Teachers' insights and attitudes toward the implementation of the competency-based curriculum in Addis Ababa

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Abstract

This study examined teachers' understanding, beliefs, and attitudes toward the implementation of the competency-based curriculum in Addis Ababa. A concurrent embedded mixed-methods research design was employed. Data were collected from 384 teachers who were proportionately selected from all schools using a simple random sampling technique to complete the questionnaire. Additionally, 20 teachers were purposively selected for interviews. Quantitative data were analyzed using descriptive statistics, including mean and standard deviation, while qualitative data were analyzed thematically. The results of the study indicate that teachers have conflicting understandings of the goals of the competency-based curriculum. They report possessing a strong grasp of pedagogical content knowledge, general pedagogical knowledge, and subject matter knowledge. Additionally, teachers recognize the benefits of the competency-based curriculum for students in developing the outlined competencies. However, the findings also reveal that teachers exhibit moderately low attitudes toward its implementation; as a result, they were employing the basic principles of the competency-based curriculum only to a limited extent, including student-centered approaches, authentic learning, and authentic assessment methods. Finally, the study suggests several strategies to enhance teachers' understanding, beliefs, and attitudes toward the competency-based curriculum. First, policymakers should ensure that teachers receive adequate training, supported by ongoing professional development and mentorship. Second, Education Bureaus should organize workshops and training sessions specifically designed to equip teachers with practical skills for implementing this innovative approach. Additionally, teacher training institutions can play a key role by integrating competency-based curriculum principles into their programs.

Keywords: *attitude , competency-based curriculum, implementation, insight*

Suggested Citation:
Araya, A.B., Boru, A.K. & Abraham, G.Y. (2026). Teachers' insights and attitudes toward the implementation of the competency-based curriculum in Addis Ababa. *International Journal of Educational Management and Development Studies*, 7(1), 1-23. https://doi.org/10.53378/ijemds.353310

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1. Introduction

Education is a key driver of change within a society, as it equips individuals with knowledge, critical thinking, skills, and essential competencies that ensure social equity, economic growth, and civic participation (Biswas, 2023; Genelza, 2022). The fast-changing environment in the 21st century requires educational systems to develop comprehensive competencies that learners can use to address complex social, technological, and economic issues. These global changes have significantly influenced policymakers and educational administrators, compelling them to recognize the urgent need to reform educational practice. Such reform must provide students with empirically grounded knowledge and empower them with the necessary competencies to handle the challenges of a multifaceted social, economic, and technological world (Darling-Hammond et al., 2022). The redefinition of school curricula with a greater focus on competency development has been promoted by international organizations such as UNESCO, the Organization for Economic Cooperation and Development (OECD), and the European Union (EU), whose purpose is to close the gap between theoretical education and practical skills (UNESCO, 2023).

Competency-based education has gained wider acceptance across the world as nations recognize its benefits as opposed to knowledge-based education (Ige et al., 2024). The shift to a competency-based curriculum is based on the need to develop critical thinking, creativity, communication, and collaboration, ensuring that students acquire skills that are transferable and can be applied in all fields and real-life scenarios (Darling-Hammond et al., 2022). Incorporating these competencies in the core courses, CBE aims at enriching the knowledge of students to make them ready to tackle modern problems efficiently (Ponomarioviene et al., 2025). This is a paradigm shift in education since it does not focus on what students have learned but the application of knowledge in a meaningful and contextually relevant way.

In line with educational trends internationally, Ethiopia implemented a competency-based curriculum (CBC) as general education curriculum in 2010, with the aim of providing high-quality education at all levels of formal education and developing a knowledge-based society (MoE, 2009). However, the initial implementation experienced significant obstacles, due to lack of knowledge among teachers, resources, and readiness of teachers and school administrators (MoE, 2018). The CBC continues to struggle with serious challenges that are associated with teacher qualification, lack of resources, and systemic barriers. Empirical data have shown that a significant percentage of educators do not have sufficient training to apply

the CBC, which results in the lack of both pedagogical and competency-based teaching knowledge (Kebede and Phasha, 2024). Studies in primary schools show that the use of active learning strategies and assessment modalities aligned with the CBC is not widely implemented largely because teachers do not receive long-term support and practical training (Melaku et al., 2025).

In response to the need for 21st-century skills and alignment with the Sustainable Development Goals, the Ministry of Education introduced the comprehensive Education Development Roadmap (2018-2030) and the General Education Curriculum Framework (GECF) in December 2020 (MoE, 2020). The GECF emphasizes core competencies such as digital literacy and critical thinking, and it guided the piloting of a revised middle-school curriculum in Addis Ababa in 2021, followed by full implementation across the city. However, the effectiveness of such measures will be depend on various factors, specifically the institutional nature of schools, curriculum design, and above all, the knowledge, beliefs and attitudes of the teachers who bring the policy to the classroom practice.

Teachers are crucial when it comes to curriculum innovations, and their knowledge and approach to teaching are critical to the student's outcomes (Darling-Hammond et al., 2022). To successfully introduce a competency-based curriculum, teachers must be well prepared; they should be able to understand the principles and objectives of the reform, and they must have the competencies necessary to support deep, meaningful learning (OECD, 2023). Teachers had different perceptions and attitudes towards the curriculum, signifying the complexity of the transformative approach to implementing the curriculum, which is radically different from traditional practice (Li and Ma 2025). These results emphasize the fact that the degree of comprehension, belief systems, and dispositions of teachers are a critical variable that should be investigated to help roll out a competency-based curriculum successfully.

This study aims to contribute to the broader discourse on curriculum implementation in Ethiopia and similar contexts by identifying gaps in existing knowledge and attitudes, thereby providing evidence to support the professional growth of educators. The observations suggest that teachers' understanding, beliefs, and attitudes are among the most important factors that need to be examined to ensure the successful implementation of the competency-based curriculum. Specifically, the study seeks to investigate teachers' insights, beliefs, attitudes, and classroom practices regarding the implementation of the competency-based curriculum in Addis Ababa by addressing the following questions:

1. What is the level of teachers' understanding of the competency-based curriculum?

2. What are teachers' beliefs and attitudes toward the implementation of the competency-based curriculum?

3. To what extent do teachers apply competency-based curriculum principles in their classroom practice?

2. Literature Review

2.1 Competency-Based Curriculum

Competency-based curricula focus on individualized learning, which allows students to make the best use of their learning paths and achieve competency at a personalized pace (Marcotte & Gruppen, 2022). The CBC model focuses on the knowledge, skills, attitudes, and values that enable learners to solve complex problems, and especially on 21st-century competencies (Brandt, 2025). It is a student-centered paradigm designed to give students more priority in the learning processes to encourage teamwork and individualized learning approaches. As a result, teachers play the roles of guides and mentors during the learning process (Marcotte & Gruppen, 2022). Furthermore, the CBC emphasizes authentic assessment; thus, allowing the learner a chance to illustrate the skills that they internalized in practice (Brandt, 2025).

2.2 Teachers' Understanding of Competency-Based Curriculum

Teachers' understanding of curriculum innovations is a critical determinant of the successful implementation of educational reforms, particularly within a competency-based curriculum (CBC). A strong grasp of the principles, objectives, and instructional strategies underpinning the CBC enables teachers to design meaningful learning experiences, apply appropriate assessment practices, and effectively support learners in developing key competencies (Darling-Hammond et al., 2022). Conversely, limited understanding of curriculum innovations has been identified as a major barrier to effective implementation. For instance, Nsengimana (2023) reports that inadequate teacher understanding of curriculum reforms significantly hinders CBC implementation in sub-Saharan Africa. Similar challenges have also been documented in other educational contexts, including China (Li, 2024), indicating that this issue is global rather than context-specific.

A central component of teachers' understanding of the CBC is subject matter knowledge, defined as teachers' understanding of the facts, concepts, and principles fundamental to a given discipline (Shulman, 1986). This foundational knowledge is essential for effective curriculum implementation, as it forms the basis for delivering coherent, accurate, and meaningful instruction (Castro et al., 2024). Teachers with a deep understanding of subject content are better positioned to integrate real-life contexts, make evidence-based instructional decisions, and ensure alignment between curriculum content, learning outcomes, and competency standards (Mafa-Theledi, 2024; Castro et al., 2024; Shulman, 1986).

Equally important is general pedagogical knowledge, which encompasses classroom management skills, a repertoire of instructional strategies, and an understanding of learners' individual characteristics and diversity (Shulman, 1986). This form of knowledge equips teachers to respond effectively to learners' needs, select appropriate teaching approaches, and create inclusive and supportive learning environments. Research indicates that strong pedagogical knowledge is a key predictor of coherent instructional design and personalized learning experiences, which in turn enhance student engagement and academic achievement within CBC contexts (Kasa et al., 2024; Wang & Zhan, 2023).

Beyond subject matter and general pedagogy, pedagogical content knowledge (PCK) is widely regarded as a critical indicator of successful CBC implementation. PCK enables teachers to transform subject content into teachable forms by anticipating learner misconceptions, organizing content meaningfully, and employing instructional strategies that facilitate deep understanding (Can & Boz, 2022). Teachers with strong PCK can simplify complex concepts into accessible learning pathways, thereby supporting competency development among learners (Mafa-Theledi, 2024). Furthermore, PCK underpins the effective integration of technology in teaching and learning, particularly in technology-enhanced and learner-centered CBC environments (Yalcin & Imamoglu, 2025). Empirical studies across diverse educational settings consistently demonstrate that strong PCK is associated with higher levels of student engagement, improved conceptual understanding, and enhanced academic performance (Can & Boz, 2022).

2.3 Teacher Beliefs and Attitudes

Teachers' beliefs about teaching and learning are embedded in every element of their instructional choice and the type of learning environment they create. Such beliefs can

generally be divided into two categories: traditional and constructivist belief systems. Teachers who subscribe to constructivist philosophy generally use learner-centered approaches, in which the learners participate in the knowledge-building process through learning experiences, collaborative learning, critical thinking, and development of deep understanding of the subject (Primarni, 2024). On the other hand, those who hold traditional beliefs prefer a teacher-centered method which is based on direct instruction, memorization, and passive learning (Kaymakamoglu, 2018). Regrettably, research conducted by Azeb et al. (2025) showed that most teachers and students in Addis Ababa agree that heavily lecture-based methods are still the most common in teaching science.

The attitudes of teachers play a central role in the effective implementation of curriculum reforms. The attitude of teachers toward a revised curriculum can positively influence the creation of an effective learning environment, learner engagement, and the achievement of the desired learning outcomes (Dumbi and Indrasari, 2024). On the other hand, an adverse attitude may hinder the implementation of a curriculum and reduce the motivation of the students, which reiterates the importance of teacher dispositions in the overall efficiency of the educational change efforts (Pillai et al., 2022). Therefore, cultivating and maintaining optimistic teacher attitudes is a critical task to instill meaningful and sustainable changes in classroom practice.

2.4 Theoretical Framework of the Study

The study is informed by Teacher Cognition Theory (Borg, 2003), which describes how beliefs, knowledge, attitudes, and previous experiences of teachers influence their pedagogical choices and classroom practice. The theory states that attitudes of teachers toward a curriculum are a critical factor in conceptualizing and achieving success in the implementation of that curriculum. Teachers' understanding, perceptions, and attitudes are critical to whether the curriculum will be implemented in a way that reflects its original design. Through this framework, the current research will examine the teachers' insights, beliefs and attitudes toward the CBC and how these cognitive variables inform teachers' practices in their classrooms in Addis Ababa. The premises that teachers interpret the CBC as well as their instructional decisions are mediated by their professional backgrounds, training, and experience. As a result, the Teacher Cognition Theory provides a perspective that aid in the analysis of the internalization of the CBC.

3. Materials and Methods

3.1 Research Philosophy

This research utilized a mixed research design. The philosophical paradigm that best suits mixed-methods research is the pragmatist paradigm, which was used in this study as its guiding paradigm. Pragmatism argues that methodological choices must be shaped by their practical success in answering research questions, and not by adherence to a single epistemological position. As Morgan (2022) states, pragmatism supports the intentional combination of qualitative and quantitative designs to improve the richness, reliability, and practical usefulness of research results.

3.2 Research Design

The current study used a concurrent embedded mixed-methods design to explore the knowledge, beliefs, and attitudes of teachers towards the competency based curriculum adopted in middle schools within Addis Ababa. This design is able to best combine quantitative and qualitative methods thus allowing the researcher to leverage the complementary advantages of each method. The simultaneous collection and analysis of the two streams of data allow the study to present a more comprehensive view of the research topic. In this study, quantitative data were used as the primary source of evidence, and qualitative data were collected to obtain a more detailed picture (i.e., QUAN-qual). The two datasets were collected and analyzed in a single phase of analysis, which made it easier to identify either confirmatory or divergent results that could strengthen the study (Creswell & Plano Clark, 2017). The QUAN and qual datasets were triangulated during the phase of analysis.

3.3 Population, Sample and Sampling Technique

The study population consists of middle school teachers (grades seven and eight) in the Addis Ababa City Administration. The study adopted a multistage sampling approach, which involved three stages of sampling, a methodological decision that allows saving costs and increasing efficiency without losing representativeness due to the use of successive selection steps (Etikan & Bala, 2017). First, simple random sampling was used to select five sub-cities out of the eleven that are available. In the second step, ten public schools (two per chosen sub-city) were then selected through simple random sampling to maintain equal representation, with such a procedure assigning every population unit the same likelihood of inclusion

(Creswell & Creswell, 2018). The last phase was proportionate selection of 384 teachers in all the participating schools using a simple random sampling method to administer the questionnaire. The calculation of the sample size was based on Yamane's formula. Furthermore; twenty teachers were selected purposively together with the head teachers. In particular, two teachers were sampled per school, selected among the staff with subject-specific knowledge that was relevant to the study area thus guaranteeing the presence of information-rich cases (Palinkas et al., 2015).

3.4 Data Collection Instruments

Data were collected from the respondent using a questionnaire and an interview. The questionnaire was used as the primary data collection tool, while the interviews were used as a supplementary tool. A five-point Likert-like scale type was used in the questionnaire. The researcher chose a questionnaire because it is easy to administer, respondents can complete it quickly, and it provides convenience during the process of data collection (Creswell & Plano Clark, 2017). Moreover, a semi-structured interview was conducted to collect relevant data from respondents and enable the researcher to triangulate data from multiple sources, thus increasing the reliability and validity of the results (Kallio et al., 2016). The interview guides were prepared based on the research questions to reinforce and complement the data collected through the questionnaires. The questionnaire was given in person to 384 teachers, out of which 352 (91.2%) teachers had returned them. With regard to the interview element, the researcher informed the participants about the purpose of the research, read each item to the nineteen interviewees one at a time and took notes on their responses

The questionnaire and interview protocols were designed based on a thorough review of the relevant literature to ascertain their validity (Fink, 2016). The instruments were also reviewed by professionals with research experience and language knowledge and adjusted according to their recommendations to enhance validity. A pilot study was then carried out in five Addis Ababa middle schools. This pilot test was done to determine the reliability of the questionnaires. Cronbach's alpha was calculated, and the value was 0.84, which shows a high level of reliability (Tavakol & Dennick, 2011).

3.5 Methods of Data Analysis

Quantitative data collected using questionnaires was analyzed descriptively with SPSS version 24. Standard deviations and mean scores were calculated to provide a concise summary

of the responses of the participants. At the same time, qualitative data gathered using semi-structured interviews were analyzed systematically using the thematic analysis method of research, which allows finding, interpreting, and presenting common patterns and regularities in the stories of participants (Braun & Clarke, 2021). Transcription of the audio recordings of the interviews was done along with indexing and coding. The coded data were summarized into three thematic areas: understanding, beliefs, and attitudes of teachers toward a competency-based curriculum, thereby, integrating the qualitative insights with the general research questions. To realize methodological triangulation, quantitative research was done before the qualitative one, which strengthens the validity, reliability, and significance of the research findings (Creswell & Plano Clark, 2017).

3.6 Research Ethics

The researcher maintained the rights and the dignity of all the participants. Teachers gave informed consent before taking part in the study. The data collection and analysis process involved the use of anonymity and confidentiality. In addition, school principals were contacted formally and gave permission prior to the start of data collection. The participants also agreed that the study findings would be used in academic publications, hence considering the ethical standards. These steps were necessary not only to adhere to ethical guidelines but also to improve the credibility, trustworthiness, and the quality of the research in general (Creswell & Creswell, 2018).

4. Findings

Table 1 presents teachers' understanding of the concept of the CBC. The first item reveals that some teachers agreed that the goal of competency-based curriculum is the mastery of competencies (M=3.19, SD=.65), while others agree that its goal is the mastery of contents (M=2.86, SD=.97).

Table1

Teachers' understanding of the goal of competency-based curriculum

No	Statements	N	M	Sd
1	The goal of competency-based curriculum is mastery of competencies.	352	3.19	.65
2	The goal of competency-based curriculum is mastery of contents.	352	2.86	.97

To gain deeper insights into teachers' understanding of the 2021 competency-based curriculum, interviews were conducted. The following responses illustrate teachers' perspectives:

> *"At the beginning, I was not clear about the concept and goal of competencies. However, over time, I gained some insight through discussions with my colleagues regarding the goal of competency-based curriculum. To the best of my knowledge, its goal is to make the learner competent."* **(T11)**
>
> *"From the training organized, I understand the goal of the new curriculum is the mastery of competencies/skills."* **(T19)**
>
> *"I had the opportunity to participate in a training session organized by the Addis Ababa Bureau of Education to raise awareness about the Competency-Based Curriculum (CBC). In my opinion, the duration of the training was too short, resulting in many teachers not being well-informed about the goal of the new curriculum"* **(T5)**
>
> *"From the training organized, I understand the goal of the new curriculum is mastery of competencies/skills."* **(T10)**
>
> *"I have been teaching English for the last ten years. In my understanding, the major objective of the curriculum is to ensure learners understand and master each content area, making learners proficient in the subject they have learnt."* **(T12)**

The interview responses indicate a disparity in teachers' understanding of the goal of CBC. Both the quantitative and qualitative data suggests variations in teacher levels of understanding regarding what the competency-based curriculum intended to achieve.

Table 2 shows that teachers recognize the importance of having a deep understanding of the subject matter, encompassing the facts, concepts, and principles inherent to their discipline, despite some variation in their responses (M=4.02, SD=1.09). They also acknowledge that a deep understanding of subject matter enables them to connect content to real-world situations (M=4.47, SD=.66).

Table 2

Teachers' understanding of subject matter knowledge

No	Statements	N	M	Sd
1	Teachers' subject matter knowledge refers to understanding of the facts, concepts, and principles within the subject area they teach.	352	4.02	1.19
2	Deep understanding of subject matter concepts will enables me to connect content to real-world	352	4.47	.66

To further explore teachers' views on their subject matter knowledge, interviews were conducted. For example, one interviewee stated:

"I believe that subject matter knowledge is the foundation for teaching any subject. If you do not understand the concept, how could you teach it or connect it to the real world." **(T2)**

The results obtained from both the questionnaire and the interviews are consistent. Findings from the quantitative and qualitative data indicate that subject matter knowledge enables teachers to connect content to real-world applications.

Table 3

Teachers' understanding of general pedagogical knowledge

No	Statements	N	M	Sd
1	A well-managed classroom promotes student engagement and active participation by creating conducive and inclusive classroom environment	352	4.52	.69
2	Mastery-based learning emphasizes students' demonstration of proficiency in competencies before progressing to the next level or topic.	352	4.26	.81
3	Personalized instruction tailors teaching methods to meet the individual needs, preferences, and abilities of each learner	352	4.11	.85
4	Authentic assessment involves evaluating students' abilities to apply their learning to real-world situations.	352	4.17	.83
5	Feedback help students to identify their strengths and areas for improvement	352	4.50	.65

Table 3 presents teachers' level of knowledge regarding general pedagogy. The results show that teachers agree that a well-managed classroom promotes student engagement and active participation by creating a conducive and inclusive learning environment (M = 4.52, SD = 0.69). They also recognize that mastery-based learning emphasizes students' demonstration of proficiency in competencies before progressing to the next level or topic (M = 4.26, SD = 0.81). Moreover, teachers agree that personalized instruction tailors teaching methods to meet the individual needs, preferences, and abilities of each learner (M = 4.11, SD = 0.85).

In addition, Table 3 presents teachers' level of knowledge regarding assessment. According to Item 4, teachers perceive authentic assessment as the process of evaluating students' ability to apply their learning to real-world situations (M = 4.17, SD = 0.83). They also agree that feedback helps students identify their strengths and areas for improvement (M

= 4.50, SD = 0.65). Overall, the results indicate that teachers have a strong understanding of general pedagogical knowledge, which has the potential to support the application of effective teaching methods.

To complement the quantitative findings, one of teacher explained during the interview:

> *"Classroom management involves setting clear expectations and routines, minimizing disruptions and is therefore crucial in creating a positive and conducive learning environment where students can thrive academically."* **(T13)**
> *"Classroom management includes establishing consistent routines, defining clear guidelines, and ensuring a well-structured environment within the classroom."* **(T8)**

The interview responses indicate that teachers recognize the importance of pedagogical knowledge in creating a supportive learning environment that fosters effective learning. Findings from both the survey and the interviews further demonstrate that teachers acknowledge the crucial role of pedagogical knowledge in facilitating a meaningful teaching–learning process.

Table 4

Teachers' understanding of pedagogical content knowledge

No	Statement	N	M	Sd
1	Pedagogical content knowledge refers to knowledge concerned with how to integrate content and pedagogy effectively	352	4.42	.85
2	Pedagogical content knowledge is a means to identify common student misconceptions and how to address them	352	4.28	.79
3	Technology-integrated teaching requires knowledge of subject matter, pedagogical strategies, and technology	352	4.42	.86

Table 4 shows that teachers understand pedagogical content knowledge as the ability to effectively integrate content and pedagogy (M = 4.42, SD = 0.85) and to identify common student misconceptions and appropriate strategies to address them (M = 4.28, SD = 0.79). They also believe that technology-integrated teaching requires a sound understanding of subject matter, pedagogical strategies, and technology (M = 4.42, SD = 0.86). During the interviews, teachers expressed the following views:

"Pedagogical content knowledge allows me to present the material in a way that is accessible *and meaningful to my student."* **(T4)**

"Pedagogical content knowledge is the bridge that connects subject matter expertise with effective teaching practices in order to facilitate student learning." **(T6)**

"Pedagogical content knowledge includes knowing the best instructional strategies, methods, and approaches for conveying content, as well as how to assess student understanding." **(T15)**

The interview results indicate that teachers understand pedagogical content knowledge as a means of effectively integrating content and pedagogy to facilitate student learning. When combined with the survey responses, the findings suggest that teachers recognize the importance of pedagogical content knowledge in integrating content, pedagogy, and technology.

Table 5

Teachers' belief about competency based approach

No	Statements	N	M	Sd
1	Competence-based approach empowers learners to play active role in their own learning	352	4.39	.83
2	Competence-based approach provides a valuable opportunity to personalize learning for students.	352	4.27	.85
3	Competency-based approach provides a valuable opportunity for students to learn at their own pace.	352	4.29	.81
4	Authentic assessment helps learners to demonstrate their performance in real-world context.	352	4.32	.81

Table 5 shows that teachers believe students should always be at the center of classroom activities (M = 4.39, SD = 0.83). They also agree that this approach provides valuable opportunities to personalize learning (M = 4.27, SD = 0.85) and allows students to learn at their own pace (M = 4.29, SD = 0.81). Moreover, teachers believe that continuous assessment enhances learning and helps students develop the competencies outlined in the curriculum (M = 4.32, SD = 0.81).

Overall, these results suggest that teachers hold strong beliefs that the competency-based approach is beneficial to students, as it enables them to actively contribute to their own

learning, personalize the learning process, progress at their own pace, and demonstrate their competencies in real-world contexts. During the interviews, teachers expressed the following views:

> *"In my opinion,* a *competency-based approach is supposed to enable students to take charge of their learning by taking their part in the teaching process. This principle is not being observed, however, in our particular situation, where teachers are still largely responsible in organizing activities that guarantee the curriculum content coverage within the academic year."* **(T3)**
>
> *"My reading helps me realize that competency-based education encourages increased student engagement through an emphasis on real-world applications, practical skill development, and hands-on learning experiences, and I am also in support of this principle."* **(T17)**

According to the interview data, teachers confirm that the competency-based approach enables them to actively engage learners in the learning process while addressing the diverse needs of students through personalized learning pathways and self-paced advancement opportunities. Teachers also view this approach as a means of helping students demonstrate their performance in real-world contexts through authentic assessment. Consistent with these findings, results from both the questionnaire and the interviews indicate that teachers perceive the competency-based approach as student-centered and effective in enabling students to apply their learning in real-world contexts.

Table 6

Teachers' beliefs regarding the role of competency-based curriculum

No	Statement	No	M	Sd
1	Competency-based curriculum enhances students' critical thinking and problem-solving skills.	352	4.22	.91
2	Competency-based curriculum enhances students' creativity and innovation skills.	352	4.30	.87
3	Competency-based curriculum is a means to develop communication and collaboration.	352	4.03	1.01
4	Competency-based curriculum adequately prepare students for real life	352	4.09	.97
5	Competency-based curriculum enhances students' learning and helps them develop the competencies outlined in the curriculum.	352	4.49	.88

Table 6 shows that teachers believe the CBC enhances students' critical thinking and problem-solving skills (M = 4.22, SD = 0.91) as well as their creativity and innovation skills (M = 4.30, SD = 0.87). They also believe that CBC fosters communication and collaboration (M = 4.03, SD = 0.87) and adequately prepares students for real-life challenges (M = 4.09, SD = 0.97). Moreover, teachers agree that the competency-based curriculum enhances student learning and supports the development of the competencies outlined in the curriculum (M = 4.49, SD = 0.88).

Overall, the results indicate that teachers hold positive beliefs about the role of CBC in equipping students with essential competencies and 21st-century skills (M = 4.22). This suggests that teachers view the competency-based curriculum as an effective means of preparing learners with the competencies specified in the curriculum.

Table 7

Teachers attitude toward competency-based curriculum

No	Statements	N	M	Sd
1	Implementing the competency-based curriculum in my classroom is manageable and feasible.	352	2.87	0.96
2	The competency-based curriculum is too difficult to implement in my classroom	352	3.67	1.17
3	The new competency-based curriculum is not different from the former one.	352	3.37	1.25
4	I show a lot of motivation and enthusiasm when implementing the curriculum.	352	2.88	0.94

The results in Table 7 reveal that teachers agreed that implementing the CBC in their classrooms was manageable and feasible (M = 2.87, SD = 0.96). However, they also agreed that implementing the curriculum was challenging (M = 3.67, SD = 1.17). Moreover, teachers agreed that the new competency-based curriculum is not significantly different from the former one (M = 3.37, SD = 0.96), while also reporting a moderate level of motivation and enthusiasm when implementing the curriculum (M = 2.88, SD = 0.94). Overall, the results indicate that teachers hold a moderately low attitude toward the competency-based curriculum.

In addition to the questionnaire used to assess teachers' attitudes toward the competency-based curriculum, interviews were also conducted. For instance, interviewees stated:

"Teachers felt they were not involved in the awareness training and workshops related to the new curriculum. This lack of involvement has resulted in many of them not showing strong interest in implementing the curriculum." **(T1)**

"It is a very big challenge for us to implement the new curriculum because we were required to adopt it without any teaching and learning materials." **(T14)**

"One of the challenges of implementing the curriculum is the lack of quality textbooks. In addition being poorly written, they are inadequate, and pupils are forced to share them in class." **(T16)**

"I feel the competency-based curriculum is good, but its full implementation and effectiveness may be hindered by the government's failure to adequately train teachers and provide the necessary resources." **(T7)**

"While I understand that competency-based curriculum is beneficial for equipping students with necessary skills, without teacher motivation and adequate learning resources such as quality textbooks, CBC may not benefit students and society. Instead, it could fail like the previous curriculum." **(T9)**

The interview responses indicate that teachers view the CBC positively; however, they express ambivalence toward its implementation, citing frustration with the lack of high-quality resources and insufficient preparation to successfully implement the new curriculum. The quantitative results show that teachers' attitudes toward the practice of the competency-based curriculum are moderately low. Similarly, the qualitative data demonstrate that these lower attitudes are largely attributable to shortages of resources and inadequate training.

The CBC emphasizes student-centered learning, authentic learning experiences, and the connection of knowledge to real-life situations. Classroom observations were conducted to examine the implementation of the CBC, yielding several salient findings.

First, the classroom was arranged in a traditional layout, with desks in linear rows facing the blackboard, and instruction was predominantly lecture-based. The teacher provided direct explanations but rarely employed interactive techniques, limiting the participation of students with diverse learning styles.

Second, while lesson units were coherently linked to previous lessons, daily objectives and assessment criteria were not clearly communicated. Assessments relied primarily on oral questioning, and feedback was minimal, vague, and generalized, failing to address the needs of individual students.

Third, teachers did not consistently integrate practical examples, relate lessons to real-life situations, or involve students in problem-solving tasks that could develop transferable skills for practical settings. Overall, classroom observations indicate a limited application of CBC principles, reflected in teacher-centered instruction, restricted authentic assessment, and insufficient focus on real-life relevance.

The implementation of the CBC was modest. Instructional practices remained largely teacher-centered, with lectures as the dominant mode of delivery, minimal use of interactive methods, and low student engagement. Communication of objectives and assessment criteria lacked clarity, feedback mechanisms were ambiguous, and integration of real-world contexts was superficial.

Interview data revealed that, although teachers held generally positive views of the CBC in theory, they faced significant challenges in its implementation. These challenges were attributed to insufficient preparation, limited access to resources, and a lack of confidence in applying student-centered pedagogies.

5. Discussion

Teachers' understanding of the competency-based curriculum. Effective curriculum implementation requires teachers to understand the curriculum's goals and believe in their ability to implement it competently. However, the present study revealed that some teachers were implementing the CBC without fully understanding its objectives, indicating a lack of awareness-raising training. This finding aligns with Nsengimana (2023), who reported that inadequate knowledge about curriculum innovations among educators is a leading barrier to effective implementation. Similar challenges have also been documented in educational contexts outside sub-Saharan Africa (Deng et al., 2024).

The study further shows that teachers possess solid subject-matter knowledge, pedagogical knowledge, and pedagogical content knowledge (PCK). This aligns with research by Kasa et al. (2024) and Wang and Zhan (2023), which consistently demonstrate that teachers' subject-matter knowledge positively influences curriculum implementation and student achievement. In addition, teachers demonstrate strong general pedagogical knowledge, which supports effective teaching and learning. Darling-Hammond (2017) emphasizes that general pedagogical knowledge is a key condition for successful teaching, as it encompasses a wide range of skills that enable teachers to create motivating and dynamic learning environments.

Moreover, the study indicates that teachers recognize the importance of pedagogical content knowledge in integrating content and pedagogy effectively. This enables them to teach specific subject areas with clarity and impact. This finding is consistent with Owusu-Fordjour et al. (2022), who highlight that teachers with higher levels of PCK demonstrate more effective instructional practices and positively influence students' comprehension and problem-solving skills.

Teachers' beliefs and attitudes toward CBC implementation. The findings indicate that teachers view the CBC as inherently learner-centered, focusing on students' individual needs. This approach allows learners to demonstrate their competencies in real-life contexts, aligning with the view that CBC is fundamentally learner-centered, attentive to diverse student needs, and allows learners to progress at their own pace (Dube & Mtshali, 2024).

Teachers also believe that the CBC enables learners to acquire the core competencies outlined in the framework, including critical thinking, communication, digital literacy, collaboration, and problem-solving skills. This supports employability and socio-economic development, rather than mere memorization of content (Ndayisenga, 2025). Overall, teachers' attitudes toward the curriculum are largely positive. However, their attitudes toward its implementation are relatively low, primarily due to inadequate preparation and a lack of learning materials. This contrasts with Ngeno et al. (2024), who found that primary school teachers in Kericho County, Kenya, maintained positive attitudes toward the CBC, with a significant positive correlation between teacher attitudes and CBC implementation.

Teachers' classroom practices. The limited classroom practices observed appear closely linked to teachers' beliefs and attitudes. Although teachers value CBC principles, their moderately low attitudes hinder the effective implementation of key strategies such as student-centered approaches, authentic learning, and authentic assessment methods. This finding is consistent with Li and Ma (2025), who state that teacher attitudes are positively and significantly related to teacher practices.

This underscores the critical role of teacher attitudes in curriculum adoption: positive beliefs alone are insufficient if teachers are not adequately prepared or supported to translate these beliefs into practice. Enhancing professional development, providing sufficient instructional resources, and fostering supportive school environments are essential to align

teacher attitudes with classroom practices and ensure meaningful competency development among learners.

5. Concussion

The study investigated teachers' knowledge, beliefs, and attitudes regarding the implementation of the competency-based curriculum (CBC). While teachers showed strong subject-matter, general pedagogical, and pedagogical content knowledge and recognized the learner-centered focus and competency outcomes of the curriculum, there were ambiguities in their understanding of curriculum objectives. Despite acknowledging the curriculum's benefits, teachers exhibited moderately low attitudes toward its implementation, mainly due to insufficient professional preparation and limited access to necessary resources. The findings highlight the need for targeted professional development and increased resource support to strengthen teacher perceptions and attitudes, which are essential for effective curriculum reform.

The current study contributes to teachers existing knowledge, beliefs, and attitudes toward the implementation of a CBC in middle schools in Addis Ababa Ethiopia whereby a successful implementation of the CBC majorly relies on the knowledge and the dispositions of teacher. The results are generalizable to Sub-Saharan Africa, suggesting that comprehensive training that is marked with continuous professional development, mentoring schemes, hands-on skill-building workshops, and the incorporation of the principles of CBC in teacher education curricula can better equip both current and future teachers.

This study has some limitations. First, the sampling frame was limited to public middle schools of the level, which may generalizability of the findings to the situations of the private educational institutions. Second, the research used a small sample and relied solely on teachers as the respondents.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was not supported by any funding.

Institutional Review Board Statement

This study was conducted in accordance with the ethical guidelines of Addis Ababa University. As part of the dissertation, it received approval from the Institutional Review Board of the College of Education and Behavioral Studies (CEBS), Addis Ababa University, under protocol number CEBS_IRC_C&I_007_2024/16, dated June 2024.

AI Declaration

The author declares the use of Artificial Intelligence (AI) tools in the preparation of this paper. Specifically, ChatGPT was used for rephrasing, refining sentences, and checking and correcting grammar. The author takes full responsibility for thoroughly reviewing, editing, and ensuring the accuracy and integrity of all AI-generated content.

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