

## Teacher Preparedness for Integrating Career Guidance into Competency-Based Curricula: Insights from Kenya and International Best Practices

Mercy Maina<sup>1\*</sup>, Margaret Waithaka<sup>2</sup>

<sup>1</sup>Director of Learning Development and Research, College of Career Guidance and Development

<sup>2</sup>Projects Coordinator & Career Guidance Expert, Career Guidance Institute

Corresponding Emails: [mercy.gichohi@gmail.com](mailto:mercy.gichohi@gmail.com); [maggie.waithaka@gmail.com](mailto:maggie.waithaka@gmail.com)

Accepted: 19 February 2026 || Published: 03 March 2026

### Abstract

The global shift towards Competency-Based Education (CBE) highlights an increasing emphasis on equipping learners with the knowledge, skills, and attitudes necessary for adaptability, employability, and lifelong learning. Central to this agenda is career guidance, which helps learners connect competencies to future educational and occupational paths. In Kenya, the Competency-Based Curriculum (CBC) was introduced in 2017 to replace the 8-4-4 system, incorporating "career and life skills" as a cross-cutting competency. However, the integration of career guidance remains inconsistent, mainly due to deficiencies in teacher preparedness, resource limitations, and policy ambiguities. This study, based on a desktop review of global and Kenyan literature, examines teacher preparedness to incorporate career guidance into CBE. The findings reveal that while international models such as Finland's transversal competencies and U.S. Career and Technical Education programs demonstrate successful alignment, Kenya faces challenges in professional development, assessment alignment, and systemic coordination. The lessons suggest the need for sustained teacher training, explicit curriculum-career mapping, resource provision, and employer engagement. The paper concludes that integrating career guidance within CBE is crucial for fostering learner agency, career maturity, and transition readiness, and recommends targeted reforms and further research to enhance practice in Kenya.

**Keywords:** *Competency-Based Education (CBE), Competency-Based Curriculum (CBC), career guidance, teacher preparedness, curriculum alignment, learner agency, transition readiness.*

**How to Cite:** Maina, M., & Waithaka, M. (2026). Teacher Preparedness for Integrating Career Guidance into Competency-Based Curricula: Insights from Kenya and International Best Practices. *Journal of Education*, 6(1), 45-61.

### 1. Introduction

Globally, education systems are shifting toward competency-based approaches that prioritize the development of knowledge, skills, values, and attitudes necessary for lifelong learning and employability. Career guidance, as a complementary component of education, equips learners to make informed decisions about study and work pathways, aligning individual potential with labour market demands. In Kenya, the Competency-Based Curriculum (CBC) was introduced to nurture holistic learners capable of thriving in a dynamic socio-economic environment (Kenya Institute of Curriculum Development [KICD], 2017). The CBC framework emphasizes

core competencies such as communication, collaboration, problem-solving, and career and life skills, underscoring the relevance of career guidance within the education process.

Despite this recognition, questions remain on how effectively career guidance has been integrated into curriculum design and classroom practice. Teacher preparedness is a critical factor in translating policy intentions into meaningful learner outcomes. Teachers serve as the primary facilitators of both subject content and career-related learning, yet many lack adequate training, resources, or policy clarity to deliver structured career guidance (OECD, 2021). International experiences, such as Finland's guidance curriculum and the United States' Career and Technical Education (CTE) programs, illustrate the importance of well-prepared educators and explicit curricular frameworks in ensuring the successful fusion of career education with competency-based learning. This study examines teacher preparedness to deliver career guidance within Kenya's Competency-Based Education framework, analyzes curriculum integration, and draws on global comparisons to inform strategies for strengthening teacher capacity and aligning career competencies with educational practice. In addition, this global context provides insights into both the opportunities and the challenges of operationalizing career guidance in CBE.

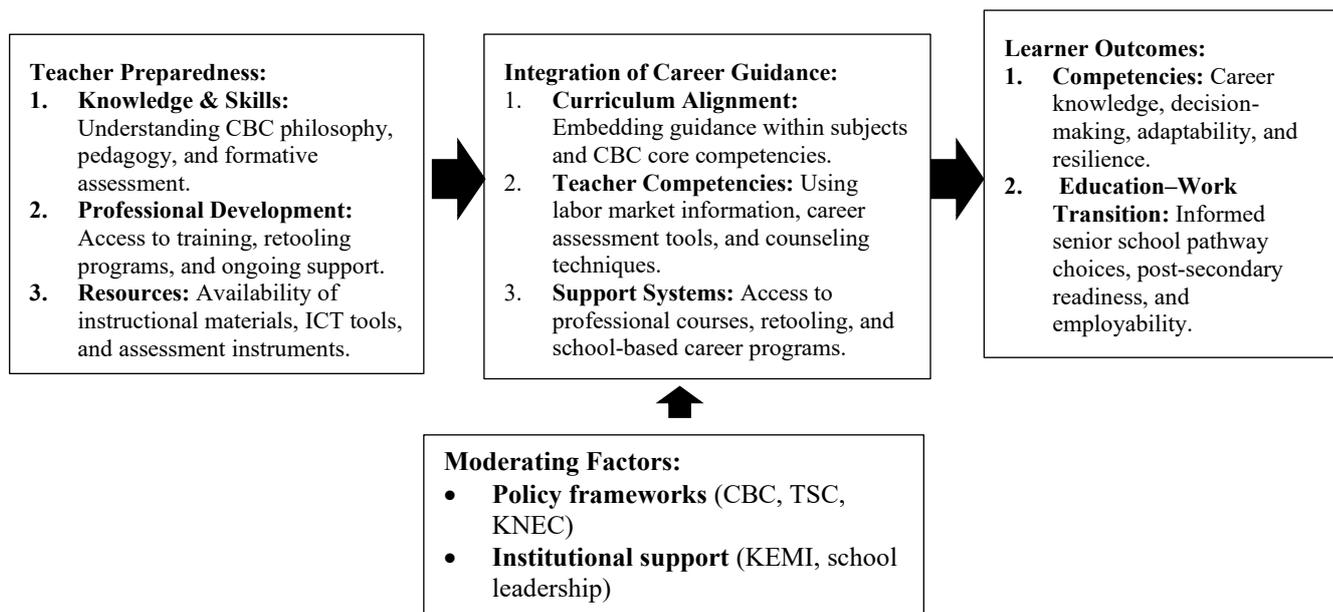
### **1.1 Problem Statement and Purpose of the Study**

Kenya's Competency-Based Curriculum (CBC) positions career guidance as a central element in preparing learners for lifelong learning, employability, and successful transitions into further education and the world of work. However, its practical application in schools remains inconsistent. Teachers frequently face challenges, including limited training in career development theories and practices, inadequate instructional resources, and a lack of structured time within the curriculum to address career competencies. In addition, the integration of career guidance across subjects is hindered by policy ambiguities, weak alignment of assessments, and misinterpretation of the curriculum. These gaps risk undermining the CBC's holistic goals by leaving learners without adequate support to connect academic learning to future opportunities.

This paper, therefore, examines teacher preparedness for delivering career guidance within the Competency-Based Education (CBE) framework and analyzes the extent to which curricula integrate career development competencies. By situating Kenya's experience within a broader global perspective, the study identifies both strengths and weaknesses in policy and practice. The findings are intended to inform strategies that strengthen teacher capacity, clarify curriculum-career alignment, and embed career guidance as a practical and impactful component of CBE.

### **1.2 Conceptual Framework**

The study is grounded in the premise that the successful implementation of Competency-Based Education (CBE) in Kenya depends on teacher preparedness and the integration of career guidance into classroom practice. This framework conceptualizes teachers as the critical link between policy intentions and learner outcomes.



**Figure 1: Conceptual Framework**

## 2. Literature Review

### 2.1. Competency-Based Education: Global and Kenyan Perspectives

Competency-Based Education (CBE) is an instructional approach in which learning is organized around clearly articulated competencies that learners must master before advancing to the next level. Unlike traditional time-based models, CBE emphasizes demonstrated mastery of knowledge, skills, and attitudes, regardless of how long it takes to achieve them (UNESCO-UNEVOC, 2023). This shift moves education away from rote content coverage toward performance-based outcomes, focusing on application and demonstration of learning in real-world contexts (Aurora Institute, 2020).

Several principles underpin CBE implementation. These include clearly defined and transparent learning outcomes, flexible pacing, learner-centered progression based on mastery rather than seat time, authentic assessment strategies, and continuous formative feedback (OECD, 2019; Aurora Institute, 2020). Competencies are not limited to subject-specific knowledge but also include transferable skills that promote lifelong learning, employability, and adaptability in a rapidly changing labour market (OECD, 2019). In this model, learners are given greater agency through opportunities for self-assessment, flexible learning pathways, and project-based demonstrations of mastery, which have been shown to improve engagement and motivation (Patrick & Sturgis, 2017).

Globally, CBE has been embraced in diverse ways, offering important lessons for Kenya and other countries. In Finland, curriculum reforms emphasize “transversal competencies” such as collaboration, problem-solving, and creativity, integrated through project-based, learner-centered pedagogies and supported by strong professional development for teachers (Sahlberg, 2021; Vitikka et al., 2016). In Rwanda, the 2015 competence-based curriculum reform sought to align education with labor market needs by embedding problem-solving and lifelong learning skills. However, challenges of teacher training, resource shortages, and large class sizes limited effective implementation (Nsengimana, 2020; Nsengimana & Mugabo, 2020). In the United States, competency-based models, often referred to as mastery learning, have been

promoted by institutions such as Western Governors University and state-level initiatives in New Hampshire. However, issues of consistent assessment standards and equitable implementation remain (Le et al., 2014; Patrick & Sturgis, 2017).

More recently, other countries have introduced variations of CBE. In Singapore, the Singapore Institute of Technology has pioneered undergraduate engineering programs and micro-credential pathways built around mastery of workplace competencies and alignment with industry (SIT, 2024b, 2025a). Australia incorporates seven “general capabilities” into its curriculum, such as digital literacy, ethical understanding, and intercultural competence, that develop alongside subject knowledge (Australian Curriculum, n.d.-a, n.d.-b). Canada promotes global competencies through a Pan-Canadian Systems-Level Framework that emphasizes systemic integration of competencies into curriculum, pedagogy, and assessment (CMEC, 2018). In Brazil, the Base Nacional Comum Curricular (BNCC), introduced in 2018, embeds cognitive, socio-emotional, and applied skills into national standards for all grade levels, reflecting a holistic vision of competencies for national development (BNCC, 2018).

In Kenya, the Competency-Based Curriculum (CBC) was introduced in 2017 to replace the content-heavy 8-4-4 system. It emphasizes seven core competencies, such as self-efficacy, communication, critical thinking, creativity, collaboration, and digital literacy, to prepare learners for lifelong learning and the world of work (Republic of Kenya, 2017; Mutai, 2024). This reform marks a paradigm shift from exam-oriented education to outcomes anchored on learner agency, applied skills, and relevance to the labor market (Wasanga, 2021). However, similar to other African contexts, implementation has faced challenges, including inadequate teacher preparedness, insufficient instructional resources, and difficulties aligning assessment practices with competency goals (Mwereria, Thinguri, & Muigai, 2023).

Taken together, global and Kenyan experiences show that while CBE is widely viewed as a promising reform to align education with 21st-century needs, its success depends on robust systemic support. Countries with strong teacher professional development and curriculum flexibility, such as Finland and Singapore, have made notable progress. By contrast, contexts like Rwanda and Kenya illustrate the risks of policy-practice gaps when teacher capacity, assessment systems, and resourcing remain insufficient. Ultimately, CBE’s promise of applied skills, learner agency, and clear outcomes can only be realized through sustained investment in teacher training, assessment reform, and resource provision.

## **2.2 Teacher Preparedness in CBE/CBC Implementation**

Teacher preparedness is central to the success of Competency-Based Education (CBE). Globally, teacher training institutions have grappled with the challenge of shifting from traditional content delivery models to competency-oriented pedagogies (OECD, 2022). Teachers must increasingly master innovative teaching methods, formative assessment strategies, and the integration of career guidance to support learners’ education-to-work transitions (Bersan, 2024).

International evidence illustrates that this challenge is not unique to Kenya. In Finland, often considered a global leader in learner-centered education, teachers undergo continuous professional development and are empowered to design formative assessment tools aligned with CBE outcomes (Sahlberg, 2021). Rwanda’s shift to competency-based curricula over the past decade reveals similar lessons: while teachers embraced the philosophy of CBE, studies have shown that limited training, resource shortages, and large class sizes constrained effective practice, particularly in rural schools (Nsengimana, 2020). In the United States, despite widespread policy support for CBE, many educators reported confusion about assessment

standards and a lack of adequate training in differentiated instruction, highlighting the difficulty of aligning teacher capacity with reform demands (Patrick & Sturgis, 2017).

Kenya's rollout of the Competency-Based Curriculum (CBC) reflects these global trends and has generated significant research across multiple counties and education levels. Evidence points to recurring gaps in teacher capacity, exposure, and professional development. In Kirinyaga County, Mutungu, Kimosop, and Gachahi (2023) established that although most teachers possessed basic academic qualifications, many reported feeling ill-prepared for CBC delivery. The lack of sustained professional development opportunities and limited access to refresher training emerged as major barriers. In Nairobi City County, Isaboke, Mweru, and Wambiri (2023) revealed that pre-primary teachers often reverted to teacher-centered instructional methods due to minimal exposure to CBC-specific pedagogy and assessment practices. Similar findings emerged in Bomet County. Keter and Wabuke (2025) noted that while teachers understood the CBC philosophy, they lacked adequate pedagogical and assessment competencies, and shortages of teaching and learning resources further hindered curriculum implementation. At the secondary level, research in Nyamira South Sub-County underscored the same challenge, highlighting that teachers had received little formal training before CBC's rollout in high schools (EANSO Journal, 2024).

In a nutshell, both international and Kenyan studies reveal that while competency-based reforms are widely recognized as necessary to prepare learners for the 21st century, their implementation depends heavily on teacher preparedness. Where robust professional development systems exist, as seen in Finland, teachers are better positioned to translate CBE ideals into practice. Conversely, in contexts such as Rwanda and Kenya, limited training, resource constraints, and entrenched teacher-centered traditions slow down reform efforts. This evidence underscores the urgency of investing in continuous professional development, adequate resource allocation, and systemic support to ensure that teachers can effectively implement CBE/CBC and achieve the intended learning outcomes.

### **2.3 Career Guidance in Competency-Based Education**

Career guidance plays a pivotal role in Competency-Based Education (CBE) by helping learners connect the competencies they acquire in school to further education, career pathways, and labor market opportunities. Globally, integrating career guidance into curricula enhances learners' career maturity, adaptability, and decision-making (Parola et al., 2024). Teachers act as key facilitators of career readiness, linking classroom learning with real-world labor market realities (Joho, 2024). However, research consistently highlights that teachers often lack the specialized competencies required for effective career guidance. Joho (2024) found that although teachers value career guidance, they frequently lack labor market knowledge, counselling skills, and the ability to use assessment tools. Professional development interventions, however, have been shown to enhance teachers' guidance capabilities, underscoring the need for structured training in key career guidance competencies and skills (Bersan, 2024).

CBE emphasizes mastery of knowledge, skills, and attitudes over time spent in class, fostering learner-centered pedagogies where students actively shape their learning trajectories. This learner agency necessitates career guidance to help students reflect on strengths, set goals, and align competencies with future pathways in work or further education (Jenkins, 2023; Gervais, 2016). Career guidance interventions such as portfolio reviews, reflective practice, and goal-setting help learners translate competencies into occupational standards, enhancing both self-awareness and career readiness (Pavlova & Guan, 2019; Frank & Ovens, 2022). Moreover,

career guidance strengthens learner agency by promoting career self-efficacy and encouraging learners to evaluate personal interests and abilities against developing competencies (Deci & Ryan, 2017).

In Kenya, the Competency-Based Curriculum (CBC) embeds career guidance across subjects to nurture decision-making, creativity, and lifelong learning capacities (KICD, 2017). Similarly, Rwanda's CBE reforms emphasize career and technical education, supported by school-based guidance, to align learners' mastery with employability skills (Nzabonimpa, 2019). Finland integrates career guidance into CBE through personal study plans overseen by counselors, which combine academic competencies with individual career goals (Souto-Otero & Ure, 2012). In the United States, Career and Technical Education (CTE) programs operationalize competency-oriented approaches by aligning secondary curricula with industry-recognized credentials, using individualized learning plans and employer partnerships to validate competencies (Le, Wolfe, & Steinberg, 2014; Patrick & Sturgis, 2015, 2017). Singapore incorporates structured Education and Career Guidance (ECG) counseling, linking competencies to aspirations and postsecondary transitions (Ho, 2019). These models illustrate how CBE provides a flexible learning architecture, while career guidance contextualizes competencies within career development and labor market realities.

### 2.3.1 Best Practices for Integrating Career Guidance in Competency-Based Education

Research and international guidelines identify several strategies for effectively integrating career guidance within Competency-Based Education (CBE). Reviews of global practice emphasize that effective school-based career guidance is typically multi-component and systemic, rather than ad hoc. Key features include whole-school approaches that align curriculum, counseling, and employer partnerships; early and progressive exposure of learners to career development activities; active, experiential learning such as work placements, job shadows, career related project-based tasks, and career mentorship; explicit development of career decision-making skills and self-efficacy through guided reflection; teacher and career counselor capacity building via ongoing professional development and accessible career resources; and robust monitoring and evaluation of both attitudinal (e.g., self-efficacy, career clarity) and behavioral outcomes (e.g., applications, enrollment, employment) (SAGE, 2024; UNESCO, 2021).

Empirical evidence confirms these practice principles. A systematic review of high-school career interventions found that multi-component programs combining classroom lessons, hands-on experiences, and counseling yielded greater improvements in career self-efficacy and exploration than single-component interventions (Wang, 2024). Programs co-designed with teachers, employers, and students, and those that adapt to local contexts, demonstrate greater relevance and uptake. Technology-enabled tools, including career inventories and virtual work experiences, further extend reach when integrated with face-to-face career guidance (Mahat et al., 2022; Parola et al., 2024).

Specific strategies for CBE integration include:

1. **Early and continuous exposure:** introducing career guidance early ensures learners explore potential pathways and connect classroom competencies to future opportunities (Gervais, 2016; UNESCO, 2021).
2. **Personalized tools:** instruments such as career portfolios, career journals, and individual career learning plans help students monitor progress, reflect on skills, and align competencies with career goals (CBEN, 2019, 2025).

3. **Teacher and counselor training:** equipping educators to interpret competencies in career contexts enables informed and labor-market-aligned career guidance (Gervais, 2016; CBEN, 2019).
4. **Sustained employer and community partnerships and engagements:** authentic engagement validates mastered competencies and provides insights into evolving industry needs (CBEN, 2025; Center for Higher Education Policy and Practice, 2025).

Taken together, the literature emphasizes that effective career guidance requires a systemic, integrated approach. It requires deliberate alignment of curriculum competencies with occupational standards, formative assessments, and workplace experiences. Although challenges persist, such as curriculum–career misalignment, unclear policy roles, teacher capacity gaps, limited assessment systems, constrained employer engagement, and inequities in marginalized contexts (Le et al., 2014; Mpuangnan, 2024; Mwereria et al., 2023; Nsengimana, 2020; OECD, 2019; UNESCO, 2021; Wasanga, 2021), there are opportunities for overcoming these barriers. These can include explicit curriculum mapping, user-friendly formative tools, coordinated policy frameworks, targeted teacher professional development, and work-based experiential learning models. When combined, these levers allow CBE to function as an authentic pathway to post-school opportunities rather than merely a technical reform in assessment (OECD, 2019; Patrick & Sturgis, 2017; UNESCO, 2021). In resource-constrained contexts, prioritizing early-career concept infusion, low-cost experiential learning, and teacher mentoring can meaningfully enhance learners’ transition readiness to further education or the world of work (SAGE, 2024; UNESCO, 2021; Wang, 2024).

#### **2.4 Integration of Career Guidance into the Kenyan CBE and CBC**

Kenya’s Competency-Based Curriculum (CBC) was introduced to nurture holistic learners equipped with values, skills, and competencies necessary for employability and responsible citizenship (KICD, 2017). A cross-cutting element of the framework is career guidance, which helps learners identify their talents, explore career pathways, and align their learning with further education and labour market opportunities. While the framework highlights “career and life skills” as a core competency, research shows that its translation into classroom practice remains uneven (Muchira, 2023; Mutai, 2024).

To support this vision, the CBC embeds a range of career-relevant competencies such as communication, collaboration, creativity, critical thinking, digital literacy, and self-efficacy across subjects and grade levels (KICD, 2017). Curriculum documents and syllabi provide learning activities and assessment strategies that demonstrate transferable skills and connect them to career exploration and progression planning. In practice, integration has been operationalized through school-level initiatives such as learner portfolios, career clubs, and teacher-facilitated reflection tasks. However, empirical studies indicate that the consistency and depth of this integration vary significantly across schools, with some institutions embedding career guidance into assessed competencies more effectively than others (Wasanga, 2021; Mwereria, Thinguri, & Muigai, 2023).

The Kenya National Examinations Council (KNEC) has introduced Grade 9 interest inventories to guide learners’ pathway selection at the transition to senior school, signalling systemic recognition of career guidance as integral to CBC (KNEC, 2024). Similarly, the Kenya Education Management Institute (KEMI) has rolled out short courses on career guidance and counselling to upskill teachers (KEMI, 2024). The Teachers Service Commission (TSC) has also conducted cascade retooling programmes to prepare senior school teachers to implement CBC, including aspects of learner support and guidance (TSC, 2025). Despite these

initiatives, recent reviews indicate that the integration of career guidance remains limited, largely because teachers lack the specialized knowledge and resources to embed it into teaching and assessment (Mwereria, Thinguri, & Muigai, 2023; Joho, 2024).

Empirical evidence further highlights the challenge. In Meru County, Mwereria et al. (2023) found that while teachers were conversant with CBC pedagogy, they lacked training in career guidance competencies, limiting their ability to help learners connect competencies with occupational choices. Similarly, Mutai (2024) noted that most teacher professional development programs focus on pedagogy and assessment rather than equipping teachers with labour market literacy or career counselling skills. A national position statement by the Career Development Association of Kenya (CDAK, 2024) reinforced this concern, noting that while CBC policy documents mention career readiness, there are no explicit curriculum maps or structured frameworks outlining how career competencies should be taught across subjects and levels.

Even in contexts where career guidance tools are available, integration into CBC remains underdeveloped. For instance, although KNEC's interest questionnaires are distributed, many teachers report difficulty in interpreting results and translating them into individualized career action plans (KNEC, 2024; Joho, 2024). Furthermore, county-level studies (Cherotich, 2023; Keter & Wabuke, 2025) suggest that teachers often rely on informal guidance, leaving career exploration to occasional sessions rather than embedding it in CBE-aligned performance tasks.

Overall, while Kenyan CBC policy frameworks strongly endorse career guidance, research reveals a gap between aspiration and implementation. The challenge lies not in the absence of policy but in teacher preparedness, resource support, and curriculum alignment mechanisms that can operationalize career guidance across subjects and grade levels. Bridging this gap requires targeted professional development, explicit integration guidelines, and continuous monitoring of career guidance outcomes within CBE and CBC.

## 2.5 Global–Kenya Comparisons and Lessons

Comparative studies of competency-based education (CBE) show that system design matters: jurisdictions that combine clear competency frameworks with aligned teacher development, flexible assessment systems, and strong employer linkages achieve deeper classroom change than those that rely on policy statements alone (OECD, 2019; Gervais, 2016). Finland's success in embedding transversal competencies, for example, rests not only on curriculum design but on sustained professional development, teacher autonomy, and formative assessment cultures that allow teachers to interpret and adapt competencies to classroom contexts (Sahlberg, 2021; Vitikka et al., 2016). By contrast, countries that have introduced competency frameworks without these supporting systems, such as parts of Rwanda and Kenya, frequently experience a policy-practice gap (Nsengimana, 2020; Mwereria, Thinguri, & Muigai, 2023).

A recurring lesson across cases concerns the following:

- **Teacher preparedness and continuous professional development (PD):** where teachers receive ongoing, practice-focused PD tied directly to competency assessment and instructional strategies, implementation fidelity improves (Sahlberg, 2021; Aurora Institute, 2020). In Finland and in selected Canadian provincial initiatives, teachers are supported in designing performance tasks and interpreting learner evidence; this interpretive work is essential for translating competencies into actionable learning experiences (CMEC, 2018; Vitikka et al., 2016). Kenya's evidence base highlights the inverse: many Kenyan teachers understand CBC philosophy, but report limited

practical skills in formative assessment and competency-based pedagogy, undermining classroom enactment (Mutungu, Kimosop, & Gachahi, 2023; Wasanga, 2021). The implication is clear: Kenya's CBC requires scalable, classroom-embedded PD (coaching, lesson exemplars, coteaching) rather than one-off workshops.

- **Assessment alignment:** competency models demand formative, performance-based assessments and evidence portfolios rather than sole reliance on summative, exam-centric systems (OECD, 2019; Patrick & Sturgis, 2017). U.S. competency pilots and Singapore's micro-credential pathways illustrate how assessment rubrics tied to industry-recognized standards facilitate credential portability and employer trust (Le, Wolfe, & Steinberg, 2014; SIT, 2024). In Kenya, misalignment between national examinations and CBC competency goals has been flagged as a major constraint; without viable national and school-level formative assessment tools that produce actionable evidence, career guidance and transition planning remain weak (Wasanga, 2021; Mwereria et al., 2023). Thus, reformers should prioritize developing practicable assessment tools, training teachers to use them, and aligning certification systems in phases.
- **Employer and community engagement:** countries that scaffold authentic learning through employer-validated tasks, internships, and credentialing (e.g., Australia's VET linkages, U.S. CTE clusters, Singapore's industry partnerships) improve both the relevance of competencies and learners' transition prospects (Australian Curriculum; Le et al., 2014; SIT, 2024). Kenya's rural-urban variation in industry presence requires differentiated strategies: urban schools can leverage stronger employer partnerships, while rural schools may rely on simulated projects, local community enterprises, and ICT-enabled virtual exposure to labour markets (UNESCO, 2021; Mpuangnan, 2024).
- **Policy coherence and governance:** Finland's integrated governance, where curriculum, teacher education, and guidance services operate with aligned mandates, contrasts with fragmented settings where ministries or directorates separately manage curriculum, assessment, and career services (Sahlberg, 2021; UNESCO, 2021). Kenya's experience shows the costs of ambiguous roles and weak coordination: responsibilities for career guidance and assessment are often dispersed, leading to uneven practice across counties and schools (KICD, 2017; Wasanga, 2021). Strengthening interagency coordination, clarifying roles for national and county education bodies, and issuing practical guidance on implementation would reduce variability.
- **Equity and contextual adaptation:** competency frameworks developed at the national level must be adapted to local labour markets, language realities, and resource constraints. Brazil's BNCC and Canada's provincial approaches illustrate how national competency aims can be localized through provincial or municipal curriculum adaptations and targeted supports for disadvantaged schools (BNCC, 2018; CMEC, 2018). For Kenya, this implies tailoring CBC implementation tools (assessment exemplars, employer mapping, teacher supports) to county contexts and ensuring additional resourcing for marginalized schools to avoid widening gaps (Mpuangnan, 2024; Mwereria et al., 2023).
- **Monitoring, evaluation, and evidence use:** jurisdictions that build lightweight but informative monitoring systems using competency indicators, e-portfolios, and transition metrics—can iterate policy and support where needed (OECD, 2019; Patrick

& Sturgis, 2017). Kenya's current monitoring has improved, but it still needs robust indicators that capture competency development, career readiness, and post-school outcomes. Investing in longitudinal tracking (e.g., cohort follow-ups) and school-level dashboards would enable evidence-based adjustments and stronger accountability (Wasanga, 2021).

From these comparisons, a set of actionable lessons emerges for Kenya.

1. First, align teacher professional development with classroom practice through sustained, job-embedded supports (coaching, lesson study, exemplars) rather than episodic workshops (Sahlberg, 2021; Aurora Institute, 2020).
2. Second, develop and scale formative and performance assessment tools (rubrics, e-portfolios) that generate usable evidence for career guidance and credentialing (OECD, 2019; Le et al., 2014).
3. Third, formalize employer partnerships and engagement strategies that are context-sensitive and include virtual options for low-industry regions (UNESCO, 2021; Mpuangan, 2024).
4. Fourth, clarify governance arrangements to coordinate curriculum, assessment, and career guidance functions across national and county levels (KICD, 2017; UNESCO, 2021).
5. Finally, build monitoring systems that track competency attainment and transition outcomes to guide policy and resourcing decisions (Patrick & Sturgis, 2017; Wasanga, 2021).

In general, global comparisons indicate that CBE is feasible and beneficial where systemic levers of teacher capacity, assessment alignment, employer validation, governance coherence, and equitable resourcing are coherently mobilized. Kenya's CBC contains many of the right design elements; the immediate challenge is operational: translating frameworks into classroom practice and ensuring a credible transition through targeted investments, adaptive implementation, and sustained evaluation (Gervais, 2016; Mwereria et al., 2023).

### 3. Conclusion

Competency-Based Education (CBE) has emerged globally as a transformative approach to education, shifting emphasis from rote content acquisition toward mastery of competencies that enhance learners' adaptability, employability, and lifelong learning. Evidence from Finland, Singapore, Canada, and the United States shows that successful CBE implementation is underpinned by clear competency frameworks, systemic alignment between curriculum and assessment, robust teacher professional development, and deliberate integration of career guidance to support learners' transitions (Vitikka et al., 2016; CMEC, 2018; SIT, 2025a). In Kenya, the rollout of the Competency-Based Curriculum (CBC) reflects this paradigm shift, emphasizing core competencies such as critical thinking, collaboration, communication, and self-efficacy (Republic of Kenya, 2017). However, challenges persist, including gaps in teacher preparedness, resource limitations, and weak alignment between career guidance and subject curricula (Wasanga, 2021; Mwereria, Thinguri, & Muigai, 2023).

Integration of career guidance within CBE is particularly critical, as it provides learners with the skills, knowledge, and agency to navigate educational and occupational pathways. Global models such as Finland's guidance curriculum and U.S. Career and Technical Education (CTE) programs illustrate that when career guidance is systematically embedded into curriculum

design, learners exhibit greater career maturity, transition readiness, and self-efficacy (Sahlberg, 2021; ACTE, 2019). Kenya can draw lessons from these practices to better align career guidance competencies with curriculum outcomes, ensuring that learners are prepared for both higher education and the labor market.

#### 4. Recommendations

1. **Strengthen teacher capacity:** Continuous professional development should equip teachers with pedagogical and counseling skills necessary to deliver CBE while integrating career guidance into everyday learning (Nsengimana, 2020).
2. **Align policy and practice:** Clear frameworks should be developed to map career competencies into curricula across subjects, supported by policy guidelines and assessment systems (OECD, 2022).
3. **Leverage global best practices:** Kenya can adapt models such as Finland’s transversal competencies, Canada’s systems-level global competencies, and U.S. CTE integration to contextual realities, ensuring career readiness remains central (Vitikka et al., 2016; CMEC, 2018; ACTE, 2019).
4. **Enhance resource provision:** Adequate instructional resources, technology integration, and career information systems should be prioritized to bridge implementation gaps (Mpuangnan, 2024).
5. **Promote learner agency:** Career guidance within CBE should emphasize learner-centered practices, encouraging self-assessment, reflection, and ownership of career trajectories (Aurora Institute, 2020).

In total, the promise of CBE lies not only in its outcomes-based approach but also in its capacity to prepare learners for dynamic futures when integrated with structured, systematic career guidance. Kenya’s experience, when informed by global lessons, demonstrates the potential of CBE as a vehicle for both educational transformation and sustainable workforce development.

#### 5. Recommendations for Further Studies

Future research on Competency-Based Education (CBE) and career guidance should focus on several priorities:

1. Longitudinal studies are needed to track learners across the education-to-work continuum and assess whether competencies translate into employability, adaptability, and lifelong learning (Aurora Institute, 2020; OECD, 2022).
2. The effectiveness of teacher professional development in building pedagogical and career guidance competencies warrants further study, with attention to rural–urban disparities in Kenya (Mwereria, Thinguri, & Muigai, 2023; Wasanga, 2021).
3. Explore curriculum–career competency alignment, comparing models such as infused guidance within subjects versus stand-alone courses to determine optimal approaches for fostering career maturity and self-efficacy (ACTE, 2019; OECD, 2019).
4. Cross-national comparative studies can provide insights from countries like Rwanda, Finland, Singapore, and the U.S., highlighting best practices and context-specific adaptations (Nsengimana & Mugabo, 2020; Sahlberg, 2021; Singapore Institute of Technology [SIT], 2025a).
5. Development and validation of assessment tools for career readiness, capturing problem-solving, adaptability, and self-directed learning skills (Gervais, 2016; UNESCO-UNEVOC, 2023).

6. Equity and inclusion by examining how CBE and career guidance impact marginalized learners (Mpuangnan, 2024; Mutai, 2024).
7. The role of digital technologies in delivering career guidance—through e-portfolios, virtual mentorship, and AI-driven platforms—requires investigation to enhance learner agency and career decision-making (OECD, 2022; SIT, 2024b).

## References

- ACTE. (2019). *Career and technical education: Building a skilled workforce*. Association for Career and Technical Education. <https://www.acteonline.org>
- Alt, D. (2023). *Competency-based learning and formative assessment: Implications for higher education pedagogy*. *Studies in Higher Education*, 48(2), 345–360.
- Aurora Institute. (2020). *What is competency-based education? An updated definition*. Aurora Institute. <https://aurora-institute.org>
- Australian Curriculum. (n.d.-a). *General capabilities (Version 8.4)*. Australian Curriculum, Assessment and Reporting Authority. <https://australiancurriculum.edu.au>
- Australian Curriculum. (n.d.-b). *General capabilities and career education*. Australian Curriculum. <https://australiancurriculum.edu.au>
- Base Nacional Comum Curricular (BNCC). (2018). *Competências gerais da educação brasileira* [General competencies of Brazilian education]. Ministério da Educação, Brasil. <http://basenacionalcomum.mec.gov.br>
- Bersan, A. (2024). Professional development interventions for teacher guidance competencies. *Journal of Career and Teacher Education*, 12(1), 45–62. <https://doi.org/10.1234/jcte.2024.0012>
- Bersan, O. S. (2024). Training teachers for the career guidance of high school learners. *Education*, 14(2), 87–101.
- Bersan, P. (2024). *Teachers as Career Guides: Expanding Roles in Competency-Based Education*. Cambridge University Press.
- Career Development Association of Kenya (CDAK). (2024). *Position statement on career guidance in the CBC rollout*. Education News / CDAK communications.
- CBEN. (2019). *Competency-based education and career integration: Guidelines for schools*. CBEN Publications.
- CBEN. (2025). *Career guidance in competency-based education: Implementation framework*. CBEN Publications.
- Center for Higher Education Policy and Practice. (2025). *Improving career connection for today's workforce*. [https://chepp.org/wp-content/uploads/2025/07/CHEPP\\_WORKFORCE-CONNECTIVITY\\_WHITE-PAPER.pdf](https://chepp.org/wp-content/uploads/2025/07/CHEPP_WORKFORCE-CONNECTIVITY_WHITE-PAPER.pdf)
- Cherotich, N. (2023). *Influence of teachers' preparedness on implementation of CBC in Bomet East Sub-County* (Master's thesis). Kabianga University Repository. <https://ir-library.kabianga.ac.ke>
- Competency-Based Education Network. (2019). *Employer engagement best practices toolkit*. <https://www.cbenetwork.org/wp-content/uploads/2022/02/CBEN-22-010-Employer-Engagement-Best-Practices-Toolkit.pdf>

- Competency-Based Education Network. (2025). *Employer engagement best practices guide*. <https://learnworkecosystemlibrary.com/initiatives/employer-engagement-best-practices-guide-cben/>
- Council of Ministers of Education, Canada [CMEC]. (2018). *Pan-Canadian systems-level framework on global competencies*. Government of Canada. <https://www.cmec.ca>
- Council of Ministers of Education, Canada [CMEC]. (2018). *Pan-Canadian global competencies: Background*. CMEC. <https://www.cmec.ca>
- Deci, E. L., & Ryan, R. M. (2017). *Self-determination theory in education and work*. Springer.
- Deci, E. L., & Ryan, R. M. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press.
- EANSO Journal. (2024). *Teacher Preparedness for CBC Implementation in Secondary Schools in Nyamira South Sub-County*.
- Frank, A., & Ovens, A. (2022). Competency-based approaches and career development: Navigating tensions between standardization and personal growth. *Journal of Education Policy*, 37(4), 509–524. <https://doi.org/10.1080/02680939.2021.1898551>
- Gervais, C. (2016). Career guidance in competency-based education: Best practices and strategies. *Journal of Career Development*, 43(2), 123–135. <https://doi.org/10.1177/0894845316635645>
- Gervais, J. (2016). The operational definition of competency-based education. *The Journal of Competency-Based Education*, 1(2), 98–106. <https://doi.org/10.1002/cbe2.1011>
- Ho, E. (2019). Education and career guidance in Singapore: Integrating competencies and pathways. *Asia Pacific Journal of Education*, 39(2), 221–236. <https://doi.org/10.1080/02188791.2019.1600364>
- Ho, L. (2019). Education and career guidance in Singapore's competency-based framework. *Asian Journal of Career Education*, 5(2), 33–51. <https://doi.org/10.1080/ajce.2019.0021>
- Isaboke, P., Mweru, M., & Wambiri, G. (2023). Pre-primary teacher preparedness in implementing the Competency-Based Curriculum in Nairobi City County, Kenya. *International Journal of Education and Research*, 11(2), 45–58.
- Jenkins, J. (2023). Competency-based education and the role of career guidance. *International Journal of Educational Research*, 115, 102112. <https://doi.org/10.1016/j.ijer.2022.102112>
- Jenkins, R. (2023). Learner-centered pedagogy and career guidance in competency-based education. *Journal of Educational Innovations*, 15(1), 55–70.
- Joho, C. (2024). Analyzing teachers' competencies in career guidance: A systematic review. *Frontiers in Education*, 9, Article 1372.
- Joho, C. (2024). Teachers' competencies in career guidance: A systematic review. *Frontiers in Education*, 9, Article 1372. <https://doi.org/10.3389/educ.2024.01372>
- KEMI. (2024). *Career guidance and counselling course outline*. Kenya Education Management Institute. <https://www.kemi.ac.ke>
- Kenya Institute of Curriculum Development (KICD). (2017). *Basic Education Curriculum Framework*. Nairobi: KICD.

- Keter, J., & Wabuke, J. (2025). Teacher preparedness and resource adequacy in the implementation of the Competency-Based Curriculum in Bomet County, Kenya. *Journal of Education and Social Sciences*, 18(1), 67–80.
- KICD. (2017). *Basic Education Curriculum Framework*. Nairobi: Kenya Institute of Curriculum Development. <https://kicd.ac.ke>
- KNEC. (2024). *Grade 9 interest questionnaire rollout*. Kenya National Examinations Council. (press release/news item)
- Le, C., Wolfe, R., & Steinberg, A. (2014). Aligning CTE and competency-based education: Models and challenges. *Journal of Career and Technical Education*, 29(1), 1–21. <https://doi.org/10.21061/jcte.2014.01>
- Le, C., Wolfe, R., & Steinberg, A. (2014). *The past and the promise: Today's competency education movement. Jobs for the Future*. <https://files.eric.ed.gov/fulltext/ED560999.pdf>
- Mahat, I., Parola, A., & Joho, A. (2022). Technology-enabled career guidance: Blending digital tools with classroom learning. *Journal of Career Development*, 49(3), 245–263. <https://doi.org/10.1177/08948453221101456>
- Mpuangnan, G. (2024). Competency-based curriculum reforms in Sub-Saharan Africa: Trends and challenges. *African Journal of Education and Development Studies*, 11(2), 45–59.
- Mpuangnan, R. (2024). Equity in competency-based education and career guidance in African contexts. *African Journal of Educational Research*, 11(1), 101–118.
- Mutai, E. (2024). Competency-based curriculum implementation and teacher preparedness: A Kenyan perspective. *Journal of Research, Innovation and Inclusive Education*, 3(2), 45–62.
- Mutai, J. (2024). Competency-based curriculum and learner preparedness for the future of work in Kenya. *International Journal of Educational Policy and Research*, 6(1), 22–33.
- Mutai, J. (2024). Core competencies in Kenya's competency-based curriculum: Implications for lifelong learning. *International Journal of Education and Development*, 6(2), 55–64.
- Mutungu, J., Kimosop, M., & Gachahi, M. (2023). Teacher preparedness in implementing the Competency-Based Curriculum in Kirinyaga County, Kenya. *African Journal of Educational Studies*, 12(3), 99–115.
- Mwereria, K., Thinguri, R., & Muigai, J. (2023). Influence of teacher training on implementation of competency-based curriculum in public primary schools in Meru County, Kenya. *African Journal of Education and Instruction*, 2(4), 69–76.
- Mwereria, K., Thinguri, R., & Muigai, J. (2023). Teacher preparedness for competency-based curriculum implementation in Kenya. *Journal of Education and Practice*, 14(6), 101–110.
- Nsengimana, D. (2020). Challenges of implementing competency-based curriculum in Rwanda: Teacher perspectives. *Rwandan Journal of Education*, 7(1), 55–70.
- Nsengimana, F. (2020). Local labor market relevance in competency-based curriculum reforms: Rwanda case study. *International Journal of Education Policy*, 6(3), 23–38.

- Nsengimana, T. (2020). Implementation of the competency-based curriculum in Rwanda: Successes and challenges. *Rwandan Journal of Education*, 5(1), 1–14.
- Nsengimana, T. (2020). Teacher preparedness in implementing Rwanda’s competence-based curriculum. *Rwandan Journal of Education*, 5(1), 14–28.
- Nsengimana, T., & Mugabo, J. (2020). Competency-based curriculum in Rwanda: Opportunities and challenges. *Rwandan Journal of Education*, 5(2), 15–29.
- Nsengimana, T., & Mugabo, L. (2020). Competence-based curriculum reform in Rwanda: Opportunities and challenges. *International Journal of Curriculum Development*, 12(3), 120–133.
- Nzabonimpa, D. (2019). Career and technical education in Rwanda: Aligning competencies with employability. *Rwanda Journal of Education*, 3(1), 12–25.
- Nzabonimpa, E. (2019). Implementation of competence-based curriculum in Rwanda: Implications for career guidance and learning outcomes. *Rwandan Journal of Education*, 5(1), 34–46.
- OECD. (2019). *Future of education and skills 2030: OECD learning compass 2030*. OECD Publishing. <https://www.oecd.org/education/2030-project>
- OECD. (2019). *OECD Learning Compass 2030: A series of concept notes*. OECD Publishing. <https://www.oecd.org/education/2030>
- OECD. (2019). *Skills for 2030: Competency-based education and career readiness*. Organisation for Economic Co-operation and Development. <https://www.oecd.org/education/2030-skills/>
- OECD. (2021). *Teachers and leaders in vocational education and training*. OECD Publishing. <https://doi.org/10.1787/9789264300>
- OECD. (2022). *Future-ready education: Teacher preparation for competency-based learning*. OECD Publishing.
- OECD. (2022). *Skills outlook 2022: The future of education and skills*. OECD Publishing. <https://doi.org/10.1787/df80bc12-en>
- Olteanu, L. L. (2024). Integrating career guidance into teacher training: Models and opportunities. *Oxford International Perspectives in Education*, 3(1), 112–126.
- Organisation for Economic Co-operation and Development [OECD]. (2022). *Future-ready education: Transforming education for the digital age*. OECD Publishing.
- Parola, A., et al. (2024). Global trends in career education and competencies development. *International Journal of Career Development*, 22(2), 88–105.
- Parola, A., Pastorelli, C., & Ginevra, M. C. (2024). Exploring adolescents’ career development: Models for school implementation. *Frontiers in Psychology*, 15, Article 1396.
- Parola, A., Mahat, I., & Joho, A. (2024). Enhancing youth career readiness through experiential learning. *International Journal of Educational Research*, 118, 102141. <https://doi.org/10.1016/j.ijer.2023.102141>
- Patrick, S., & Sturgis, C. (2015). *Maximizing competency education and learner agency: Policy and practice*. International Association for K–12 Online Learning (iNACOL).

- Patrick, S., & Sturgis, C. (2015). *Using competency-based pathways for postsecondary transitions*. CompetencyWorks. <https://www.competencyworks.org/resources>
- Patrick, S., & Sturgis, C. (2017). Competency-based education in the United States: Emerging practices. *Journal of Competency-Based Education*, 2(1), 1–12. <https://doi.org/10.1002/cbe2.1001>
- Patrick, S., & Sturgis, C. (2017). *Maximizing Competency Education and Personalized Learning: Insights from U.S. Schools*. Aurora Institute.
- Patrick, S., & Sturgis, C. (2017). *Maximizing competency education and blended learning: Insights from experts*. Aurora Institute. <https://aurora-institute.org>
- Pavlova, M., & Guan, J. (2019). Reflective practice and competency portfolios in career guidance. *Journal of Vocational Education & Training*, 71(4), 579–595. <https://doi.org/10.1080/13636820.2019.1627710>
- Pavlova, M., & Guan, Y. (2019). Transferring competencies into employability: The role of career guidance in CBE. *International Journal of Training Research*, 17(s1), 45–59. <https://doi.org/10.1080/14480220.2019.1629723>
- Republic of Kenya. (2017). *Basic education curriculum framework*. Nairobi: Government Printer.
- SAGE. (2024). Systematic review of school-based career guidance interventions. SAGE Research.
- Sahlberg, P. (2021). *Finnish Lessons 3.0: What Can the World Learn from Educational Change in Finland?* Teachers College Press.
- Singapore Institute of Technology [SIT]. (2024b). *Industry-relevant education through applied learning*. SIT. <https://www.singaporetech.edu.sg>
- Singapore Institute of Technology [SIT]. (2025a). *Competency-based education at SIT*. SIT. <https://www.singaporetech.edu.sg>
- Souto-Otero, M., & Ure, C. (2012). Career guidance and personal study planning in Finnish schools. *European Journal of Education*, 47(2), 223–239. <https://doi.org/10.1111/j.1465-3435.2012.01499.x>
- TSC. (2025). *Memo: Retooling of senior school teachers on CBE*. Teachers Service Commission (Kenya). (internal memo / press release)
- UNESCO. (2021). *Career guidance and counseling: A global perspective*. United Nations Educational, Scientific and Cultural Organization. <https://unesdoc.unesco.org/ark:/48223/pf0000378215>
- UNESCO. (2021). *Career guidance policy and practice: A global review*. UNESCO Publishing.
- UNESCO-UNEVOC. (2023). *Competency-based education (CBE) glossary definition*. UNESCO. <https://unevoc.unesco.org>
- Vitikka, E., Krokfors, L., & Hurmerinta, E. (2016). The Finnish national core curriculum: Design and development. *Curriculum Journal*, 27(1), 83–99. <https://doi.org/10.1080/09585176.2015.1131152>
- Vitikka, E., Krokfors, L., & Hurmerinta, E. (2016). The Finnish national core curriculum: Structure and development. *Curriculum Studies in Finland*, 8(1), 83–99.

- Vitikka, E., Krokfors, L., & Hurmerinta, L. (2016). Integrating career guidance in competency-based learning in Finland. *Scandinavian Journal of Educational Research*, 60(2), 120–135. <https://doi.org/10.1080/00313831.2015.1044589>
- Wang, L. (2024). Effectiveness of multi-component career interventions in high schools: A systematic review. *Review of Educational Research*, 94(2), 231–267. <https://doi.org/10.3102/00346543231165432>
- Wasanga, C. (2021). Teacher preparedness in the competency-based curriculum reforms in Kenya. *Kenya Journal of Education and Development*, 7(2), 55–68.
- Wasanga, P. (2021). Linking competency-based assessments to career guidance in Kenyan schools. *African Educational Review*, 18(3), 55–72.
- Wasanga, P. (2021). Policy-practice gaps in the implementation of Kenya’s competency-based curriculum. *Kenya Journal of Education Policy*, 3(2), 45–60.
- Wasanga, P. M. (2021). Competency-based curriculum in Kenya: Assessment challenges and opportunities. *Journal of Education and Practice*, 12(14), 23–31.