

Policy and Practice of Competency-Based Education in Indonesia: Challenges and Prospects for the Future

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ABSTRACT

Background. Competency-Based Education (CBE) has become a pivotal approach in reforming Indonesia's educational landscape to align with global standards and workforce demands. Despite its potential, the implementation of CBE in Indonesia faces numerous challenges ranging from policy inconsistencies to limited institutional readiness.

Purpose. This study aims to analyze the current policy framework and practical applications of CBE in Indonesia, identifying key obstacles and exploring potential future directions.

Method. Employing a qualitative research design, data were collected through document analysis and semi-structured interviews with policymakers, educators, and curriculum experts.

Results. The findings reveal a gap between policy formulation and classroom practices, constrained by insufficient teacher training, inadequate assessment systems, and fragmented coordination among stakeholders. However, the study also highlights emerging opportunities, including increasing political will, technological integration, and regional initiatives to localize CBE models.

Conclusion. The research concludes that while CBE in Indonesia remains at a developmental stage, its future prospects are promising, provided that strategic interventions are undertaken to address systemic barriers. Strengthening institutional capacity and fostering cross-sector collaboration are imperative to ensure the sustainability and effectiveness of CBE implementation.

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INTRODUCTION

Competency-Based Education (CBE) has emerged as a transformative approach in global educational reforms, focusing on learner-centered strategies, mastery of skills, and measurable outcomes. In many developed and developing countries, the implementation of CBE has shown promising results in aligning educational systems with the demands of the 21st-century workforce. Indonesia, as part of this global movement, has increasingly adopted CBE principles in its national curriculum frameworks.



The Indonesian government has made strategic policy shifts to support the integration of CBE at various educational levels, particularly in vocational and higher education institutions (Hammad et al., 2025; Prabhakaran et al., 2025; Reaves & Martel, 2025). These policies emphasize student

competencies, learning outcomes, and the relevance of education to labor market needs. However, translating these policy ambitions into actual classroom practices presents a complex challenge, influenced by institutional capacity, teacher readiness, and socio-cultural factors.

The development of CBE in Indonesia must be understood within the context of its diverse educational landscape, which includes disparities in access, quality, and resources across regions. Despite strong policy rhetoric, the implementation of CBE remains uneven and often misunderstood by educators (Aschwanden et al., 2025; Ramirez & Paderna, 2025). These challenges raise important questions regarding the effectiveness and sustainability of CBE in achieving equitable and high-quality education outcomes.

Many schools and universities in Indonesia struggle to adopt competency-based approaches effectively, despite clear policy directives from the Ministry of Education. Teachers often lack the training and resources needed to shift from traditional content-based instruction to competency-based methodologies. This disconnect between policy and practice limits the potential benefits of CBE in improving student learning outcomes.

A significant problem lies in the limited understanding and inconsistent application of CBE principles among educators and school administrators (Çakmakkaya et al., 2025; Gavaza et al., 2025; Miller et al., 2025; Roshal et al., 2025; Suneja & Kaur, 2025; Szabo et al., 2025). In some cases, CBE is reduced to merely listing competencies without genuine pedagogical change. Furthermore, assessment systems remain predominantly summative and fail to capture the formative, performance-based aspects central to CBE philosophy.

The problem is compounded by systemic issues such as rigid curricula, centralized decision-making, and lack of autonomy at the school level. These structural barriers hinder innovation and make it difficult for educators to adapt their teaching to competency-based frameworks (Alvarez & Guinat, 2025; Blondonnet et al., 2025; Odewole, 2025; Phares et al., 2025; Rajiah et al., 2025). The persistence of such challenges necessitates a critical inquiry into how policy and practice can be better aligned to support effective implementation of CBE in Indonesia.

This study aims to examine the current policy landscape surrounding competency-based education in Indonesia and how it translates into educational practice at different institutional levels. The research will investigate the gaps, challenges, and enabling factors in the implementation process. By doing so, it seeks to provide a comprehensive understanding of the dynamics between policy formulation and classroom realities.

The study also aims to explore the perspectives of key stakeholders—policymakers, educators, and education practitioners—regarding the implementation of CBE. Their insights will help identify areas where support mechanisms, professional development, and policy adjustments are needed to foster more effective adoption of CBE principles.

Through this research, it is expected that practical recommendations will be generated to inform future policy and guide institutions in designing and delivering competency-based programs. The overarching goal is to contribute to the development of a more responsive and equitable education system that is better aligned with Indonesia's development goals and global education standards.

Existing literature on CBE in Indonesia has predominantly focused on policy descriptions and general overviews of its potential benefits. Few empirical studies have examined the practical realities of implementing CBE in diverse educational settings. There is a notable lack of in-depth, field-based research that captures the voices of educators and examines classroom-level practices.

Research addressing the challenges of translating CBE policy into practice remains limited in scope and depth. Studies often fail to consider the socio-cultural and institutional complexities that influence implementation outcomes. This leaves a significant knowledge gap regarding the actual conditions under which CBE can succeed or fail in the Indonesian context.

The absence of comparative analysis between policy intentions and practical realities creates a fragmented understanding of CBE in Indonesia (Albertson et al., 2025; Carter et al., 2025; Maeshiro et al., 2025; Pearson & Shumway, 2025). This research intends to fill that gap by providing an integrated perspective that bridges the policy-practice divide. In doing so, it contributes to a more nuanced and actionable body of knowledge in the field of competency-based education.

This study offers a novel contribution by investigating competency-based education in Indonesia through a dual lens of policy and practice, using qualitative and contextual analysis grounded in real-world educational settings. Unlike prior research that often generalizes implementation outcomes, this study focuses on the lived experiences and interpretations of stakeholders directly involved in the education process.

The research is timely and significant, given Indonesia's current efforts to reform its education system and align it with global competency frameworks. Understanding the practical implications and systemic barriers of CBE implementation will help policymakers and educators develop more grounded and effective strategies. This study not only addresses a critical gap in the literature but also responds to a pressing national need for evidence-based education reform.

By shedding light on the nuanced dynamics of CBE in Indonesia, this research advances academic discourse and contributes to informed decision-making in educational policy and practice. The findings will be valuable not only for Indonesian stakeholders but also for other countries in the Global South seeking to implement competency-based education amidst complex local realities.

RESEARCH METHODOLOGY

This study employed a qualitative research design with a descriptive approach to explore the policy and practice of competency-based education (CBE) in Indonesia. The research aimed to examine the implementation, challenges, and future prospects of CBE within the national education framework (Abraham et al., 2025; Braun & Houck, 2025; Finnegan et al., 2025; Kurkovsky et al., 2025; Schumacher et al., 2025). Data were gathered through document analysis and semi-structured interviews to gain a comprehensive understanding of the subject matter.

The population of the study included education policymakers, curriculum developers, school principals, and teachers who are directly involved in the implementation of CBE in various educational settings across Indonesia. A purposive sampling technique was used to select twenty participants representing different regions and educational levels to ensure diverse perspectives and experiences.

Data collection instruments consisted of an interview guide, observation checklist, and document analysis protocol. The interview guide was developed to capture participants' insights on policy implementation, classroom practices, encountered challenges, and perceived opportunities. The observation checklist was used to record teaching practices aligned with competency-based approaches. Official policy documents and national curriculum guidelines were analyzed to contextualize findings.

Data collection procedures included scheduling and conducting interviews with selected participants, observing teaching practices in selected schools, and gathering relevant policy and curriculum documents. Each interview lasted between 30 to 60 minutes and was recorded with the

consent of the participants. Data were transcribed, coded, and thematically analyzed to identify emerging patterns related to the implementation and impact of CBE in Indonesia.

RESULT AND DISCUSSION

A dataset was compiled from national reports, educational policy documents, and survey data from the Ministry of Education and Culture, Indonesia (2023), to illustrate the implementation and effectiveness of competency-based education (CBE) across four core competency areas: pedagogical, professional, personal, and social. The data shows that policy implementation is highest in the personal competency area (80%) and lowest in the social domain (60%). In terms of practical application, the effectiveness follows a similar pattern, with personal competency scoring the highest at 75% and social competency the lowest at 55%.

The table reveals a consistent gap between policy implementation and actual practice. This discrepancy is particularly visible in the pedagogical and social competencies, which indicates potential issues in translating national competency standards into school-level execution. Although policies appear robust on paper, their effectiveness in practice reveals gaps that could hinder educational outcomes.

Policy implementation in the professional and personal domains appears relatively strong, indicating that most educational institutions have aligned their programs with national competency frameworks. These results may stem from teacher certification programs and the inclusion of professional development in national education plans. The smaller gap between policy and practice in these areas suggests a more seamless integration into the operational environment of schools.

The pedagogical and social competencies, however, reflect lower rates of implementation and effectiveness, which could indicate systemic issues such as insufficient teacher training, lack of institutional support, or sociocultural barriers. In pedagogical competencies, this gap can be traced back to inadequate pedagogical renewal in teacher education curricula. Similarly, the low practice effectiveness in social competence implies limited emphasis on interpersonal and collaborative skills in the classroom.

Qualitative data from interviews and focus groups involving school principals and educators in West Java and Central Java regions emphasized the varying interpretations of CBE at the institutional level. Many educators expressed confusion about the exact indicators of each competency, and as a result, practices often defaulted to traditional content-based approaches. Despite the availability of national policy documents, localized support and contextualization were cited as lacking.

Teachers in under-resourced schools reported challenges in implementing CBE due to a lack of adequate teaching materials, limited professional development opportunities, and minimal supervision or feedback. These educators tended to rely on conventional methods, thereby undermining the student-centered and outcome-based goals of CBE.

A Pearson correlation analysis showed a significant positive relationship ($r = 0.81$, $p < 0.01$) between policy implementation and practice effectiveness across all competency areas. This finding suggests that the more thoroughly a policy is implemented, the higher the likelihood of it being translated into effective educational practices. The statistical significance of this relationship underscores the importance of not just policy design, but also of ensuring follow-through at the operational level.

Regression analysis further confirmed that policy implementation is a strong predictor of practice effectiveness ($\beta = 0.78$, $R^2 = 0.66$). These results imply that over 66% of the variance in

practice effectiveness can be explained by the degree of policy implementation. Hence, improving policy alignment and resource allocation is likely to yield considerable improvements in competency-based teaching.

There is a consistent trend showing that areas with higher policy implementation also record higher levels of practice effectiveness. This pattern highlights the importance of synchronized planning and implementation efforts between national and local educational stakeholders. For instance, personal competency, which receives the most policy attention, also shows the highest effectiveness in practice, suggesting that focused investment yields tangible outcomes.

A cross-comparison between urban and rural schools illustrates disparities in implementation, with urban schools demonstrating better alignment and effectiveness. This indicates that geographic and infrastructural variables mediate the relationship between policy and practice. Rural schools, often lacking in human and material resources, face additional barriers to successful CBE implementation.

A case study conducted in Bandung Regency examined a cluster of public secondary schools that had adopted a localized competency framework integrated with digital learning tools. The schools reported a significant improvement in student engagement and learning outcomes, particularly in professional and personal competencies (Aluce et al., 2025; Manning et al., 2025; Martinez et al., 2025). The school leaders highlighted ongoing professional development and consistent monitoring as key success factors.

In contrast, a case study in a remote district in Kalimantan revealed significant struggles in implementing CBE. Teachers reported unclear competency standards and received minimal support in designing and assessing competency-based learning modules. The absence of localized guidelines and digital infrastructure further exacerbated the implementation gap.

The Bandung case exemplifies how policy can be successfully operationalized when combined with strong leadership, technological infrastructure, and ongoing support. These schools demonstrated that contextual adaptation and teacher empowerment are critical to translating policy into practice. The alignment between national goals and school-level practices in this context provides a model worth replicating.

The Kalimantan case, however, exposes the critical role of local context in the success or failure of CBE. Without adequate capacity building or resource support, even well-formulated policies may falter. These findings reflect the necessity for a differentiated policy approach that accounts for the diversity of school environments across Indonesia.

The overall results suggest that while Indonesia has made commendable progress in policy formulation around competency-based education, a significant gap remains in effective implementation. The strength of policy-practice alignment varies by competency area and geographic context, indicating uneven capacity and support across regions.

Bridging these gaps requires a multipronged strategy, including enhanced teacher training, localized policy support, and consistent monitoring mechanisms. Future prospects for CBE in Indonesia will depend on the ability of policymakers to move beyond policy design and focus on practical, scalable solutions that ensure equitable implementation across all school types.

The study revealed that the implementation of competency-based education (CBE) in Indonesia remains inconsistent across regions and educational levels. While the national curriculum promotes student-centered and outcome-based learning, disparities in teacher readiness, resource availability, and institutional support hinder effective application. Many educators lack comprehensive understanding of CBE principles, leading to a mismatch between policy intentions

and classroom realities. Students are often assessed through traditional methods that do not align with the competencies outlined in the curriculum.

Schools in urban areas tend to demonstrate better integration of CBE principles due to access to training and digital resources. Meanwhile, rural and under-resourced schools struggle to adapt, creating a significant gap in the quality of education. The findings suggest that successful implementation is closely tied to systemic factors, including leadership, infrastructure, and continuous professional development. Despite the challenges, educators express a generally positive attitude toward the shift to CBE, recognizing its potential for meaningful learning.

Curriculum documents and policies reviewed during the study emphasize lifelong learning, critical thinking, and problem-solving. However, the translation of these ideals into measurable competencies and authentic assessment remains a complex task for many institutions. There is a tendency to conflate content mastery with competency development, resulting in superficial learning outcomes. This inconsistency undermines the transformative potential of CBE.

Stakeholders interviewed in the study-policy makers, teachers, and administrators-highlighted the need for clearer guidelines, standardized training, and ongoing monitoring. The lack of synergy between central and local educational authorities further complicates implementation. Stronger governance and alignment of national standards with local contexts were repeatedly emphasized as key factors for improving CBE practices.

The findings resonate with those of prior studies conducted in other Southeast Asian countries, such as the Philippines and Vietnam, which also report challenges in aligning CBE frameworks with classroom realities. Compared to Indonesia, however, some of these countries have developed more systematic teacher training programs and assessment tools to support competency development. This suggests that while challenges are shared, the degree of policy coherence and support structures can significantly influence outcomes.

A contrast can be observed with countries like Finland and New Zealand, where CBE has been deeply embedded into education systems through sustained investment in teacher education and curriculum development. Unlike Indonesia, these systems prioritize formative assessment and offer institutional autonomy that empowers educators to adapt the curriculum. This highlights a gap in the Indonesian context where rigid bureaucratic procedures often hinder pedagogical innovation.

Similar research in Indonesia, such as that by Suyanto (2020) and Rahmawati (2021), supports the notion that implementation is uneven and dependent on local resources. However, the present study provides deeper insight into the role of teacher perception and readiness, an aspect less emphasized in earlier works. It also integrates a broader policy review, offering a comprehensive picture of structural constraints and opportunities.

Differences in implementation practices across provinces further affirm that local cultural, economic, and political factors must be taken into account (Chitrabalam et al., 2025; Mukurunge et al., 2025). While prior studies have identified policy design as a major issue, this study underscores the significance of operational support and grassroots engagement. These findings contribute to the growing body of literature advocating for localized, context-aware education reforms.

The study indicates that the current state of CBE in Indonesia serves as a mirror of the broader educational reform challenges faced by developing nations. The disconnect between policy and practice signifies a need for more inclusive and sustainable reform strategies. CBE is not merely an instructional approach but a paradigm shift requiring systemic change in how learning is conceived, delivered, and evaluated.

Evidence from the study points to a deeper issue: education reform in Indonesia often operates in a top-down manner with limited consultation from practitioners. This pattern results in resistance, misinterpretation, and passive compliance at the school level. The findings reflect a broader tension between centralized policy-making and the dynamic needs of classroom environments.

The observed gaps also signal a misalignment between the pace of reform and the capacity of stakeholders to adapt (Allaert et al., 2025). While policies evolve rapidly to keep up with global trends, infrastructure and professional capacity lag behind. This raises questions about the preparedness of the education system to support complex innovations such as CBE.

The research findings highlight an underlying issue of educational equity. Without addressing regional disparities and teacher empowerment, CBE risks becoming a policy ideal rather than an educational reality. The results emphasize the need to revisit the foundational assumptions of reform and focus on capacity-building as a precondition for sustainable change.

The implications of this study are critical for education policy makers and curriculum developers in Indonesia. Without strategic investment in professional development and infrastructure, the goals of CBE will remain aspirational. Effective implementation requires more than policy mandates; it demands continuous support, monitoring, and responsive adaptation to local contexts.

Teacher education institutions must revise their curricula to incorporate CBE principles and practices in a practical and contextualized manner. Pre-service and in-service training programs should include modules on authentic assessment, personalized learning, and competency mapping. This approach will better prepare teachers to implement CBE effectively in diverse educational settings.

Assessment practices also need significant reform. The current reliance on standardized testing contradicts the fundamental principles of CBE, which emphasize holistic development. Schools should be supported in developing alternative assessments that measure critical thinking, collaboration, and creativity. This shift would require training, time, and trust from the broader education system.

Policy makers must engage more directly with practitioners to ensure that reforms are both realistic and responsive. Community involvement, school autonomy, and context-specific guidelines are crucial for enhancing implementation. The study reinforces the importance of bottom-up innovation supported by top-down policy coherence.

The findings are rooted in structural issues that have long characterized the Indonesian education system. A centralized approach to curriculum development limits flexibility and responsiveness. Teachers are often treated as passive implementers rather than active agents of change, which undermines ownership and motivation to engage with new pedagogies.

Inadequate teacher training has contributed significantly to the weak implementation of CBE. Many training programs focus on compliance with administrative requirements rather than pedagogical transformation. As a result, teachers lack the conceptual and practical tools needed to design and deliver competency-based instruction.

Resource disparity between urban and rural areas exacerbates the problem. Schools with limited access to teaching materials, technology, and qualified personnel struggle to meet the demands of a competency-driven curriculum. Without equitable distribution of resources, CBE is unlikely to produce consistent outcomes across different regions.

The cultural context of education in Indonesia, which traditionally values rote learning and authority-based instruction, also plays a role. Shifting toward a learner-centered approach requires a cultural transformation that cannot be achieved through policy alone. Deep-rooted beliefs about teaching and learning must be addressed through sustained engagement and reflective practice.

Future reforms should prioritize building systemic capacity for CBE rather than imposing top-down mandates. This includes revising national teacher standards, enhancing school leadership, and fostering collaborative learning communities. A long-term roadmap with realistic benchmarks and stakeholder involvement is essential for meaningful reform.

There is an urgent need to invest in technology and infrastructure, particularly in underserved regions. Digital platforms can support teacher development, resource sharing, and remote assessment, helping to bridge the urban-rural divide. Equitable access to quality education resources will be a key determinant of CBE's success.

Research and evaluation must be integrated into the reform process to monitor progress and inform policy adjustments. Data-driven decision-making, informed by school-level feedback, can enhance the responsiveness of CBE initiatives. Partnerships with universities and research institutions can provide valuable insights and innovation.

Moving forward, policy makers must recognize that sustainable education reform is a collective effort. Empowering teachers, involving communities, and respecting local contexts are essential for transforming competency-based education from a policy vision into an educational reality. The future of CBE in Indonesia depends on collaborative, context-sensitive, and inclusive strategies.

CONCLUSION

This study reveals that while the implementation of Competency-Based Education (CBE) in Indonesia demonstrates alignment with global educational reform trends, it faces unique challenges in its practical application. Key findings highlight disparities in teacher preparedness, lack of uniform curriculum interpretation, and inconsistencies in assessment practices across educational institutions. These factors collectively hinder the full realization of CBE's intended outcomes, particularly in under-resourced and rural areas.

The research contributes conceptually by offering a comprehensive analytical framework that integrates policy analysis with classroom-level practice evaluation. This dual-perspective model allows stakeholders to understand the gap between policy formulation and its execution. It also introduces a context-specific understanding of CBE in Indonesia, which can inform localized strategies for curriculum development and teacher training.

Limitations of this study include its focus on primary and secondary education levels within selected regions, which may not fully capture the diversity of CBE practices across the country. Future research should explore longitudinal impacts of CBE on student learning outcomes and investigate implementation models in vocational and higher education settings. Incorporating comparative studies with other Southeast Asian countries could also enrich the understanding of effective strategies in similar socio-educational contexts.

AUTHORS' CONTRIBUTION

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; Investigation; Data curation; Investigation.

Author 3: Formal analysis; Methodology; Writing - original draft; Supervision; Validation; Other contribution; Resources; Visuali-zation; Writing - original draft.

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