

## Impact of Regular In-Service Training on Delivery of Competency-Based Curriculum in Nigerian Schools

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### Abstract

*The global shift toward Competency-Based Curriculum (CBC) underscores the need for educational systems to realign teaching practices with learner-centered and outcome-based methodologies. This theoretical review examines the impact of regular in service teacher training on the effective delivery of CBC in Nigerian schools. Drawing on recent literature and empirical evidence, the study highlights inservice training as a critical tool for equipping teachers with contemporary pedagogical, assessment, and content-related skills. Findings indicate a strong correlation between continuous in service training and successful curriculum delivery of CBC. However, systemic barriers such as unstable funding, insufficient follow-up support, and resistance to change undermine training effectiveness. The paper offers practical recommendations for policymakers, educational administrators, and teacher educators, emphasizing policy reform, context responsive program design, mentorship and institutional collaboration to reinforce in-service training and support sustainable CompetencyBased Curriculum (CBC).*

**Keywords:** *In-Service Training, Curriculum, Curriculum Delivery, Competency-Based Curriculum,*

### INTRODUCTION

The educational landscape has experienced a notable paradigm shift with the growing global adoption of Competency-Based Curriculum (CBC), which emphasizes learners' mastery of skills and the application of knowledge over rote memorization (UNESCO, 2021). In many developing countries including Nigeria, Competency-Based Curriculum (CBC) have been initiated to align curriculum with the needs of 21st-century learners. However, the success of (CBC) hinges significantly on the preparedness and capacity of teachers to deliver the new curriculum effectively. Regular in-service training plays a central role in equipping educators with the pedagogical, technical, and content-related competencies necessary for effective CBC implementation. According to Darling-Hammond et al. (2017), effective professional development is sustained, collaborative, and aligned with curriculum changes. Yet, in many education systems, in-service training remains sporadic, overly generic, or disconnected from classroom realities, thereby weakening the objectives of CBC reform (OECD, 2020). Alasoluyi (2024), in a study on ICT integration for CBC delivery in Lagos State, noted that while teachers were aware of the

principles of competency-based teaching, they lacked the practical know-how to deliver lessons in line with CBC goals, largely due to irregular and poorly structured training opportunities. Similarly, Umoh and Bassey (2024) investigated the influence of professional competence on curriculum delivery among secondary school teachers in Akwa Ibom State and reported a statistically significant relationship between continuous professional development and effective teaching practices. Empirical studies by Akinrinola et al. (2021) reveals that although secondary school teachers in Nigeria embrace the principles of CBC, many were not adequately equipped with the instructional skills necessary for its execution due to insufficient exposure to competency-based methods during in-service programs. Their study stressed the importance of regular training that is tailored to competency-based instructional and assessment strategies.

Wambugu and Muthaa (2022) found that teachers who underwent structured CBC training programs demonstrated better understanding and classroom application of competency-based strategies. Bottom of Form. Adeyemi and Olayiwola (2020) also found that many Nigerian teachers expressed willingness to adopt CBC but were hindered by limited access to adequate training opportunities, resulting in confusion and occasional resistance. These empirical studies shows that while curriculum documents may be well designed, their successful execution relies heavily on consistent and relevant professional training. Competency-Based Curriculum no doubt, promotes critical thinking, creativity, collaboration, and the ability to apply learning in real-life contexts. Its learner-centered philosophy marks a shift from traditional, content heavy instruction to one that values demonstration of competence. Regular in-service training, as a form of continuous professional development is therefore indispensable as it provides a structured platform for updating teachers on new content areas, pedagogical techniques, assessment methods, and classroom management approaches that align with CBC. In-service training remains a cornerstone of educational quality improvement and curriculum reform, as it enhances teachers knowledge, pedagogical skills, and readiness to implement innovations like CBC. However, its effectiveness depends on thoughtful design, consistent delivery, contextual relevance, and strong follow-up support mechanisms. Despite these findings, in-service training in Nigeria is often marred by challenges such as inadequate funding, lack of follow-up mechanisms, insufficient training materials, poorly qualified facilitators, and limited opportunities for peer collaboration (Eze & Njoku, 2022). These systemic issues raise serious concerns about the sustainability and effectiveness of CBC reforms, especially in rural and underserved areas.

This study, therefore, aims to examine how regular and structured in-service training influences the effective delivery of the Competency-Based Curriculum in Nigerian schools. Specifically, it explores the frequency, content, delivery modes, and perceived effectiveness of training programs and how these elements impact teachers' classroom practices and student learning outcomes.

### **Concept of In-Service Training**

In-service training refers to organized professional development programs designed for teachers who are actively engaged in teaching. The aim is to enhance their knowledge, instructional skills, professional attitudes, and overall effectiveness in the classroom. It is a vital component of Continuous Professional Development (CPD), particularly in the context of educational reforms such as the implementation of Competency-Based Curriculum (CBC). Afolabi and Loto (2021) define in-service training as “a systematic professional development activity organized within the school or education system aimed at updating teachers' knowledge, skills, and attitudes to improve classroom practices and student outcomes.” Eze and Odo (2020) define it as “an on-the-job training program meant to expose teachers to innovations in curriculum delivery, pedagogical approaches, and assessment techniques for improved school effectiveness.” In-service training encompasses sustained, collaborative, and practice-oriented learning experiences designed to improve instructional quality and align teaching practices with contemporary curricular demands. Adewale and Yusuf (2023) note that “in-service training includes seminars, workshops, and refresher courses intended to build teachers' capacities and help them cope with new challenges in the education sector. From an institutional perspective, UNESCO (2011) defines in-service training as all professional development activities undertaken after initial teacher certification, aimed at improving teaching competence. The OECD (2020) extends this definition to include both formal and informal learning activities that enhance teachers' knowledge, skills, and attitudes throughout their careers. Olawumi and Mavuso (2024) describe in-service training as “structured professional development initiatives designed to promote education for sustainable development, equipping current teachers with updated knowledge, instructional strategies, and values aligned with modern educational goals. The Teachers Institute (2024), in a recent web publication, defines in-service education as “ongoing professional development programmes for practicing teachers, aimed at updating subject knowledge, adopting new pedagogies, integrating technology, and addressing emerging classroom challenges. Similarly, Okonkwo and Igwe (2022) describe in-

service training as “planned learning experiences and activities provided by the employer to enhance the competencies of teachers while they are actively engaged in teaching. The concept has evolved from one-time workshops to more sustained and collaborative learning communities centered on reflective practice and instructional improvement. In-service training activities may include workshops, refresher courses, mentoring, peer coaching, online modules, and collaborative learning sessions. The ultimate goal is to strengthen teachers’ professional competencies, improve classroom instruction, and ensure responsiveness to curriculum reforms. When properly designed and implemented, in-service training has the potential to significantly enhance teacher motivation, instructional quality, and student learning outcomes thereby playing a pivotal role in the success of Competency-Based Curriculum delivery.

### **Concept of Competency-Based Curriculum (CBC)**

The term curriculum is a multifaceted concept that refers to the planned and structured content and learning experiences provided by educational institutions to learners. It encompasses not only the subjects taught but also the teaching methods, learning outcomes, materials, and assessments designed to guide and enhance student learning. Curriculum refers to the planned and guided learning experiences and intended outcomes, formulated through systematic reconstruction of knowledge and experience, under the auspices of the school, for the learner’s continuous and holistic development. According to Offorma (2020), curriculum is "a structured framework of knowledge, skills, attitudes, and values designed to guide the learning experiences of students in a formal school system. Similarly, Fafunwa (2021) underscores that the curriculum in Nigeria must reflect indigenous knowledge systems and the developmental priorities of the country. He argues that curriculum is a vehicle for national integration, capacity building, and moral education, especially in a pluralistic society like Nigeria. Tanner and Tanner (2020) further describe curriculum as "the reconstruction of knowledge and experience, systematically developed under the auspices of the school, to enable the learner to increase control over their environment.

Curriculum delivery, on the other hand, refers to the methods, strategies, and processes educators use to implement the planned curriculum and facilitate student learning. It involves pedagogical decisions, classroom management, the use of educational resources, and technology integration.

Adebayo and Oyetunde (2022) define curriculum delivery as the process through which teachers translate the curriculum content into learning experiences for students using appropriate pedagogical strategies and instructional materials. Furthermore, Okafor and Bello (2023) define curriculum delivery as a dynamic and learner-centered approach in which educators interpret, adapt, and present curriculum content to achieve stated educational objectives.

Modern curriculum delivery emphasizes:

- i. Learner-centered approaches – encouraging active participation, collaboration, and critical thinking (Noddings, 2021).
- ii. Differentiated instruction – adapting teaching to meet diverse learners’ needs (Tomlinson, 2017).
- iii. Competency-based learning – prioritizing mastery of specific knowledge, skills, and attitudes (UNESCO, 2021).
- iv. Integration of ICT – utilizing digital tools to enhance accessibility and engagement (Anderson & Dron, 2022).

Competency-Based Curriculum (CBC) is a learner-centered framework that focuses on developing specific competencies of knowledge, skills, attitudes, and values required for personal and professional success. Unlike traditional systems that rely on time-based progression, CBC allows learners to advance once mastery is demonstrated. Competency-Based Curriculum (CBC) aligns with this approach by emphasizing personalized learning, flexible pacing, and performance-based assessment (UNESCO, 2021). CBC focuses on what learners are expected to do rather than what they should know, emphasizing outcomes, performance, and skill mastery. In many developing countries, CBC is being adopted to align education with 21st-century skills and labour market needs. Yoon et al. (2020) emphasize that competency-based curriculum promotes learner-centered teaching, aligning curriculum design, assessment, and pedagogy with clearly defined outcomes. CBC defines measurable learning goals that integrate knowledge, skills, and behaviors, assessed in real-world contexts. However, the successful implementation of CBC requires a paradigm shift in pedagogy, assessment practices, and curriculum delivery necessitating well-trained and continuously supported teachers.

## **Purpose of In-Service Training**

In-service training is a critical strategy for building the professional capacity of teachers while they are actively employed. It ensures that teachers continuously update their competencies in response to changing pedagogical practices, curricular reforms, and policy demands. The key purposes of in-service training include:

1. **Keeping Teachers Updated with New Knowledge and Practices:** In-service training helps educators stay current with evolving curriculum reforms, pedagogical innovations, and subject content. Olawumi and Mavuso (2024) affirm that in-service programs are essential for sustaining educational reform.
2. **Enhancing Teaching Competence and Classroom Effectiveness:** It equips teachers with instructional techniques, classroom management skills, and formative assessment strategies. A meta-analysis by the International Journal of STEM Education (2025) found that In-service training improves teacher efficacy and student outcomes.
3. **Facilitating Curriculum Reform Implementation:** Curriculum reforms especially CBC requires specific teaching methods and assessment strategies. Frontiers in Education (2025) stresses that targeted in-service training align classroom practice with curriculum goals.
4. **Promoting Reflective Practice and Lifelong Learning:** In-service training fosters reflective thinking, experimentation, and continuous professional growth. A review in Teaching and Teacher Education (2023) shows that both formal and informal learning activities strengthen teacher self-efficacy and autonomy.
5. **Encouraging Collaboration and Peer Learning:** Structured training often involves Professional Learning Communities (PLCs), which enhance collaborative problem-solving and peer mentoring. ILO and UNESCO (2024) find that PLCs improve teacher well-being, reduce isolation, and foster collective efficacy.

### **Scope of In-Service Training**

In-service training encompasses a wide range of structured professional development activities designed to improve teachers' knowledge, skills, and attitudes while they are actively teaching. Its scope is comprehensive, particularly in the context of implementing

Competency-Based Curriculum (CBC), where pedagogical transformation is essential. The following outlines the major areas covered:

- 1. Pedagogical Skills Development:** In-service training supports the development of learner-centered instructional strategies, including collaborative learning, problem-solving, and project-based methods, all central to CBC (UNESCO, 2021; Wambugu & Muthaa, 2022 & Adewale & Yusuf, 2023). These methods foster critical thinking and competence acquisition among learners
- 2. Curriculum Content Mastery:** Teachers are updated with current curriculum content and frameworks to ensure accurate and relevant classroom delivery. Regular training ensures that teachers internalize the objectives of CBC and align teaching with expected learning outcomes (Orodho, 2018).
- 3. Assessment and Evaluation Techniques:** Competency-based systems require performance-based assessment approaches. In-service training equips teachers to use continuous, formative, and authentic assessment tools such as rubrics, checklists, and portfolios (Darling-Hammond et al., 2017 & Afolabi & Loto, 2021).
- 4. Integration of ICT in Teaching;** Training programs include digital literacy and the integration of Information and Communication Technology (ICT) in lesson planning, delivery, and assessment, particularly important in enhancing CBC delivery in remote or underserved areas (OECD, 2020). Eze & Odo, 2020).
- 5. Classroom Management:** Effective classroom management strategies are included in in-service programs to help teachers create inclusive, disciplined, and engaging learning environments essential for competency development (Guskey, 2002).
- 6. Inclusive Education and Special Needs Strategies:** Training focuses on helping teachers adapt lessons for learners with special needs, ensuring that CBC benefits all students regardless of ability, in line with inclusive education goals (UNESCO, 2021). (Onwuchekwa & Bello, 2022).
- 7. Professional Ethics and Values:** Teachers are guided on professional conduct, values-based education, and ethical decision making, promoting character formation and social-emotional competencies in learners (Olawumi & Mavuso, 2024 (Nwachukwu & Ogar, 2021).

- 8. Educational Policy and Reform Awareness:** In-service training ensures teachers stay informed about educational policies, curriculum reforms, and implementation guidelines, which is essential for consistent and faithful application of CBC principles (UNESCO, 2021).
- 9. Leadership and School Improvement:** Advanced training prepares teachers for leadership roles, enabling them to serve as mentors and facilitators of school-based professional learning communities (Darling-Hammond et al., 2017).

### Challenges to Effective In-Service Training in Nigeria Schools

In-service training is crucial for enhancing teacher competence, updating knowledge, and improving curriculum delivery. However, several challenges hinder its effectiveness in Nigeria. These include:

- 1. Inadequate Funding:** One of the major challenges is the lack of sufficient funding. Many in-service training programs are underfunded, leading to poor quality training, lack of instructional materials, and low participation rates. Ogunyemi & Aladejana (2021) assert that many professional development initiatives in Nigeria suffer due to "budgetary constraints, inadequate logistical support, and lack of sustained governmental commitment.
- 2. Poor Planning and Implementation:** Many training programs are poorly structured, hastily planned, and not based on actual teacher needs. Often, programs are organized as ad-hoc events rather than part of a strategic professional development plan. Adekunle & Salawu (2020) argue that "the absence of a well-articulated framework for in-service training results in overlapping, irrelevant, and ineffective sessions for teachers."
- 3. Lack of Needs Assessment:** In many cases, training is provided without prior assessment of what teachers actually need. This leads to irrelevant or misaligned content that fails to improve classroom practices. Nwankwo & Eze (2022) note that "effective in-service training must be preceded by a rigorous needs assessment to identify competency gaps; however, this is largely missing in Nigeria's system.

**4. Inadequate Monitoring and Evaluation:** There is limited follow-up or assessment of the impact of in-service training. This makes it difficult to evaluate whether training has improved teacher performance or student outcomes. According to Obi & Okeke (2021), "there is a disconnect between training delivery and performance monitoring, leaving the effectiveness of most programs unknown."

**5. Insufficient Incentives and Motivation:** Teachers are often not motivated or rewarded for attending in-service training. In some cases, they must attend at their own expense, making participation unattractive. Adebayo & Jimoh (2020) found that "teachers in rural areas especially lack incentives or support to attend training, resulting in low morale and absenteeism during such programs."

**6. Over-centralization and Bureaucracy:** Training initiatives are usually centrally organized, leaving little room for local contexts or school-level autonomy. The bureaucratic approach delays implementation and reduces responsiveness. Ibrahim & Lawal (2023) observe that centralized control by education ministries often leads to delays and mismanagement, rendering many well-intended programs ineffective.

**7. Teacher Workload and Time Constraints:** Teachers are already burdened with heavy workloads. Attending in-service training during school sessions disrupts teaching, while out-of-session training is often rushed or poorly attended. Chukwu & Umeh (2021) emphasize that "teachers find it difficult to leave their classes for workshops, especially without proper substitution arrangements."

**8. Digital Divide and ICT Limitations:** With the rise of online professional development, the lack of ICT skills and infrastructure limits access to training, especially in rural or under-resourced areas. Eze & Nwachukwu (2022) report that "many teachers lack the digital literacy and internet access needed to participate in virtual training programs, widening the professional development gap."

**9. Lack of Policy Continuity:** Changes in government or leadership often result in the abandonment of ongoing training initiatives. This creates inconsistency and reduces the sustainability of training efforts. Onyema & Okafor (2020) pointed out that "policy summersaults

and lack of continuity plague teacher training programs in Nigeria, causing disruption in long-term goals.”

**10. Urban-Rural Disparities:** There is an unequal distribution of training opportunities, with urban teachers benefiting more than their rural counterparts. Rural schools often lack access to workshops and seminars. (Iheanacho & Bello (2021).

## RECOMMENDATIONS

Based on the reviewed literature and theoretical analysis, the following recommendations are proposed:

### 1. Institutionalized Regular In-Service Training

Ministries of Education should mandate and support regular in-service training as a core requirement for all educators, particularly those involved in implementing Competency-Based Curriculum (CBC).

### 2. Align Training with CBC Pedagogical Demands

In-service training should be practical, classroom-focused, and tailored to the specific instructional strategies, assessment techniques, and learner outcomes emphasized in CBC.

### 3. Incorporate Mentorship and Follow-Up Support

Training programs should include structured post-training support mechanisms such as mentorship, peer coaching, classroom observation, and feedback to reinforce the application of newly acquired skills.

### 4. Leverage Technology for Professional Development

Digital platforms—including webinars, online courses, and mobile learning tools—should be utilized to expand access to training, especially for teachers in rural and underserved areas.

### 5. Establish Monitoring and Evaluation Systems

Educational institutions should develop robust systems to monitor and evaluate the

impact of training programs on teacher practice and student learning outcomes, ensuring continuous improvement and accountability.

## **Implications of the Study**

The empirical studies and theoretical insights from this study carry significant implications for policy, practice, and future research in the Nigerian educational context, especially with the adoption of the Competency-Based Curriculum (CBC):

### **1. Policy Implications**

This study highlights the urgent need for educational policymakers to institutionalize regular in-service training as a core component of curriculum reform initiatives. For CBC to be effectively implemented, national and state education ministries must allocate dedicated funding and develop structured frameworks for continuous teacher development. The findings support the integration of in-service training into Teacher Service Schemes, Education Sector Plans, and National Curriculum Policies, ensuring sustainability and alignment with education reforms.

### **2. Pedagogical Implications**

The study reinforces that teacher competence directly influences the quality of curriculum delivery. When teachers undergo regular, targeted professional development, they are more likely to adopt learner-centered, competency-based instructional strategies. Therefore, teacher education institutions and professional development agencies must design training programs that are practical, subject-specific, and closely linked to classroom realities. This also calls for a shift from traditional, one-off workshops to ongoing, school-based, and reflective learning models.

### **3. Administrative Implications**

School leaders and administrators play a crucial role in supporting in-service training initiatives. The study implies the need for principals and head teachers to act as instructional leaders by

facilitating internal capacity-building efforts, supporting collaborative learning communities, and ensuring that trained teachers are empowered to implement what they have learned. Effective monitoring, mentorship, and resource allocation at the school level are also necessary to bridge the gap between training and practice.

#### **4. Technological Implications**

Given the challenges of access and equity in Nigeria, the study supports the use of digital platforms and mobile learning technologies to scale in-service training, especially in rural and hard-to-reach areas. Institutions such as the Teachers Registration Council of Nigeria (TRCN) and the Universal Basic Education Commission (UBEC) can leverage e-learning tools to offer flexible, cost-effective training modules aligned with CBC delivery.

#### **5. Research Implications**

This study lays the groundwork for further empirical research on the long-term effects of in-service training on CBC implementation. Future studies should investigate the specific training models that yield the highest impact, explore regional disparities, and assess student outcomes in classrooms where teachers have received continuous professional development. There is also a need to examine how factors like teacher motivation, leadership support, and resource availability mediate the success of in-service programs.

#### **6. Social and Economic Implications**

By improving teacher effectiveness through regular in-service training, this study indirectly contributes to better learning outcomes, skill development, and workforce readiness among Nigerian students. In the long term, such educational improvements can support national development goals, youth employability, and economic competitiveness in an increasingly skills-driven global economy.

## **CONCLUSION**

This study emphasized the pivotal role that regular in-service training plays in the effective delivery of the Competency-Based Curriculum. As demonstrated through current literature and empirical evidence, teachers are the primary agents of curriculum implementation, and their continuous professional growth is essential for aligning instructional practices with evolving pedagogical frameworks. When carefully designed and executed, in-service training empowers teachers with the competencies required for learner-centered instruction, formative assessment, and competency-based learning. However, persistent challenges—such as inadequate funding, poor coordination, lack of follow-up, and resistance to change—continue to undermine the effectiveness of teacher development initiatives.

To ensure the sustainability and success of CBC in Nigeria In-service training must be prioritized, adequately funded, and systematically institutionalized as a central pillar of educational reform. Stakeholders, including policymakers, school administrators, and teacher training institutions, must collaborate to build a coherent, responsive, and dynamic professional development system that supports quality education for all.

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