Union (SADTU), was at the forefront of the CBC's implementation (Molapo & Pillay, 2018). However, the politicisation of the CBC reform by SADTU leaders restrained an effective curriculum reform. Rather than representing SADTU as an autonomous agency, leaders of SADTU, which was the most prominent teachers' trade union in South Africa, were involved in the national politics shaping the union to a political movement (Mouton et al., 2013).

A pertinent question on the involvement of SADTU leaders in national politics is, whose interests did they seek to protect? Is it the citizens' educational needs or the political class interests? SADTU leaders were deplored for prioritising maintenance of their political influence by crippling the CBC process. Union leaders obstructed noble CBC reforms due to the fear that the union would be side-lined and silenced, which would politically disempower it (Logue & Glaser, 2018). For instance, SADTU was disinclined to the government's performance evaluation proposition (Glaser, 2016, p. 41). Notably, Jansen (2004) observes that SADTU rejected the inspectorate system in schools, which was a provision to help hold teachers and school heads accountable. His further observation is that SADTU ran a defiance campaign that encouraged expulsion of school inspectors from schools and non-cooperation of school heads. Moreover, SADTU obstructed the decentralisation of the education system which was aimed at ensuring adequate distribution of human and physical resources to poor schools to facilitate the curriculum's implementation in classrooms (Logue & Glaser, 2018). Thus, teachers in poor schools which were mainly rural, township (Mandukwini, 2016) and black schools were highly disadvantaged (Phelokazi, 2013). These schools faced issues of poor infrastructure, overcrowding in classrooms and inflexible teaching schedules due to understaffing (Mandukwini, 2016; Naong, 2008). The poor conditions affected teachers' efficacy in curriculum planning, implementation and increased their work-related stress (Phelokazi, 2013).

For the Tanzanian case, literature suggests that the country's low economic landscape posed as a limitation to its capability to facilitate a robust curriculum reform. Given that competency-based approaches in education are costly over traditional techniques (Rwezaura, 2016), other low-income countries like Rwanda also struggle with running the CBC (Ndihokubwayo & Habiyaremye, 2018). Also, Burundi's CBC was immensely funded by foreign donors like World Bank (World Bank, 2018). As such, whether the CBC policy was an ambitious education reform that was not feasible due to the country's low economic conditions becomes a pertinent question to look at in a low-income country like Tanzania.

Literature on the CBC's implementation in Tanzania indicates that the policy was costly for the country (Rutayuga, 2014; Tambwe, 2017). Thus, Tanzania received donor funding from international organisations like the Swedish International Development Cooperation Agency and the African Development Bank to support the development of the curriculum, curriculum support materials and teacher training programs (African Development Bank, 2014). Nevertheless, donor

funding did not fill the financial gap experienced in the implementation process. Considering that the Ministry of Education could not afford to deploy adequate teachers to meet the needs of the entire education system, there was wide-spread understaffing leading to heavy teacher workloads and large class sizes (Kafyulilo et al., 2013). School infrastructure and teaching and learning materials like textbooks were inadequate and of poor quality (Kafyulilo et al., 2013; Mosha, 2012; Muneja, 2015), limiting teachers' pedagogical practices (McKenney, 2019; Valverde et al., 2002; Vinnervik, 2020).

2.3.4 Process

Process refers to the procedure of policy reform. Many curriculum policy changes do not achieve the intended outcomes due to flawed implementation process (Jie, 2016). This section seeks to answer two main questions, (a) What approaches were adopted in the implementation of the CBC in South Africa and Tanzania and (b) How did the implementation process obstruct the delivery of the CBC policy in South Africa and Tanzania?

A key observation in the implementation of the CBC in South Africa is that its policy process was a top-down approach. In a top-down approach, policy decisions are centrally made then passed down to other agents for implementation (Cerna, 2013). Often, the role of local agents and actors who operationalize policy is disregarded. The CBC policy process in South Africa was characterised by passivity of different stakeholders (Schmidt, 2017). Due to minimal consultations with various agents on issues pertaining the CBC (Kallaway et al., 1997), there was little sense of ownership of the curriculum. For instance, a study conducted in 8 schools in South Africa shows that parents were ignorant of the curriculum and did not support teachers in the implementation (Singh et al., 2004). Consequently, there were minimal parent-teacher engagements hindering what Feiler et al. (2008, p. 15) refers to as "home school knowledge exchange." Moreover, non-involvement of parents was hindered by the fact that many of them did not understand the reforms to give meaningful input in teaching and learning (Singh et al., 2004). Black teachers also raised concerns that due to the imbalances in stakeholder engagements the resulting curriculum was socially exclusive, sustaining the apartheid legacy that disadvantaged certain groups (Soudien & Baxen, 1997). Indeed, a study of 185 participants from 17 schools in Free State shows that parents from economically disadvantaged black townships could not afford to provide materials to support the CBC's implementation in schools (Motseke, 2005). Following these contestations regarding

the curriculum processes, the government initiated a curriculum review committee to investigate the implementation crisis that was being witnessed. The committee reported that the implementation strategy was flawed and sought an inclusive implementation process across different levels of the system (Chisholm et al., 2000), taking into account coordination and engagement within the macro and institutional levels (Cross et al., 2002).

Similarly, Tanzania adopted a top-down bureaucratic approach in implementing the CBC (Hipolite, 2019), which hindered the coordination of the implementation process across levels. A study by Rutayuga (2014) involving 16 education stakeholders shows that the lack of stakeholder engagement in Tanzania's CBC provided a space for weak accountability relationships and mismatches at different levels of the education system. These findings are further supported by a study involving 334 participants from 4 regions in Tanzania which shows a discrepancy between the CBC policy and stakeholder's practices for example, teacher training institutes, school leaders, quality assurers and teachers (Komba & Shukia, n.d.).

Moreover, the hierarchical implementation process in Tanzania disfranchised stakeholders of their rights to contribute to the discourses on the new curriculum prompting feelings of dissatisfaction. Policy implementors felt that there was some level of control in the implementation process and expressed discontent on the curriculum. For instance, a study by Kopweh (2014) involving 107 participants from 4 districts in Tanzania shows that school leaders were dissatisfied because they felt that the curriculum was imposed on them by the government without prior consultations. Control of school leaders by the government trickled down the line to lower implementation levels. A study by Muneja (2015) conducted in 2 schools in Arusha shows that teachers felt that schools leaders imposed their authority on them by merely passing down instructions. This led to feelings of subordination in teachers. The study further shows that the passivity of teachers due to monocratic school leadership was detrimental to their motivation and eventually their commitment to curriculum delivery. School leaders managed teachers rather than providing transformational and instructional leadership to them (Kopweh, 2014). As instructional leaders, school heads are expected to give pedagogical support to teachers and transformational leadership required them to motivating teachers in curriculum implementation (Day & Simmons, 2013).

2.4 Summary of the literature review

The first section of the literature review outlined the facets of the competency-based approach to education, pointing out how it's content, pedagogy and assessment differs from the traditional education model. In the second section, I contextualised the competency-based approach to the Kenyan education experience. I unpacked Kenya's shift towards the competency-based approach from the historical, economic and political lens, highlighting the requirements that these influences place on education content, pedagogy and assessment. These two sections help us to understand the new demands that the new CBC policy in Kenya has placed on teachers to align their education practices with this policy.

With new demands on teachers to align their practices with the CBC policy, an important area of interest is on the support they are receiving to enable them to fulfil these demands. In the third section I looked at the implementation of the CBC in South Africa and Tanzania through Jie (2016) framework. The review showed that a key factor that hindered the CBC's implementation in these countries was inadequate support towards the policy. This key insight informs the framing of my research question, which I highlight in the next chapter looking at the methodology of the study. Key implementation support issues that emanated from the literature review include inadequate teacher training, staffing, teaching and learning materials, infrastructure and support from different stakeholders. These issues inform the designing of the study's questionnaire and interview guides, presented in the appendix 6 and 7 respectively.

CHAPTER THREE: METHODOLOGY

This chapter firstly provides an overview of the research aim and the research question. Secondly, it outlines the research design and the methods adopted in the study. Thirdly, it describes the population and sampling procedure and outlines research instruments, data analysis, ethical consideration and the limitations of the study. Finally, it looks at the researcher's positionality and reflexivity.

3.1 Research aim and research question

The study's overarching aim was to examine the Kenyan experience on the new Competency-Based Curriculum (CBC) policy, particularly looking at teachers views on the implementation of the policy. The study was framed by one central question:

1) Do teachers feel that the support they receive in implementing the Competency-Based Curriculum (CBC) policy in Kenya is sufficient to help them with its implementation in the classrooms?

3.2 Mixed methods research design

The study adopted a mixed methods research design by utilizing both qualitative and quantitative methods (Wisdom & Creswell, 2013). It followed a convergent mixed methods design whereby quantitative and qualitative data was collected simultaneously, analysed independently, and then the results were merged (Creswell & Plano, 2011). Quantitative methods in the study included a closed-ended questionnaire and a written test while qualitative methods included open-ended interviews. Magrath, Aslam and Johnson (2019) are emphatic on the power of a mixed method inquiry in helping the researcher to obtain robust findings. Thus, the reasoning behind the adoption of a mixed methods design was to achieve holism through complementarity and triangulation (Creswell & Plano, 2011; Schoonenboom & Johnson, 2017). Moreover, the methodological pluralism in mixed methods design helped in offsetting methods' weaknesses, thus improving the validity and reliability of the study (Plano & Ivankova, 2016). I will elucidate on the abovementioned justifications later in this section.

Epistemologically, quantitative data is associated with an objectivist conception while qualitative data is linked with a subjectivist conceptualisation of inquiry (Antwi & Hamza, 2015).

This study distanced itself from the philosophical dual dichotomy of objectivity and subjectivity and their associated paradigms, that is, post positivist and constructivist paradigms. The study embraced the philosophical pluralism that is embedded in the mixed methods design, recognising that there are multiple realties and gaining a full picture requires integrating different methods depending on the nature of the subject of inquiry. Thus, the study's research question was paramount in influencing the methods utilised. A key consideration was the appropriateness of the design in addressing the research question, thus aligning the study to the pragmatic paradigm (Biesta, 2010; Creswell & Plano, 2011; Tashakkori & Teddlie, 2008).

The use of qualitative and quantitative methods led to an effective dialogic inquiry on the research question, leading to a holistic understanding of the subject of study. Due to the complexity of phenomena, it is inadequate to employ research methods within a single methodological approach in an attempt to understand and answer questions about the subject (Magrath et al., 2019). For a deeper and richer understanding of the support system availed to teachers in implementing the CBC in Kenya, I chose to draw to multiple and distinctive quantitative and qualitative methods, which served the purpose of complementing each other. For instance, findings from the qualitative open-ended interviews helped to explain and elaborate the findings generated from the quantitative closed-ended questionnaire. The written test also contributed to a holistic understanding of the subject of study through triangulation. They sought to establish convergence in the data obtained from the different methods to help draw complete inferences on the subject.

While each method has its strengths and weakness, the strength of one method can offset the weakness of the other method, thus improving the validity and reliability of the study. Alluding to this, Burke & Larry (2012) draw from a metaphor of fishing nets. They posit that a mixed methods study "is like putting together several flawed fishing nets—each of which has a hole, a torn part, or a weak point—to construct a new, stronger net that works well despite the problem with each net" (2012, p. 196). While the quantitative written test and closed-ended questionnaire could not provide in-depth data, this was offset by qualitative open-ended interviews. At the same time, the quantitative closed-ended questionnaire and the written test helped to establish the relative frequency of data, which could not be obtained from the qualitative open-ended interviews. Thus, by combining these different methods through the aid of the mixed methods design, I was able to draw on their abovementioned strengths to obtain more reliable and valid results on the study's subject.

3.3 Population and sampling

The study's research question looked at teachers' views in Kenya on the adequacy of the support they received in implementing the CBC in classrooms. Consequently, the participants that were recruited for the study were teachers. Initially, I contacted 14 teachers, each from a different school, inviting them to take part in the study but only 10 of them agreed to participate. Hence, the study's interviews were conducted with the 10 teachers. The written test was also administered to the 10 teachers who took part in the interviews. Of all the teachers that were interviewed and partook the written test, 2 of them taught in grade one, 3 in grade two, 2 in grade three and 3 in grade four. Through the help of the 10 participants and school heads, the survey was also distributed to other teachers in different schools in Kenya, hence obtaining 53 responses. Other demographic data about the participants was not collected due to ethical issues which will be discussed in subsection 3.6.2.

3.3.1 Purposive sampling

Purposive sampling technique was employed to recruit this study's participants (Suri, 2011). On the value of purposive sampling strategy, Patton (2002, p. 230) propounds:

> The logic and power of purposeful sampling lie in selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry, thus the term purposeful sampling. Studying information-rich cases yields insights and in-depth understanding rather than empirical generalizations.

This study's purpose was to understand teachers' views on the CBC's implementation in Kenya, particularly the support system availed to them. Hence, selecting teachers that were involved in the policy's implementation was a requisite to provide information-rich cases. Thus, to recruit relevant participants for the study, I devised an inclusion criterion. The inclusion criteria was critical in enhancing the external and internal validity of a study because it helped in ruling in only participants that could help adequately respond to the research question (Salkind, 2010). The eligibility criteria of the study's participants was narrowed down to the following:

1. Teachers Service Commission registered primary school teachers.
2. Teachers involved in teaching any CBC class, that is, grade one to grade four.

3.3.2 Snowballing sampling

I used my professional contacts and referral chains to recruit this study's participants, a sampling criteria known as snowballing (Barglowski, 2018). Nevertheless, researchers ought to be cautious of how they implement snowballing sampling as lack of control on scrutiny of the eligibility of the participants is detrimental to the rigour of research (Dusek et al., 2015). This was a key consideration in the utilisation of snowballing technique to recruit participants in the study. Thus, I applied the inclusion criteria mentioned in subsection 3.3.1 in recruiting participants to yield information-rich cases.

3.4 Research instruments

3.4.1 Open-ended interviews

For collection of qualitative data, this study adopted open-ended interviews. The initial interviewing plan was that the interviews would be in person. However, due to the prevailing COVID-19 pandemic, I conducted 10 WhatsApp voice interviews. WhatsApp interviews exist within the broader qualitative internet-mediated research, which embodies all the research powered by the internet (Hewson et al., 2003). It is widely argued that internet-mediated research generates rich information, just like traditional offline research (Bowker & Tuffin, 2004; Hewson, 2014; Kenny, 2005). Moreover, internet-mediated research has proven to be valuable in accessing participants in hard to reach areas (Sturges & Hanrahan, 2004). In this study, it was particularly valuable in reaching out to participants in remote areas. Also, participants' physical distancing from the researcher and the school context gave them greater sense of control than in in-person setting, where they may be disinclined to engage candidly (Hine, 2004). The utilisation of WhatsApp was because it was the most accessible technology for the study's participants.

Open-ended interviews do not have an interview structure with any pre-determined questions (Zhang & Wildemuth, 2009). I relied on the study's participants to shape the conversation. Participants' freedom does not only have the "ability to challenge the preconceptions that the researcher may bring to the interaction, but also enable interviewees to answer questions within their own frame of reference" (May, 2011, p. 136). The researcher's non-imposition to the participants helped in maintaining the validity and reliability of the study's research findings (Salazar, 1990). This is because the interviewees retained the autonomy to steer up the direction of the interviews in ways that resonated with their views and not the researcher's (Fox, 2009). The

interviewees freedom also helped to achieve depth in the study through contextualised findings obtained without the researcher's "priori categorization" (Punch, 1998, p. 178). To enable this, the interview schedule only outlined the broad support areas to be covered in the interviews, as presented in appendix 7, were tied to the research question and were informed by the literature review. They include curriculum support, assessment support, practicalities of the CBC support, in-school support and external support.

After the interviews, I conducted "member checking" or "participant validation" to further improve the validity of the study (Birt et al., 2016, p. 1802). Member checks is "the process of testing hypotheses, data, preliminary categories, and interpretations with the members of the stake holding groups from whom the original constructions were collected" (Guba & Lincoln, 1989, pp. 238, 239). I returned the transcribed interviews to the participants to check the correctness, ensuring that the transcriptions represented participants' meanings.

3.4.2 Questionnaire

A closed-ended questionnaire was administered online to 53 teachers to gather quantitative data. The questionnaire provided respondents with choices of responses to pick from, predetermined by the researcher. The questionnaire, as presented in appendix 6, consisted of 29 items under five key areas tied to the research question and informed by the literature review. These areas included: curriculum support, assessment support, practicalities of the CBC support, in-school support and external support.

The closed-ended questionnaire was aimed at measuring the intensity of teachers' perceptions on various aspects of the support availed to them in implementing the CBC. Measuring intensity in research enhances understanding of the broader climate of opinion from the participants on the subject matter (Converse & Presser, 1986). While the study aimed at capturing the frequency of different intensity levels of teachers' perceptions, the closed-ended questionnaire aided this due to its standardized data collection, that enabled comparability of data (Burke & Larry, 2012; Friborg & Rosenvinge, 2013). The generalisability and statistical power of the study was also enhanced by administrating the questionnaire to a wider population (Polit & Beck, 2010), improving the breadth of the study.

The study adopted a four-option response format Likert scale to mark intensity indicators on teachers' perceptions (Floyd, 1995). The rationale of using a Likert Scale was because the

statistical data generated through a Likert scale could be integrated, compared, contrasted or combined with data collected through other methods. Therefore, it was vital to conduct a Likert scale questionnaire jointly with other data collection methods to have a complete picture of the subject of study (Nemoto & Beglar, 2014). Thus, quantitative data from the Likert scale questionnaire was simultaneously analysed with the qualitative data from interviews. Section one and two of the Likert Scale questionnaire, as presented in appendix 6, was also analysed concurrently with the written test which is presented in appendix 5.

The Likert scale was symmetrical, allowing the participants to choose their responses in a balanced way, within the extremes. There were two negative ratings and two positive ratings – Strongly Disagree (SD), Disagree (D), Agree (A) and Strongly Agree (SA) (see appendix 6). This symmetrical scale helped to yield more validity than an asymmetric scale because it was not biased towards the negative or positive end of the scale (Pornel & Saldaña, 2013). In considerations of the reliability of the four-option response format Likert scale utilized in the study, the rationale to use four points was drawn from a study by Borgers, Hox and Sikkel (2004) which shows that a four-option response option is ideal as the more the responses in the scale, the more it loses its stability.

There was no neutral mid-point in the Likert scale. In Likert scale questionnaires, there are concerns that participants often assign other meanings to the neutral midpoint, other than it's intended neutral interpretation (Chyung et al., 2017). A study by Kulas and Stachowski (2009) shows that a neutral midpoint can be a "dumping ground" for participants who are uncertain about their response, or if the questionnaire items are socially unappealing. Hence, this leads to different meanings assigned to the neutral midpoint. These considerations informed my decision of omitting the neutral mid-point in the scale.

3.4.3 Written test

Due to time constraints for data collection and physical distancing from study sites caused by the COVID-19 pandemic, I administered a 15-question written test to a small sample size of 10 teachers who were interviewed to assess their content, pedagogical and assessment knowledge (see appendix 5). The written test items were extracted from World Bank's Service Delivery Indicators (SDI) tests which have been used in several African countries, including Kenya (Filmer, 2016; Gayle & Obert, 2013; Wane & Martin, 2016). The test, was administered as a triangulation

protocol of section 1 (a), (b) and (c) of the questionnaire, which looked at in-service training on content and pedagogy, and section 2 (a), (b), (e), (f) and (g) which focused on in-service training on assessment (see appendix 6). Triangulation of the questionnaire's quantitative data was intended to enhance the validity of the study's findings (Mathison, 1988; Moran-Ellis et al., 2006). The teachers' test was aimed at establishing if there was a convergence (or not) between teachers' perceptions on the in-service training on content, pedagogical and assessment areas and their actual knowledge on these areas (Tonkin-Crine et al., 2015).

Considerations of the adequacy of time to perform the test was integral in its administration. The test was administered to different teachers at different times, depending on the teachers' schedules. Participants were required to submit their responses within four hours after administration. Much time limit set aside for the completion of the test was not for administrative conveniences but for the validity of the test. Considering that different participants have different paces, the researcher risks collecting data that is not an accurate reflection of the participants' mastery of content, if they administer a test under tight time limits (Gernsbacher et al., 2020). A study by Kendall (1964) shows that increasing short time-limit to a certain point in a test increases the validity of scores across different samples. Thus, these reasonings informed my decision to give the participants more time to perform the test.

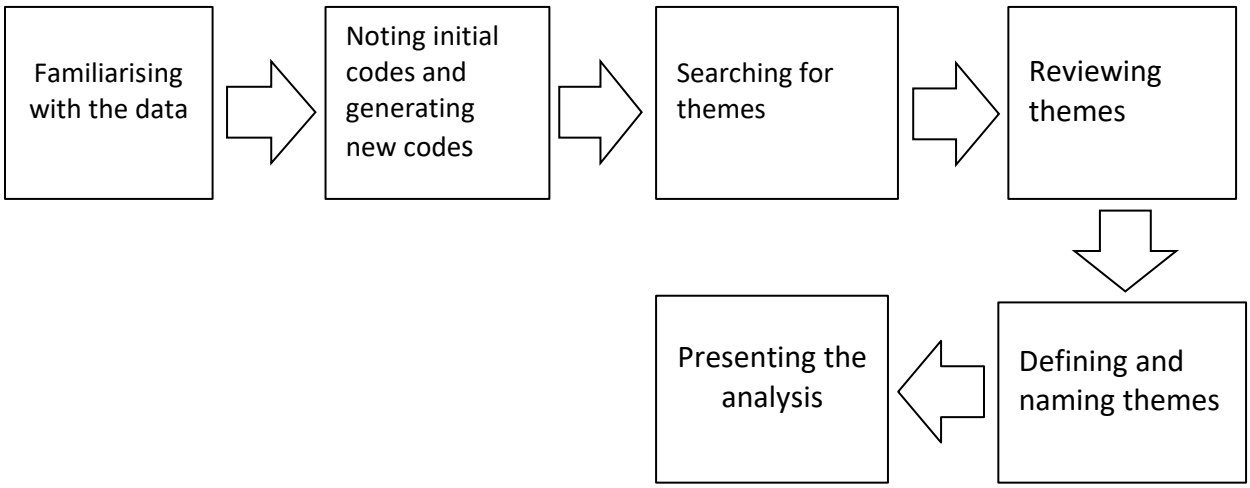
3.5 Data analysis

For the quantitative data collected through the questionnaire and the written test, descriptive data analysis approach was utilised (Nassaji, 2015). Questionnaire responses were analysed in percentages in order to acquire the overall ratings of various support structures availed to teachers. Similarly, teachers' scores in the written test were analysed in percentages to determine the general content, pedagogical and assessment knowledge levels of the participants.

A thematic analysis, which is the process of "identifying, analysis and reporting patterns (themes) within data" was followed in the analysis of qualitative data (Braun & Clarke, 2006, p. 79). I followed inductive and deductive coding process. Through the process of deductive coding, I developed general codes from the literature review which guided the development of the questionnaire and the interviews (Fereday & Muir-Cochrane, 2006). These codes also served as a guide in the coding process. For the inductive coding, I was open to other codes that emerged from the data and added them (Chandra & Shang, 2019).

Nowell et al. (2017) propose six steps in thematic analysis, which I followed in the analysis of qualitative data in the study. The first step involved familiarising myself with the data. For deductive coding, I familiarised myself with the existing theory while for inductive coding, I re-read the interview transcripts. In this step, I sought to make meaning of the theory and the data obtained. In the second step, I noted the initial codes developed through deductive process. I also generated new codes from the data collected by finding interesting features in the data. The third step involved searching for themes in the data. These themes were inductively and deductively generated from the codes. In the fourth step, I reviewed all the themes that were generated to ascertain that they were aligned with meanings of the data. Furthermore, the validity of themes is based on whether they represent the meanings of the data (Braun & Clarke, 2006). The fifth step involved defining and naming themes to ensure that they were comprehensive and made sense to the reader. Finally, the sixth step involved putting the analysis into writing by selecting short and extensive quotes from the respondents to support the themes. It also involved comparing and contrasting the analysis with the existing literature. Figure 1 below shows the analysis process:

Figure 1: Thematic analysis process



3.6. Ethical considerations

Before data collection, I applied for and received ethics clearance from Oxford's Central Research Ethics Committee (CUREC). CUREC approval is presented in appendix 1. The British Educational Research Association ethical guidelines for educational research were adhered to in the design of the study. During the study, ethical guidelines of voluntary informed consent, anonymity, confidentiality and ethics of incentivising were followed.

3.6.1 Voluntary informed consent

Voluntary informed consent, which is one of the principles of research ethics that "protects the rights of self-determination and places some of the responsibility on the participant should anything go wrong in the study," was adhered to in this study (Cohen et al., 2017, p. 122). Key ethical guidelines in the process of obtaining a valid consent was to ensure that it was fully informed (Biros, 2018). The participants also had the liberty to opt out of the study at any time (Wiles et al., 2007). For the interviews, the process of obtaining informed consent began by providing participants with information regarding the study via email, as shown in appendix 3. Once they went through this information, I provided them with an opportunity to ask any questions regarding the study before eventually asking them to choose freely to participate in the study or not. Considering that interviews were conducted remotely, informed consent to take part in the study was obtained orally and recorded during the interview. I also completed the record of consent form, which is presented in appendix 4.

Nevertheless, Halai (2006) warns that informed consent is not an ethical measure that is obtained once in the study. She further argues that the researcher should continuously engage with the process of reaffirmation of informed consent throughout the study. Hence, I obtained informed consent at the start of the interview and asked the participants to review their informed consent at the end of the interview. Considering that the participants who were interviewed were the same respondents that took the written test, informed consent to partake the test was obtained during the interview.

For the questionnaire, the first page contained information about the study, eligibility criteria to complete the survey and consent information as shown in appendix 6. After participants read the first page and were comfortable to fill in the survey, they were prompted to proceed to the survey. Proceeding to the questionnaire questions was an indication of informed consent.

Participants however retained the freedom to opt out of the online questionnaire at any stage of the questionnaire. If the participant opted out of online questionnaire, their responses were not recorded.

3.6.2 Anonymity

Victimisation of teachers by school leaders is deeply embedded in Kenyan schools (Mobegi et al., 2010). With the main participants of this study being teachers, anonymity, a key ethical practice in research that protects participants from harm and ensuring their privacy, was applied to protect teachers in-case they expressed negative sentiments about their schools' leadership (Cohen et al., 2017). At the start of the interviews, I explained to the participants that their participation in the study would be anonymised. Considering that school leaders were key professional contacts that assisted in recruitment of the participants, any information that could lead to the identification of teachers, for example the schools they were affiliated with, and their names, was anonymized. Personal information that could reveal the identity of the participants was not obtained during data collection stage.

3.6.3 Confidentiality

Confidentiality, an ethical practice in research that requires the researcher to ensure that participants' data or responses are protected from a third party was adhered to in the study (Johnson & Christensen, 2019). Firstly, I ensured that this was achieved by storing all data in password-protected files. Secondly, all the data was encrypted before being uploaded to a password protected online storage. All interviews that were conducted through WhatsApp calls were protected through an end-to-end encryption.

3.6.4 Ethics of incentivising

Considering that participants of the study received financial incentives, a key consideration that guided the incentivisation process was the ethical appropriateness of the incentives. A key factor put under scrutiny was whether the incentives was coercive, diminishing the autonomy of participants to make decisions on whether to take part in the study or not (McNeill, 1997). This is mainly common in research that involves participants from low-economic backgrounds. In regards to this, there was no financial "dependency relationship" between the researcher and the participants in the study (Grant & Sugarman, 2004, p. 717). Instead, incentivising participants in

the study was built on the rationale of facilitating the research process in order to obtain strong research outcomes in the absence of harm to the participants (Zutlevics, 2016). Participants of the study were encouraged to take part through giving them financial incentives to cover the cost of data bundles they used during WhatsApp interviews and in filling the online questionnaire.

3.7 Limitations of the study

The choice of the research instruments, particularly internet-mediated interviews, was a key limitation in the study. A major strength of internet-mediated research in this study was that it increased the validity of the study by minimizing the researcher's bias. This is because the researcher operates remotely, thus, making it easier for the participants to express themselves freely (Padayachee, 2016). Nevertheless, the physical absence of the researcher was also a downside to the research because of its potential to pose challenges for the researcher's entry to the participants (Hesse-Biber & Griffin, 2013). While the initial plan of the study was to conduct face-to-face interviews, this was not possible due to the travel restrictions imposed to contain the COVID-19 pandemic. Hence, all the interviews were carried on online, through WhatsApp calls. This made it challenging to establish a strong rapport, online, with the participants. Nevertheless, I utilised personal disclosure to build rapport before the interviews (Hewson et al., 2016). I shared my personal biography and photograph with the participants prior to interviewing them. To further cement the personal relationship with the participants, I initiated every interview by sharing my personal details and giving the participants an opportunity to ask questions.

Moreover, the small sample sizes that were adopted in the interviews posed as a limitation of the study, particularly on the generalisability. Small samples sizes support an in-depth study, analysis and increased comprehension of a particular context (Etz & Arroyo, 2015). However, generalisability to the wider population is problematic in small sample sizes (Tipton et al., 2017). Cognisant of the strength of generalisability of research findings, I administered the questionnaire to a wider sample size, 53 respondents, for more generalisable results on the subpopulation.

3.8 Researcher's positionality and reflexivity

It is uncommon for educational researchers to be value-free (Greenbank, 2003) due to their values and beliefs that shape their research. Macbeth (2001) urges researchers to reflect and engage with self-reflexive scrutiny to acknowledge how their positioning of self, identity and place influence their research. I was aware of, and considered what Holmes (2020, p. 5) refers to as an "emic" position to pinpoint the influence of my insider stand to the study, due to my previous experiences as a teacher. Positively, it helped me to negotiate my access to the participants of the study, teachers, helping me to easily building trust and rapport (Dwyer & Buckle, 2009). This allowed me to elicit honest and rich responses from the participants. Further, I contemplated on my prior knowledge which is built on my rich teaching experiences in helping me during the designing of the study, analysis and interpretation of the obtained information (Fleming, 2018).

Nevertheless, I was conscious of the negative influence that my insider position had on the study. Firstly, as an insider, participants may fail to deeply articulate information that seems obvious to the insider. However, I employed probes to elicit more information from the participants based on their responses to stimulate the discussion (Sanchez, 2014). Secondly, I was mindful of the influence of my insider position on my neutrality in the study. As an insider, I stood the risk of imposing my biases in the study due to my familiarity with the field. Researchers who are insiders face the risk of holding their stance based on their experiences, thus may be unable to challenge their disciplinary viewpoints (Hesse-Biber & Leavy, 2010). However, to minimize the risk of imposing my perspectives, which could have negatively influenced the study's validity and reliability, I used open-ended interviews which encouraged participants to choose how to respond and build up the conversation in ways that were meaningful and relevant to them.

As a single coder of the data collected, I was cognisant of the risk of being biased by seeking to validate some themes over others. I was also aware of the risk of overlooking some themes from the data collected. These personal biases are a liability to reliability and validity of the study as the findings may not be representative of the participants' views (Montanye, 2016). To minimize these biases, participants of the study conducted an independent check of the codes assigned to the data to ascertain that they were a representation of their views.

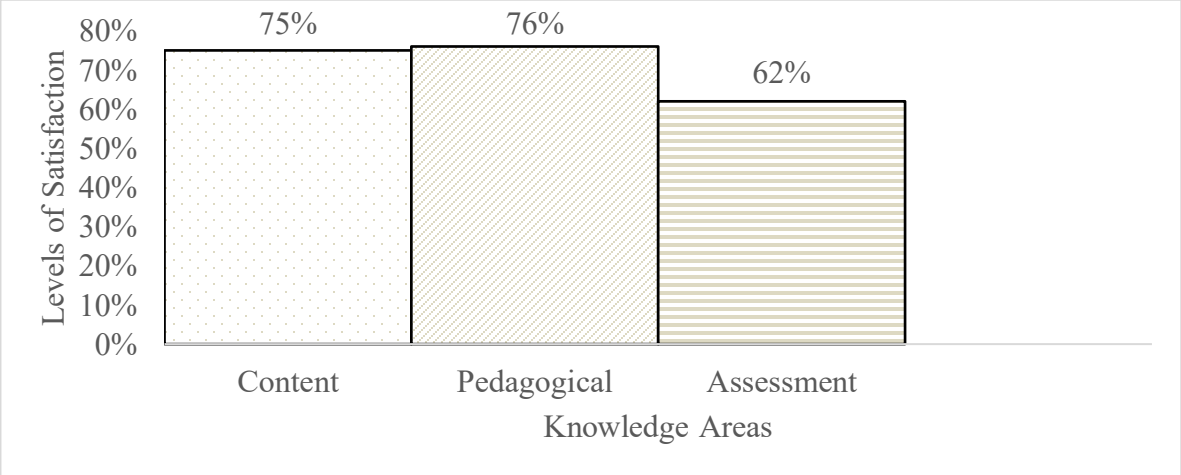
CHAPTER FOUR: FINDINGS AND DISCUSSION

Drawing from the study's findings, this chapter answers the research question, "Do teachers feel that the support they receive in implementing the Competency-Based Curriculum (CBC) policy in Kenya is sufficient to help them with its implementation in the classrooms?" The study's results were obtained from 53 questionnaire responses, 10 interviews and 10 written test results. For the presentation of the study's results, questionnaire, interviews and written test findings are integrated, whereas the analysis places the results in relation to the wider literature. As such, the results of the study and its analysis are presented together.

4.1 Curriculum support: Professional development programs

The relevance and effectiveness of the CBC policy in terms of curriculum support was examined using closed-ended questionnaire, open-ended interviews and written test. Overall, participants stated that they had received adequate in-service training and hence were well versed with the CBC policy. In the survey conducted, 83% of the respondents noted that the in-service training they underwent helped them to handle the new curriculum. Participants were highly satisfied with the training they received on various knowledge areas depicted in figure 2.

Figure 2: Participants' satisfaction of the training on content, pedagogy and assessment by knowledge areas (53 participants)



Similarly, interviewees expressed positive remarks about the benefits of the in-service training on their content knowledge, which positively influenced students' learning outcomes. For instance, one interviewee noted:

> Reflecting on my teaching at the start of the CBC's implementation, there was an improvement in the mastery of subject matter as training progressed. Learners' performance has also improved. Some aspects of the CBC's content are different from the previous curriculum. The training has provided me with knowledge on new areas. (Teacher 3)

The CBC has new competencies that teachers should strive to nurture in learners. On this, one respondent noted that the in-service training exposed her to the core CBC competencies, relevant pedagogical methods to build these competencies, and measurement techniques to evaluate students' progress in attaining these competencies. She observed:

> . . . the curriculum seemed complex. The training was very rigorous and now I understand skills that I should support like communication and critical thinking. I am now well equipped with new teaching approaches and assessment methods for the skills . . . I would not be able to perform these if there was no training . . . (Teacher 9)

Whether the traditional curriculum or the new CBC, studies have found weaknesses in the capacity of teachers to teach the curriculum in Africa (Filmer, 2016; Gayle & Obert, 2013; Wane & Martin, 2016). Although in-service professional development programs are rolled out to equip teachers with knowledge on the curriculum, these do not always prove to be effective as teachers still have limited knowledge on the curriculum (Mandukwini, 2016). The world Bank is carrying out systematic series of studies, Service Delivery Indicators (SDI), introduced in East African countries like Kenya and Uganda to test teachers' professional knowledge. These are aimed at determining teachers' quality and the adequacy of teacher training programs. Guided by these studies, I evaluated 10 participants' content, pedagogical and assessment knowledge using a subtest of the SDI tests. This was to assess whether the in-service training that the participants of the study had received equipped them with the relevant professional skills and capabilities to implement the CBC. The 10 teachers' performance on the test was meant to provide evidence to reaffirm teachers' views on the quality of the training that they underwent.

The findings of the study showed a discrepancy between teachers' views on the trainings and their performance in the test. According to the SDI's scoring criteria, the minimum knowledge score a teacher should attain in the test is 80%. A teacher who scores 80% and above in the test is considered to have mastered the essential teaching competencies (Wane & Martin, 2016). Interestingly, the study revealed that, while the participants were confident about the quality of the

in-service training, as evidenced by the survey's high ratings and interviews, only 30% of the participants scored the minimum 80% and above knowledge bar.

With 70% of the current study's participants scoring lower than the minimum SDI bar, this suggests that the in-service trainings are non-effective in equipping the teachers with necessary professional skills. However, these findings cannot be generalised due to the limited number of participants who took part in the test. Nevertheless, studies on teacher training in other Sub-Saharan countries also reveal the inadequacy of pre-service and in-service teacher training programs (Kopweh, 2014; Motseke, 2005). Evidence from other SDI testing studies across Sub-Saharan Africa also show that many teachers do not have technical competencies on the curriculum. Scores from Mozambique show that only 0.3% of teachers attained the minimum score bar, while in Nigeria, Tanzania, Togo and Uganda, only 2.4%, 15.6%, 0.9% and 10.1% respectively attained the minimum score bar (Filmer, 2016).

A study by Komba & Mwandaji (2015) on teacher quality pinpoints that the key attributes that we can look at in assessing teachers' competencies is their professional knowledge. Another study by Kanyonga et al. (2019) also shows that there is a correlation between teachers' professional knowledge and their quality of teaching. Based on this evidence, a key concern in the current study is the quality of teaching for the majority of the participants' (70 percent) who scored below the minimum knowledge bar. These results further raise the question around the quality of training they have been exposed to. Nevertheless, a conclusion on the quality of curriculum support availed to teachers through in-service training cannot be drawn from these findings, which as earlier mentioned is due to the limitations of the sample size. The results of the current study however add weight to the results of full SDI studies in Kenya which evidence poor training of teachers marked by their low performance in the SDI tests (Gayle & Obert, 2013).

4.2 Practicalities of the curriculum

Among various factors, the feasibility of curriculum policy change is shaped by inputs to support this. The extent to which a policy is resourced affects how implementors approach and implement it, influencing the realisation of the policy. Subsections 2.3.1 and 2.3.3 of the literature review on South Africa and Tanzania's CBC case study explicitly pinpoints that a key challenge that teachers face in implementing policy is inadequate resource support. This ultimately results in the deceleration of education policy reforms. Thus, I present and examine the findings on the support

availed to Kenyan teachers to help them achieve the CBC's policy objectives. This is particularly in terms of such support's responsiveness to the practicalities of the CBC including material, infrastructural and staffing provision. Data was collected through a closed-ended questionnaire and open-ended interviews.

4.2.1 Material and infrastructural support

Material support refers to instructional resources, while infrastructural support refers to physical school structures. These are at the core of curriculum delivery. Participants in this study observed that they were well equipped with instructional materials, which consist of textbooks in most learning areas. However, concerns were raised that the quality of the textbooks was substandard. In addition, the participants felt that the infrastructure, for example electricity sockets and laboratories, were inadequate to support good quality teaching and learning.

4.2.1.1 Instructional materials

A significant proportion of the teachers were satisfied about the number of textbooks that were availed to support teaching and learning. In the survey responses, 59% of the participants indicated that they had adequate textbooks to support teaching and learning activities. In the interviews, one participant noted:

> . . . In English every learner has books, and none of them share . . . Learners are not over reliant on my notes. (Teacher 7)

However, there was scarcity of textbooks in certain learning areas, specifically the new areas introduced in the CBC policy like home science and art and craft. While the CBC advocates for a shift from teacher-centred to learner-centred pedagogical approach, the lack of adequate textbooks in some learning areas affected the implementation of the learner-centred pedagogy. One participant stated:

> We have textbooks in other subjects but in new areas like home science, and art and craft, textbooks are not available. I use curriculum designs or revision materials to get a gist of the content. Learners should do the work as I facilitate but instead, I do most of the work for them because they do not have access to the relevant textbooks. (Teacher 9)

Moreover, participants were concerned about the poor quality of some of the textbooks availed to them by the government. Consequently, schools opted to source for better quality textbooks themselves to supplement the ones provided by the state. One participant remarked:

> . . . The government grants tenders to cheap publishers. They consider the costs but not the book content. Cheap is expensive because learning aims in the CBC are missed. We have the books, but they have shallow content . . . errors . . . [and] mixed up content. The school has to buy better books or ask parents to purchase the books . . . (Teacher 2)

This study's findings support the view that both the quality and quantity of textbooks matter in teachers' practices as these can be a negative or positive proxy to curriculum delivery (Mosha, 2012). Furthermore, this study reveals that the availability of textbooks affects teachers' pedagogical choices on whether to make learning teacher-centred or learner-centred when implementing the CBC policy. This supports the findings by Mosha (2012) showing that the number of textbooks availed to learners is one of the driving factors influencing teachers' practices. Moreover, teachers' concerns about the contribution of poor quality textbooks in hindering the realisation of the CBC's objectives reinforces the argument by Valverde et al. (2002, p. 9) that textbooks are "mediators" between policy intention and policy implementation. This argument justifies schools' actions to purchase more quality textbooks and seek parents' support for this in facilitating curriculum delivery.

4.2.1.2 Infrastructure

61% of the survey respondents stated that the school infrastructure was inadequate to support them in implementing the CBC. While a common practice in the CBC policy is the integration of Information Communication and Technology (ICT) in teaching and learning, infrastructural deficiency was particularly evident in this area. This hindered ICT uptake in classrooms. Participants maintained that:

> Some classes do not have sockets. If I want to use a digital device, I have to shift learners to another class with sockets. (Teacher 10)

> The government provided us with laptops but there are no computer laboratories. The laptops are just locked in the cabinet. I rarely use them because classrooms are not suitable for using the laptops. (Teacher 3)

Additionally, adequate infrastructure was not availed to support teaching and learning activities in the new learning areas, particularly home science, art and craft and music. Participants observed that:

> We do not have a home science laboratory. I end up not carrying out activities that require access to the laboratory. (Teacher 8)
>
> For art and craft and music, a school should have a room to carry out practicals and preserve materials and instruments, but we do not have that. We perform activities outdoors. Other times, I ignore tasks. If the weather is not good, we conduct activities in classrooms and take so much time to arrange and rearrange classes. (Teacher 1)

The findings of the study portray a curriculum reform that is not accompanied by infrastructural development to support the new changes. This is consistent with the findings of Mosha (2012) on the implementation of the CBC in Tanzania. A similar study by Vinnervik (2020) also illustrates how poor infrastructural conditions create discrepancies between teachers' classroom practices and curriculum implementation. The current study arrives at the same conclusion based on the said teachers' non-integration of ICT in learning and avoidance of hands-on learning activities in implementing the CBC, suggesting that the availability or unavailability of necessary infrastructure to support teaching and learning activities affect teachers' responsiveness to curriculum reforms.

4.2.2 Staffing

The literature review in section 2.1 highlights new pedagogical principles and techniques that the CBC imposes on educational practices. These methods oblige the implementation system to follow staffing approaches that are aligned to the needs of the new curriculum, to ensure that teachers are not drowned in the reforms. However, this study's participants expressed views that there was minimal staffing support provided to implement the CBC. In the study's survey, 77% of the participants noted that they had an overwhelming workload due to understaffing. Respondents observed that the workload was sometimes unmanageable. One participant remarked that:

> A teacher should have a maximum of approximately 35 lessons per week. However, I usually have between 36 to 42 lessons because there are no adequate teachers in my school. When I have 42 lessons there are collisions in the timetable. I can have English in one grade and Mathematics in the other grade. I can only teach a maximum of 40 lessons. I cannot teach the remaining two lessons because there is a collision. So, I have to decide which class I will attend. If I attend grade four English this week, then next week I attend the other class. (Teacher 2)

Teachers' heavy workload drained their energy levels, which affected their productivity in classrooms. This was detrimental to curriculum delivery as it led to non-coverage of parts of the curriculum. One participant reported:

> I have lessons from morning to evening with no free lesson on my timetable because I teach all subjects in grade three . . . Sometimes I do not feel like teaching due to tiredness . . . I only teach for a few minutes then give learners some work to do as I relax, and I do not cover all required topics . . . (Teacher 1)

Additionally, it was difficult for teachers to maintain a work-life balance because they partook school activities beyond official working hours. Moreover, due to the huge amount of time spent in teaching, teachers did not have adequate time for curriculum planning and preparation. One participant said:

> . . . with few teachers the situation worsens because for the CBC you have to prepare a rubric for every learner in every sub-strand, update it daily, and put it in the portfolio every day . . . I teach until 3:00 pm and after 3:00 pm, I work on portfolios and start to plan for next day classes. This is so much work to do after working hours, so it is common to go to class with no lesson plan or teaching aid because I have much at hand. Also, I have other responsibilities to fulfil not just teaching so at some point I have to go home. (Teacher 10)

The findings further showed that teachers handled large class sizes due to understaffing, making it difficult for them to align their classroom practices with the CBC. While section 2.1 of the literature review highlights that the CBC requires teachers' pedagogical practices to focus on individual learners' needs, in the study's survey, 62% of the respondents stated that the high student-teacher ratios made it difficult for them to abide to this practice. Teachers were particularly not able to nurture capabilities of learners with learning disabilities. In addition, the large class sizes affected teachers' classroom management because they could not engage all learners at the same time. One participant noted:

> . . . Slow learners are disadvantaged because there is no time to check on every learner and help them. It is impossible to go back to what I taught in the previous lesson to see whether all learners have understood because I have to cover other content. I also deliver a lesson and report once I am done. So, I cannot teach the same thing again to assist slow learners . . . It is also tough to manage a massive class because when you spend time on one learner, most of the learners are idle. (Teacher 5)

Further, high student-teacher ratios hindered good quality pedagogical practices. While section 2.1 of the literature review highlights that the CBC is centred on monitoring each learner progress, teachers could not keep track of individual learner's progress in achieving learning objectives. Also, the high student-teacher ratios impeded teachers' ability to give learners individualised feedback. Participants maintained:

> I have 57 learners in my class. One lesson is not enough to focus on individual learners during lessons. I put learners in groups and ask them to perform tasks and assess few learners from the group. This means that I am not able to give each learner individualised feedback . . . If I decide to mark each assignment and provide individualised feedback it means that I spend little time teaching. Instead, I ask learners to exchange books with each other, give them the answers to the tasks and tell them to mark each other's work. (Teacher 4)

> In literacy, learners are expected to read passages and we record the number of words they can read within a particular time. It is difficult to carry out this activity because there are 60 learners in my class. I group learners depending on their capabilities and ask them to read together. Or I ask a few to read and then give all learners in that group the same score because it is not possible to listen to every learner read. (Teacher 8)

The findings of the study show that teachers' capacity to implement the CBC is undermined by the pressure that understaffing places on them. Issues of understaffing have previously been highlighted in the country, with the studies on this pointing out that Kenya's previous 8-4-4 system curriculum was constrained by inadequate staffing levels (Fomiškina et al., 2021). This study's findings suggest that the CBC's implementation will likely incur similar outcomes if a robust workforce is not deployed to offload teachers' heavy workload and large class sizes. The finding on understaffing of the CBC policy mirrors the global challenge of teacher staffing shortages. This is particularly the case in other Sub-Saharan countries, as highlighted in studies by Kafyulilo et al. (2013) and Naong (2008). With this study showing a student-teacher ratio of as high as 60:1, teachers' ability to deliver quality teaching is under threat due to their inability to follow the CBC's pedagogical principles. Furthermore, a study by Muneja (2015) shows that development and adoption of appropriate teaching and learning techniques by teachers is inhibited by the large number of students they are assigned. The current study's results on the effect of teachers' heavy workload on their planning, classroom practices, syllabus coverage and work-life balance supports the findings of a study by Phelokazi (2013) showing that curriculum planning, delivery and teachers' wellbeing is also affected by teachers' workload. Thus, the present study suggests that needs-based staffing processes are essential in ensuring that teachers handle manageable workload.

4.3 In-school support

Other implementation levels beyond the school—like district, county and national level—also set directions for curriculum reforms. However, meaningful curriculum policy change occurs at the school level. Hence, this section looks at teachers' views on the support availed to them at the school level. Data collection was through a closed-ended questionnaire and open-ended interviews.

4.3.1 School leadership

To understand the role of school leaders in supporting teachers to improve their performance in the CBC's implementation, the study assessed both transformational and instructional school leadership as highlighted by Day & Simmons (2013) in subsection 2.3.4 of the literature review.

4.3.1.1 Transformational school leadership

Commenting on the transformative role of school heads, Day & Simmons (2013) posit that school leaders should set directions for policy reform by enhancing teachers' commitment to organisational goals. Teachers' commitment can be enhanced by motivating them to perform their duties. In this study's survey, 65% of the respondents indicated that school leaders did not foster positive and motivating attitudes. Thus, the schools' climate was not conducive for teachers to implement the CBC. Teachers' motivation to deliver the CBC was hindered by school leaders' autocratic practices, which created a culture of fear within schools. Such a toxic school culture deprived teachers' autonomy to govern their practices, further hindering their motivation to deliver the curriculum. One participant noted:

> . . . teachers are very careful about how they relate with the headteacher . . .You have to conform with what he says because he might ruin your reputation with the employer by filing a bad report for you. You might lose your job or not be promoted. Even when you are not comfortable with how he wants you to run things, you cannot complain. It is demotivating because I feel that I do not have the necessary level of control over my work. (Teacher 1)

The effect of the deeply entrenched fear, as the findings of the study revealed, further bred a culture of silence among the teachers. Due to fear of victimisation by school leaders, the teachers chose to mute their voices on matters relating to teaching and learning. One participant stated:

> If you air concerns about what is not going on well in school, she says that you are inciting other teachers . . . so we rarely talk about issues that we face in class. We talk in the staffroom with other teachers, but we have to be careful because some teachers may report to the headteacher. Last term she alleged that I was inciting teachers to boycott her leadership and she summoned me to her office to quarrel me. (Teacher 5)

As the findings revealed, lack of verbal praise, and constant criticism of teachers' work by school heads, made them feel that their work in curriculum delivery was undervalued. Thus, teachers experienced feelings of professional stress and job dissatisfaction, dwindling their commitment to teaching. One participant affirmed:

> I feel like the CBC has been imposed on me because he expects that I teach but does not recognise my efforts. In staff meetings, he is keen on pointing out teachers' mistakes. The CBC

> is not easy to implement. I need to feel appreciated for my efforts . . . I have low morale every day I wake up to go to school. (Teacher 9)

This study's findings highlight the negative impact of the absence of school leaders' transformational responsibility to teachers' professional attitudes and motivation. It supports the theory that lack of transformation leadership by school heads negatively impacts teachers' motivation and their commitment to policy implementation (Muneja, 2015). This suggests that motivation is a key ingredient for enhancing teachers' job performance. The value that teachers in this study attach to non-material motivation is an interesting finding as it contrasts with the theory that material rewards like money and gifts are the main sources of teachers' motivation (Muneja, 2015). While material rewards cannot be eliminated as key motivators that enhance teachers' commitment, non-emphasis on these by teachers in this study suggest that they value non-material motivation—through autonomy, voice and verbal praise—more than material motivation.

4.3.1.2 Instructional school leadership

Regarding school leaders' instructional role, Day & Simmons (2013) hold that school heads should offer support to teachers by facilitating teaching and learning activities. However, this study's findings showed that while most teachers looked up to school leaders for direction on the CBC's implementation, school heads offered minimal pedagogical support. In the survey, 61% of the respondents indicated that they did not receive guidance on matters regarding the CBC from school leaders. Low engagement of school leaders on CBC matters likely stemmed from their limited knowledge on the curriculum, as many did not attend the CBC training programs. One participant reported:

> . . . He does not offer guidance on the CBC because he has limited knowledge of the curriculum. He does not go for training. Teachers are more knowledgeable on the new curriculum and don't rely on him to assist. He ignores training programs although school heads are required to attend. On matters on the CBC he assigns all responsibilities to teachers. (Teacher 7)

To promote teachers' competencies, the ministry of education charges school leaders with the responsibility to supervise classroom instruction and offer constructive feedback to teachers. While teachers found that school leaders' observations and feedback enabled them to reflect on and improve their classroom practices, they raised concerns that school heads barely conducted classroom observations. One participant asserted:

> Our headteacher has not set up any observational schedules to see how we are handling the new curriculum. The ministry directs that headteachers must assess teachers in classrooms through the Teacher Appraisal Performance and Development [TPAD] program. I find that the appraisal program is important because it helps us identify gaps and strengths in my classroom practices based on TPAD feedback. (Teacher 3)

Teacher observations helped school leaders to maintain a connection with the classroom, providing them with first-hand information regarding teachers' working conditions. Participants stated that this information was pertinent because of its potential to act as the basis of enhancing teachers' experiences. However, due to minimal classroom observation routines, school leaders were distanced from classroom realities, hindering their ability to improve adverse conditions that negatively affected teachers' implementation of the CBC. One participant noted:

> . . . Classroom observations are crucial because he [school leader] can identify some of the classroom challenges, so that we do not have to tell him everything. It is not easy for him to understand the challenges we face in the classroom because he does not come to observe us carry out lessons. Otherwise, if he came to the classroom to observe how we conducted teaching, he would see the challenges we face and work on them. (Teacher 9)

This study's results, on the vacuum between teachers' and school heads' curriculum leadership, supports the findings of Kopweh (2014) on the non-provision of instructional leadership from school leaders. Teachers emphasis on school heads' monitoring roles to help operationalise the curriculum and make teaching and learning more effective implies that, even with strong teachers' leadership, school leaders still need to provide curriculum leadership. The absence of instructional leadership from school heads is seemingly sustained by their limited knowledge on the CBC. A study by Komba & Shukia (n.d.) also highlights curriculum knowledge gap among school leaders. As this current study further shows, the aforesaid knowledge gap fuels teachers' non-reliance on school leaders' pedagogical assistance, suggesting that teachers only build confidence in school leader's instructional leadership capacity if the school leader is knowledgeable about the curriculum.

4.3.2 Peer support

This study's respondents expressed positive opinions about supportive school cultures among teachers in the implementation of the CBC. In the survey, 85% of the participants reported that there were robust teachers' professional communities within schools to support each other. Teacher collaboration was particularly a key practice through team planning, team teaching and team assessment. Participants commented:

> There are two streams in grade two and we collaboratively write schemes of work with the other teacher. Sometimes I teach her classes and vice versa (Teacher 5)
>
> . . . in national exams, we help the teacher whose class is being assessed. We did that this year in grade three and grade four national examinations. (Teacher 7)

The respondents stated that they also devised strategies that promoted sharing of good curriculum practices, to improve each other's pedagogical skills. A key practice that facilitates this is peer observations. One participant reported:

> A while back, my learners faced difficulties handling word problem questions. I invited one of the teachers in my school who is good in this area to teach while I observed how she delivered the lesson. Following that, in the next lesson, I asked her to observe me while I taught the same area and gave feedback on how I was doing. This practice helped me improve my delivery skills. (Teacher 4)

Considering that the CBC training was not conducted at the same time for all teachers, many noted that teachers-initiated peer teaching programs within schools helped enhance each other's knowledge on the CBC. This was particularly aimed at supporting teachers who had not been exposed to in-service training. One participant noted:

> After every training, we hold a meeting in my school and teachers who went for training teach other teachers. (Teacher 5)

In addition, technology, particularly social media, emerged as a pertinent tool that teachers use to support each other professionally and personally beyond school environments. It provides teachers with an avenue for sharing teaching and learning materials and to engage in conversations regarding teaching. One participant said:

> . . . We use Whatsapp to build each other . . . We share teaching and learning materials and ask each other questions . . . We have built a greater sense of interactivity beyond the school environment through our Whatsapp group by sharing our daily classroom experiences to motivate and encourage each other. (Teacher 6)

The study reveals that teachers have built strong collaborative communities to help each other develop their capacities to implement the CBC. This is through the development of in-school communities for Kenyan teachers to provide peer support to each other through activities like team teaching, team planning, peer observation, and sharing of resources to improve their practices. This is in congruence with Mandukwini's (2016) study, which concludes that teachers rely on peer support to understand new content. It further aligns with Leithwood & Steinbach (2003) and Stoll et al. (2012)'s assertions that vouch for a collaborative culture among teachers to allow knowledge exchanges.

4.4 External support

Subsection 2.3.4 of the literature review on the CBC's implementation in South Africa and Tanzania explicitly illustrates that successful curriculum reform is a consequence of a multi-levelled stakeholder efforts, within and beyond the school. Thus, this section looks at teachers' views on the support availed to them by different stakeholders like parents, government agencies and teachers' trade unions. Data was collected through a closed-ended questionnaire and open-ended interviews.

4.4.1 Parents

The results of the study showed that participants had varied experiences regarding the amount of parental involvement in the CBC implementation. From the survey, 51% of the respondents stated that parents were not supportive in the CBC activities, while 49% of them noted that they received support from parents.

Participants who observed that parents were supportive related this to the provision of the necessary teaching and learning materials to learners. One participant noted:

> The majority of them provide learners with the materials I ask them to bring from home. (Teacher 10)

Supportive parents also showed interest in learning, evidenced by their regular inspection of learners' work. Such parental engagement boosted teachers' motivation to teach. One participant asserted:

> I invite parents to school to assess learners' rubrics and files, and the majority are very enthusiastic about this activity. They request me to send them pictures of their children's rubrics. This encourages me to perform my duties because I know that parents are supportive of our work and interested in their children's education. (Teacher 10)

Contrastively, teachers who had an experience with non-supportive parents noted that parents were reluctant in assisting learners with their homework. Aiming to improve learners' performance, teachers also organised parent-teacher meetings to seek out ways on how to collaboratively work on this. However, some parents did not attend the meetings. Participants noted:

> . . . parents say that it is not their job to help with schoolwork. They say that I am not doing my work well because I always give learners practical tasks to complete with their parents. (Teacher 8)

> . . . when I call them [parents] in school to discuss learners progress, some do not come. I do this because we want to see how we can help learners do better. Sometimes I have to send learners home if their parents do not come to school (Teacher 5)

A key issue hampering high level input from parents to support the CBC implementation is their limited knowledge and awareness about the curriculum. Participants stated:

> . . . Some are not conversant with the new curriculum . . . A parent came to school to complain that assessment seems shallow. She did not understand that the CBC learners do integrated examinations. (Teacher 5)
>
> Parents are opposed to the new grading criteria because they do not understand the terminologies. The previous curriculum grading involved rankings and percentiles, but this is not the case in the CBC . . . It not easy to mobilise support from parents because they do not know how the new curriculum works. (Teacher 6)

Lack of sensitisation about the CBC is the main factor contributing to parents' limited knowledge about the curriculum. To build their capacity to support the implementation of the CBC, teachers and schools have taken initiatives to educate parents about this new curriculum. However, teachers were concerned that this new responsibility makes their work strenuous. One participant noted:

> The government is not working towards enlightening parents about the CBC. As a teacher I have no option other than taking this as my duty. I cannot juggle teaching and, at the same time, foster parents' involvement. Teaching is already overwhelming. (Teacher 9)

Studies are emphatic about the importance of parental engagement in enriching teaching and learning (Feiler et al., 2008), which also emerges in this study through teachers' emphasis on parental support via the provision of learning materials and helping learners with their homework. Research shows that a key practice in a successful curriculum process is parent-teacher cooperation (Singh et al., 2004). This rationalises the current study's findings on teachers' efforts to engage parents while implementing the CBC. Nevertheless, this study further shows that parent-teacher cooperation is hindered by parents' low knowledge of the curriculum. This supports Motseke (2005)'s apt observation that the development of parental support programs can empower parents to support curriculum implementation. Evidence on the ignorance projected by parents towards the CBC supports Singh et al. (2004)'s findings that parents' ignorance regarding curriculum reforms hinders their participation. However, other nuances like economic background, as Motseke (2005) highlights, do not emerge in this current study as contributing factors that influence parental engagement. The current study's exclusion of demographic data like economic background explains why this variable does not emerge as a controlling factor in parental engagement. Nonetheless, the findings herein suggest that future research should look at parental

engagement across different economic groups, to understand how economic background shapes parental engagement.

4.4.2 Government agencies: Teachers Service Commission (TSC)

TSC's major mandate is to facilitate curriculum implementation by dealing with matters relating to the teaching profession. In this study, 60% of the survey's respondents expressed the view that TSC had not put into place adequate mechanisms to support teachers in the CBC's implementation. While direct communication channels for teachers to air their views and challenges to the necessary authorities have been put in place, the level of receptivity to those concerns was often weak. Two participants remarked:

> There are performance gaps in TPAD where we explain the challenges that we encounter during the CBC's implementation . . . However, they do not address the challenges we raise . . . (Teacher 1)

> . . . there is no follow up on these [concerns] because the issues that I raise still exist. Giving them feedback is a waste of time, and I do it just because it is a mandatory exercise. I hope that they will eventually solve the issues that I am facing, but I don't know how long it will take. (Teacher 2)

Concerns were raised regarding the level of assessment by Quality Assurance and Standards Officers (QASO). This was particularly about the frequency of assessment. In the survey, 63% of the respondents noted that they barely received supervision from QASO officers. Participants reported:

> I have not been assessed for more than a year. The last time assessment officers visited my school was in 2019. I was the only teacher who was assessed. They did not assess the other teachers. (Teacher 7)

> Assessment officers only visit us once a year. (Teacher 10)

Shortages in deployment of QASO officers was a key factor that hindered frequent supervision of teachers in implementation of the CBC. One participant said:

> They rarely visit because there are many schools but few officers. Other programs related to the CBC have to be run too. When they visit, they do not assess all teachers because of the few number of officers. Mainly they sample few classes. They do not have specialists in all learning areas. (Teacher 6)

However, despite the low supervision levels, the teachers interviewed acknowledged the benefits of supervision in helping to improve their performance. QASO officers provided teachers with professional guidance on their classroom practices, which helped to enhance teachers' content and pedagogical practices. Participants observed:

> In the previous term, before going home due to the COVID 19 pandemic, we presented complete lessons to the officers and they suggested ways we could improve this. They assessed our professional documents and gave us constructive feedback. They also presented lessons to us to observe. (Teacher 4)
>
> Most QASO officers have accumulated several years of teaching experience. They thus possess the necessary skills to monitor our implementation of the CBC. They make recommendations on innovations that we can implement, as teachers, which has helped improve my teaching methods. (Teacher 2)

Jie's (2016) framework points out that non-streamlined policy processes lead to poor policy outcomes. The implementation of the CBC policy in Kenya runs the risk of poor realisation of its outcomes as this study's results show that government's mechanisms, specifically TPAD feedback and QASO supervisions, have not been streamlined to help improve teachers' conditions and practices. The implementation gap between reporting of teachers' challenges and TSC's non-responsiveness to these challenges supports findings of Rutayuga (2014) on the existence of multi-levelled implementation gaps, due to lack of coordination among stakeholders. This suggests that there is a need for proper coordination across levels, which participants of the study suggest could be achieved through comprehensive follow up programs in schools to assess teachers' challenges.

On the significance of QASO supervisions, research suggests that they are merely a formality because many of supervision officers are not skilled on conducting instructional supervisions (Gitonga, 2019; Kamindo, 2008). In some cases, external supervisions by quality and standards officers have been met with much backlash (Glaser, 2016; Jansen, 2004). Nevertheless, this study's results contravene these findings. Teachers appreciate QASO supervisions, which equip them with knowledge to improve their pedagogical practices. This finding suggests that the usefulness of teacher supervisions cannot be ruled out, thus proposing that research should be updated to also reflect on the importance of teacher supervisions as a way of supporting teachers in curriculum delivery.

4.4.3 Trade unions: Kenya National Union of Teachers (KNUT)

KNUT's mandate is to protect and enhance teachers' welfare in order to improve their performance in curriculum implementation. From this study's survey, 68% of the respondents noted that trade unions were not supportive in improving teachers' conditions to enhance the CBC's implementation. The trade union's high politicisation and backlash against the new curriculum limited its possibility to offer support to teachers. One participant reported:

> When the implementation of the CBC began, leaders of the trade union's stance was that the curriculum's implementation was unconstitutional and illegal. They were clear that they would not support the implementation of the CBC. They are defiant of curriculum and they have not taken lead to support us in implementing it. (Teacher 2)

While teachers were positive about the CBC, KNUT leaders objected to the curriculum, claiming that they were not consulted during the CBC's roll out process. Thus, trade union leaders made attempts to influence teachers to paralyse the curriculum, rather than supporting them with its implementation. These attempts, interviewees posited, reflected union leaders' political stance as the leaders were affiliated to political parties that were opposed to the curriculum. One participant observed:

> They called for the suspension of the CBC and said they were not involved. Teachers were asked to boycott. There was nothing wrong with the CBC. Clearly their demands were politically motivated. Some union leaders joined political parties. When you look closely at their demands, they were politically motivated because these parties did not support the curriculum. (Teacher 3)

Partiality of the trade union due to its leaders' affiliations with political parties undermined the union's main responsibility to protect and support teachers in the implementation of the CBC. Some of the teachers were disappointed that their working needs were no longer at the forefront of the trade union's work. They expressed that the trade union leaders' actions were geared towards protecting their own interests, once they joined the political class. One participant stated:

> The Kenya National Union of Teachers [KNUT] stopped fighting for teachers when its leaders began to be involved in politics . . . Teachers are no longer guaranteed that they would fight for dignified working conditions for teachers. Even with the many challenges teachers encounter in the new curriculum, the trade union leaders no longer fight for proper teaching conditions for teachers, it is now about them. (Teacher 1)

Moreover, TSC sought to collapse KNUT on the basis of the union's politicisation, which they argued compromised its credibility. This was vilified by the teachers as they stated that TSC's action further impaired the union's little efforts to agitate for better working conditions for teachers. As one participant articulated:

> . . . TSC has weaken the trade union. The union is now less relevant and powerless in pushing for better conditions for teachers. Efforts to collapse the trade union were motivated by the union's actions like calling for unnecessary strikes to prove to the government that they had the power. They wanted to prove themselves politically by paralysing the whole country's learning, instead of negotiating with the government to come up with amicable solutions to improve the teaching profession. For instance, in one year, they called for two strikes and defied court orders that declared the strikes illegal. (Teacher 1)

With the presumed collapse of KNUT, some teachers left the union because they felt that their membership yielded minimal benefits in improving their conditions of service. Union members were cynical of its work towards improving teaching conditions. Moreover, TSC seemingly supported teachers' intentions to leave the union, as teachers were no longer obliged to be members of the union. One participant revealed:

> I am not in any trade union now. Teachers have lost confidence in trade unions because nothing has improved. And TSC began to give benefits to teachers who were not in KNUT and stopped remitting teachers' dues to KNUT. The commission withdrew teachers' obligation to join a trade union and many teachers left KNUT. These actions by the commission have reduced the trade union's power. (Teacher 6)

Literature on teachers trade unionism recognises trade unions positive influence on education through their efforts to enhance teachers' efficacy by fighting for improved teaching conditions (Han, 2019). Contrastively, this study shows that KNUT was fundamentally opposed to, and distanced itself from, the CBC reform. Hence, it did not support teachers in implementing the curriculum. KNUT leaders' political affiliation supports the studies on the global trend in teacher unionism, whereby, unions have shifted from unofficial channels in fighting for teachers' proper working conditions to the "electoral arena, renegotiating their alliances with political parties" (Chambers-Ju, 2017, p. 1). The current study's findings on the negative effects of KNUT leaders' involvement in politics, particularly the issue of the union shrinking on its responsibilities due to the tensions between union leaders' political interests and teachers' needs, is also in congruence with the findings of Logue & Glaser (2018) on the CBC's implementation in South Africa. The study shows that South Africa's CBC was also met with political contestations and obstruction of policy reforms, as trade union leaders sought to maintain their bargaining power instead.

4.5 Variations between schools

4.5.1 Rural schools versus urban schools

Another key finding of this study is that there were disparities on the support availed to teachers depending on the geographical location of their school. The dominant imbalances in geographical support were along the rural-urban dichotomy. Two participants reported:

> Many schools in urban areas have more teaching and learning materials compared to rural schools. I teach in a rural school. I do not have adequate resources to support teaching and learning and no wonder my learners do not perform like the ones in urban schools. (Teacher 6)

> I cannot ask learners to print materials from home because there is no access to electricity or printers in the area. My school is in a very remote area. I go to the nearest urban centre to print materials. We don't have computers in school, not even electricity. (Teacher 9)

The study's results show the spatial inequalities in the support availed to teachers, pinpointing the rural disadvantage in the implementation of the CBC. These results are consistent with the findings of Mandukwini (2016), which highlight the rural-urban gap in the support availed to teachers. The findings of this current study show that such geographical inequality, particularly on provision of teaching and learning materials affects students' outcomes. This suggests that there is a correlation between students' performance and materials available to facilitate their learning.

4.5.2 Public schools versus low fee-paying private schools

This study's interview findings showed that the amount of support availed to teachers was also dependant on whether the school held a public or low fee-paying private school status. Public schools in Kenya are run and financed by the government while low fee-paying private schools are run independently by non-governmental organisations, religious groups and community members and financed by parents. Low fee-paying private schools are mainly in low-income areas that are deprived of government provision. Teachers in low fee-paying private schools were less supported in comparison to those in public schools. Two participants revealed:

> The headteacher has to pay for their teachers to go for training because the government only supports public schools. My school is a low fee-paying school . . . We are not financially stable, and it took more time for all of us to be trained. (Teacher 5)

> . . . I photocopied the curriculum design . . . Public schools were given curriculum designs by the government, but for us, we do not receive any from them . . . We cannot push ourselves to compete with them [public schools] because they are well resourced . . . (Teacher 8)

The low fee-paying private schools' disadvantage in the implementation of the CBC implies that these schools have low capacity in the delivery of the curriculum, compared to public schools. The economic crisis facing low fee-paying private schools hinder their ability to acquire adequate materials and to facilitate teachers' training. In the competition between public and low fee-paying private schools education, teachers pinpoint that the lack of adequate material in low fee-paying private schools places them at a disadvantage. Telli (2013) also highlights the negative impact of low resource input to teaching and learning. This suggests that the provision of same level of input to low fee-paying private schools, like public schools, would set them up for high-quality standards which are at par, or above public schools in the implementation of the CBC.

CHAPTER FIVE: CONCLUSION AND FUTURE IMPLICATIONS

In this chapter, I conclude the study by providing a summary of the research findings. I then discuss the limitations of the study, policy implications and finally look at the research implications.

5.1 Summary of the findings

This study explored teachers' views on the support they receive in the implementation of the Competency-Based Curriculum (CBC) policy in Kenya. Teachers expressed confidence in the CBC's in-service training, and felt that it enhanced their content, pedagogical and assessment knowledge. However, when a subtest of the Service Delivery Indicators (SDI) test was administered to test these knowledge areas, majority of participant teachers' performance was below the SDI's score bar. Due to the limited number of teachers who took the test, the results cannot be generalised to make a conclusion about the quality of training that teachers have undergone. However, they show that there is a mismatch between teachers' positive views on the in-service training and what their test results say about the training they have received. This implies that further research and scrutiny of teachers' training programs in a larger sample size is needed to examine its efficacy in enhancing teacher's knowledge on the CBC.

Overall, teachers observed that there was adequate provision of instructional materials like textbooks to support teaching and learning in most learning areas. However, they expressed their dissatisfaction on the adequacy of textbooks in the new learning areas introduced by the CBC. The inadequacy, they further stated, impeded their ability to exercise quality pedagogy. Moreover, they felt that the textbooks' quality was substandard, hindering the realisation of the curriculum's aims in the classroom.

Teachers were concerned that the implementation of the CBC was not backed with adequate infrastructure to support different teaching and learning activities. They maintained that this led to the misalignment of their practices with the CBC policy. Major infrastructural issues surrounded the integration of Information Communication and Technology in the classrooms and conducting practical activities, for example, in laboratories.

Further, teachers observed that the CBC policy was inadequately staffed, requiring them to handle heavy teaching workloads. Teachers' heavy workload was detrimental to their productivity and ultimately their curriculum coverage. Moreover, many teachers felt that the high student-teacher ratios hindered their ability to focus on individual learners' needs, offer individualised feedback, and monitor learners' progress.

Teachers were concerned that school leaders did not perform their transformative duty of fostering positive attitudes in teachers. They noted that school leaders had built a culture of fear and silence in teachers, denying them autonomy and muting their voices on matters regarding the implementation of the CBC. In addition, some teachers criticized school leaders' instructional leadership which, as they perceived, gave them inadequate guidance on implementing the new CBC policy. They were concerned that school leaders rarely conducted classroom supervisions, hence were not conversant with teachers' classroom realities. Conversely, teachers felt that peer support among teachers was a strong practice through team planning, team teaching, peer teaching and peer observation. They further stated that social media, for instance WhatsApp, was an effective medium that teachers utilised to give each other professional support through sharing teaching and learning materials, and personal support through motivating each other.

There was mixed feedback on parental support. Half of the teachers maintained that parents supported the implementation of the CBC by providing instructional materials to facilitate teaching and learning. Also, parents showed interest in learning outcomes by following up on learner performance, thus boosting teachers' motivation to teach. The other half encountered unsupportive parents who neither helped learners with homework nor attended parent-teacher meetings. Absence of support from some parents was purported to be due to their lack of knowledge about the CBC.

Teachers were concerned about the Kenya National Union of Teachers' (KNUT) capacity to improve their working conditions, for effective curriculum delivery. They perceived that with the politicisation of the CBC by KNUT's leaders, the union's priority shifted from supporting teachers to serving union leaders' political interests. Following the trade union's efforts to sabotage the implementation of the CBC, the Teachers Service Commission stripped KNUT of its power, restraining its influence on education and on improving teachers' conditions. Thus, teachers noted that they had no faith on the trade union's capacity to fight for improved teaching conditions.

Finally, teachers were concerned that the support availed to them was dependant on the type of school. Teachers in rural schools felt that they were disadvantaged over those in urban schools in terms of access of teaching and learning materials, and infrastructure. Similarly, teachers in low fee-paying private schools perceived that they were disadvantaged over their public-school counterparts with regards to accessing training programs and teaching and learning materials.

5.2 Limitations of the study

This study focused on teachers' views on the implementation of the CBC. Getting perspectives from just one group of people, in this case teachers, can be biased. The study would have benefited more by obtaining perspectives from other stakeholders for example, school leaders, students, parents and government agencies, to get a more balanced view. Moreover, the study would have benefitted more from the use of a larger sample size for generalisability.

5.3 Policy implications

There are several key policy implications that data from this study suggests. These are grouped into three categories: 1) material and physical resourcing, 2) quality teaching and 3) stakeholder engagement. These recommendations are not only relevant in the implementation of the CBC but go beyond this in guiding the improvement of Kenya's education system.

With regards to the first policy implication on adequate material and physical resourcing in schools, the data suggests the need for proper material and infrastructural planning to ensure that the resources provided are adequate to support teaching and learning. Moreover, parity in the provision of materials and infrastructure—with regards to rural and urban schools as well as public and low fee-paying private schools—should be a key consideration. This requires policy makers to adopt a needs-based approach, considering the complexities that surround different schools. The provision of resources should be accompanied by stringent quality assurance measures.

On the second policy consideration touching on the improvement of quality of teaching, data suggests that policy makers need to review staffing strategies to deploy adequate QASO officers for regular supervision of teachers. This is essential in giving teachers adequate feedback on how to improve their pedagogical practices. Moreover, for teacher recruitment, a process that balances

teacher-supply and teacher-demand sides is pertinent to offload teachers the heavy workload and large class sizes to ensure quality teaching practices.

Regarding the third policy direction on improvement of stakeholder engagement to create an enabling environment for teachers, data suggests that government's non-responsiveness to the challenges that teachers face defeats the purpose of the existence of communication channels with teachers. Thus, policy makers need to develop comprehensive follow up mechanisms to assess teachers' challenges, followed by action plans to mitigate the challenges in improving teachers' curriculum delivery experiences. To strengthen the involvement of stakeholders like parents, policy makers should initiate and support training programs to equip parents with knowledge about the new curriculum, and create awareness on their role in supporting teaching and learning. Similarly, training programs need to be put into place to help school leaders understand their role as curriculum leaders to bridge the gap between teachers and school heads' leadership.

5.4 Implications for further research

During data analysis, a key theme that emerged through inductive coding process was the differentials in the amount of support availed to teachers in rural versus urban schools and low fee-paying private schools versus public schools. This study's findings showed that teachers in urban and public schools received more support compared to those in rural and low fee-paying private schools. Due to the limited scope of this research, I could not delve deeper into studying these issues. Thus, further research on these variations is needed to deeply understand how the implementation of the CBC is influenced by these variables. Studies in these areas will help unpack the systemic complexities in the implementation of the curriculum. In doing so, it would set the ground for further policy interventions to ensure that the aims of the CBC are realised equally across schools. Moreover, the impact of studies on rural versus urban and public versus low fee-paying schools disparities would go beyond the CBC's implementation to give directions to future interventions to ensure equity in Kenya's education.

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APPENDICES

Appendix 1: Ethics approval

From: Joshua McGrane <joshua.mcgrane@education.ox.ac.uk>
Sent: Monday, March 29, 2021 3:34 PM
To: Brian Micheni <brian.micheni@stx.ox.ac.uk>
Cc: Student CUREC <student.curec@education.ox.ac.uk>; David Johnson <david.johnson@sant.ox.ac.uk>
Subject: Re: CUREC documents

Dear Brian,

Title: "Towards a Competence Based Education: Exploring the Experiences of Kenyan Teachers in the Implementation of the Competence Based Curriculum"

The above application (reference number ED-CIA-21-128) has been considered on behalf of the Departmental Research Ethics Committee (DREC) in accordance with the procedures laid down by the University for ethical approval of all research involving human participants.

I am pleased to inform you that, on the basis of the information provided to DREC, the proposed research has been judged as meeting appropriate ethical standards, and accordingly, approval has been granted.

If your research involves participants whose ability to give free and informed consent is in question (this includes those under 18 and vulnerable adults), then it is advisable to read the following NSPCC professional reporting requirements for cases of suspected abuse
http://www.nspcc.org.uk/Inform/research/questions/reporting_child_abuse_wda74908.html

Should there be any subsequent changes to the project which raise ethical issues not covered in the original application you should submit details to research.office@education.ox.ac.uk for consideration.

N.B. Any data collection involving in-person interactions with participants must have an up-to-date COVID-19 fieldwork risk assessment in place. Please refer to the guidance at https://researchsupport.admin.ox.ac.uk/governance/ethics/coronavirus as the University's position on conducting in-person research may change.

Good luck with your research study.

Yours sincerely,
Joshua McGrane
Member of DREC

Appendix 2: Participant recruitment email

Participant recruitment email

Dear_____,

I have been given your details by_____and am reaching out to you regarding my research study.

I am a Master's student in Education at the University of Oxford in the United Kingdom. I am conducting a research study on the implementation of the Competence Based Curriculum in Kenya as part of my master's degree requirements. My study explores the experiences of teachers in the implementation of the Competence Based Curriculum. In my study, I will be engaging teachers teaching pre-primary one to grade four pupils in any subject. I will administer questionnaires, tests and conduct WhatsApp interviews.

If you would like to participate in the study or have any questions regarding the study, please free to reach out to me via brian.micheni@stx.ox.ac.uk. I am looking forward to hearing from you.

Thank you, and best wishes.

Brian Mugendi Micheni.

Appendix 3: Participant information sheet

PARTICIPANT INFORMATION SHEET

Central University Research Ethics Committee (CUREC) Approval Reference:

1. ***Why is this research being conducted?***

This research explores the experiences of teachers in the implementation of the Competence Based Curriculum in Kenya. The purpose of the study is to examine the in school and beyond school support that teachers receive, in the implementation the curriculum in classrooms. Such an understanding is essential because it provides a background to help improve teachers' practices, thus ensuring effective implementation of the Competence Based Curriculum.

2. ***Why have I been invited to take part?***

You have been invited because you teach learners from pre-primary one to grade four, in any subject offered in the Competence Based Curriculum.

3. ***Do I have to take part?***

No. You can ask questions about the research before deciding whether or not to take part. If you do agree to take part, you may withdraw yourself from the study, without giving a reason, by advising me of this decision. The deadline by which you can withdraw any information you have contributed to the research is 1/7/2021. Any data that will have been collected from you will be destroyed.

4. ***What will happen to me if I take part in the research?***

You will be invited to attend one WhatsApp interview.

Before the interviewing process, I will talk you through the study procedures and give you the chance to ask any questions. If you are still happy to take part, I will ask you to sign a consent form.

If you are happy to take part in the research, you will be interviewed through a WhatsApp call.

The interview/session should take approximately one hour. You can also ask to pause or stop the interview at any time.

You will also be asked to fill an online questionnaire.

You will also complete a test.

There will be no follow up interviews, questionnaires or tests.

With your consent, I would like to audio record you so that I can have an accurate record of your thoughts.

5. ***Are there any potential risks in taking part?***

The following risk is involved in taking part in the study: breach of confidentiality.
To reduce any potential risk, I will anonymise qualitative personal data of all participants in the study. All WhatsApp calls will also have an end-to-end encryption. All the information will be stored in password-protected files in my one drive account.

6. ***Are there any benefits in taking part?***

The benefits of taking part are that sharing your experiences will provide evidence that can be used as the basis to improve classroom experiences of teachers in the implementation of the Competence Based Curriculum, leading to successful curriculum implementation.

7. ***What happens to the data provided?***

The information you provide during the study is the **research data**. Any research data from which you can be identified e.g. name, date of birth, audio recording is known as **personal data**.

Personal / sensitive data will be stored in my university one drive account. All the files will be encrypted and will be password protected. All the research data except consent forms will be destroyed after the submission of my dissertation on 31/08/2021. Consent forms will be destroyed after three years. They will be transferred to my Google Drive account before the closure of my one drive account at the end of my course.

Other research data (including consent forms) will be stored for at least 3 years after publication or public release of the work of the research.

The researcher and supervisor will have access to the research data. Responsible members of the University of Oxford may be given access to data for monitoring and/or audit of the research.

I would like your permission to use direct quotes anonymously in any research outputs.

8. ***Will the research be published?***

The research may be published in academic publications and websites.

The University of Oxford is committed to the dissemination of its research for the benefit of society and the economy and, in support of this commitment, has established an online archive of research materials. This archive includes digital copies of student theses successfully submitted as part of a University of Oxford postgraduate degree programme. Holding the archive online gives easy access for researchers to the full text of freely available theses, thereby increasing the likely impact and use of that research.

The research will be written up as a student's thesis. On successful submission of the thesis, it may be deposited both in print and online in the University archives to facilitate its use in future research. If so, the thesis will be openly accessible.

9. ***Who is funding the research?***

N/A

10. ***Who has reviewed this study?***

This study has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee Reference number: ED-CIA-21-128

11. ***Who do I contact if I have a concern about the study or I wish to complain?***

If you have a concern about any aspect of this study, please contact Brian Mugendi Micheni at brian.micheni@stx.ox.ac.uk or Dr. David Johnson at david.johnson@sant.ox.ac.uk and we will do our best to answer your query. We will acknowledge your concern within 10 working days and give you an indication of how it will be dealt with. If you remain unhappy or wish to make a formal complaint, please contact the Chair of the Research Ethics Committee at the University of Oxford who will seek to resolve the matter as soon as possible:

OR

Education Departmental Research Ethics Committee
Jackie Bridges
Email: student.curec@education.ox.ac.uk
15 Norham Gardens
Oxford
OX2 6PY

12. ***Data Protection***

The University of Oxford is the data controller with respect to your personal data, and as such will determine how your personal data is used in the study.
The University will process your personal data for the purpose of the research outlined above. Research is a task that is performed in the public interest.
Further information about your rights with respect to your personal data is available from http://www.admin.ox.ac.uk/councilsec/compliance/gdpr/individualrights/.

13. ***Further Information and Contact Details***

If you would like to discuss the research with someone beforehand (or if you have questions afterwards), please contact:

Brian Mugendi Micheni
Department of Education
15 Norham Gardens
Oxford
OX2 6PY
01865 274024
brian.micheni@stx.ox.ac.uk

Appendix 4: Oral consent script

Oral consent script

Hello again, my name is Brian Mugendi Micheni. I'm currently a master's student at the University of Oxford in the Department of Education.

- In my study, I want to investigate teachers experiences in the implementation CBC, particularly the support availed to them. I'm interested in experiences of teachers teaching any CBC subjects. If you choose to be a part of this project, here is what will happen:
- I will have a conversation with you, give you a survey and written task where I will ask a range of questions about your experiences in implementing CBC and testing your content, pedagogical and assessment knowledge.
- The data you give will form the basis of my MSc thesis/research publication. On a practical level, only the researcher will have access to your data.
- I will store your data safely and confidentially on password protected one drive account and will keep the research data for three years after publication.
- With your permission, I would like to make an audio recording of our discussion to make sure I'm getting an accurate record of the interview. Instead of recording you, I can take notes in my notebook. Which would you prefer?
- I would also like your permission to keep your contact details so that I can re-contact you to clarify information you gave me in your interview.
- I will directly extract quotes from the interview, but they will be anonymized.
- The following risks are involved in taking part e.g. an interview could be time-consuming and asking specific questions about your school situation. In order to reduce any potential risks, I will anonymize the data.
- You don't have to take part; you can ask me any questions you want before or throughout; you can also withdraw at any stage without giving a reason. You can withdraw your information/ data until 31ST July 2021, before publication).
- The project may/ will be published in a(n) thesis/ dissertation/ academic journal. A copy of my thesis/ dissertation will be deposited both in print and online in the University archives.
- If you have any complaints or concerns, please feel free to contact me. You can reach me at brian.micheni@stx.ox.ac.uk
- This research project has been reviewed and approved by an Oxford University ethics committee. The ethics reference is ED-CIA-21-128. If, after contacting me with any concern, you're still unhappy and wish to make a formal complaint, please contact the ethics committee. Their email address is ethics@socsci.ox.ac.uk or ethics@medsci.ox.ac.uk
- The University of Oxford is responsible overall for ensuring the safe and proper use of any personal information you provide, solely for research purposes. Further information about your rights to information you provide is available from the University's data protection website.
- Do you have any questions?
- Do you give your permission for me to interview you/audio record you?
- Do you give permission for me to re-contact you to clarify information?
- Do you give me permission to quote you directly without identifying you?
- Are you happy to take part?

Ok, thanks, let's start.

Appendix 5: Written Test

The grade 4 syllabus states that learners should be able to write simple letters, use sentence structures correctly including past and present tenses, use a range of vocabulary, and use both withinand between sentence punctuation.

Two pieces of writing from pupils in a primary school are given below. The pupils were asked to write a letter to a friend about their school. Please look at each piece of writing and answer the questions that follow:

Chinyere's Letter:

Dear Ngozi

I hope you are fine and healthy where you are now. I want to tell you about our primary school our school is very clean it has four offices. I want you to know our headteacher the biggest office is for the headteacher Mr. Alaba. He is a very nice man who dresses smartly The second office is for Mrs. Owa. Mrs Owa is the deputy head teacher sometimes she has to run errands for the school when she is requested.

The third office is for the Senior teacher our Senior teacher is Mrs. Abubakar. Mrs. Abubakar is very nice and kind and tells us interesting stories. We enJoy learning in our school, And our school has a secretary She is Mrs Okonkwo. She types letters She also keeps records. I think you will be pleased to know about our school.

Yours faithfuLLy

From your Loving Frend Chinyere

Nkechi's Letter

Dear Bolanle

name is Nkechi I am wirting abaut my school. my school is called Community pramaruy school. my school have many puple. my school have Many teacher bat puple are many them teacher. my school have Eight classes and I am Stamdard frar. My school have flag of nigeria. it have four coloce. my school have Flowers and tree and grass. My school have a gat and fens. my school is very clean. my school have a garden. my school have a vary big fild. my school have so very clean teacher and puple.

good beay my frend see you next time

1. The weakness of Chinyere's letter is mostly
A. Organization
B. Spelling
C. Punctuation
D. Grammar

2. The weakness of Nkechi's letter is mostly
A. Organisation
B. Spelling
C. Punctuation
D. Grammar

3. How would you describe the focus of both letters?
A. They tell a story
B. They make an argument
C. They give a description
D. They give instructions

4. Which of the following statements best describes Chinyere's letter?
A. There are many punctuation errors that prevent us from understanding the letter
B. There are many spelling errors that prevent us from understanding the letter
C. There are many punctuation errors but these do not interfere with our understanding of the letter
D. There are many spelling errors but they do not interfere with our understanding of the letter

5. Which of the following statements best describes Nkechi's letter?
A. There are many punctuation errors that prevent us from understanding the letter
B. There are many spelling errors that prevent us from understanding the letter
C. There are many punctuation errors but these do not interfere with our understanding of the letter
D. There are many spelling errors but they do not interfere with our understanding of the letter

Monitoring progress

1. You have recorded the test scores of your students for one academic year. You want to monitor the progress that they are making. Look at the record below.

TABLE 1: TEST SCORES JSS 2(SCIENCE)

S. First name	S. Last name	Sex	July 2018	December 2018	April 2019
PROVERB	ENDURANCE	G	294	372	287
GIDEON	OHULE	B	95	196	242
SALIHU	IDRIS	B	137	131	170
ZAINAB	MUSA	B	208	59	149
FATIMA	HASSAN	G	63	87	136
MARYAM	UMAR	G	58	80	79
Total class mean			143	154	177

6. Which learner scored the highest consistently across the year?
A. Salihu
B. Gideon
C. Proverb
D. Fatima
E. Maryam
F. Zainab
G. None of the learners

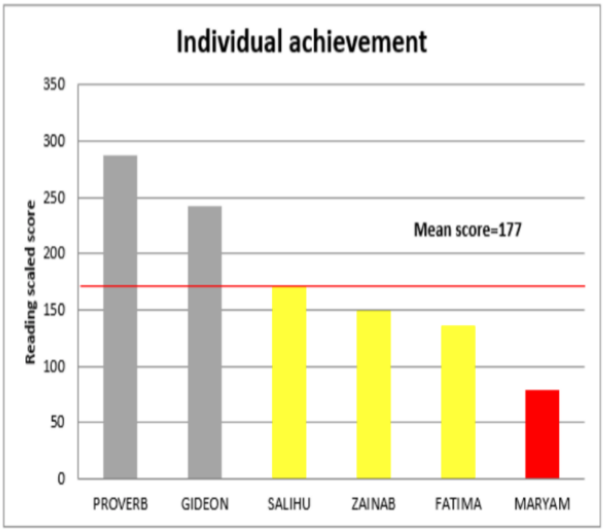
7. Which learner has made the fastest progress across the year?
A. Salihu
B. Gideon
C. Proverb
D. Fatima
E. Maryam
F. Zainab
G. None of the learners

8. For which learner has the progress been stagnate over the year?
A. Salihu
B. Gideon
C. Proverb
D. Fatima
E. Maryam
F. Zainab
G. None of the learners

9. For which learner has progress declined across the year?
A. Salihu
B. Gideon
C. Proverb
D. Fatima
E. Maryam
F. Zainab
G. None of the learners

10. For which learner did scores drop sharply in the second test?
A. Salihu
B. Gideon
C. Proverb
D. Fatima
E. Maryam
F. Zainab
G. None of the learners

Look at the individual achievements of the learners on test 3 in April 2019. To help you plan how to help students best, answer the following questions.



11. Which learner is performing significantly below the class average?
A. Salihu
B. Gideon
C. Proverb
D. Fatima
E. Maryam
F. Zainab
G. None of the learners

12. Which three learners would you group together to provide targeted support?
A. Salihu
B. Gideon
C. Proverb
D. Fatima
E. Maryam
F. Zainab
G. None of the learners

13. Which of the students is at risk of failing?
A. Salihu
B. Gideon
C. Proverb
D. Fatima
E. Maryam
F. Zainab
G. None of the learners

14. Proverb and Gideon are progressing well. What would you do?
A. Let them work independently and support the weaker students
B. Provide them with support and focus on the weaker students
C. Provide the same level of support to all the students

15. From the chart above, what would you say?
A. Girls are better in Science than boys
B. Boys are better in Science than girls
C. It is not possible to say

Appendix 6: Questionnaire





Kenya's Competency Based Curriculum (CBC) - Teacher Survey.

Thank you for taking the time to complete the survey. My name is Brian Micheni and I am conducting a study that explores teacher perspectives in the implementation of the CBC policy in Kenya.The survey is designed to measure the extent to which you feel supported in implementing the CBC. It should take no more than 10 minutes to complete. You are eligible to take part in the survey if:

1) You are a Teachers Service Commission registered primary school teacher and involved in teaching any learning areas in grades implementing the CBC, that is, grade one to grade four.

Note: Starting the survey is an indication that you have given the consent to use this data for the aforementioned research study, and that you are doing it voluntarily. You can opt out of the survey at any point. If you decide to opt out, your responses will not be recorded unless you have submitted them.

Proceed to the next page for questions.

Q1

CURRICULUM SUPPORT

To what degree do you agree with the following statements?

	Strongly Disagree	Disagree	Agree	Strongly Agree
The in-service training you have received on Competence Based Curriculum has been of great value in helping you handle the new curriculum.	○	○	○	○
The in-service training has enhanced your subject content knowledge, for example, teaching of Mathematics, English and Social Studies etc.	○	○	○	○
The in-service training complemented what you know about the pedagogical knowledge to help you implement the curriculum, for example, how to run activities in the classroom etc.	○	○	○	○
You have adequate learning and teaching materials to support the teaching of each session.	○	○	○	○
You have received adequate materials to guide you in implementing the Competence Based Curriculum, for example, syllabus and teacher guide.	○	○	○	○

ASSESSMENT SUPPORT

To what degree do you agree with the following statements?

	Strongly Disagree	Disagree	Agree	Strongly Agree
You have been adequately exposed to the new Competence Based Curriculum assessments methods, for example observations and tests, and have adequate practice to use them.	○	○	○	○
You have adequately been trained on how to use/implement the new Competence Based Curriculum assessments.	○	○	○	○
You have adequate resources to support various assessment strategies in the classroom.	○	○	○	○
You have adequate material to guide you in implementing different assessment methods in classrooms aligned with the Competence Based Curriculum.	○	○	○	○
The training you have received has enhanced your knowledge on how to record learners' information for example, learners' performance in a summative assessment.	○	○	○	○
The training you have received has enhanced your knowledge on how to interpret learners' information, for example, learners' performance.	○	○	○	○
The training you have received has enhanced you knowledge on how to report learners' information, for example, learners' achievements.	○	○	○	○

PRACTICALITIES OF IMPLEMENTATION

To what extent do you agree with these statements?

	Strongly Disagree	Disagree	Agree	Strongly Agree
The class size enables you to focus on individual learners needs.	○	○	○	○
There is adequate teaching staff so you do not have a heavy workload.	○	○	○	○
There are adequate instruction materials like textbooks in your class to facilitate your teaching.	○	○	○	○
There is adequate school infrastructure to support you in implementing the Competence Based Curriculum.	○	○	○	○

IN SCHOOL SUPPORT

To what extent do you agree with these statements?

	Strongly Disagree	Disagree	Agree	Strongly Agree
Your school leader is very proactive in helping to facilitate teachers' professional development programs.	○	○	○	○
Your school leader has built a relational trust between the school administration and teachers, enabling exchanges between these two levels to facilitate effective implementation of the Competence Based Curriculum.	○	○	○	○
Your school leader promotes a conducive environment for implementing the Competence Based Curriculum through fostering positive attitudes motivating teachers.	○	○	○	○
Your school leader offers guidance on CBC matters.	○	○	○	○
There is adequate support from fellow teachers in the implementation of the curriculum.	○	○	○	○

EXTERNAL SUPPORT

To what extent do you agree with these statements?

	Strongly Disagree	Disagree	Agree	Strongly Agree
Parents are willing to be involved in Competence Based Curriculum activities.	○	○	○	○
You have frequent assessment by quality assurance and standards officers on your teaching.	○	○	○	○
The Teacher Service Commission (TSC) has put into place adequate strategies to support teachers in the implementation of the Competence Based Curriculum.	○	○	○	○
Teachers' trade unions have adequately supported teachers in the implementation of the Competence Based Curriculum.	○	○	○	○

Appendix 7: Interview guide

OPEN ENDED INTERVIEW GUIDE

Guiding interview question:

1. Is the support that you have received to implement CBC sufficient to help you implement the curriculum in the classroom?

Areas of focus

1. Curriculum support
2. Assessment support
3. Practicalities of implementation
4. In school support
5. External support