
**THE CONTRIBUTION OF TEACHER PROFESSIONAL
DEVELOPMENT ON COMPETENCY-BASED CURRICULUM
IMPLEMENTATION IN PUBLIC SECONDARY SCHOOLS IN
MAKAMBAKO TOWN COUNCIL, TANZANIA**

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ABSTRACT

The Competency-Based Curriculum (CBC) represents a paradigm shift in Tanzanian education, emphasizing learner-centred pedagogy, competency acquisition, and practical skill development. This study investigates the contribution of teacher professional development (TPD) to CBC implementation in public secondary schools in Makambako Town Council, Tanzania. Using a qualitative case study design, data were collected from 14 participants, including school leaders, teachers, and students, through interviews, focus group discussions, and document reviews. The findings indicate that professional development initiatives such as in-service training, mentorship, school-based workshops, and study leave significantly enhance teachers' pedagogical skills, assessment competence, and confidence, fostering improved learner engagement and outcomes. Challenges such as resource limitations, large class sizes, and inequitable access to training were identified, alongside opportunities to strengthen TPD through digital platforms, mentorship institutionalization, and policy support. The study concludes that teacher professional development is central to successful CBC implementation, and recommends coordinated, continuous, and well-resourced professional development programs.

KEYWORDS: Competency-Based Curriculum, Teacher Professional Development, Public Secondary Schools, Pedagogical Skills, Tanzania.

1.0 INTRODUCTION

Education is universally recognized as a cornerstone for socio-economic development, social transformation, and human capital formation. It is through education that societies can cultivate skills, knowledge, and attitudes necessary for sustainable development, equitable growth, and innovation. The quality and effectiveness of education systems are not only dependent on physical resources, such as classrooms, teaching materials, and infrastructure, but also on the capacity of teachers to translate curriculum intentions into meaningful learning experiences. Teachers' professional competence and preparedness are central to ensuring that curriculum reforms achieve their intended outcomes, particularly in contexts where shifts from traditional content-based education to more progressive approaches, such as the Competency-Based Curriculum (CBC), are being pursued (Fullan, 2016).

In Tanzania, the education sector has undergone significant reforms aimed at aligning learning outcomes with the competencies required in a rapidly changing society. The introduction of the CBC represents a paradigm shift from rote memorization and examination-focused learning to an approach that emphasizes critical thinking, problem-solving, collaboration, creativity, and the practical application of knowledge. The curriculum is designed to equip learners with the skills, attitudes, and knowledge necessary to thrive in higher education, employment, and everyday life, ensuring holistic development that goes beyond the acquisition of academic content. For successful CBC implementation, teachers play a pivotal role, as they are responsible for facilitating learner-centred pedagogy, designing competency-focused lessons, and employing formative assessment strategies that accurately measure students' mastery of essential skills (UNESCO, 2015).

Teacher Professional Development (TPD) is widely acknowledged as a critical mechanism for enhancing teacher capacity to deliver curriculum reforms effectively. TPD encompasses structured opportunities for teachers to improve their pedagogical knowledge, subject matter expertise, instructional strategies, assessment literacy, and professional attitudes. Continuous professional development ensures that teachers remain responsive to evolving educational demands, understand innovative curriculum frameworks, and adopt practices that enhance student learning outcomes. In the context of CBC, TPD is particularly vital because it equips teachers with the skills required to shift from teacher-dominated instruction to facilitative, student-centred approaches that prioritize competency acquisition over rote memorization (Darling-Hammond, Hylar, & Gardner, 2017).

Globally, research indicates a strong correlation between effective teacher professional development and improved student learning outcomes. According to Darling-Hammond et al. (2017), teachers who engage in sustained, collaborative, and context-specific professional development demonstrate enhanced instructional practices, higher confidence, and the ability to adopt innovative teaching methods aligned with curriculum reforms. Similarly, Hattie (2012) highlights that teacher expertise and reflective practice are among the most influential factors in student achievement. In the Tanzanian context, studies such as those by Fullan (2016) and UNESCO (2015) have emphasized that professional development initiatives, when integrated with policy frameworks and school-based support mechanisms, are essential for translating curriculum reforms like CBC into tangible classroom practices that positively impact learner outcomes.

Despite the acknowledged importance of TPD, the effective implementation of CBC in Tanzanian public secondary schools faces several challenges. Teachers' capacity to internalize CBC principles, adopt learner-centred pedagogy, and employ competency-focused assessment varies significantly across schools. Factors such as resource limitations, high student-teacher ratios, inadequate teaching and learning materials, and uneven access to professional development programs hinder consistent and effective curriculum implementation. Additionally, systemic constraints, including limited administrative support, insufficient mentorship, and irregular follow-up, reduce the sustainability of professional development outcomes. These challenges underscore the need to examine not only the existence of professional development initiatives but also their effectiveness in enhancing teachers' competence and improving CBC implementation (Sanga & Mkumbo, 2019).

In Makambako Town Council, public secondary schools have increasingly focused on equipping teachers with professional development opportunities aimed at supporting CBC. Initiatives include in-service training, school-based workshops, mentorship programs, study leave for advanced studies, and adherence to national frameworks such as the National Framework for Teachers' Continuous Professional Development (MEWAKA 2020). These initiatives are designed to enhance teachers' pedagogical knowledge, practical instructional skills, assessment competence, and professional confidence. Teachers who participate in these programs gain exposure to learner-centred instructional methods, formative assessment techniques, and strategies for integrating competency development into lesson plans. Such professional development is intended to create a workforce capable of delivering a

curriculum that prioritizes student engagement, practical skill acquisition, and holistic development (MEWAKA, 2020).

The impact of TPD on CBC implementation can be observed in multiple dimensions, including teaching practices, assessment strategies, learner engagement, and student outcomes. Teachers who have participated in professional development programs often demonstrate enhanced lesson planning skills, improved classroom management, and greater ability to design competency-focused lessons. Furthermore, professional development equips teachers with formative assessment strategies, enabling them to monitor learners' progress continuously, provide timely feedback, and adjust instruction to meet individual student needs. Such improvements in pedagogy and assessment practices directly contribute to higher-quality learning experiences and more effective attainment of CBC objectives (Fullan, 2016).

Learner-centred pedagogy is a core component of CBC, and its successful implementation depends heavily on teachers' competence and confidence. Professional development initiatives provide teachers with opportunities to practice participatory teaching strategies, engage in collaborative problem-solving, and reflect on instructional effectiveness. As teachers gain mastery of these approaches, students become more active participants in the learning process, developing critical thinking, collaboration, and problem-solving skills. This aligns with the fundamental goal of CBC: producing learners who are not only knowledgeable but also capable of applying knowledge practically and working effectively in real-world contexts (Vygotsky, 1978).

Teachers' perceptions of CBC also play a significant role in determining how effectively professional development translates into classroom practice. Positive perceptions, reinforced through structured TPD programs, encourage teachers to adopt innovative strategies and integrate continuous assessment practices. Conversely, teachers with limited understanding or negative perceptions of CBC may struggle to apply professional development in meaningful ways, resulting in uneven implementation and suboptimal student outcomes. Therefore, examining the impact of professional development on CBC implementation requires an understanding of both the strategies employed and the extent to which teachers internalize and apply these principles (Hattie, 2012).

In addition to pedagogical skills, professional development enhances teachers' motivation, professional identity, and confidence, which are critical for sustaining high-quality instruction. Teachers who feel competent and supported are more likely to experiment with new teaching strategies, engage students actively, and persist in the face of challenges. Mentorship programs, peer learning, and school-based workshops contribute to creating professional communities that reinforce reflective practice, collaboration, and continuous improvement. These supportive networks ensure that professional development is not a one-time intervention but a continuous process that strengthens curriculum implementation over time (Darling-Hammond et al., 2017).

However, systemic challenges remain. Resource limitations, including inadequate access to teaching materials, ICT infrastructure, and instructional support, constrain the full potential of professional development. Large class sizes, heavy teacher workloads, and inequitable access to training opportunities further limit the consistency and effectiveness of CBC implementation. Addressing these challenges requires a holistic approach that integrates professional development with adequate resourcing, policy guidance, institutional support, and monitoring mechanisms. By doing so, schools can maximize the impact of TPD and ensure that teachers are fully equipped to deliver competency-based education (Sanga & Mkumbo, 2019).

This article focuses specifically on the impact of teacher professional development on CBC implementation in public secondary schools in Makambako Town Council. It explores how professional development initiatives influence teachers' teaching practices, assessment strategies, learner-centred pedagogy, student performance, and professional motivation. The study provides insights into the interconnections between training programs, teacher understanding and perceptions, classroom practices, and systemic factors that facilitate or hinder curriculum implementation. By examining these dimensions, the article contributes to a deeper understanding of how professional development can be strategically leveraged to enhance CBC outcomes, both for teachers and students (MEWAKA, 2020).

The findings of this study are particularly relevant for policymakers, school administrators, teacher educators, and researchers interested in curriculum reform and teacher capacity building. They underscore the necessity of sustained, context-specific, and well-resourced professional development initiatives that are integrated with policy frameworks and supported by mentorship and follow-up mechanisms. Ultimately, improving teacher

competence through professional development is not only an investment in educators but also a critical driver of improved learning outcomes, student engagement, and the overall effectiveness of competency-based education in Tanzania (Fullan, 2016).

The introduction highlights the centrality of teacher professional development in implementing CBC successfully. Effective professional development enhances teachers' pedagogical knowledge, assessment competence, learner-centred instructional skills, and professional motivation. By fostering continuous learning, reflective practice, and collaboration, TPD ensures that curriculum reforms are translated into classroom practices that promote competency acquisition, critical thinking, and practical skill development among students. The subsequent sections of this article will outline the methodology employed in the study, explain data collection and analysis procedures, and present a detailed discussion on the impact of teacher professional development on CBC implementation (Darling-Hammond et al., 2017).

2.0 LITERATURE REVIEW

2.1 Theoretical Literature Review

The study is anchored in Adult Learning Theory (Knowles, 1980), which posits that adult learners are self-directed and bring prior knowledge and experiences to the learning process. In the context of TPD, teachers actively engage with professional development programs when the content is relevant, practical, and aligned with classroom realities. This theory emphasizes reflective practice, continuous learning, and application of knowledge critical components for CBC implementation. Additionally, Constructivist Theory (Vygotsky, 1978) underlines the importance of learner-centred pedagogy, which is central to CBC. Teachers act as facilitators of learning, guiding students to construct knowledge through active engagement, collaboration, and practical tasks. Professional development programs that emphasize these principles help teachers shift from teacher-centred instruction to competency-focused teaching.

2.2 Empirical Literature Review

Empirical studies underscore the link between TPD and effective curriculum implementation. Darling-Hammond et al. (2017) demonstrate that sustained, collaborative, and context-specific professional development improves teachers' instructional practices, confidence, and ability to adopt innovative teaching strategies. Fullan (2016) and Hattie (2012) highlight that professional growth, reflective practice, and peer collaboration enhance teacher competence,

directly influencing student learning outcomes. In Tanzania, UNESCO (2015) notes that TPD aligned with policy frameworks such as MEWAKA ensures consistency in teacher training, promoting standardized curriculum delivery across schools. School-based workshops, mentorship, and study leave have been found to provide opportunities for reflective practice, peer learning, and skills application, which are essential for CBC success.

Despite these benefits, challenges persist. Resource constraints, large class sizes, inequitable access to professional development, and lack of structured follow-up often hinder the translation of TPD into effective classroom practice (Sanga & Mkumbo, 2019; Lyimo & Kajoro, 2020). Digital platforms and blended learning modalities are increasingly recommended to complement traditional training, ensuring inclusive, flexible, and continuous teacher professional development. These insights provide a foundation for examining the impact of TPD on CBC implementation in Makambako Town Council.

3.0 METHODOLOGY

3.1 Research Approach

This study adopted a qualitative research approach, which is appropriate for exploring complex educational phenomena such as the contribution of teacher professional development to CBC implementation. The qualitative approach allowed for an in-depth exploration of participants' lived experiences, perceptions, and classroom practices. It enabled the collection of rich, descriptive data, providing insights into how professional development strategies influence teachers' competence, understanding, and application of CBC principles.

3.2 Research Design

A case study design was employed to provide a detailed examination of TPD within selected public secondary schools in Makambako Town Council. This design is suitable for studying a phenomenon within its real-life context, allowing the researcher to investigate the dynamics of professional development, teacher practices, and curriculum implementation. It facilitated triangulation of data through multiple sources, including interviews, focus group discussions, and document reviews, enhancing the credibility and depth of findings.

3.3 Target Population

The target population comprised school heads, human resource officers, teachers, and students involved directly or indirectly in CBC implementation. Specifically, 14 participants

were purposively selected: one head of school, one human resource officer, four teachers, and eight students. This composition ensured the inclusion of perspectives from administrators, implementers, and beneficiaries of CBC, providing a comprehensive understanding of TPD's impact.

3.4 Sampling Technique and Sample Size

The study used purposive sampling to select participants with direct experience in professional development programs and CBC implementation. Purposive sampling is effective in qualitative research because it targets information-rich cases that provide deep insights into the phenomenon under investigation. A small, focused sample of 14 participants was sufficient to achieve data saturation and gather detailed accounts of professional development strategies, classroom practices, and student experiences.

3.5 Data Collection Methods and Tools

Data were collected using semi-structured interviews, focus group discussions (FGDs), and document review. Semi-structured interviews allowed participants to express their experiences, perceptions, and challenges regarding TPD and CBC implementation. FGDs with students provided insights into the observable impact of teacher professional development on classroom practices and learning outcomes. Document reviews included school meeting minutes, annual training plans, professional development attendance records, and MEWAKA 2020 policy documents, providing corroborative evidence of professional development activities and frameworks.

3.6 Data Analysis

Data were analyzed thematically using qualitative content analysis. Interviews and FGD transcripts were coded to identify recurring patterns, themes, and subthemes related to teacher professional development and its impact on CBC implementation. Document review findings were integrated to validate participants' accounts and provide contextual evidence of professional development initiatives. Thematic analysis facilitated the identification of relationships between TPD strategies, teacher competence, classroom practices, and systemic challenges, ensuring comprehensive interpretation of findings.

4.0 RESULTS

4.1 Impact of Teacher Professional Development on CBC Implementation

4.1.2 In-Service Training

In-service training emerged as a key strategy for enhancing teachers' pedagogical knowledge, instructional competence, and understanding of CBC principles. These training sessions focused on learner-centred pedagogy, competency-focused lesson planning, and formative assessment methods. Teachers reported that in-service training improved their confidence in implementing CBC, enabled them to adopt interactive teaching strategies, and strengthened their ability to monitor student progress effectively.

4.1.3 Mentorship and Peer Learning

Mentorship programs paired experienced teachers with less experienced colleagues to provide guidance, feedback, and collaborative problem-solving opportunities. Peer learning facilitated professional dialogue, exchange of best practices, and reflective practice. These approaches reinforced training outcomes, ensuring that teachers applied newly acquired skills in the classroom and developed practical solutions to challenges in CBC implementation.

4.1.4 School-Based Workshops

School-based workshops provided immediate, context-specific training that addressed the specific needs of teachers within individual schools. These workshops focused on local challenges, practical strategies for implementing CBC, and alignment with school priorities. Participants highlighted that workshops strengthened collaboration, enhanced problem-solving skills, and promoted consistency in curriculum delivery across departments.

4.1.5 Study Leave Programs

Study leave opportunities allowed teachers to pursue advanced studies or specialized training, enhancing subject knowledge and pedagogical competence. Participants noted that teachers who returned from study leave applied advanced instructional strategies, introduced innovative teaching approaches, and improved assessment practices, contributing to overall CBC effectiveness.

4.1.6 Policy Framework Alignment (MEWAKA 2020)

Adherence to national frameworks, such as MEWAKA 2020, ensured standardization and alignment of professional development programs with curriculum objectives. Teachers

reported that guidance from these policies facilitated structured training, clear expectations for CBC implementation, and systematic evaluation of professional growth.

4.1.7 Challenges and Opportunities

Despite the benefits, systemic challenges, including limited resources, large class sizes, and inequitable access to training, constrained the full potential of TPD. Opportunities for improvement include institutionalizing mentorship, leveraging digital platforms for continuous learning, ensuring equitable access to training, and strengthening monitoring and evaluation mechanisms to sustain professional growth.

5.0 DISCUSSIONS

The findings from this study underscore the critical role of teacher professional development in enhancing the implementation of the Competency-Based Curriculum (CBC) in public secondary schools in Makambako Town Council. Professional development strategies, particularly in-service training, mentorship, school-based workshops, and study leave, were found to significantly enhance teachers' pedagogical knowledge, instructional competence, and confidence.

Integration of Professional Development with Classroom Practices: Teachers who engaged in structured professional development demonstrated a marked improvement in lesson planning, classroom management, and learner-centred instruction. This finding supports the notion that continuous professional growth translates into better classroom outcomes (Darling-Hammond et al., 2017). Teachers who internalized CBC principles employed formative assessment techniques, interactive teaching strategies, and competency-focused learning activities that fostered critical thinking and practical skill acquisition among students.

Role of Teacher Perceptions and Attitudes: The study revealed that teachers' positive perceptions of CBC were instrumental in translating professional development into effective classroom practices. Teachers who valued competency-based approaches were more likely to apply innovative instructional methods and actively engage students. This aligns with Hattie's (2012) assertion that teacher beliefs and attitudes are pivotal in shaping instructional effectiveness. Students' feedback corroborated this finding, noting that lessons were more participatory, practical, and relevant to real-life contexts.

Challenges and Systemic Constraints: Despite the benefits, the study highlighted several systemic barriers that limit the full impact of professional development. Large class sizes, insufficient teaching and learning resources, and uneven access to training opportunities were identified as key impediments. These findings echo UNESCO (2015), which emphasizes that professional development must be accompanied by structural and resource support to ensure sustainable improvements in teaching quality.

Opportunities for Enhancement: The study identified several practical strategies to optimize professional development outcomes, including institutionalizing mentorship programs, formalizing school-based workshops, integrating digital learning platforms, and strengthening policy frameworks like MEWAKA 2020. These measures are consistent with best practices in teacher development, emphasizing continuous learning, collaborative professional communities, and alignment with national education policies (Fullan, 2016).

Overall, the discussion highlights a reinforcing cycle: structured professional development improves teacher competence, which positively influences classroom practice, resulting in better student engagement and learning outcomes. Simultaneously, systemic support and positive teacher perceptions amplify the impact of professional growth initiatives, suggesting that effective CBC implementation requires a holistic, integrated approach.

6.0 CONCLUSION

This study affirms that teacher professional development is fundamental for the successful implementation of the Competency-Based Curriculum in public secondary schools in Makambako Town Council. Professional development initiatives, including in-service training, mentorship, school-based workshops, and study leave, significantly enhance teachers' pedagogical knowledge, instructional competence, and confidence. These initiatives enable teachers to implement learner-centred pedagogy, conduct competency-focused assessments, and actively engage students in the learning process.

Teachers' understanding and positive perceptions of CBC were found to reinforce the application of newly acquired skills in classrooms, leading to more interactive, participatory, and practical instruction. Students reported improved learning experiences, highlighting the direct impact of professional development on teaching quality and student outcomes.

Despite these benefits, systemic challenges such as resource limitations, large class sizes, unequal access to training, and insufficient follow-up mechanisms were found to constrain the effectiveness of professional development initiatives. Addressing these challenges is critical to ensuring that professional growth translates into sustained improvements in teaching and learning.

The study emphasises the importance of a coordinated, holistic approach that integrates structured professional development, mentorship, digital platforms, and supportive policy frameworks. Such an approach ensures that teachers are equipped, motivated, and supported to deliver high-quality, competency-based education.

7.0 Recommendations

7.1 Recommendations for Action

Institutionalize Teacher Professional Development: Schools and local education authorities should make professional development a continuous, integral part of the education system. This should combine in-service training, school-based workshops, mentorship, and peer learning. Institutionalizing professional development ensures that teachers receive ongoing support to address instructional challenges while reinforcing the principles of the Competency-Based Curriculum (CBC). It also allows for systematic monitoring and evaluation of training activities, promoting sustainability and consistency in teacher growth.

Formalize Mentorship Programs: Experienced teachers should mentor less experienced colleagues through structured programs with clear objectives and monitoring mechanisms. Formal mentorship encourages reflective practice, knowledge sharing, and collaborative problem-solving. It also helps bridge gaps in understanding or implementing CBC principles, ensuring that teachers consistently apply learner-centred pedagogies and competency-focused assessments. By fostering professional communities, mentorship supports continuous instructional improvement beyond individual training sessions.

Integrate Digital Learning: Online training modules, virtual workshops, and digital collaboration platforms should complement face-to-face professional development. Digital learning expands access and flexibility, particularly for teachers in resource-constrained or remote schools. It also enables continuous professional growth by allowing teachers to engage in reflective practice, interact with peers, and access training materials at their

convenience. Investing in ICT infrastructure and digital literacy among teachers is essential to maximize the benefits of online professional development initiatives.

Strengthen Monitoring and Evaluation: Schools should establish clear indicators to assess the impact of professional development on teacher competence, instructional practices, and student outcomes. Regular monitoring and evaluation enable evidence-based decision-making, guide resource allocation, and ensure alignment with curriculum objectives. Additionally, documenting best practices, challenges, and lessons learned provides feedback for refining training programs and informs future professional development initiatives.

Address Systemic Challenges: Efforts should be made to reduce class sizes, balance teacher workloads, provide adequate teaching resources, and ensure equitable access to professional development. Addressing these systemic barriers enhances the effectiveness of training programs and allows teachers to apply newly acquired skills meaningfully. Holistic interventions that integrate professional development with resource provision, policy support, and structural improvements create an enabling environment that maximizes the impact of teacher capacity-building efforts on student learning outcomes.

7.2 Recommendations for Further Research

Longitudinal Studies: Future research should investigate the long-term impact of professional development on teachers' instructional practices and student learning outcomes over multiple academic years. Longitudinal studies will provide insights into the sustainability of professional development effects and help identify which strategies yield durable improvements in teaching effectiveness.

Comparative Effectiveness of Professional Development Modalities: Research should assess the relative impact of different professional development modalities, including in-service training, study leave, mentorship, school-based workshops, and online learning. Comparative studies will help policymakers and school leaders prioritize high-impact approaches and optimize resource allocation for improving teacher competence and CBC implementation.

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