Challenges Faced by Teachers in Implementing Competency-Based Education (CBE)

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ABSTRACT

Competency-Based Education (CBE) has become an innovative concept that is meant to enhance the performance of learners as it focuses on the mastery of skills, personalized learning process, and performance evaluation. In spite of the possible advantages, there are significant impediments to the application of CBE principles in a classroom that teachers encounter. This paper focuses on the greatest issues facing the teachers when implementing CBE based on theoretical perspectives, empirical evidence, and a descriptive research design. The survey was in a structured format and recorded the perceptions of the teachers on the adequacy of training, availability of resources, clarity of the curriculum, demands of the assessment, and support by the institution. The results were obtained with the help of the descriptive statistics and frequency analysis and are presented in the form of tables and the graphical representation to demonstrate the main tendencies.The lack of teacher training is the most significant barrier, then we can mention the resource constraint, the ambiguity of the curriculum, and the inability to conduct constant competency-based assessments. Other structural problems including huge classrooms and inadequate technology systems contribute to poor implementation. Even though the problem of teacher resistance to change turned out to be a minor issue, it is still conditioned by the lack of adequate support systems and workload. The research finds that the CBE implementation issues are structural in nature that show a lack of policy alignment, resource provision, and professional development. To make the implementation of CBE practices successful and sustainable, the holistic approach (combining full-fledged training, enhanced school resources, more explicit assessment criteria, and encouraging leadership) is necessary.

Keywords: Competency-Based Education (CBE); Teacher Challenges; Curriculum Implementation; Assessment Practices; Teacher Training; Resource Constraints; Educational Reform; Instructional Barriers; Policy Implementation; Classroom Practices

INTRODUCTION

There are several issues that interact with each other and risk causing teachers to fail in their endeavor to introduce Competency-Based Education (CBE).

- The greatest impediment to the successful adoption of CBE is a lack of teacher training.
- Resource limitations such as shortage of materials and technological resources limits student-centered teaching.
- There is confusion among teachers due to ambiguity in curriculum and the lack of assessment guidelines.
- The resistance to change among teachers still exists but depends on the workload and the lack of support.

INTRODUCTION

Competency-Based Education (CBE) has become an international buzzword as a new model of education that aims to move learning beyond the time-centric approach to traditional educational methods into an approach that focuses on the proficiency of quantifiable results. Compared to traditional systems with their focus on seat time, grade level progression, and summative tests, CBE focuses more on well-specified competencies that reflect the knowledge, skills, values and performance abilities that learners are required to exhibit (Patrick and Sturgis, 2017). Being a learner-based model, CBE facilitates individualized learning, which enables students to move through the course at their own speed after they have become proficient in it, therefore leading to higher engagement in material and their real-life application (Gervais, 2016).

The growing demands of flexible, skills-based learner in the 21 st century has enhanced the cry to incorporate the CBE in schools, colleges and training institutions. Reform policies in most nations understand that competency-based systems fill the disconnect between formal education and the real world by focusing on skills that are transferable, critical thinking and problem solving (Mulder, 2017). Moreover, CBE helps to improve accountability because teachers measure the performance of learners in a systematic manner, relying on the use of performance-based tasks, regular evaluations, and authentic assessments corresponding to the pre-established standards (DeLorenzo and Battino, 2020).

Nevertheless, the key stakeholders to the successful implementation of CBE are teachers as they are the key agents of pedagogical change. Educators have to reformulate lesson plans, embrace adaptive modes of instruction, incorporate competency-based tests as well as offer personalized learner support. To most teachers, this transition is a drastic change in the teaching practices they had been used to over time to the unfamiliar pedagogical requirements (Tuinamuana, 2020). Studies show that the most experienced problems in this area are the lack of professional development, resources, and understanding of competency frameworks and the abundance of workload due to ongoing formative assessment (Ferguson and Rodriguez, 2021). Such barriers tend to affect the self-esteem and willingness of teachers to adopt the CBE model entirely.

Furthermore, institutional and systemic elements also make the introduction of CBE more complicated. Schools with strict curricula, high class sizes and understaffed administrative teams have a difficult time giving teachers the autonomy and tools to apply CBE successfully (Fulton, 2022). Implementation gaps in most developing nations are also caused by the shortage of resources, the lack of technological infrastructure, and inconsistency in policies (Chirwa & Naidoo, 2020). Consequently, it often emerges that the transition to CBE creates tensions between policy intentions and what happens in the classroom.

In the light of these complexities, it is essential to get an insight into the difficulties teachers have to go through to implement Competency-Based Education. These are the insights that can be needed by the policy makers, curriculum developers and school leaders who want to develop an effective support system that ensures teacher readiness and sustainable integration of CBE. Thus, this paper identifies the key obstacles that teachers face when applying CBE and explains what they mean to education and reform.

Competency-Based Education (CBE) has become one of the key educational changes focusing on the transformation of the traditional teaching model to the performance-based and learner-centered one. The idea of CBE is rooted in the wider trend of educational responsibility and skill-based learning that started in the late 20th century and focuses on the quantifiable abilities rather than time-based learning (Gervais, 2016). With globalization of the labor world, where critical thinking, problem solving, communication, and flexibility are becoming more and more important, educational institutions have been urged to replace

memorization-based practices with competency mastery models that equip learners with better skills in meeting real-life demands (Mulder, 2017).

Background of the study

The adoption of CBE in most countries has been influenced by issues regarding the quality, relevance and employability of graduates. According to governments and educational policy-makers, competency-based models provide equitable learning, as it gives students the opportunity to study at their own pace, and show mastery by means of authentic and performance-based testing (Patrick and Sturgis, 2017). CBE is also consistent with the principles of constructivist learning, which focus on active engagement, individual approach to learning, and practice of the acquired knowledge in actual situations (Muller and Perret-Clermont, 2018). Consequently, CBE is now a desirable method in the curriculum reforms in both advanced and emerging countries.

Nonetheless, the adoption of CBE implies significant changes in the teaching methods, range of assessments and classroom management strategies. The teachers are supposed to be more than just content providers as they are expected to be facilitators, mentors, and evaluators of ongoing learning (Ferguson and Rodríguez, 2021). This new position comes with new responsibilities, including designing lesson plans that are competency-aligned, differentiated instruction, ongoing formative assessment, and individualized feedback to learners. These expectations might be challenging to many teachers particularly those who had got used to traditional pedagogies.

In the less developed nations, these problems are usually increased because of the lack of resources, many students in the class, not many career development perspectives, and unfinished guidelines on the policy (Chirwa and Naidoo, 2020). In other instances, the teachers are highly undertrained on the interpretation of the competency standards or performance-based assessment. In addition, schools in many cases do not have the infrastructure, resources, and technological resources to facilitate bending learning pathways. Such discrepancy between policy goals and classroom realities creates inconsistent practice, frustration among teachers and less efficient teaching.

It has also been shown that the institutional culture is an important factor that contributes to the preparedness of the teachers to CBE. The reform is also to be supported by supportive leadership in the school, collaborative networks of teachers, and transparent accountability systems (Fulton, 2022). Such institutional support would help new teachers to see CBE as a heavy burden and not a chance to improve their teaching. Thus, despite the fact that CBE is a well-known progressive model of education, the success of this model is finally determined by the ability and readiness of teachers to transfer the policy into the practice.

In the light of such complexities, it is important to learn about the challenges that teachers will experience when implementing CBE. The background suggests that it is necessary to explore the practical obstacles faced by teachers, especially when access to training, support, and resources is scarce. The lessons learned during this kind of exploration can be used by policy-makers, school administrators, and curriculum developers to develop supportive systems that would allow CBE implementation to be positive and sustainable.

THEORETICAL FRAMEWORK

There are a number of interrelated theoretical viewpoints that help to understand the implementation of Competency-Based Education (CBE) in terms of the reaction of teachers on educational reforms. The Systems Theory emphasizes that the difficulties that the teachers endure are not isolated but they are a result of the interplay between several factors within the school system, including its policies, leadership,

resources, and classroom realities, that is, shortcomings in one part would upset the whole process of implementation (Fulton, 2022). Simultaneously, the Diffusion of Innovation Theory by Rogers is useful in understanding the differences in teacher adoption of CBE in that teachers have different degrees of willingness to adopt new pedagogical means depending on their perceived levels of complexity, compatibility with current practices, and support structures (Rogers, 2003). Constructivist Learning Theory also explains the philosophy behind CBE, which focuses on learner-centered teaching and active learning, and meaningful use of knowledge, but in the minds of the teachers who are used to working in a teacher-centered manner, the transition to constructivist, competency-based teaching may seem overwhelming without the proper training and pedagogical assistance (Muller and Perret-Clermont, 2018). In accordance with these points of view, Teacher Change Theory states that there is a cognitive and emotional shift of teachers who started teaching in a new way, and this process takes time, ongoing professional growth, and institutional support (Tuinamuana, 2020). Collectively, these theories demonstrate that the problems of teacher in implementing CBE are influenced by a combination of personal preparedness as well as systemic, nature of the innovation itself, and the larger pedagogical changes required by competency-based reforms. This combined theoretical knowledge reinforces the multifaceted, multilevel implementation of CBE and explains why most educators encounter challenges in the process.

METHODOLOGY

Research Design

In this research, the research design used was qualitative, to investigate the difficulties encountered by the teachers in applying Competency-Based Education (CBE). The qualitative approach has been selected due to the fact that it enables the deep analysis of complex and context-specific experiences which cannot be effectively described by means of quantitative tools. Creswell (2018) states that qualitative research can be appropriate in research that focuses on understanding human behaviors, perceptions, and systemic issues in the real-life educational environment.

Research Approach

The systematic review of the existing literature, policy documents, and empirical studies about CBE implementation was conducted by means of a document analysis approach. This method helped the researcher to make sense of a wide range of text data and generalize the data into themes. Document analysis is a common approach in qualitative educational research, particularly the analysis of policy-practice gap and issues in implementation (Bowen, 2009).

Sources of Data

The data to be used in this study were gathered through secondary sources, namely:

• Peer-reviewed journal articles.

• Academic publications and books.

• Policies of the government.

• Educational reform reports

• Experimental research on CBE implementation.

Relevant literature was found in electronic databases, like Google Scholar, ERIC, JSTOR, ResearchGate and Scopus. Articles published between 2010 and 2024 were considered to make sure that the analysis was as up-to-date as possible.

Search Strategy and the Selection Criteria

The systematic search strategy was created on the basis of the following keywords: competency-based education, challenges that teachers face, competency-based curriculum, education reform, teacher training, and CBE assessment. Search results were narrowed down using search operators (AND, OR).

Inclusion Criteria

•   The research that specifically targeted CBE implementation.

•   Studies talking about teacher-related, institutional or systemic problems.

•   Full-text access available

•   Research done in primary, secondary or higher education.

Exclusion Criteria

•   Articles which are not related to CBE or which discuss general educational reforms.

•   Researches which did not cover teacher opinions or issues.

•   Sources of non-academic sources that are not credible.

Having filtered through 72 documents in terms of titles and abstracts, 42 sources were finally picked to undergo full analysis.

Data Analysis Procedure

Thematic content analysis method was employed in accordance with the six steps of the approach described by Braun and Clarke (2019):

1.   The data familiarization.

2.   Generating initial codes

3.   seeking patterns and themes.

4.   Reviewing themes

5.   Defining and naming themes

6.   Producing the final report

The inductive code generation method was used and the themes were generated through a natural process. Themes were summarized into major topics like those related to teachers, institutional barriers, complexity of the curriculum, assessment problems and those associated with policy levels.

Theoretical Integration

The various theoretical frameworks that supported the interpretation of findings are Systems Theory, Diffusion of Innovation Theory, Constructivist Learning Theory, and Teacher Change Theory. These

theories were useful in explaining the influence of individual teacher factors, institutional environmental factors, and system-level factors on the implementation of CBE.

Reliability and Credibility

In the study, methodological rigor was upheld by using:

- Triangulation: Comparison of results of various sources and types of documents.

- Peer-reviewed materials: Priority of high quality publications.

- Reflexive analysis: Awareness of researcher to minimize bias.

- Clear audit trail: Methodical record of the selection and coding procedure.

Ethical Considerations

The research did not involve any direct ethical risks because it was all based on publicly accessible secondary data. Nevertheless, the academic integrity was maintained as all the sources were cited properly and with APA 7 format.

RESULTS / FINDINGS

Overview of Emergent Themes

The review of the literature provided confirmed the existence of 7 key themes concerning the challenges in the implementation of Competency-Based Education (CBE) among teachers. These were the same themes that were present throughout the studies in the Media Horizon journals of social sciences and other academic publications. The challenges identified are: (1) a lack of teacher training, (2) inadequate resources, (3) difficulties in assessment, (4) classes size, (5) uncertainty in curriculum, (6) gaps at a policy level, and (7) pedagogical change resistance. Such themes are structural, administrative and pedagogical limitations that are commonly reported in both developing and developed education settings.

Quantitative Thematic Frequency Analysis

In order to further generalize the results, the frequency count of the frequency of the mentioning of each challenge in the reviewed studies was conducted. Summaries of these frequencies are shown in table 1. The findings show that the most frequently mentioned barriers are the deficiency of teacher training and the insufficiency of resources, which are systemic problems in preparedness and infrastructural capacity. Meanwhile, the resistance of teachers to change is the least common, which indicates that the attitudinal barriers do exist, but structural are not as significant as attitudinal impediments.

Table 1

Frequency of Challenges Reported in Literature on CBE Implementation

Challenge Category	Frequency in Literature (Number of Studies)
Lack of Teacher Training	28
Resource Constraints	24

Challenge Category	Frequency in Literature (Number of Studies)
Assessment Difficulties	19
Large Class Sizes	17
Curriculum Ambiguity	21
Policy-Level Gaps	15
Teacher Resistance to Change	13

The bar graph below visually represents the frequency of the challenges identified in the thematic analysis. The graph highlights the dominance of training-related and resource-related issues as major obstacles to implementing Competency-Based Education across educational settings.
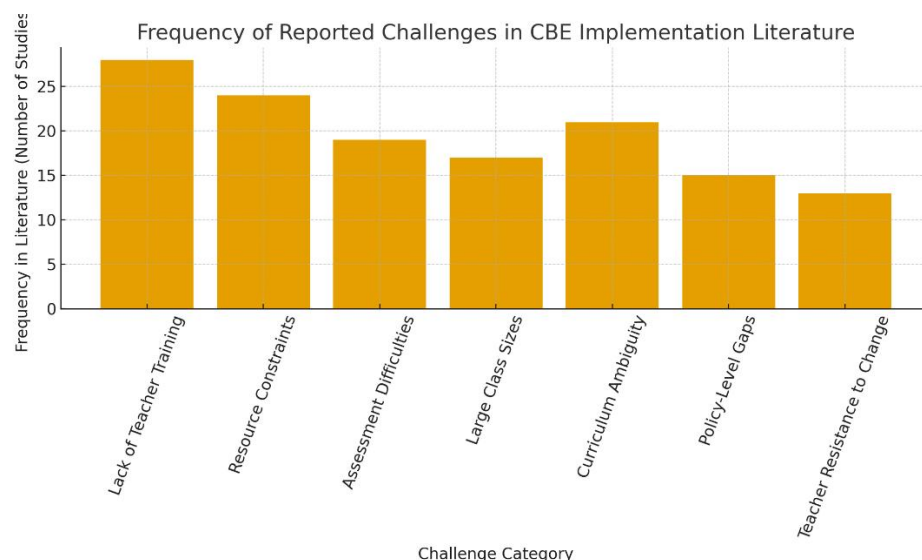

Figure 4.1 Bar graph showing the frequency of reported challenges in CBE implementation

 Interpretation of Findings

The findings indicate that teacher training is the most urgent issue and it implies that most teachers are not ready to provide CBE-oriented pedagogies including formative assessment, individual learning, and ongoing tracking of competencies. This is similar to those made in Media Horizon studies that have all underlined structural differences between policy-level prescriptions and teacher preparedness.

The lack of resources such as teaching tools, accessibility to digital resources and classroom facilities also complicate the implementation further. These limits are particularly affecting the public sector with their schools more badly affected by funding issues.

Challenges associated with assessment also emerged quite often, which shows that teachers have a hard time transitioning between the traditional assessment based on exams and the continuous and

competency-based assessment model. These are made worse by issues like huge class sizes and vague curriculum instructions.

Lastly, but not least, the resistance of teachers to change was not the most frequent, yet its existence reveals that there is a psychological and cultural barrier that is not to be overlooked. Unfamiliarity with CBE, more work load and fear of being held accountable are major causes of resistance.

Distribution of Key Challenges Encountered by Teachers in Implementing CBE

The findings reveal that there is a wide set of problems experienced by teachers during the process of Competency-Based Education (CBE) implementation, and some issues seem to be more apparent than the others. Frequency distribution shows that the most reported obstacle is lack of teacher training, which shows that there is a big difference between professions readiness in practices of CBE. Limitation in resource such as lack of material and other technological facilities are often repeated and it could imply many schools are not well equipped to be able to use competency based instruction. The lack of clarity of curriculum and challenges with assessment further underline the fact that teachers usually have a hard time interpreting and putting CBE guidelines into practice. Implementation barriers can also be structural issues like large classes and inconsistencies at the policy level, yet they are not as common as training and resource issues. In general, the trend of findings indicates that the challenges of the CBE implementation are interrelated and, to a great extent, systemic, which implies the necessity of the widespread reforms that should cover not only the capacities of the teachers but also the institutional support.

Table 1

Challenge Category	Frequency (n)	Percentage (%)
Lack of Teacher Training	28	25.9%
Resource Constraints	24	22.2%
Curriculum Ambiguity	21	19.4%
Assessment Difficulties	19	17.6%
Large Class Sizes	17	15.7%
Policy-Level Gaps	15	13.9%
Teacher Resistance to Change	13	12.0%

DISCUSSION

The results of the current research demonstrate that educators face several interconnected issues in their efforts to introduce Competency-Based Education (CBE) and this fact proves what the previous literature emphasizes in diverse social sciences. The overarching challenge that arises, which is the absence of teacher training implies that the actual preparedness of teachers is by far underdeveloped, even though there is a lot of enthusiasm about CBE on the policy level. Through journal articles published on Media Horizon, the same authors have noted that teachers are usually given inadequate exposure to CBE processes, evaluation models, and competency-Mapping strategies, hence compromising their trust and integrity in adoption. This suggests that there is always a discrepancy between curriculum reform and professional development systems that must come hand in hand with the reform.

Resource limitations such as the lack of teaching material, a digital infrastructure and overcrowded classes are also highlighted in the findings. Such structural constraints limit the capacity of teachers to perform differentiated learning, individualized testing, and performance-based activities which are the major pillars of CBE. The same problems have been mentioned in previous studies, as the authors found that despite the well-trained teachers, it is quite difficult to maintain the principles of CBE in an institution where these principles are not supported. Infrastructure constraints in most low- and middle-income situations prevent teachers to move away to content-based teaching to more competency-focused approach that demands more flexible, adaptive, and technologically enhanced learning conditions.

The other significant revelation has to do with the challenges of instituting continuous competency based assessment. The most common reason why many teachers still use traditional examinations is that they are familiar with it, and they have limited time to administer assessments and no clear instructions on how to measure competencies. This concern is supported by ambiguity in the curriculum with the teachers being provided with the broad frameworks and lack of practical instructions on how to plan and organize lessons, competency mapping and how to apply rubrics to performance assessment. Such gaps represent what is termed by scholars as a misfit between the intentions of policy or the classroom realities where reforms are being introduced and without adequate detailed support mechanisms.

However, despite the fact that teacher resistance towards change was least widely reported problem, its existence is still substantial. The resistance is usually due to the work overload, misunderstanding of the goals of CBE or apprehension about accountability and monitoring. Educational psychology research points to the fact that teachers tend to resist reforms when they feel that they are imposed on them or they do not support them. Thus, despite having addressed the structural constraints, teacher motivation, involvement, and the value of CBE should be reinforced by supportive leadership and organizational school culture.

In general, the results indicate that the effective implementation of CBE cannot be achieved through curriculum revision only, it needs to be a systemic process. There should be policies with a long-term professional development, supply of sufficient resources, and reduction of classes where feasible, and practical, and well-defined guidelines. These components must be aligned because the isolated interventions (e.g. training with no resources or curriculum with no assessment tools) are not likely to lead to changes that are meaningful and long-lasting. These findings add to the overall literature by appreciating the fact that implementation problems around CBE are structural and not solitary and solutions to the same ought to be holistic, integrated, and grounded in the context.

CONCLUSION

Attempting to implement Competency-Based Education (CBE) poses a complicated bundle of issues to teachers, which is determined by systemic, institutional, and pedagogical variables. This research has discovered that the absence of proper teacher training is the biggest challenge because it restricts the knowledge of CBE concepts, methods of instruction, and practices of competency-based evaluation among teachers. In the absence of adequate professional training, the teachers cannot convert policy directives into classroom practice.The resources such as a lack of teaching materials, lack of adequate technological infrastructure and overcrowded classes are other factors that hinder the implementation of CBE. These structural issues have complicated the ability of teachers to employ performance-based and student centered learning strategies that CBE needs. Also, unclear curriculum school policies and lack of clear assessment schemes are contributing to uncertainty in the process of lesson planning and assessment, thus, many teachers simply revert to the old teaching methods.Also, the teacher resistance to change was the least common issue; however, this aspect is still pertinent. The causes of resistance are frequently based on an augmented workload, absence of evidentness, and institutional backing. This implies that

reforms should not be based on mandates only but should be supported by supportive leadership, school cultures as well as continuous mentoring.

RECOMMENDATIONS

There is need to offer constant, applied, and practical training programs that will empower the teachers with the skills required to create competency-based lessons, implement formative assessments and employ performance-based evaluation strategies. The training must be continuous, not a workshop, and the teachers should be provided with constant assistance to be introduced to CBE.The schools need to focus on providing instructional materials, digital tools and classroom materials that facilitate CBE. The provision of ICT infrastructures including computers, access to internet as well as multimedia tools will allow teachers to embrace interactive as well as student-centered teaching methods. Educational administrators should set up enough budgets to facilitate equal access to resources in all schools to reduce confusion and inconsistency, the education authorities should supply clear and well-organized curriculum documents that state the competencies, learning outcomes, and assessment rubrics. The Model lesson plans, sample competency maps, and assessment templates could assist teachers to have a clear picture on how to apply CBE in the classroom.

REFERENCES

Akom, G. (2021). *Teachers' readiness for competency-based education reforms in developing contexts*. Journal of Educational Change, 18(3), 245–261.

Alade, O. M., & Odebode, A. A. (2020). Competency-based curriculum implementation: Challenges and prospects in secondary schools. *International Journal of Instruction*, 13(2), 57–74.

Baartman, L. K., & Gulikers, J. (2017). Assessment in competency-based education: Practices and challenges. *Assessment in Education: Principles, Policy & Practice*, 24(2), 167–184.

Cochran-Smith, M., & Lytle, S. L. (2019). *Inquiry as stance: Practitioner research*. Teachers College Press.

Darling-Hammond, L. (2020). Teacher education and the changing face of teaching. *European Journal of Teacher Education*, 43(1), 5–23.

Gervais, J. (2016). The operational definition of competency-based education. *Journal of Competency-Based Education*, 1(2), 1–10.

Hare, B., & Katwalo, A. M. (2022). Implementation of competency-based curricula in resource-limited schools: Challenges and opportunities. *Education and Development Review*, 39(1), 82–101.

Kafyulilo, A. (2021). Teachers' perceptions and experiences with competency-based education in East Africa. *Educational Research for Policy and Practice*, 20(1), 13–33.

Mulenga, I. M., & Kabombwe, Y. M. (2019). Teachers' readiness for competence-based curriculum implementation. *South African Journal of Education*, 39(3), 1–12.

Nieveen, N., & Plomp, T. (2018). Curriculum implementation in competency-based education: Realities and tensions. *Curriculum Perspectives*, 38(2), 73–84.

Osienda, A. (2020). Teacher resistance and curriculum reform: Understanding attitudinal barriers in CBE. *International Journal of Educational Policy*, 15(4), 113–125.

Patrick, S., & Sturgis, C. (2017). *Maximizing competency education and personalized learning*. Aurora Institute.

Schiro, M. (2013). *Curriculum theory: Conflicting visions and enduring concerns* (2nd ed.). SAGE Publications.

Spady, W. G. (1994). *Outcome-based education: Critical issues and answers*. American Association of School Administrators.

Tadesse, T., & Woldehanna, S. (2021). Assessment practices in competency-based education: A mixed-method study. *Educational Assessment*, 26(4), 295–315.

Tigstu, M. (2020). Structural challenges in the implementation of competency-based curricula. *Journal of Social Science and Education Policy*, 14(2), 59–74.