Teacher Preparedness and Professional Development in the Competency-Based Education (CBE): An Assessment of Training, Resourcing, and Support in Kenya

Paul Alela Oguta

Lecturer, Rongo University

Abstract: Kenyan teaching and learning outcomes have undergone a paradigm shift as a result of the Competency-Based Education (CBE) system, which took the role of the 8-4-4 educational system. The preparation of instructors and the potential benefits of professional development for enhancing the delivery of CBE are examined in this study. This study focuses on three main indicators—training programs, resources, and support mechanisms—to evaluate teachers' readiness for the implementation of CBE in Kenya. The literature review took into account the perspectives of Kenya, Africa, and the world. The study employed a mixed-methods approach, and the sample consisted of 1200 instructors from Comprehensive schools spread across the counties in the Nyanza Region. The study's mixed-method approach exploited questionnaires and document evaluations to assess instructors' preparation, resources, and assistance in implementing this curriculum. The findings demonstrate the necessity for systematic and ongoing professional development programs by exposing notable differences in training quality, availability to learning materials, and systemic support. The article's recommendations for improving teacher readiness as a basis for CBE success are included at the end.

Keywords: Competency-Based Education, Teacher Preparedness, Professional Development, Educational Reform, Kenya.

1. INTRODUCTION

The Competency-Based Education (CBE) introduced in Kenya in 2017 aims to equip learners with skills and values essential for the 21st century. Unlike the traditional knowledge-based 8-4-4 system, CBE focuses on outcomes such as creativity, collaboration, critical thinking, and communication. Central to this reform are teachers, who play a pivotal role in actualizing curriculum goals. However, concerns about their preparedness and ongoing professional development have raised questions about the viability and effectiveness of the CBE implementation.

The effective implementation of CBE largely depends on teachers who are well-trained and possess both pedagogical content knowledge and the ability to promote learner-centered instruction. However, numerous educators indicate that they face challenges such as inadequate training, limited access to current instructional materials, and a lack of sufficient support from their institutions. Transitioning to CBE requires not only alterations in curriculum content but also shifts in teaching philosophies, assessment strategies, and classroom practices. Consequently, without thorough and ongoing professional development initiatives, along with supportive policies and infrastructure, the transformative goals of CBE may be jeopardized within the classroom setting.

2. PURPOSE OF THE STUDY

This study aims to assess teacher preparedness for CBE implementation in Kenya, focusing on examining the adequacy of initial and ongoing training programs, the availability and accessibility of teaching and learning resources, and the institutional and systemic support mechanisms provided to teachers.

3. LITERATURE REVIEW

3.1 International Perspective

Competency-Based Education (CBE) has become popular all over the world because of its focus on mastery-based progression, individualized learning, and skill development. Effective implementation of CBE systems is largely dependent on context-specific and continuous professional development that is adapted to educators' requirements, claim Darling-Hammond et al. (2017). Finland has demonstrated success in implementing learner-centered education, which has been attributed to teacher autonomy and rigorous professional training (Sahlberg, 2015).

The importance of formative assessments and ongoing teacher support in promoting student achievement has been demonstrated by CBE efforts in US states such as New Hampshire and Maine (Sturgis, 2014). To guarantee ongoing teacher development in line with national curriculum revisions, Singapore, meantime, places a strong emphasis on the utilization of professional Learning Communities (Ng, 2013).

These global experiences highlight how important organized feedback and collaboration are to raising the caliber of instruction within CBE settings. Specifically, by including formative evaluations, educators can modify their pedagogical approaches in response to learners' development in real time, which promotes greater comprehension and proficiency. Additionally, Singapore's professional learning communities encourage educators to co-create knowledge, engage in reflective discourse, and support one another—practices that have been connected to better student outcomes and instructional effectiveness (Hargreaves & Fullan, 2012). Competency-based changes cannot be sustained until these cooperative and flexible approaches are incorporated into teacher development frameworks.

The significance of collaborative inquiry and reflective practice among educators is further highlighted by Australia's CBE reforms. To assist teachers throughout educational transitions, the Australian Institute for Teaching and School Leadership (AITSL, 2020) advocates for organized coaching and mentoring programs.

The strategy used in Australia supports the notion that structured professional learning that is peer-driven, context-relevant, and job-embedded is essential to long-term teacher development. In addition to improving teachers' teaching methods, collaborative inquiry increases the group's ability to address the various needs of learners. With the help of coaching and mentoring, reflective practice enables teachers to assess their approaches critically and bring them into line with CBE principles. Such support mechanisms are essential to guaranteeing consistency, competence, and confidence among teachers facing curricular transitions, as AITSL (2020) highlights. These tactics are especially important for keeping the reform movement moving forward while meeting the changing needs of contemporary classrooms.

3.2 African Perspective

In the African context, countries such as Rwanda and South Africa have also adopted competency-based reforms, placing strong emphasis on teacher capacity-building and curriculum alignment. However, challenges such as inadequate training frameworks, resource constraints, and limited stakeholder coordination have impeded effective implementation (Ottevanger, Akker, & Feiter, 2007). For CBE to be impactful, it must be supported by systemic investments in teacher development, including mentorship, coaching, and reflective practice opportunities. According to UNESCO (2019), sustainable education reforms in Africa require ongoing professional learning that is embedded in school culture and tailored to local realities.

Competency-based frameworks are being adopted by a number of African nations. When Rwanda implemented a competency-based curriculum in 2015, teacher preparation had to be completely revised. According to Musabyimana and Cheruto (2017), two major obstacles were a lack of ongoing professional development and restricted access to resources. Ameyaw and Ababio (2019) observed that although the curriculum change in Ghana was intended to promote creativity and critical thinking, insufficient teacher preparation hampered its successful implementation. Similar to this, competency-based components are incorporated into South Africa's Curriculum and Assessment Policy Statement (CAPS), although instructors frequently encounter difficulties with pedagogical adaptation and content knowledge (Modisaotsile, 2012).

Although the implementation of competency-based frameworks shows a common commitment to enhancing learning outcomes, these examples from various parts of Africa show that systemic support and teacher readiness are crucial to their success. Insufficient funding for capacity-building programs, a shortage of teaching resources, and restricted teacher autonomy are frequently the causes of the discrepancy between policy and classroom practice. Furthermore, even well-meaning reforms might not succeed if ongoing professional development is not in line with curriculum objectives and contextual realities. According to Sinyolo (2012), the successful localization and durability of CBE models throughout the continent depend on providing teachers with ongoing training, opportunities for peer collaboration, and access to instructional materials.

These incidents highlight a larger pattern throughout the continent wherein systemic and institutional constraints frequently thwart ambitious curriculum revisions. Teachers are frequently expected to adopt novel instructional strategies without the necessary continuous support, resources, or training. The potential advantages of competency-based education are compromised by this misalignment between curriculum design and classroom realities. Jwan (2010) points out that in addition to initial teacher training, ongoing professional development, school-level support networks, and teachers' active participation in curricular interpretation and adaptation are all necessary for the successful implementation of such changes. Competency-based changes might not become transformative practices but just theoretical goals in the absence of these fundamental components.

In vocational training, Uganda's education sector has tested CBE reforms. Oketch and Asiachi (2018) assert that the availability of useful tools and continuous support for teachers are critical to the success of these programs. CBE has had conflicting results in Tanzania because of differences in facilities and the quality of teacher training (Mosha, 2015). Systemic investment in leadership, resources, and professional development is essential for CBE sustainability, according to these African experiences.

These observations from Tanzania and Uganda highlight the complexity of successful CBE implementation, especially in technical and vocational education. Competency-based approaches rely on the institutional and infrastructure ecology surrounding the teacher in addition to curriculum creation. According to Tikly (2013), more comprehensive systemic problems like teacher development framework coherence, educational leadership, and fair resource distribution must be addressed by sustainable education reform in Africa. Even well-designed CBE programs run the risk of becoming inconsistent or unsustainable without these, particularly in environments with limited resources. For long-term effects, a comprehensive strategy that incorporates infrastructure investment, policy coherence, and teacher empowerment is essential.

3.3 Kenyan Perspective

In Kenya, the switch to CBE has been well-documented. Although many educators claim inadequate training, Oduor et al. (2020) assert that teacher preparedness is essential to curriculum achievement. The Teachers Service Commission (TSC, 2020) emphasized the necessity of ongoing in-service training and recognized shortcomings in professional development.

Although the policy climate has advanced to promote CBE, the Kenyan experience shows that teacher ability remains a barrier to practical implementation. The necessary pedagogical changes are frequently unclear to teachers, especially when it comes to learner-centered instruction, formative assessment, and the integration of values and soft skills. Due to a lack of exposure to practical, context-specific training, many educators find it difficult to convert curriculum designs into successful classroom practices (KICD, 2021). Therefore, for Kenya to fully achieve CBE aims, it is not only advantageous but also essential to increase teacher induction, mentorship programs, and school-based continuing professional development.

According to a research by Waweru & Ngaruiya (2021), many teachers lacked practical knowledge of CBE pedagogy, even though the majority had participated in sensitization workshops. In a similar vein, Muthoni (2019) discovered that inadequate resources, especially in rural locations, make it difficult to offer CBE effectively. Additionally, curriculum integrity and teacher morale are strongly impacted by administrative support and school leadership (Ndethiu, 2021).

These reviews demonstrate how intricately institutional leadership, resource availability, and teacher preparation interact to influence how well CBE is implemented. Although sensitization seminars have increased awareness, they frequently fail to provide teachers with the practical skills required for varied learning, formative assessment, and learner-centered instruction. These issues are made worse by the unequal distribution of resources, which creates an unfair playing field for

all schools, especially in rural and neglected areas. Additionally, school leadership that cultivates a collaborative, supportive, and visionary atmosphere greatly improves teacher morale and curriculum fidelity, as noted by Ndethiu (2021). Therefore, a systematic approach that incorporates effective instructional leadership, fair resource distribution, and hands-on teacher training is necessary for the successful implementation of CBE.

Ndirangu and Macharia (2021) emphasized the value of Teachers' Colleges in educating educators for CBE. However, the fact that many schools still employ traditional pedagogies limits the preparedness of pre-service teachers. A study by Koech and Barasa (2020) found that structured mentorship and school-based training significantly improved teacher confidence and CBE implementation in the classroom.

Despite policy frameworks designed to support CBE, operational gaps persist. Even though the Kenya Institute of Curriculum Development (KICD) created the resource materials, their accessibility and adoption vary greatly by location. By highlighting a disparity between curriculum design and actual classroom realities, this emphasizes the importance of contextualized teacher support.

4. METHODOLOGY

The research used a mixed-methods approach. Through a systematic survey, 1200 teachers from Comprehensive schools throughout the counties of the Nyanza Region were included in the sample. Twelve key informant interviews were also performed with Ministry of Education representatives, curriculum support staff, and school administrators. Thematic coding for qualitative data and descriptive statistics were used for data analysis.

5. DATA ANALYSIS AND FINDINGS

5.1 Training

Three indicators were put to test. They were formal training; duration and depth of training and follow-up training. The results were as shown on Table I

Table I: Training and Mentorship

		Yes	%	No	%
1	Formal training	813	67.75	387	32.25
2	Duration and depth of Training	629	52.41667	571	47.58333
3	Follow-up Training	330	27.5	870	72.5

According to Table I, 813 (67.75%) of those surveyed said they have attended CBE Formal Training sessions that were arranged by TSC and the Ministry of Education. The trainings were deemed excessively short and primarily theoretical by 629 (52.41%). Furthermore, follow-up training or mentorship of any kind was only provided to 330 (27.5%) of the respondents.

5.2 Resources

Three indicators were put to test. They were Instructional materials, digital access, and infrastructure. The results were as captured on Table II below

Table II: Resources

		Yes	%	No	%
1	Instructional Materials	712	59.33	488	40.66
2	Digital Access	423	35.25	777	64.75
3	Infrastructure	895	74.58	305	25.41

Table II indicated that 712 (59.33%) respondents noted inadequate supply of CBE teaching materials. On digital ACCESS, only 423 (35.25%) had access to digital content or e-resources, with rural teachers disproportionately affected. Lastly, 895 (74.58%) indicated that they witnessed limited classroom space and lack of learning tools (e.g., charts) and that they were recurrent issues.

5.3 Support Systems

Three indicators were put to test. They were school leadership, interaction with Curriculum Support Officers, and Peer Support. The results were as shown on table III below

Table III: Support Systems

		Yes	%	No	%
1	School Leadership	748	62.33	452	37.67
2	Curriculum Support Officers CSOs	489	40.75	711	59.25
3	Peer Support	857	71.42	343	28.58

Although 748 (62.33%) respondents said their head teachers were supportive, Table II revealed that this support was frequently unstructured. Additionally, only 489 people (40.75%) interacted with Curriculum Support Officers (CSOs). 857 (71.2%) participated in informal peer learning groups, indicating a solid foundation.

6. DISCUSSION

The training data's implications (Table I) indicate that although a sizable portion of teachers (67.75%) have undergone formal CBE training, 52.41% of respondents questioned the training's efficacy because of its brief duration and lack of depth. The lack of mentorship and follow-up training is even more worrisome; only 27.5% of teachers reported having access to ongoing professional development. The implementation of CBE in classrooms is weakened by this absence of reinforcement mechanisms, which also impedes the development of practical pedagogical abilities. The results point to the need for more comprehensive, practical, and ongoing frameworks for professional growth, such as coaching and mentorship after training.

There are notable differences in the accessibility of essential teaching and learning resources, according to the resource statistics (Table II). A significant 40.66% of respondents still do not have access to instructional resources, despite 59.33% reporting having some, indicating unequal resource distribution. With only 35.25% of teachers having access to digital content or e-resources, the situation is dire in terms of digital access; this disparity is particularly noticeable in rural areas. In addition, 74.58% of respondents cited infrastructure issues like packed classrooms and a dearth of simple teaching tools like charts. These ramifications imply that the learner-centered, activity-based needs of the CBE are unlikely to be successfully implemented in the absence of sufficient digital and physical resources.

Although 62.33% of respondents said that school leadership is supportive, support system data (Table III) show that this support is frequently unstructured and informal. Even though Curriculum help Officers (CSOs) are essential for curriculum interpretation and classroom help, only 40.75% of instructors communicate with them, which is a serious concern. Positively, peer support—often in the form of unofficial Communities of Practice—benefits 71.42% of instructors. These results suggest that formal institutional structures are still underutilized, despite grassroots initiatives to foster collaborative support. Strengthening the role of CSOs in continuing teacher development and institutionalizing school-based support networks are essential for the success of CBE.

7. CONCLUSION

In conclusion, the following inferences result from the data analysis. The findings demonstrate that teachers' levels of preparedness differ and that there are glaring gaps in institutional support, training standards, and resource accessibility. Government programs have attempted to offer CBE training across the nation, but they usually lack sufficient depth and are hampered by logistical problems.

Educational gaps are made worse by the fact that urban teachers usually have more resources than their rural colleagues. Furthermore, curricular integrity and teacher trust are undermined by a lack of reliable and helpful support. These findings support those of Waweru & Ngaruiya (2021) and Muthoni (2019) and point to systemic problems.

In Kenya, teacher readiness continues to be a key factor in CBE's success. To guarantee consistency, depth, and justice in teacher professional development, more work must be done, even in light of admirable training and awareness-raising initiatives. Teachers must be empowered, well-prepared, and consistently supported in order to implement the CBE's learner-centered approach.

8. RECOMMENDATIONS

1. Strengthen Teacher Training: Make CBE in-service training more frequent, longer, and more hands-on.

2. Improve Resource Allocation: Give fair distribution of instructional materials and ICT resources a priority, particularly in underserved areas.

3. Institutionalize Support Systems: Establish official coaching and mentoring programs in educational institutions.

REFERENCES

[1] Ameyaw, S. K., & Ababio, B. T. (2019). Curriculum Reform in Ghana: The Need for Effective Teacher Preparation. *International Journal of Educational Development*, 66, 38–45.

[2] Australian Institute for Teaching and School Leadership (AITSL). (2020). *Professional growth for teachers*. Retrieved from https://www.aitsl.edu.au

[3] Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.

[4] Hargreaves, A., & Fullan, M. (2012). *Professional Capital: Transforming Teaching in Every School*. Teachers College Press.

[5] Jwan, J. O. (2010). *Initiating Curriculum Reforms in Kenya: Challenges and Prospects*. *International Journal of Educational Development*, 30(3), 239–245.

[6] Koech, P. K., & Barasa, L. P. (2020). Teacher mentorship as a strategy for implementing competency-based curriculum in Kenya. *East African Journal of Education Studies*, 2(3), 56–67.

[7] Modisaotsile, B. M. (2012). *The Failing Standard of Basic Education in South Africa*. Policy Brief No. 72. Africa Institute of South Africa.

[8] Mosabyimana, J., & Cheruto, K. (2017). Challenges in implementation of the competency-based curriculum in Rwanda. *Rwandan Journal of Education*, 4(2), 27–35.

[9] Mosha, H. J. (2015). The role of teachers in implementation of competency-based education in Tanzania. *Journal of Education and Development*, 2(1), 67–78.

[10] Musabyimana, F., & Cheruto, K. (2017). Challenges Facing Implementation of ompetency-Based Curriculum in Rwanda: A Case of Gasabo District. *International Journal of Education and Research*, 5(6), 103–114.

[11] Muthoni, A. W. (2019). Challenges facing implementation of the Competency-Based Curriculum in Kenya. *International Journal of Education and Research*, 7(6), 15-28.

[12] Muthoni, D. K. (2019). Challenges Facing Implementation of Competency-Based Curriculum in Kenya: A Case of Public Primary Schools in Nakuru County. *International Journal of Education and Research*, 7(10), 55–68.

[13] Ndethiu, S. M. (2021). Influence of School Leadership on Teacher Motivation and Curriculum Implementation in Kenyan Schools. *Journal of Education and Practice*, 12(2), 112–120.

[14] Ndirangu, C., & Macharia, J. (2021). Challenges of teacher education in implementing CBE in Kenya. *Kenya Journal of Teacher Education*, 2(1), 11–25.

[15] Ng, P. T. (2013). Developing Singapore Teachers: *A Foundation for Lifelong Learning and Development*. Springer.Sturgis, C. (2014). *Progress and Proficiency: Redesigning Grading for Competency Education*. International Association for K–12 Online Learning (iNACOL).

[16] Ng, P. T. (2013). Lessons from Singapore's curriculum reforms. *Asia Pacific Journal of Education*, 33(3), 289–301.

[17] Oduor, J., Simiyu, M., & Kiarie, M. (2020). Teacher preparedness for the implementation of CBE in Kenya. *Kenya Journal of Education Planning, Economics and Management*, 12(3), 50-65.

[18] Oketch, M. O., & Asiachi, A. J. (2018). Competency-Based Education and Training in Uganda: Emerging Lessons from the Field. *Uganda Journal of Education and Development*, 3(2), 112–124.

[19] Ottevanger, W., van den Akker, J., & de Feiter, L. (2007). *Developing Science, Mathematics, and ICT Education in Sub-Saharan Africa: Patterns and Promising Practices*. World Bank.

[20] Sahlberg, P. (2015). *Finnish Lessons 2.0: What Can the World Learn from Educational Change in Finland?* Teachers College Press.

[21] Sturgis, C. (2014). *Progress and proficiency: Redesigning grading for competency education*. International Association for K–12 Online Learning.

[22] Teachers Service Commission (TSC). (2020). *Status Report on Teacher Training for CBE Implementation*. Nairobi: Government Printer.

[23] Tikly, L. (2013). Re-thinking Education for Sustainable Development in Africa. *European Journal of Education*, 48(2), 243–256.

[24] UNESCO. (2019). *Education Sector Strategy 2019–2025: Empowering Learners for Inclusive and Sustainable Development*. Paris: UNESCO.

[25] Waweru, P. N., & Ngaruiya, B. N. (2021). Teachers' Preparedness in Implementing the Competency-Based Curriculum in Kenya: A Case of Primary Schools in Kiambu County. *International Journal of Education and Social Science*, 8(3), 15–25.