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Paradigms for Contextualizing Competency Based Curriculum in Africa: Inferences from the OECD Countries

Yasin Mohamed Gulled[1]

[1] Visiting Scholar (Taiwan Fellowship Recipient 2023), National Taiwan Normal University
Email: Fiqi215@gmail.com

Abstract
Competency-based curriculum (CBC) has gained significant attention in recent years as an innovative approach to curriculum design and delivery. This paper explores the use of competency-based curriculum in educational settings and its potential impact on student learning outcomes. It specifically portrays how various countries in OECD utilized the system and urges African countries to undertake the pre-tested approaches by the OECD countries. The paper first provides an overview of CBC and the key principles that underpin this approach. It then discusses the advantages of using CBE, including the ability to personalize learning, increase student engagement and motivation, and improve workforce readiness. The paper also examines the challenges and limitations of implementing CBC, including the need for robust assessment practices, alignment with instructional and assessment methods, and the importance of teacher training and support. Lastly, the paper presents case studies of schools and institutions that have successfully implemented CBC, highlighting best practices and lessons learned. Overall, this paper argues that competency-based curriculum has the potential to transform traditional education by shifting the focus from seat time/knowledge-based to mastery of competencies, thus better preparing students for the demands of the 21st century workforce.

Keywords: Competency-Based Curriculum, Content-Based Curriculum, Mastery, Training and Assessment, Labor Market Demands

1. Introduction

Competency-based education is an instructional approach that focuses on the development of students' skills and knowledge through clear learning outcomes and performance assessments. The competency-based curriculum is designed to provide students with opportunities to demonstrate their understanding of a subject through practical application and hands-on experience. This approach emphasizes student-centered learning and assesses students' progress based on their ability to demonstrate mastery of specific competencies, rather than simply spending a set amount of time on a particular subject.

Competency-based education has gained popularity in recent years as a way to provide students with a more personalized and flexible learning experience. This approach has been adopted in various countries around the world, including the United States, Australia, Canada, and the United Kingdom.

In the United States, competency-based education has been embraced as a way to provide students with the skills and knowledge they need to succeed in a rapidly changing job market. The Lumina Foundation, a private, independent foundation that supports higher education, has been a major advocate for competency-based education in the United States. In a recent report, the foundation highlighted the benefits of this approach, including increased student engagement, personalized learning, and better alignment between education and employment (Lumina Foundation, 2013).

Australia has also embraced competency-based education, with several universities and schools adopting this approach. For example, the University of Southern Queensland offers a competency-based program in business administration that allows students to demonstrate their mastery of specific competencies through practical assessments and projects (University of Southern Queensland, 2021). In addition, the Australian government has supported the development of competency-based programs in various industries, such as construction and healthcare, as a way to provide workers with the skills they need to succeed in a rapidly changing job market (Australian Government, 2021).

In Canada, competency-based education has been adopted by several post-secondary institutions, including Simon Fraser University and the Northern Alberta Institute of Technology. These institutions have developed programs in a variety of fields, such as business, healthcare, and technology, that allow students to demonstrate their mastery of specific competencies through practical assessments and projects (Simon Fraser University, 2021; Northern Alberta Institute of Technology, 2021).

The United Kingdom has also embraced competency-based education, with several universities and schools adopting this approach. For example, the University of Bristol offers a competency-based program in business administration that allows students to demonstrate their mastery of specific competencies through practical assessments and projects (University of Bristol, 2021). In addition, the UK government has supported the development of competency-based programs in various industries, such as construction and healthcare, as a way to provide workers with the skills they need to succeed in a rapidly changing job market (UK Government, 2021). The Organization for Economic Co-operation and Development (OECD) is a global organization that brings together 36 countries to promote policies that will improve the economic and social well-being of people around the world. Many of the countries that are part of the OECD have adopted or are exploring the use of competency-based education in their educational systems.

Recently, the OECD has recognized the potential of competency-based education to support the development of skills and knowledge that are relevant to today's rapidly changing job market. The organization has identified competency-based education as a promising approach to address the skills mismatch that exists in many countries and to provide students with more flexible and personalized learning experiences (OECD, 2018).

In particular, the OECD has highlighted the benefits of competency-based education for disadvantaged students and for those who are pursuing alternative pathways to traditional university-based programs. The organization has also noted the importance of establishing clear learning outcomes and assessments in order to ensure that competency-based programs are rigorous and of high quality (OECD, 2018).

In some OECD countries, such as Finland, competency-based education has been integrated into the national education system and is widely used in schools and universities. In other countries, such as the United States, competency-based education is still in the early stages of adoption, but is gaining momentum as a promising approach to addressing the skills mismatch and providing students with more flexible and personalized learning experiences (OECD, 2018).

Similarly, the case of competency-based education has become increasingly popular in many countries in Asia, as nations seek to improve the quality and relevance of their education systems. In countries such as Singapore, competency-based education has been integrated into the national education system and is widely used in schools and universities. Singapore's education system is widely recognized as one of the best in the world, and the adoption of competency-based education has been credited with contributing to its success (OECD, 2018).

Similarly, Taiwan is one of the forefront countries in the PISA exams of OECD countries. Taiwan has been developing and implementing a competency-based curriculum (CBC) since the early 2000s. The Ministry of Education in Taiwan has been committed to developing a curriculum that focuses on the development of competencies that prepare students for the 21st century.

In 2018, the Ministry of Education implemented a new CBC for elementary and junior high school students. The new curriculum places a greater emphasis on interdisciplinary learning, hands-on experiences, and the development of skills such as critical thinking, problem-solving, communication, and collaboration.

The implementation of the CBC in Taiwan has been met with some challenges, including a lack of understanding of the new curriculum by some teachers and the need for additional training and professional development for educators. However, there have also been positive results, including increased student engagement, improved teaching and learning outcomes, and better preparation for the workforce.

According to a study conducted by Li and Tsai (2019), the implementation of the CBC in Taiwan has resulted in a shift in teaching practices, from teacher-centered to student-centered approaches, and has improved student performance in various areas. The study also found that the implementation of the CBC has led to the development of new instructional materials and pedagogical approaches, as well as increased collaboration among teachers.

Overall, the implementation of the CBC in Taiwan is still ongoing, and further research is needed to assess the long-term impact of the new curriculum on student learning outcomes and workforce readiness.

In other countries in the region, such as South Korea, competency-based education is still in the early stages of adoption, but is gaining momentum as a promising approach to addressing the skills mismatch and providing students with more flexible and personalized learning experiences (OECD, 2018). In India, the government has launched initiatives to promote the use of competency-based education in schools and universities. The government recognizes the importance of preparing students for the rapidly changing job market and the need to develop skills that are relevant to the needs of industry (OECD, 2018).

Main Objective: This paper explores the use of competency-based curriculum by portraying how various countries in OECD utilized the system and to put forward inferences from the challenges, intervention and implementation strategies.

2. Curriculum and Labor Market Demands

The correlation between school curriculum and employment is a complex and multi-faceted issue that has been the subject of much debate and research in recent years. On one hand, there is a growing recognition of the importance of providing students with the skills and knowledge they need to succeed in today's rapidly changing and highly competitive job market (OECD, 2019). On the other hand, there is concern that too narrow a focus on certain subjects or skills may limit students' opportunities and creativity, and leave them ill-prepared for the challenges of the future.

One of the key factors that have been identified as affecting the correlation between school curriculum and employment is the changing nature of work (OECD, 2019). With technological advances and globalization transforming the job market, it is increasingly important for students to have a broad range of skills and knowledge, including critical thinking, problem-solving, and communication, that will enable them to adapt to new and changing circumstances. Despite the recognition of the importance of these skills, there is still a strong emphasis in many school curricula on subjects that are seen as more "practical" or directly related to specific jobs or industries. This can include subjects such as math, science, and business, as well as vocational or technical training in areas like engineering, health care, and IT.

While these subjects can provide students with valuable skills and knowledge, there is a risk that they will become overly focused on the immediate needs of the job market, at the expense of other areas of learning that are equally

important (OECD, 2019). For example, there is evidence to suggest that students who are heavily focused on math and science may miss out on the benefits of a more holistic education, including exposure to the arts, humanities, and social sciences, that can help them develop a more well-rounded and creative perspective on the world. To address these concerns and better align school curricula with the needs of the job market, it will be important for educators and policymakers to take a more comprehensive approach, that recognizes the importance of a broad and well-rounded education, while also preparing students for the realities of the job market (OECD, 2019).

One possible approach is to focus on the development of transferable skills, such as critical thinking, problem-solving, and communication, that are relevant across a range of different fields and disciplines, and will help students to adapt to the changing demands of the job market (NACE, 2020). This can be done through a combination of subject-specific learning, such as math and science, and more interdisciplinary or project-based learning, that encourages students to apply what they have learned in different contexts (OECD, 2019).

In addition, it will be important to provide students with opportunities to gain real-world experience and exposure to different careers, through internships, co-op programs, and other experiential learning opportunities (NACE, 2020). This can help students to develop a better understanding of the job market and the skills and knowledge that are in demand, and make more informed decisions about their future careers (OECD, 2019).

Competency-based education (CBE) is an educational approach that aims to ensure that students have the knowledge and skills they need to succeed in the workforce. The main premise of this approach is that students should not be evaluated based on time spent in the classroom, but rather on their mastery of the subjects they are studying (Cedefop, 2020). This is seen as a way to better align educational programs with the changing demands of the labor market, and to provide students with the skills they need to succeed in an increasingly competitive job market.

One of the key benefits of a competency-based curriculum is that it allows students to work at their own pace and to focus on areas where they need the most improvement (Cedefop, 2020). This is seen as a way to address the needs of students who may be struggling with certain subjects, and to ensure that they have the necessary skills and knowledge to succeed in the workforce. Another key benefit of this approach is that it can help to address the skills gap that exists between what students are learning in school and the skills that are in demand in the workforce (Cedefop, 2020). By ensuring that students are mastering the skills and knowledge that are most relevant to the job market, competency-based curriculum can help to prepare students for the demands of the modern workforce and to increase their chances of success in the job market.

Despite the many potential benefits of competency-based curriculum, there are also some concerns about this approach. One of the key challenges is that it can be difficult to assess students' mastery of subjects in a meaningful and reliable way (Cedefop, 2020). This is because the evaluation of student learning outcomes is based on more subjective measures, such as portfolios and assessments, rather than traditional measures like standardized tests.

Another concern is that competency-based curriculum can be more time-intensive and expensive to implement, particularly in resource-constrained settings (Cedefop, 2020). This is because it requires significant investments in technology, teacher training, and assessment systems, and may not be feasible in all educational settings.

3. The Epistemological Hypotheses of the CBC

Competency-based curriculum refers to an educational approach where learning outcomes are defined in terms of specific competencies or skills that students are expected to master. This approach differs from traditional education (content or knowledge-based curriculum) where the emphasis is on covering a set curriculum of content and knowledge. In competency-based education, assessment is focused on evaluating students' demonstration of competence in the defined skills, rather than just their recall of information.

Furthermore, competency-based curriculum is a teaching and learning approach that centers on students acquiring the skills, knowledge, and attitudes required to solve problems in real-life contexts. The epistemological

hypotheses of competency-based curriculum are grounded in constructivism and pragmatism. According to Piaget (1970), constructivism is a learning theory that posits that learners construct knowledge by actively engaging with the environment. Learners actively seek meaning in their experiences, and knowledge is developed through a process of reflection and inquiry. The epistemological hypothesis of competency-based curriculum is grounded in constructivism, as the curriculum is designed to be experiential, and learning is viewed as a process of active construction of knowledge.

More so, competency-based curriculum is centered on the development of competencies, which are the combination of knowledge, skills, and attitudes required to solve problems in real-life contexts. The development of competencies is facilitated by creating learning environments that encourage students to actively engage with the subject matter. According to Marsh and Willis (2007), competency-based curriculum is designed to promote active learning, collaborative problem-solving, and the integration of knowledge across disciplines.

Likewise, pragmatism is another epistemological hypothesis that underpins the competency-based curriculum. Pragmatism posits that knowledge is a tool that is used to solve problems in the real world. Knowledge is valued for its usefulness, and it is viewed as a means to an end rather than an end in itself. Competency-based curriculum is grounded in pragmatism, as it is designed to provide learners with the tools they need to solve real-world problems.

The competency-based curriculum is designed to ensure that students develop the competencies they need to be successful in the real world. These competencies are defined by industry or professional standards and are designed to be transferable across different contexts. According to Wessel and Zlatkin-Troitschanskaia (2019), the competency-based curriculum is designed to prepare students for the challenges of the 21st century by equipping them with the skills, knowledge, and attitudes required to be successful in an ever-changing world.

In the case of Africa, competency-based curriculum (CBC) has become increasingly popular in the continent. The approach emphasizes the mastery of skills and knowledge as opposed to the accumulation of credits or hours in a traditional educational system. One of the major African problems in the lack of employment and mismatch between the school knowledge and labor market demands. This is one of the major driving forces of the adoption of competency-based curriculum in the continent. Studies have shown that lack of engagement and misconception on the methodology of introducing this curriculum remains a challenge.

4. Review of Related Literature

A review of the literature shows that there has been a growing interest in CBE in Africa, particularly in vocational and technical education. According to Akyeampong and Lussier (2016), the shift towards competency-based education is due to the need to align education with the changing demands of the job market. The traditional education system is seen as inadequate in providing students with the necessary skills and competencies needed to succeed in the modern workplace. A competency-based curriculum is seen as a solution to this problem. One of the key benefits of CBE is that it allows students to learn at their own pace and demonstrate their understanding of a subject before moving on to the next topic. In a traditional education system, students are expected to learn at the same pace, which can be challenging for those who struggle with certain subjects. The flexibility of CBE allows students to focus on areas where they need improvement and accelerate their learning in areas where they excel (Bao, 2019).

Nonetheless, the implementation of CBE in Africa has not been without its challenges. One of the main challenges is the lack of resources and infrastructure to support the approach. According to Mulder and Vermeulen (2017), the success of CBE depends on the availability of technology, appropriate learning materials, and qualified teachers. Unfortunately, many schools in Africa lack these resources, which makes it difficult to implement a competency-based curriculum. Another challenge is the lack of clarity around the competencies that students are expected to master. According to Maunganidze and Mgutshini (2020), there is a need for clear and specific learning outcomes that align with the needs of the job market. Without clear competencies, it can be difficult to assess whether students have mastered the necessary skills.

A study by Alsharif, D'Amour and Lamontagne (2019) examined the development of a competency-based curriculum for a health sciences program in a Canadian university. The study used a case study approach and collected data through document analysis, interviews, and focus groups. The findings showed that the development of the curriculum was a complex process that required collaboration among faculty, students, and external stakeholders. The study highlights the importance of involving stakeholders in the curriculum development process and the need for ongoing evaluation of the curriculum.

Another study by Okeke and Nwosu (2018) examined the effectiveness of a competency-based curriculum in Nigerian technical colleges. The study used a mixed-methods approach and collected data through surveys, interviews, and focus groups. The findings showed that the competency-based curriculum had a positive impact on students' learning and skills development. The study also identified challenges in the implementation of the curriculum, including inadequate resources and limited training for teachers. The study highlights the need for adequate resources and training to support the effective implementation of competency-based curriculum in Nigerian technical colleges.

Dabbagh Kitsantas (2012) reviewed the literature on best practices for competency-based curriculum design. The study identified key principles and practices, including the importance of defining learning outcomes, designing authentic assessments, and providing opportunities for personalized learning. The study also highlighted the need for ongoing evaluation and improvement of the curriculum. The study provides insights into best practices for designing competency-based curriculum and offers recommendations for educators and curriculum developers.

A review of the literature shows that West African countries have been working to develop competency-based education for decades, with the goal of providing students with the skills and knowledge required by the modern workforce. In Nigeria, for example, the National Board for Technical Education (NBTE) has been implementing a competency-based curriculum in vocational and technical education since the early 2000s (Akpan, 2016). The approach has also been adopted by other countries in the region, such as Ghana, Sierra Leone, and Liberia.

One of the key benefits of CBE is that it promotes a more student-centered approach to learning, allowing students to progress at their own pace and demonstrate mastery of a particular skill or competency before moving on to the next. This approach is designed to enhance the relevance and quality of education by ensuring that students develop practical, job-ready skills (UNESCO, 2015).

Nevertheless, the implementation of CBE in West Africa has been met with several challenges. One of the main obstacles is the lack of qualified teachers who can effectively implement the approach. According to Osa-Edoh and Inegbedion (2017), the majority of teachers in West Africa have not been trained in CBE and may not be familiar with the skills and competencies required in the workforce. This gap in teacher capacity may impact the ability of CBE to deliver its intended benefits.' Another challenge is the lack of infrastructure and resources, which are necessary to support the implementation of CBE. According to Afolabi and Esu (2015), many schools in West Africa lack the necessary technology and learning materials to effectively implement the approach. This can impact the ability of students to acquire the required competencies.

A review of the literature indicates that a number of East African countries have been working towards the implementation of competency-based education for some time now. In Kenya, for example, the Competency-Based Curriculum (CBC) was introduced in 2017 with the goal of providing learners with the necessary knowledge, skills, attitudes and values to thrive in the 21st century (KICD, 2017). The approach has also been adopted in Tanzania, Uganda, and Rwanda.

One of the main advantages of CBE is that it prioritizes a more learner-centered approach, allowing learners to progress at their own pace and demonstrate mastery of a particular skill or competency before moving on to the next. This approach aims to increase the relevance and quality of education by ensuring that learners develop practical, job-ready skills (UNESCO, 2015).

However, the implementation of CBE in East Africa has also been met with a number of challenges. One of the main obstacles has been the lack of adequate infrastructure and resources, which are necessary to support the implementation of CBE. According to a study by Akello and Kajumbula (2018), many schools in East Africa lack the necessary infrastructure and resources to effectively implement the approach, which can impact the ability of learners to acquire the required competencies.

Another challenge is the need for professional development for teachers and other stakeholders. The success of CBE is largely dependent on the quality of teaching and learning that takes place in the classroom. Therefore, there is a need for comprehensive professional development programs that equip teachers with the skills and knowledge necessary to implement the approach effectively (KICD, 2017).

Tanzania has been implementing competency-based education (CBE) for several years now with the aim of providing a quality education that equips learners with practical skills that are relevant to the country's socio-economic development. This essay provides a literature review of competency-based curriculum in Tanzania, highlighting its implementation, challenges, and potential benefits. The implementation of CBE in Tanzania started with the introduction of the Basic Education Curriculum Framework (BECF) in 2014, which aimed to ensure that learners are equipped with practical skills that are relevant to the needs of the country's economy (URT, 2014). The framework emphasized the need for a more learner-centered approach, where learners are encouraged to demonstrate mastery of specific competencies before moving on to the next level.

One of the main advantages of CBE is that it is more relevant to the needs of learners and the job market. According to Mwakibinga and Simwinga (2019), the approach enables learners to develop a broad range of competencies, including critical thinking, problem-solving, and decision-making skills, which are essential for personal and national development.

However, the implementation of CBE in Tanzania has also faced challenges. One of the main challenges is the lack of sufficient resources and infrastructure to support the implementation of the approach. According to Ndalichako (2017), many schools lack adequate resources, including textbooks and teaching materials, which can impact the quality of teaching and learning.Another challenge is the need for effective teacher training and professional development. As Mwakibinga and Simwinga (2019) note, the success of CBE depends largely on the quality of teaching and learning that takes place in the classroom. Therefore, there is a need for comprehensive professional development programs that equip teachers with the skills and knowledge necessary to implement the approach effectively.

Rwanda is one of the countries in Africa that has embraced competency-based education (CBE) as a framework for improving the quality of education in the country. The country's education system has undergone significant changes since the 1994 genocide, and CBE is seen as an important initiative for equipping learners with the practical skills necessary for socio-economic development. This essay provides a literature review of competency-based curriculum in Rwanda, highlighting its implementation, challenges, and potential benefits.

The implementation of CBE in Rwanda started with the development of the Competence-Based Curriculum (CBC) in 2015, which aimed to provide learners with a curriculum that emphasizes practical skills and hands-on learning (Mugizi et al., 2019). The curriculum focuses on seven core competencies, including communication, critical thinking, creativity, and innovation, and aims to equip learners with the skills necessary for entrepreneurship, innovation, and problem-solving. One of the main advantages of CBE in Rwanda is its potential to improve the quality of education and promote inclusive and equitable access to education. According to Twahirwa (2019), the CBC has been designed to provide a more learner-centered approach, where learners are encouraged to take an active role in their own learning and to demonstrate mastery of specific competencies.

However, the implementation of CBE in Rwanda has also faced challenges. One of the main challenges is the need for sufficient resources and infrastructure to support the implementation of the approach. According to Mugizi et al. (2019), many schools in Rwanda lack adequate resources, including textbooks and teaching materials, which can impact the quality of teaching and learning. Another challenge is the need for effective teacher training and

professional development. As Twahirwa (2019) notes, the success of CBE depends largely on the quality of teaching and learning that takes place in the classroom. Therefore, there is a need for comprehensive professional development programs that equip teachers with the skills and knowledge necessary to implement the approach effectively.

In Somaliland, the lack of knowledge or expertise in competency-based curriculum (CBC) development and implementation is a significant challenge facing many. While CBC is gaining acceptance as an effective approach to education, its success depends largely on the skills and knowledge of the experts or developers who design and implement it. One of the main reasons for the lack of knowledge in CBC is the limited availability of training and professional development opportunities for educators, teachers and curriculum developers in Somaliland education industry. According to unpublished qualitative study by Yasin (2023) on school leadership, Somaliland Ministry of Education is never driven by studies or needs assessment nor they engage relevant stakeholders such as principals, teachers, parents, students, laymen, experts, community and important actors in the review or development of a curriculum or education policy. Studies by the engagement of students in the curriculum had been revealed by Orstein and Hunkins (2009) as they also depicted the importance of inclusive approach. In sum, the limited availability of training and professional development opportunities for educators, curriculum developers, teachers as well as the limited research and knowledge sharing will always remain a challenge in Somaliland curriculum and education trajectory. Addressing this challenge requires a coordinated and collaborative approach at a national level.

According to Juma and Kaehler (2019), many African countries lack the necessary resources and expertise to support the development and implementation of CBC. This results in a gap between the demand for skilled professionals in CBC and the available supply of qualified curriculum expertise.

Another reason is the limited research and knowledge sharing among African countries. In Somaliland, the trends to develop a competency based or review a curriculum is not guided by any study or needs assessment made by the Ministry of Education. Many countries tend to develop their CBC in isolation without sharing experiences or best practices with other African countries. This results in a lack of coherence and inconsistency in the development and implementation of CBC across the continent. According to Moyo and Lubinda (2019), a coordinated and collaborative approach is needed to enhance the development and implementation of CBC across Africa, and Somaliland is no different.

The lack of knowledge and expertise in CBC among experts and developers has significant implications for the successful implementation of CBC. Inadequate knowledge and skills can result in a lack of alignment between the curriculum and the learning outcomes, leading to poor teaching and learning experiences for students. Furthermore, according to many studies in Somaliland, the majority of the teachers at all levels of schools have not been subjected to the modern pedagogical praxis (Gulled, 2019). This may result in ineffective assessment methods that do not accurately measure students' competencies, leading to an inaccurate assessment of student performance.

5. CBC Adoption Strategy: Envisioning the New Paradigm Shift

The introduction of a competency-based curriculum in a country requires a systematic and well-planned approach. The following steps can be taken as a general methodology for introducing competency-based education to a country:

1. Stakeholder Engagement: Involve key stakeholders such as educators, policy makers, parents, and students in the development and implementation process (Brown & Trotter, 2017). This will help to ensure that everyone understands the goals and benefits of competency-based education and has a stake in its success.
2. Curriculum Development: Develop a competency-based curriculum that aligns with the goals and priorities of the education system and reflects the needs of students and the broader society (Scherer & Reeve, 2017). This may involve revising existing curricula, creating new ones, or adapting existing models to fit the local context.

3. Teacher Training: Provide training and professional development opportunities for teachers to ensure that they have the knowledge and skills necessary to implement competency-based education effectively (Hattie & Timperley, 2007). This might involve workshops, online courses, mentoring programs, and other forms of support. According to Yasin (2021) teacher qualifications also account for the variance in the student performance so it should be deemed.
4. Assessment and Evaluation: Develop a robust system for assessment and evaluation that aligns with the competency-based curriculum and supports student learning and development (Wiggins, 1998). This might include formative assessments, self-reflection activities, and performance-based assessments that are aligned with real-world applications.
5. Technical Assistance: Provide technical assistance and support to schools and teachers as they implement the competency-based curriculum (Scherer & Reeve, 2017). This might include training and support for technology, access to resources and materials, and ongoing support and professional development opportunities.
6. Monitoring and Evaluation: Continuously monitor and evaluate the implementation of the competency-based curriculum to identify areas of strength and areas for improvement (Stufflebeam, 1971). This will help to ensure that the curriculum remains relevant, effective, and aligned with the changing needs of students and society.
7. Communication and Outreach: Communicate the benefits and goals of competency-based education to parents, students, and the broader community to build support and understanding (Scherer & Reeve, 2017). This might involve presentations, workshops, online resources, and other forms of outreach.

Stakeholder engagement is an essential aspect of curriculum development, as it helps ensure that the final product aligns with the needs and expectations of the various groups who will be impacted by it. In their book, "Curriculum: Foundations, Principles, and Issues," Ornstein and Hunkins (2009) discuss the importance of stakeholder engagement in curriculum development. They argue that curriculum development should be a collaborative process that involves a range of stakeholders, including educators, administrators, students, parents, and community members.

According to Ornstein and Hunkins, stakeholder engagement in curriculum development is important for several reasons. First, it helps ensure that the curriculum meets the needs of all stakeholders. By involving a range of perspectives, the curriculum can be tailored to meet the needs of learners, educators, and the community as a whole. Second, stakeholder engagement can help build support for the curriculum. When stakeholders feel that their opinions and concerns have been heard, they are more likely to support the curriculum and help implement it effectively. Thirdly, stakeholder engagement can help ensure that the curriculum reflects the values and goals of the community. By involving a range of stakeholders, the curriculum can be designed to reflect the community's cultural, social, and economic values, and help prepare students for life in that community.

Ornstein and Hunkins suggest that stakeholder engagement can be achieved through a range of methods, including surveys, focus groups, public meetings, and individual interviews. They also emphasize the importance of ongoing communication and collaboration throughout the curriculum development process. Overall, Ornstein and Hunkins stress the importance of stakeholder engagement in curriculum development as a way to create a more effective, relevant, and culturally responsive curriculum.

Here are a few common approaches to stakeholder engagement in curriculum development:

1. Surveys and questionnaires: Surveys and questionnaires can be used to gather information from stakeholders about their needs, expectations, and opinions on the curriculum. This approach allows for a large number of stakeholders to provide input in a relatively short amount of time.
2. Focus groups: Focus groups bring together a smaller number of stakeholders for in-depth discussions about the curriculum. This approach can provide valuable insights into stakeholder perspectives and can be especially useful for exploring complex or controversial issues.

3. Interviews: One-on-one interviews and key informant interviews with stakeholders can provide an opportunity to gather detailed information and gain a deeper understanding of stakeholder perspectives.
4. Public meetings and forums: Public meetings and forums provide a platform for stakeholders to voice their opinions and provide input on the curriculum in an open and transparent manner. This dialogue is of paramount importance in the process of curriculum development.
5. Online platforms: In the digital age, there are many online platforms that can be used to engage stakeholders in curriculum development, such as social media, discussion forums, and virtual meetings.

It is important to remember that different stakeholders may have different preferences for how they would like to engage, so it may be necessary to use a combination of approaches to ensure that all stakeholders have an opportunity to provide input. It is also important to listen to the perspectives of all stakeholders, regardless of whether they align with the curriculum development team's views or not, and to make every effort to incorporate their feedback into the final product.

6. Challenges to the Implementation of Competency Based Curriculum

Implementing a competency-based curriculum can present several challenges, including:

Defining Competencies: One of the significant challenges in implementing a competency-based curriculum is defining the competencies that students need to acquire. Competencies must be relevant, meaningful, and measurable to ensure that students can demonstrate their mastery(Spady, 1994). It is also important that the stakeholders come up with the translated term for “competency” in their language. This is not an issue that one person or a group of people can agree upon a word; it is a holistic and inclusive approach where pundits on the language and specialists on the field translate the word with the support of lexicographers.

Assessment: Competency-based education relies on assessments that demonstrate mastery of the identified competencies. The design of assessments that accurately measure the competencies can be challenging, as can ensuring that assessments are both valid and reliable (Stiggins, Arter, Chappuis, & Chappuis, 2006). Educational researchers have always reiterated the need for authentic tests when it comes to the assessment component of the CBC.

Teacher Training: Competency-based education requires a different approach to teaching and learning, and therefore, teacher training is essential. Teachers need to understand how to assess and track competencies, use technology, and manage personalized learning plans (Darling-Hammond et al., 2014).

Time Constraints: Competency-based education is often student-paced, and it can be challenging to ensure that all students complete their required competencies within a given timeframe, especially if students work at different paces (Hockings et al., 2012).

Resource Allocation: Implementing a competency-based curriculum often requires additional resources, such as technology, staff, and infrastructure. Schools and institutions may struggle to allocate the necessary resources to ensure a successful implementation (Kuo et al., 2013).

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