



Vol. 18 | Post COVID-19 Recovery and
Sustainable development

Vol. 18 Article 14 | January, 2 2023

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(An International Publisher for Academic and Scientific Resources)

Implementation of Competency-Based Education in Developing Nations: The Kenyan Context

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Cite as: Mwaniki, C. N. (2023). *Implementation of Competency-Based Education in Developing Nations: The Kenyan Context*. *International Journal of Social and Development Concerns*, 18(14), 173–188. <https://doi.org/10.5281/zenodo.18046145>

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Abstract: Competency-Based Education (CBE) has emerged globally as a reform strategy aimed at shifting education systems from examination-oriented learning toward the development of practical skills, values, and learner agency. In developing nations, CBE is often introduced to address persistent concerns regarding graduate employability, skills mismatch, and limited relevance of schooling to real-life contexts. In Kenya, the adoption of the Competency-Based Curriculum (CBC) represents one of the most ambitious education reforms since independence. Despite its strong policy foundation, concerns persist regarding the quality, consistency, and equity of CBC implementation across schools. This article presents a desk review of peer-reviewed literature, policy documents, and national evaluation reports to examine CBC implementation in Kenya through an evaluation lens aligned to monitoring frameworks advanced by the Kenya Institute of Curriculum Development and the Ministry of Education. Using the evaluation domains of inputs, processes, and learner outcomes, the review finds that while CBC is firmly institutionalized at policy level, its classroom realization remains uneven, shaped by teacher preparedness, assessment demands, resource constraints, and leadership capacity. The article concludes that CBC implementation in Kenya is progressive but fragile and recommends sustained, framework-aligned monitoring and equity-sensitive support to strengthen reform outcomes.

Keywords: Competency-Based Education; Competency-Based Curriculum; Curriculum Reform, Evaluation

1.1 Introduction

Education systems across developing nations are increasingly under pressure to demonstrate relevance to labour markets, civic life, and sustainable development. Traditional examination-driven curricula have been criticized for privileging rote memorization over problem-solving, creativity, and the application of knowledge in real-life contexts (OECD, 2019). In response, Competency-Based Education (CBE) has gained prominence as an approach that emphasizes demonstrable learning outcomes, learner-centred pedagogy, and continuous assessment.

In Kenya, this shift is institutionalized through the Competency-Based Curriculum (CBC), which replaced the 8-4-4 system following the development of the Basic Education Curriculum Framework (BECF) by the Kenya Institute of Curriculum Development (KICD, 2017). The CBC seeks to nurture engaged, empowered, and ethical citizens by developing core competencies such as communication,

critical thinking, creativity, collaboration, and citizenship. While the reform has been widely endorsed at policy level, its implementation has generated debate among teachers, parents, and education stakeholders.

Empirical and policy literature suggests that CBC implementation is shaped by systemic factors including teacher preparedness, assessment practices, instructional resources, and school leadership (Momanyi & Rop, 2019; Opondo, 2023). However, much of this literature examines these challenges in isolation. This article therefore adopts a desk review approach aligned to national CBC evaluation logic to synthesize existing evidence and provide a coherent interpretation of CBC implementation in Kenya.

1.2 Background of the Study

Globally, education systems have increasingly been challenged to demonstrate relevance beyond academic certification, particularly in preparing learners with practical skills, values, and adaptive capacities required in contemporary societies. Traditional examination-oriented curricula, dominant in many developing nations, have been criticized for overemphasizing content mastery and summative assessment at the expense of problem-solving, creativity, collaboration, and real-life application of knowledge (OECD, 2019). These concerns have intensified in the context of youth unemployment, skills mismatch, and rapid socio-economic change, prompting governments to re-examine the purposes and outcomes of schooling.

Competency-Based Education (CBE) has emerged within this global reform discourse as a learner-centred approach that organizes teaching, learning, and assessment around clearly defined competencies, integrated combinations of knowledge, skills, values, and attitudes that learners are expected to demonstrate in authentic contexts. International evidence suggests that well-implemented CBE can enhance learner engagement, promote deeper learning, and strengthen links between education and societal needs (UNESCO, 2017; OECD, 2019). However, the literature also cautions that CBE reforms are complex and demanding, particularly in developing contexts where institutional capacity, teacher preparedness, and resource availability are uneven.

In Africa, several countries have adopted competency-oriented curricula as part of broader education reforms aimed at improving quality and relevance. While policy frameworks across the region articulate progressive visions of learner-centred education, empirical studies consistently report implementation challenges related to large class sizes, limited instructional resources, assessment capacity, and entrenched examination cultures (Tabulawa, 2013; Schweisfurth, 2015). These challenges highlight the gap that often exists between curriculum policy intentions and classroom realities.

In Kenya, curriculum reform has been a central feature of education policy since independence. The transition from the 8-4-4 system to the Competency-Based Curriculum (CBC) marked a significant paradigm shift in the philosophy of basic education. Developed under the leadership of the Kenya Institute of Curriculum Development, the CBC is anchored in the Basic Education Curriculum Framework (BECF), which envisions the development of “engaged, empowered and ethical citizens” through competency development, values education, and learner-centred pedagogy (KICD, 2017). The

curriculum emphasizes core competencies such as communication, critical thinking, creativity, collaboration, citizenship, and digital literacy, alongside continuous formative assessment.

The implementation of CBC has been supported by policy direction from the Ministry of Education and an assessment architecture developed by the Kenya National Examinations Council, which introduced competency-based assessment frameworks to guide learner evaluation (KNEC, 2021). Together, these institutions have sought to align curriculum design, pedagogy, assessment, and progression pathways within a coherent reform structure.

Despite this strong policy and institutional foundation, CBC implementation has generated mixed reactions among teachers, parents, and education stakeholders. Early evaluations and scholarly studies indicate that while the reform is conceptually well-articulated, its enactment in schools is shaped by contextual constraints, including teacher preparedness, workload demands, availability of teaching and learning resources, assessment complexity, and disparities across school contexts (Momanyi & Rop, 2019; Opondo, 2023). These concerns have prompted national reflection on the pace, coherence, and support structures underpinning CBC implementation.

Against this background, there is growing recognition that evaluating CBC implementation requires more than documenting challenges or stakeholder perceptions. National monitoring approaches advanced by KICD emphasize “monitoring for improvement,” which frames curriculum evaluation around inputs, processes, outputs, and learner outcomes, with the aim of informing continuous refinement rather than one-off judgment (KICD, 2019). However, much of the existing literature has not systematically applied this evaluative lens, resulting in fragmented evidence that limits holistic understanding of CBC implementation as a system.

This article therefore looks into the broader context of curriculum reform in developing nations and Kenya’s ongoing CBC transition. By synthesizing existing literature and policy documents through nationally recognized evaluation domains, the study seeks to provide a structured and evidence-informed understanding of CBC implementation in Kenya, thereby contributing to curriculum discourse, policy reflection, and future research.

1.3 Statement of the Problem

The Competency-Based Curriculum was introduced in Kenya to transform learning from content accumulation and examination performance to the development of competencies applicable to real-life situations (KICD, 2017). Despite this clear policy intention, available evidence indicates that CBC implementation across Kenyan schools is uneven and contested. Studies frequently cite challenges such as increased teacher workload, inadequate instructional resources, assessment complexity, and parental confusion regarding competency-based reporting (Momanyi & Rop, 2019; Yungungu, 2023).

A critical limitation in the existing literature is the lack of systematic evaluation aligned to national monitoring frameworks advanced by KICD and the Ministry of Education. Most studies describe implementation challenges without situating them within the evaluation domains of inputs, processes, outputs, and outcomes emphasized in national monitoring-for-improvement approaches (KICD, 2019;

Ministry of Education, 2023). Consequently, there is limited clarity on whether CBC is being implemented coherently as a system rather than as fragmented school-level practices.

Furthermore, there is insufficient evidence linking implementation conditions to learner competency development and equity outcomes. While competency-based assessment structures are formally articulated by the Kenya National Examinations Council, questions remain regarding assessment standardization, moderation, and comparability across schools (KNEC, 2021). Without such evidence, policymakers and practitioners risk assuming reform success in the absence of demonstrable learning impact.

1.4 Purpose of the study

The purpose of this article is to examine the implementation of the Competency-Based Curriculum in Kenya through a desk review aligned to national CBC evaluation frameworks, with emphasis on inputs, processes, outputs, and learner outcomes.

1.5 Objectives the study

The article seeks to:

- i. Examine the adequacy of system inputs supporting CBC implementation.
- ii. Analyze the quality of classroom and school-level implementation processes.
- iii. Assess immediate outputs associated with CBC implementation.
- iv. Examine reported learner outcomes and equity implications.
- v. Identify gaps in existing literature relative to national CBC evaluation frameworks.

1.6 Scope and Delimitation of the Study

This study is delimited to its desk review design which relies exclusively on secondary sources, including peer-reviewed journal articles, policy documents, and national evaluation reports. As such, the findings are constrained by the quality, scope, and availability of existing literature and do not draw on primary data from teachers, learners, or schools. While this approach enables broad synthesis and theoretical integration, it limits the ability to capture real-time classroom practices, emerging implementation dynamics, and learner experiences that may not yet be fully documented in published sources. In addition, variations in methodologies and contexts across the reviewed studies may affect the comparability of findings.

The study focuses on Competency-Based Curriculum (CBC) implementation at the basic education level in Kenya, situating the analysis within national evaluation frameworks developed by relevant education authorities. Comparative global and regional literature is used selectively to contextualize the Kenyan experience rather than to provide exhaustive cross-country comparison. The study does not examine technical and vocational education, higher education competency-based models, or subject-specific implementation in detail. Despite these limitations, the scope is sufficient to provide a coherent, system-

level understanding of CBC implementation patterns, challenges, and implications relevant to policy, practice, and future research.

1.7 Literature Review

This section reviews theoretical and empirical literature relevant to the implementation of Competency-Based Education (CBE), with particular attention to the Kenyan Competency-Based Curriculum (CBC). The review is presented in prose form to allow for conceptual flow and synthesis rather than segmented reporting. It first examines the theoretical foundations underpinning CBE, then synthesizes empirical studies from global, regional, and Kenyan contexts, and finally identifies the research gap addressed by this desk review.

1.7.1 Theoretical Perspectives Underpinning Competency-Based Education

Competency-Based Education is grounded in learning theories that emphasize active learner engagement, demonstrable outcomes, and systemic coherence between curriculum, pedagogy, and assessment. Among the most influential theoretical foundations are constructivist learning theory, outcomes-based education theory, and systems theory. Together, these perspectives provide a conceptual lens for understanding both the promise and the implementation challenges of CBC in Kenya.

Constructivist learning theory, associated with scholars such as Piaget (1972) and Vygotsky (1978), views learning as an active process in which learners construct meaning through interaction with their environment and with others. Knowledge is not transmitted intact from teacher to learner; rather, it is developed through inquiry, problem-solving, collaboration, and reflection. This theoretical orientation strongly informs competency-based curricula, which prioritise learner-centred pedagogy, experiential learning, and continuous formative assessment. The CBC's emphasis on inquiry-based activities, projects, and real-life application reflects constructivist assumptions that learning is most meaningful when it is contextualized and participatory (KICD, 2017).

The strength of constructivism lies in its capacity to foster deep understanding, critical thinking, and learner agency—outcomes that are central to CBC's vision of producing engaged and empowered citizens. However, the theory also has limitations, particularly in resource-constrained settings. Constructivist pedagogy demands skilled teachers, manageable class sizes, sufficient instructional materials, and supportive learning environments. Where these conditions are lacking, implementation may become uneven, with teachers reverting to more didactic approaches despite constructivist policy intentions. This tension is particularly relevant in many Kenyan public schools, where contextual constraints shape classroom practice.

Outcomes-Based Education (OBE) theory provides a second important foundation for CBE. Spady (1994) argues that education systems should be organized around clearly defined learning outcomes that all learners are expected to achieve, with flexibility in instructional methods and pacing. Assessment, within this framework, focuses on mastery and demonstration of outcomes rather than comparison among learners. The CBC reflects OBE principles through clearly articulated competencies and progression pathways supported by competency-based assessment frameworks (KNEC, 2021).

OBE's major strength lies in its clarity and alignment. By specifying what learners should know and be able to do, it enhances transparency and accountability in curriculum implementation. However, OBE has been criticized for placing heavy demands on assessment systems and teachers, particularly where standardization and moderation mechanisms are weak. Without adequate support, outcomes-based reforms risk generating excessive documentation and administrative burden, a concern frequently raised in empirical studies on CBC implementation in Kenya.

Systems theory, as articulated in educational contexts by Bronfenbrenner (1979), offers a broader analytical lens by conceptualizing education as an interconnected system of interacting components, including curriculum, teachers, learners, assessment structures, leadership, resources, and policy environments. From this perspective, curriculum reforms cannot be evaluated in isolation at classroom level; their success depends on coherence and alignment across the entire system.

This theoretical perspective is particularly relevant to CBC implementation in Kenya, where multiple institutions including the Kenya Institute of Curriculum Development, the Ministry of Education, and the Kenya National Examinations Council play interdependent roles. Systems theory underpins national monitoring approaches that emphasize evaluation across inputs, processes, outputs, and outcomes, reinforcing the need for holistic rather than fragmented analysis (KICD, 2019). Its limitation, however, lies in its breadth; while it explains interconnections, it offers limited guidance on specific pedagogical practices. Nonetheless, it remains invaluable for interpreting CBC as a systemic reform.

1.7.2 Empirical Review

Empirical studies on Competency-Based Education (CBE) span global, regional, and national contexts, offering insights into both the promise and practical challenges of competency-oriented curriculum reforms. This section reviews selected empirical literature in a structured manner, beginning with global studies, followed by regional (African) evidence, and concluding with country-specific studies from Kenya.

At the global level, international organizations and comparative studies have played a central role in shaping discourse on CBE implementation. The UNESCO (2017), in the *Global Education Monitoring Report*, employed a comparative policy review methodology drawing on education systems across low, middle, and high-income countries. The report found that competency-based reforms have strong potential to enhance learner engagement and relevance of education, particularly through skills such as problem-solving and collaboration. However, the report also highlighted persistent challenges in low-resource contexts, including inadequate teacher capacity, weak assessment systems, and inequitable access to learning resources. The major gap in this report is its broad global scope, which limits detailed country-level analysis and fails to examine how national evaluation frameworks mediate implementation outcomes.

Similarly, the OECD (2019), in *Future of Education and Skills 2030*, adopted a cross-national policy analysis and evidence-based approach. The study concluded that competency-oriented curricula can effectively support the development of transferable skills when aligned with coherent assessment frameworks and sustained teacher professional development. Nevertheless, the report largely reflects

experiences from high-income countries. Its key limitation is the limited applicability of its findings to developing nations, where structural and resource constraints differ markedly from OECD contexts.

Within the African context, studies reveal a consistent gap between policy intentions and classroom realities in competency-based reforms. Tabulawa (2013), in *Teaching and Learning in Context: Why Pedagogical Reforms Fail in Botswana*, employed a qualitative case study design involving classroom observations and teacher interviews. The study found that learner-centred and competency-oriented reforms were undermined by entrenched examination cultures and limited teacher autonomy. While the study offers valuable regional insight, its gap lies in the absence of a structured evaluation framework linking pedagogy to learner outcomes.

Schweisfurth (2015), in the study *Learner-Centred Pedagogy in International Education*, used a comparative qualitative synthesis of African and Asian education reforms. The findings showed that while learner-centred approaches are widely promoted, their implementation is often superficial due to contextual constraints such as large class sizes and limited instructional support. The gap in this work is that it remains largely theoretical and does not empirically assess competency attainment or assessment practices.

UNESCO (2017) also provides Africa-specific observations within its global review, noting that competency-based reforms across Sub-Saharan Africa face challenges related to assessment standardization and equity. However, the regional analysis lacks depth in country-specific evaluation mechanisms, reinforcing the need for nationally grounded studies.

At the national level, empirical literature on Kenya's Competency-Based Curriculum (CBC) has grown steadily since the reform's rollout. Momanyi and Rop (2019), in *Teacher Preparedness for the Implementation of Competency-Based Curriculum in Kenya*, employed a descriptive survey design involving primary school teachers. The study found that while teachers largely supported CBC ideals, many felt inadequately prepared to implement competency-based pedagogy and assessment due to limited training and increased workload. The study's key gap is its focus on teacher perceptions without examining learner outcomes or aligning findings to national CBC evaluation domains.

Opondo (2023), in *Challenges Encountered by Kenyan Teachers in Implementing a Competency-Based Curriculum*, adopted a qualitative interview-based approach. The study revealed that large class sizes, documentation demands, and inadequate instructional resources constrained effective CBC implementation. Although the study richly captured teachers' lived experiences, it did not examine system-level coherence or assessment moderation, limiting its explanatory scope.

Mutai (2023), in the study *Competency-Based Curriculum Implementation and Teacher Workload: Implications for Quality Learning*, used a mixed-methods design combining surveys and interviews. Findings showed that increased workload under CBC negatively affected consistency in learner-centred pedagogy and formative assessment. However, the study did not explore how workload pressures vary across school contexts or how they affect learner competency development, leaving an outcome-level gap.

Beyond teachers and schools, Yungungu (2023), in *The Paradox of the Competency-Based Curriculum in Kenya: Expectations and Lived Realities*, conducted a qualitative policy analysis combining document review and interviews. The study revealed a disconnect between CBC policy expectations and the lived realities of teachers and parents, particularly regarding assessment complexity and parental involvement. The gap lies in the absence of systematic evaluation indicators and learner outcome analysis.

Mulinya and Kimotho (2023), in *Parental Perceptions and Challenges in Supporting the Competency-Based Curriculum in Informal Settlements in Nairobi County*, employed a qualitative case study approach. The study found that economic constraints, limited understanding of CBC, and weak communication from schools hinder parental engagement. While the study provides important equity insights, it does not examine how these parental challenges affect learner competency development or assessment outcomes.

Synthesis of Empirical Evidence

Across global, regional, and Kenyan contexts, empirical studies consistently highlight that competency-based reforms are conceptually sound but implementation-intensive. Teacher preparedness, assessment systems, leadership capacity, and resource availability emerge as decisive factors. However, most studies remain fragmented—focusing on perceptions or challenges rather than evaluating CBC across inputs, processes, outputs, and outcomes.

This fragmentation underscores the need for a desk review aligned to national evaluation frameworks, as undertaken in this article, to integrate existing evidence into a coherent system-level understanding of CBC implementation in Kenya.

Research Gap

The reviewed literature demonstrates significant scholarly and policy interest in CBC implementation in Kenya. However, three critical gaps remain evident. Most empirical studies examine isolated aspects of implementation such as teacher preparedness, workload, or parental perceptions without systematically aligning findings to national evaluation frameworks that emphasize inputs, processes, outputs, and outcomes (KICD, 2019). This fragmentation limits holistic understanding of CBC as a system.

Moreover, there is limited empirical evidence linking implementation conditions to learner competency development. While theoretical arguments strongly support CBC's potential benefits, few studies provide systematic evidence of competency attainment at scale, particularly across diverse school contexts (OECD, 2019; Muchira, 2023).

Equity and assessment standardization remain underexplored. There is insufficient analysis of how disparities in resources, leadership capacity, and assessment moderation affect learner experiences and outcomes across schools, raising concerns about fairness and comparability under competency-based assessment systems (KNEC, 2021).

1.8 Research Methodology

This article adopted a desk review research design, drawing exclusively on secondary sources to synthesize evidence on CBC implementation. Desk review methodology is appropriate for curriculum and policy analysis because it enables systematic interpretation of existing empirical studies, policy documents, and evaluation reports without generating primary data (Booth et al., 2016).

Sources reviewed included peer-reviewed journal articles, national curriculum frameworks, assessment guidelines, and education reform reports published between 2017 and 2023. Key institutional sources included publications from KICD, the Ministry of Education, and KNEC. Documents were analysed thematically and organized using four evaluation domains derived from national monitoring frameworks: inputs, processes, outputs, and outcomes (KICD, 2019).

1.9 Study Findings

This section presents findings derived from a synthesis of peer-reviewed empirical studies, policy documents, and evaluation reports on the implementation of Competency-Based Education (CBE), with specific focus on the Competency-Based Curriculum (CBC) in Kenya. In line with desk review methodology, the findings are interpretive and evidence-based, drawing on existing literature rather than primary data. The presentation follows the evaluation domains emphasized by the Kenya Institute of Curriculum Development and the Ministry of Education, namely system inputs, implementation processes, outputs, and learner outcomes.

Findings on System Inputs Supporting CBC Implementation

The reviewed literature consistently identifies teacher preparedness as the most critical input influencing CBC implementation. Studies conducted in Kenya indicate that although teachers largely support the philosophy of CBC, many feel inadequately prepared to operationalize learner-centred pedagogy and competency-based assessment (Momanyi & Rop, 2019). Training initiatives have been rolled out nationally; however, the literature suggests that these are often short-term and insufficiently focused on practical classroom application, particularly in assessment interpretation and documentation (KICD, 2019).

Similarly, availability of instructional resources emerges as a decisive factor shaping implementation quality. Activity-based learning, which is central to CBC, requires teaching materials, flexible learning spaces, and sufficient time for learner engagement. Empirical studies show that such resources are unevenly distributed, with public and rural schools facing greater constraints than private or well-resourced institutions (Opondo, 2023). This finding aligns with regional and global evidence indicating that competency-based reforms are highly sensitive to resource availability, particularly in developing contexts (UNESCO, 2017).

Large class sizes further compound these challenges. The literature indicates that managing continuous formative assessment and providing individualized feedback becomes increasingly difficult in overcrowded classrooms, undermining the depth of learner engagement envisioned under CBC (Schweisfurth, 2015).

Findings on Implementation Processes

At the process level, the desk review finds that pedagogical transition toward learner-centred practices is partial and uneven. Kenyan studies report that teachers often adopt hybrid instructional approaches, combining traditional teacher-centred methods with competency-based activities (Momanyi & Rop, 2019; Opondo, 2023). While this reflects adaptability, it also highlights tension between curriculum expectations and classroom realities. Similar patterns have been observed in other African contexts, where learner-centred reforms are promoted but inconsistently enacted due to contextual constraints (Tabulawa, 2013).

Assessment practices emerge as the most challenging aspect of CBC implementation. The literature consistently reports difficulties in interpreting competency descriptors, collecting learner evidence, and managing extensive documentation requirements (Yungungu, 2023). Although the Kenya National Examinations Council has provided a competency-based assessment framework, studies note limited moderation and standardization mechanisms, leading to variability in assessment practices across schools (KNEC, 2021). Teachers often perceive assessment as administratively burdensome rather than pedagogically supportive, which weakens the formative intent of CBC.

The desk review further highlights the role of instructional supervision and school leadership as mediating factors. Schools with strong instructional leadership and collaborative professional cultures demonstrate more coherent CBC implementation, while weak supervision contributes to fragmented practices (Ministry of Education, 2023).

Findings on Implementation Outputs

In terms of outputs, the literature shows that CBC implementation has generated expected artefacts such as learner portfolios, assessment records, and progress reports (KICD, 2019). However, several studies indicate that the quality and usability of these outputs vary considerably. In many cases, documentation is produced primarily for compliance purposes rather than as a tool for improving teaching and learning (Mutai, 2023).

A recurring finding concerns parental interpretation of CBC reports. Studies focusing on parental experiences reveal that many parents, particularly those accustomed to numerical grading systems, struggle to understand competency-based reports and expectations for home-based support (Yungungu, 2023). This communication gap weakens home-school partnerships, which are central to CBC philosophy, and places additional explanatory demands on teachers and school administrators.

The review also finds that while learner participation in competency-based activities is evident across schools, the depth and consistency of engagement depend heavily on teacher confidence, resource availability, and class size (Momanyi & Rop, 2019; Opondo, 2023).

Findings on Learner Outcomes and Equity

Outcome-level evidence from the reviewed literature remains limited and fragmented. While policy and theoretical literature strongly argue that CBC can enhance applied skills, creativity, and learner agency, few empirical studies provide systematic evidence demonstrating sustained competency development at

scale (OECD, 2019; Muchira, 2023). This gap is particularly notable given the centrality of learner outcomes to the justification of CBC reform.

Equity concerns are prominently highlighted across Kenyan and regional studies. Schools with stronger resources, supportive leadership, and manageable class sizes are better positioned to implement CBC effectively, while under-resourced schools struggle to meet similar expectations (Ministry of Education, 2023). This disparity mirrors broader African and global findings that competency-based reforms, if not carefully supported, risk reproducing or exacerbating existing educational inequalities (UNESCO, 2017).

The literature also reveals limited attention to assessment standardization and moderation, raising concerns about comparability of learner outcomes across schools. Without robust moderation mechanisms, competency judgments may vary widely, potentially undermining confidence in CBC progression and certification (KNEC, 2021).

Summary of Findings

Overall, the desk review establishes that CBC implementation in Kenya is strong in policy articulation but uneven in practice. Evidence from the literature indicates that:- Teacher preparedness and instructional resources are decisive inputs shaping implementation quality (Momanyi & Rop, 2019; KICD, 2019); Pedagogical and assessment processes are characterized by partial adoption and significant workload pressures (Opondo, 2023); Implementation outputs exist but vary in instructional value and stakeholder usability (Yungungu, 2023); and Evidence on learner outcomes and equity remains limited and underdeveloped (OECD, 2019; Ministry of Education, 2023).

These findings confirm that CBC implementation challenges are systemic rather than isolated, reinforcing the need for framework-aligned monitoring and evidence-informed refinement.

Discussion of the Findings

Inputs: System Readiness

The reviewed literature consistently identifies teacher preparedness as a central determinant of CBC implementation quality. While in-service training initiatives have been rolled out nationally, many teachers report difficulties translating CBC policy expectations into classroom practice, particularly in relation to lesson design and assessment documentation (Momanyi & Rop, 2019). This suggests that training coverage alone is insufficient; sustained instructional support and professional learning are critical.

Resource availability also emerges as a significant input constraint. CBC's emphasis on experiential and activity-based learning places demands on instructional materials and learning spaces that many schools, particularly in rural and low-income settings, struggle to meet (KICD, 2019; Opondo, 2023).

Processes: Pedagogy and Assessment

At the process level, evidence points to partial pedagogical transition toward learner-centred practices. Teachers often blend traditional and competency-based approaches, reflecting tension between reform

expectations and classroom realities. Assessment remains the most challenging process area, with studies highlighting heavy workload, inconsistent interpretation of competency descriptors, and limited moderation (KNEC, 2021).

Outputs: Records and Reporting

CBC implementation has generated expected outputs such as learner portfolios and progress reports. However, the literature indicates variability in the clarity and usability of these outputs, particularly for parents unfamiliar with competency-based reporting systems (Yungungu, 2023). This limits effective home–school collaboration, a core pillar of CBC.

Outcomes and Equity

Outcome-level evidence remains limited. While CBC is theoretically positioned to enhance applied skills and learner agency, few studies provide systematic evidence of competency development at scale (Muchira, 2023). Equity concerns are prominent, as schools with stronger resources and leadership capacity are better positioned to implement CBC effectively, potentially widening educational disparities (Ministry of Education, 2023).

Implications of the findings

The findings of this desk review have important implications for education policy, curriculum implementation, assessment practice, institutional leadership, equity, and future research on Competency-Based Education (CBE) in Kenya. Because this study synthesizes existing empirical and policy literature rather than generating primary data, the implications are interpretive and system-oriented, aimed at strengthening coherence between CBC policy intentions and classroom realities.

Policy and System-Level Implications

At the policy level, the desk review underscores the need to move beyond curriculum rollout toward implementation quality assurance. While the Competency-Based Curriculum is firmly institutionalized through the Basic Education Curriculum Framework, evidence from the reviewed literature shows that implementation remains uneven due to disparities in teacher preparedness, resourcing, and assessment capacity (KICD, 2019; Ministry of Education, 2023). This suggests that curriculum reform should be treated as an iterative process rather than a one-off structural change.

The implication for national policymakers is the importance of strengthening framework-aligned monitoring, particularly using the inputs–processes–outputs–outcomes logic already advanced by the Kenya Institute of Curriculum Development. Monitoring systems should generate actionable feedback that informs continuous curriculum refinement, resource allocation, and professional support. Without such feedback loops, CBC risks remaining strong in design but fragile in execution.

Implications for Teacher Professional Development

The desk review consistently identifies teacher preparedness as a central determinant of CBC implementation quality (Momanyi & Rop, 2019). This has critical implications for teacher professional development. Training approaches that focus primarily on orientation and policy awareness are

insufficient for the pedagogical and assessment demands of CBC. Instead, the literature suggests a need for ongoing, practice-based professional learning, including coaching, mentoring, and collaborative lesson design.

From a system perspective, this implies that professional development should be embedded within schools and supported by instructional leadership, rather than relying solely on centrally organized workshops. Such an approach aligns with global evidence indicating that sustained professional learning is more effective in supporting learner-centred reforms than episodic training (OECD, 2019).

Implications for Assessment and Quality Assurance

Assessment emerges as the most fragile component of CBC implementation. The reviewed studies highlight difficulties related to interpretation of competency descriptors, documentation workload, and lack of assessment moderation across schools (KNEC, 2021; Yungungu, 2023). This has implications for both credibility and equity of learner outcomes.

The desk review implies that competency-based assessment requires stronger standardization and moderation mechanisms to ensure comparability of judgments across diverse school contexts. For the Kenya National Examinations Council and quality assurance structures, this means prioritizing clarity of assessment guidelines, exemplars of quality evidence, and structured moderation forums. Without such measures, assessment risks being perceived as subjective or burdensome, undermining stakeholder confidence in CBC.

Implications for School Leadership and Institutional Practice

School leadership emerges from the literature as a critical mediating factor in CBC implementation (Ministry of Education, 2023). Schools with strong instructional leadership and collaborative cultures demonstrate more coherent adoption of learner-centred pedagogy and assessment practices. This implies that curriculum reform success depends not only on teacher effort but also on leadership capacity to coordinate, support, and sustain change.

The desk review therefore highlights the importance of instructional leadership development as part of CBC implementation strategy. School leaders require competencies in curriculum interpretation, formative assessment supervision, and professional learning facilitation. Strengthening leadership capacity can reduce fragmentation and promote collective ownership of CBC practices.

Equity and Social Justice Implications

One of the most significant implications of the desk review relates to equity. The literature consistently shows that schools with better resources, manageable class sizes, and supportive leadership are better positioned to implement CBC effectively, while under-resourced schools struggle to meet similar expectations (UNESCO, 2017; Ministry of Education, 2023). This raises the risk that CBC may unintentionally reproduce or deepen existing educational inequalities.

The implication for policymakers and implementers is the need for equity-sensitive implementation strategies. Monitoring and evaluation systems should explicitly disaggregate data by school context,

location, and resource levels to identify and address disparities. Targeted support for under-resourced schools is essential if CBC is to fulfil its promise of inclusive and transformative education.

Implications for Research and Knowledge Development

The desk review highlights important implications for future research. Much of the existing empirical literature on CBC in Kenya focuses on perceptions, challenges, and early implementation experiences. There remains a need for outcome-focused and longitudinal studies that examine whether learners are actually developing the competencies outlined in the Basic Education Curriculum Framework over time (OECD, 2019; Muchira, 2023).

Additionally, future studies would benefit from explicit alignment with national evaluation frameworks, enabling stronger linkage between research evidence and policy decision-making. Desk reviews such as the present study play a crucial role in synthesizing existing knowledge, but they also point to the need for complementary empirical work to validate and extend findings.

1.10 Conclusion

This desk review set out to synthesize existing global, regional, and Kenyan literature on the implementation of the Competency-Based Curriculum (CBC) using an evaluation lens aligned to nationally recognized monitoring frameworks. The review concludes that CBC implementation in Kenya is underpinned by a robust conceptual, theoretical, and policy foundation, articulated through the Basic Education Curriculum Framework and supported institutionally by the Kenya Institute of Curriculum Development, the Ministry of Education, and the Kenya National Examinations Council (KICD, 2017; KICD, 2019; KNEC, 2021).

However, the review further establishes that classroom-level realization of CBC remains uneven and context-dependent. While the reform is firmly institutionalized at national level, its enactment is shaped by persistent constraints related to teacher preparedness, assessment workload and complexity, instructional resources, class sizes, and leadership capacity (Momanyi & Rop, 2019; Opondo, 2023). These constraints are not isolated challenges but reflect systemic misalignments across inputs, processes, outputs, and outcomes, consistent with systems theory perspectives on curriculum reform.

A particularly salient conclusion emerging from the desk review is the limited availability of outcome- and equity-focused evidence. Although CBC is theoretically positioned to enhance learner competencies such as critical thinking, creativity, and collaboration, empirical validation of these outcomes at scale remains sparse. Moreover, disparities in resourcing and leadership capacity raise concerns that CBC, if insufficiently supported, may inadvertently reproduce existing educational inequalities rather than mitigate them (UNESCO, 2017; Ministry of Education, 2023).

Overall, the review concludes that CBC implementation in Kenya is progressive but fragile—a reform with significant transformative potential that requires sustained, evidence-informed refinement. Without strengthened framework-aligned monitoring, robust assessment moderation, and targeted equity-sensitive support, CBC risks falling short of its intended contribution to meaningful and inclusive learning.

1.12 Recommendations

Based on the findings of this desk review, the following recommendations are advanced to strengthen CBC implementation and evaluation in Kenya.

Curriculum and policy authorities should deepen framework-aligned monitoring and evaluation of CBC implementation. Existing national approaches that emphasize monitoring for improvement should be systematically operationalized to track inputs, processes, outputs, and learner outcomes over time (KICD, 2019). Such monitoring should generate actionable feedback that informs curriculum refinement, resource allocation, and professional support rather than serving compliance-oriented reporting functions. There is a need to strengthen competency-based assessment systems, particularly through clearer guidelines, exemplars, and moderation mechanisms. The desk review indicates that assessment remains the most fragile component of CBC implementation, with variability in interpretation and documentation practices across schools (KNEC, 2021). Enhanced moderation and professional support would improve consistency, credibility, and stakeholder confidence in competency judgments.

Instructional leadership development should be prioritized as a central pillar of CBC implementation. Evidence from the reviewed literature shows that school leadership mediates the effectiveness of curriculum reform by shaping professional learning cultures, supervision practices, and coherence of implementation (Ministry of Education, 2023). Targeted leadership development programmes focused on learner-centred pedagogy and formative assessment would contribute to stabilizing CBC practices at school level.

Equity-sensitive implementation strategies are essential. Targeted support for under-resourced schools—through differentiated resourcing, coaching, and monitoring—is necessary to ensure that all learners have meaningful opportunities to develop competencies envisioned under CBC. Without such measures, disparities in implementation quality may widen learning inequalities (UNESCO, 2017).

Future research should move beyond descriptive accounts of implementation challenges to prioritise longitudinal and outcome-focused studies aligned to national evaluation frameworks. Such research would complement desk reviews by empirically examining learner competency development over time and across diverse contexts, thereby strengthening evidence-informed policy decision-making (OECD, 2019; Muchira, 2023).

Future Research

Future research on the Competency-Based Curriculum (CBC) in Kenya should prioritise longitudinal and outcome-focused studies that examine whether learners are progressively acquiring the competencies articulated in the Basic Education Curriculum Framework. While existing literature largely documents implementation experiences and challenges, there is limited empirical evidence linking implementation conditions to learner competency development over time. Longitudinal and mixed-method studies aligned to national evaluation frameworks would provide stronger evidence on the effectiveness of CBC and inform evidence-based curriculum refinement by the Kenya Institute of Curriculum Development and the Ministry of Education.

In addition, future research should focus on assessment standardization, equity, and instructional leadership within CBC implementation. Empirical studies examining how competency-based assessment guidelines are interpreted and moderated across diverse school contexts would help address concerns about consistency and fairness raised in the literature. Equity-focused research that compares implementation quality and learner outcomes across school types and socio-economic settings, alongside in-depth studies of school leadership practices that support sustained learner-centred pedagogy, would generate practical insights to strengthen CBC implementation and policy decision-making.

References

- Booth, A., Sutton, A., & Papaioannou, D. (2016). *Systematic approaches to a successful literature review* (2nd ed.). SAGE Publications.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Kenya Institute of Curriculum Development. (2017). *Basic education curriculum framework*. Nairobi: KICD.
- Kenya Institute of Curriculum Development. (2019). *Monitoring for improvement: A guide for curriculum implementation*. Nairobi: KICD.
- Kenya National Examinations Council. (2021). *Competency-based assessment framework for basic education*. Nairobi: KNEC.
- Ministry of Education. (2023). *Report of the Presidential Working Party on Education Reform*. Nairobi: Government of Kenya.
- Momanyi, J. M., & Rop, N. K. (2019). Teacher preparedness for the implementation of competency-based curriculum in Kenya. *Journal of Education and Practice*, 10(9), 1–10.
- Muchira, J. M. (2023). Implementing competency-based curriculum in Kenya: Teacher challenges and opportunities. *International Journal of Education Research*, 11(2), 45–58.
- OECD. (2019). *Future of education and skills 2030: OECD learning compass 2030*. OECD Publishing. <https://doi.org/10.1787/5cff20d0-en>
- Opondo, R. O. (2023). Challenges encountered by Kenyan teachers in implementing a competency-based curriculum. *International Journal of Education and Research*, 11(4), 89–102.
- Piaget, J. (1972). *The psychology of the child*. Basic Books.
- Schweisfurth, M. (2015). Learner-centred pedagogy in international education. *International Journal of Educational Development*, 40, 259–266. <https://doi.org/10.1016/j.ijedudev.2014.10.006>
- Spady, W. G. (1994). *Outcome-based education: Critical issues and answers*. American Association of School Administrators.
- Tabulawa, R. (2013). *Teaching and learning in context: Why pedagogical reforms fail in Botswana*. CODESRIA.
- UNESCO. (2017). *Global education monitoring report 2017/18: Accountability in education Meeting our commitments*. UNESCO Publishing.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Yungungu, A. (2023). The paradox of the competency-based curriculum in Kenya: Expectations and lived realities. *African Journal of Social Sciences and Humanities Research*, 8(2), 199–212.