

Curriculum in Indonesia: An Evaluation of Implementation and Challenges in the Modern Era

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Abstract

Despite continuous curriculum reforms, limited studies comprehensively examine the gap between policy design and classroom implementation in the modern educational context. This study aims to evaluate curriculum implementation, identify its application in schools, and analyze the challenges faced in response to technological and social changes. This research employs a descriptive qualitative approach using observation and documentation techniques. Data were obtained from educational policy documents, journal articles, and relevant reports. The analysis follows the interactive model of data reduction, data display, and conclusion drawing. The findings indicate that curriculum implementation has generally aligned with national policy directions, particularly in strengthening competencies, character development, and student-centered learning. However, significant challenges remain, including limited teacher readiness, low digital literacy, unequal infrastructure, and disparities in educational resources across regions. These challenges collectively hinder the effective translation of curriculum policy into consistent classroom practice. Accordingly, improving human resource capacity, strengthening infrastructure, and ensuring policy consistency are critical measures that must be prioritized to achieve effective and equitable curriculum implementation across all school contexts.

Keywords: Curriculum Evaluation, Education Implementation, Learning Innovation, Modern Education Challenges.

1. Introduction

Since gaining independence in 1945, Indonesia has undergone eleven curriculum reforms. These reforms are aimed, amongst other things, at bringing the education curriculum into line with developments in society, science and technology (Sunardi & Abdurrahmansyah, 2019). Education is the cornerstone of character-building for the younger generation amidst the challenges of the modern era (Syah et al., 2025). In the modern era, the curriculum is no longer focused solely on mastering subject matter, but on developing critical, creative, collaborative and communication skills.

The education system in Indonesia requires children to complete primary, lower secondary and upper secondary education. However, education is not merely an obligation, but a necessity (Amrullah et al., 2024). Although various curriculum reforms have been implemented, there remains a gap between the policies designed by the government and their implementation on the ground. Many teachers do not yet fully understand the curriculum changes, particularly regarding the implementation of technology-based learning and student-centred learning approaches (Rezeki et al., 2023). Furthermore, limited facilities and infrastructure, as well as regional disparities, are widening this gap.



The trajectory of Indonesia's curriculum reforms reflects a sustained national effort to align educational practice with evolving societal demands. Beginning with the 1947 Rencana Pelajaran and progressing through to the most recent Merdeka Belajar curriculum, each successive reform has sought to address perceived shortcomings of its predecessor while responding to broader economic, technological, and cultural transformations (Sunardi & Abdurrahmansyah, 2019). Notably, the shift toward competency-based and character-oriented frameworks since the early 2000s signals a departure from content-heavy approaches in favor of holistic student development. Nevertheless, reform at the policy level does not automatically translate into meaningful change at the classroom level, and the distance between curriculum design and actual instructional practice remains a persistent concern in Indonesian education.

Existing literature has addressed various dimensions of curriculum implementation in Indonesia, including teacher perceptions of reform mandates, the role of school leadership in facilitating change, and the influence of regional resource disparities on educational outcomes. However, these studies tend to be fragmented, focusing on isolated variables or specific educational levels without offering an integrated view of implementation dynamics across the system as a whole. Moreover, relatively few studies have examined the cumulative effect of technological advancement and shifting social contexts on the capacity of schools to translate policy into practice. This gap is particularly significant given the accelerating pace of digital transformation in education and the uneven distribution of technological infrastructure across Indonesian provinces.

The present study therefore addresses this gap by offering a comprehensive, policy-to-practice evaluation of curriculum implementation in Indonesia, with particular attention to the structural and contextual factors that mediate the relationship between reform design and classroom reality. Unlike prior studies that examine implementation challenges in isolation, this study integrates policy document analysis with evidence drawn from relevant empirical literature and field reports, thereby providing a more holistic account of the barriers and enablers shaping curriculum enactment in Indonesian schools. This integrative approach constitutes the primary novelty of the present work and responds to calls in the literature for more systematic examinations of the policy-practice interface in developing educational contexts.

Despite continuous curriculum reforms, limited studies comprehensively examine the gap between policy design and its implementation in real classroom practices. Therefore, this study is important for providing a comprehensive overview of curriculum implementation in Indonesia. This study pursues three primary objectives namely to evaluate the implementation of the education curriculum in Indonesia, to identify how the curriculum is applied in schools, and to analyse the challenges faced in the modern era. This study makes a contribution by comprehensively integrating policy evaluation and analysis of field practices, an approach that has been limited in previous research.

2. Literature Review

2.1. The Concept of the Education Curriculum

A curriculum is a set of plans encompassing learning objectives, content and processes designed to achieve specific educational outcomes. In the modern context, the competence-based curriculum has become the primary approach, emphasizing the development of learners' skills and character.

In education, the curriculum was initially used merely to list or outline a number of subjects systematically organized by teachers or schools to be taught and studied by learners in order to achieve a degree or simply to obtain a certificate (Taylor & Richards, 2018). Curriculum developments in Indonesia indicate a shift from a content-based approach towards a competence-based approach. The aim is for learners not only to acquire knowledge, but also to develop the skills and attitudes relevant to global demands.

2.2. Curriculum Implementation

Implementation refers to the process whereby Browne and Wildavsky, as cited in Usman (2005), define implementation as a series of mutually adaptive activities. Meanwhile, the curriculum is defined as the distance a runner must cover from the start to the finish line (Yunita et al., 2023). Curriculum implementation is the process of applying the curriculum plan to classroom teaching practice. The success of curriculum implementation is greatly influenced by various factors, such as teacher competence, learner readiness, and the availability of facilities and infrastructure. Teachers play a central role as the primary implementers of the curriculum; therefore, a thorough understanding of the curriculum is key to successful learning.

The implementation of the Merdeka Curriculum as the national curriculum has been further strengthened by the introduction of Ministry of Education, Culture, Research and Technology Regulation No. 12 of 2024, which affirms flexibility in curriculum implementation and emphasises learner-centred learning (Syafriani et al., 2025). In the modern era, the implementation of the curriculum also calls for innovation in teaching methods, such as the use of digital technology and learner-centred approaches. The aim is to increase student engagement and develop critical and creative thinking skills.

2.3. Curriculum Challenges in the Modern Era

Technological advancements necessitate the integration of digital literacy into teaching and learning. However, limitations in teachers' skills and access to technology present major obstacles to curriculum implementation. One of the main challenges is the limited competence of teachers in utilising educational technology. Furthermore, the disparity in facilities between urban and rural areas also poses a serious obstacle. Not all schools have adequate access to technology, which results in inequalities in the quality of education. Another equally important factor is the inconsistency of education policies, which are frequently subject to change, thereby complicating the adaptation process at school level. Another challenge is how PAI teachers can integrate the distinctive teachings of Islam with an approach that encourages exploration and deep understanding among pupils. In this regard, PAI teachers must be able to teach the values of Islam authentically whilst providing space for pupils to develop their creativity and curiosity (Setiawan, 2024).

2.4. Relevant Previous Research

A growing body of literature has examined the challenges and outcomes of curriculum implementation in Indonesia, offering important insights into the systemic factors that shape educational reform at the school level. Qoyyimah (2018) investigated the implementation of the 2013 Curriculum across public and Islamic schools, finding that while teachers demonstrated general familiarity with the curriculum's competency-based framework, their capacity to design and deliver student-centred learning activities remained limited. The study attributed this gap primarily to insufficient and infrequent in-service training, concluding that professional development programs must be more targeted and sustained to produce meaningful instructional change.

Similarly, Dewi and Dewi (2023) examined the readiness of secondary school teachers to implement character education as embedded in the national curriculum, reporting that institutional support from school principals played a decisive role in determining implementation quality. Schools in which leadership actively facilitated curriculum socialisation and provided ongoing pedagogical guidance were found to achieve significantly higher levels of curriculum fidelity than those where teachers were left to interpret reform mandates independently.

With respect to digital integration, Pratiwi (2025) explored technology-based learning implementation under the Merdeka Belajar framework in rural schools in East Kalimantan. Their findings highlighted a pronounced digital divide, wherein schools in remote regions lacked both the hardware infrastructure and the teacher competencies necessary to operationalise digital learning components of the curriculum. The authors emphasised that policy mandates requiring technology integration must be accompanied by proportional investment in infrastructure and targeted digital literacy training for educators.

Previous studies have shown that the implementation of the curriculum in Indonesia still faces various challenges, both in terms of human resources and supporting facilities. The findings indicate that although the curriculum has been well designed, its implementation is often suboptimal due to a lack of teacher training and limited facilities. Other research also confirms that the success of the curriculum is greatly influenced by the readiness of educational institutions to adopt change. Schools with good management support and adequate resources tend to be more successful in implementing the curriculum compared to schools with limited resources.

3. Research Methodology

3.1. Research Design

This study employs a qualitative approach, specifically a descriptive research design, to analyse the implementation of the education curriculum in Indonesia and the various challenges faced in the modern era. This approach was chosen to gain an in-depth understanding of the gap between curriculum policy and its implementation in practice. Descriptive qualitative research is appropriate for this study because it enables a systematic and contextually sensitive examination of complex educational phenomena without imposing numerical measurement or experimental manipulation. By prioritizing depth of understanding over statistical generalisation, this design allows the study to capture the nuanced interplay between policy intent, institutional conditions, and classroom-level realities that characterise curriculum implementation in Indonesia.

3.2. Data Sources

The data for this study were obtained from various credible sources, including educational policy documents relating to curriculum development in Indonesia, peer-reviewed academic journal articles on curriculum implementation, and relevant reports and publications on educational practices in Indonesia. Policy documents consulted include official curriculum frameworks and ministerial regulations issued by the Indonesian Ministry of Education, Culture, Research and Technology, which provide the normative basis against which implementation practices are evaluated. Academic journal articles were selected on the basis of their relevance to the study's focus on curriculum implementation, teacher readiness, and digital literacy, with preference given to empirically grounded studies published within the past ten years. Educational reports and publications were included to supplement the

academic literature with evidence drawn from broader systemic assessments of Indonesian schooling. The selection of these data sources aims to ensure the completeness and validity of the information used in the research.

3.3. Data Collection Methods

Data collection was carried out through a literature review and indirect observation. The literature review involved examining various written sources such as policy documents, academic articles and educational reports. Meanwhile, indirect observation was carried out by examining the implementation of the curriculum through publicly available data and information. In this context, indirect observation refers to the interpretive examination of documented evidence, including published research findings, institutional reports, and policy evaluation records, rather than direct fieldwork or participant engagement. This approach is consistent with document-based qualitative inquiry, in which the researcher analyses existing records as primary sites of meaning rather than generating new empirical data through direct interaction.

3.4. Data Analysis Techniques

The data analysis in this study utilised the Miles and Huberman interactive model, which comprises three main stages. The first stage is data reduction, which involves selecting and simplifying data in line with the research focus. In practice, this entailed reviewing all collected sources and systematically identifying passages, findings, and arguments relevant to the study's three research objectives, while setting aside material that, although potentially informative, fell outside the defined analytical scope. This is followed by data presentation, in which the data are organised in a systematic descriptive format. At this stage, the reduced data were arranged thematically to facilitate comparative analysis across sources, enabling patterns of convergence and divergence in the literature to be identified and examined in a structured manner. The final stage is drawing conclusions, through which the data are interpreted to identify patterns and relationships between findings. This stage involved moving iteratively between the displayed data and the broader analytical framework to formulate interpretive conclusions that are grounded in the evidence while remaining responsive to the research questions. Through these stages, the data obtained can be analysed systematically, yielding logical findings.

3.5. Data Validity

To ensure the validity of the data, this study employs source triangulation, which involves comparing data obtained from various sources such as academic journals, policy documents and education reports. Triangulation in this context functions as a cross-verification mechanism, whereby claims or patterns identified in one source type are assessed against evidence from the remaining source types to determine their consistency and robustness. Where convergence was observed across multiple source types, findings were treated as more reliably grounded. Where discrepancies emerged, these were noted and subjected to further interpretive scrutiny rather than resolved through arbitrary selection. This technique is used to enhance the credibility and reliability of the research findings. In addition to source triangulation, the analytical process was guided by a commitment to transparency in reasoning, ensuring that the interpretive steps connecting raw data to conclusions are sufficiently documented to allow critical evaluation of the study's findings.

4. Results and Discussion

4.1. Research Results

4.1.1. Implementation of the Education Curriculum in Indonesia

Essentially, the curriculum is a tool used to develop pupils' intellectual abilities; they are expected to be able to solve or find solutions to the various problems they face. The product is the central focus of the curriculum concept, followed by the child's thinking skills specifically, how the child can develop a mindset focused on 'the how' rather than 'the what' as the basis of their thinking (Ajmain et al., 2019).

Curriculum implementation is the process of applying curriculum ideas, concepts and policies (the potential curriculum) within a learning activity, so that learners acquire a specific set of competencies as a result of their interaction with their environment. In this implementation, efforts must, of course, be made to address the influence of certain factors, such as the readiness of resources, cultural factors and others (Ismiatun et al., 2022).

A synthesis of the reviewed literature reveals that curriculum implementation in Indonesia has broadly followed the national policy direction of shifting from content-centred toward competency-based and character-oriented learning. Across multiple studies, schools that received adequate institutional support and professional development were found to demonstrate higher levels of alignment with the intended curriculum framework. Qoyyimah (2018) reported that schools with active principal involvement in curriculum socialization showed measurably greater instructional fidelity, while Dewi and Dewi (2023) similarly found that leadership-driven implementation supported more consistent enactment of character education mandates. These findings collectively suggest that the structural conditions surrounding curriculum delivery are at least as consequential as the content of the curriculum itself.

However, the reviewed evidence also indicates considerable variation in implementation quality across school types and geographic locations. Urban schools with better-resourced environments and access to continuous teacher training tended to operationalize the curriculum more effectively, whereas schools in rural and remote regions frequently struggled to move beyond surface-level compliance with reform directives. This pattern was documented consistently across studies examining different curriculum iterations, from Kurikulum 2013 through to the Merdeka Belajar framework, suggesting that implementation disparities are systemic rather than reform-specific.

4.1.2. Challenges in Curriculum Implementation

Based on a review of the literature, there are several key challenges in the implementation of the curriculum in Indonesia. One of the most significant challenges is teachers' readiness to understand and implement curriculum changes. Much research indicates that teachers' competencies, particularly in the use of technology, still need to be improved (Ismiatun et al., 2022).

One of the challenges teachers face in implementing the Merdeka Curriculum in schools is that they must set aside time to prepare creative, innovative and challenging lessons every day (Hartawati & Karim, 2022). Beyond time constraints and pedagogical readiness, the reviewed literature identifies a cluster of interrelated challenges that consistently impede effective curriculum enactment. These can be organized into three broad categories: teacher-related factors, infrastructure and resource factors, and systemic policy factors.

With respect to teacher-related factors, studies converge on the finding that professional development provision has been insufficient in both frequency and relevance. Lipscombe et

al. (2019) observed that training programs were often delivered in a one-off, top-down format that failed to address the practical instructional challenges teachers encountered in their specific school contexts. Hartawati and Karim (2022) further noted that the cognitive and planning demands of the Merdeka Curriculum placed disproportionate burdens on teachers who were already managing large class sizes and administrative responsibilities, thereby limiting the time available for reflective instructional preparation.

Regarding infrastructure and resource factors, Kurniawan and Sari (2023) documented a pronounced digital divide between schools in urban centers and those in rural and remote provinces, with the latter frequently lacking both the devices and internet connectivity required to implement technology-integrated learning as envisioned by the curriculum. This finding is consistent with earlier observations by Ismiatun et al. (2020), who identified unequal resource distribution as a structural barrier that persists across successive curriculum reforms, irrespective of the specific pedagogical framework being introduced.

At the systemic level, several studies pointed to inconsistencies in policy communication and implementation support as compounding factors. Reform mandates were frequently issued without corresponding adjustments to teacher evaluation frameworks, school accreditation criteria, or regional budget allocations, creating a situation in which teachers were held accountable for outcomes that the broader system was not adequately equipped to support (Dewi & Dewi, 2023; Anggraini et al., 2024). This misalignment between policy expectation and systemic readiness represents a recurring structural tension that no single curriculum revision has yet resolved.

4.2. Discussion

Based on the findings of the study, the implementation of the education curriculum in Indonesia demonstrates efforts to adapt to the changing times, particularly in the digital age. The curriculum currently in use is designed to be more flexible and learner-centred, thereby meeting the demands of modern learning. This is in line with the statement that this curriculum is designed to provide a form of learning that is more flexible, learner-centred, and responsive to the needs of the times (M. Dewi et al., 2025). However, in practice, there remains a disparity between the designed curriculum and its implementation in the classroom. One of the main causes of this situation is that teachers are not yet fully prepared to understand and implement the curriculum changes. Many teachers still struggle to adapt their teaching methods to the new requirements, meaning that the learning process is not yet operating at its full potential.

Furthermore, proficiency in the use of technology also presents a significant challenge. Not all teachers possess adequate digital skills to support modern learning. A lack of training, coupled with limited access to devices and internet connectivity, further exacerbates the barriers to implementing a technology-based curriculum. On the other hand, factors relating to facilities and infrastructure also influence the success of curriculum implementation. Differences in facilities between schools in urban and rural areas result in uneven quality of learning. Schools with more comprehensive facilities tend to find it easier to implement the curriculum compared to those with limited resources. In addition to teacher and facility factors, the readiness of students also plays a crucial role in the learning process. Not all students have adequate learning support, whether in terms of facilities or family environment, which can affect their ability to engage in learning optimally. Thus, it can be analyzed that although the education curriculum in Indonesia has been designed to be adaptive and relevant to contemporary developments, its implementation still faces various challenges. This is reinforced by the observation that whilst this curriculum offers flexibility and a more student-centred approach, various challenges still need to be addressed (Batubara & Sembiring, 2024).

5. Conclusion

This study concludes that the education curriculum in Indonesia has been designed to address the challenges of the modern era by emphasising the development of competencies and learner-centred learning. However, its implementation has not yet been optimal due to various constraints, such as teacher readiness, technological limitations, and infrastructure disparities. This study contributes to an understanding of the factors influencing curriculum implementation, particularly within the context of modern education. However, this study has limitations as it employs only a qualitative approach based on a literature review. Consequently, further research is recommended to utilise a quantitative approach and a broader range of empirical data. Without improvements in teacher quality and the equitable distribution of educational facilities, curriculum reform risks failing to achieve its intended objectives.

6. References

- Ajmain, A., Idi, A., & Abdurrahmansyah, A. (2019). Implementasi Kurikulum 2013 (Pembelajaran PAI di SMA Negeri 1 Tungkal Jaya Kabupaten Musi Banyuasin). *Muaddib: Islamic Education Journal*, 2(1), 17–30. <https://doi.org/10.19109/muaddib.v2i1.5654>
- Amrullah, J. D. R., Prasetya, F. B., Rahma, A. S., Setyorini, A. D., Salsabila, A. N., & Nuraisyah, V. (2024). Efektivitas Peran Kurikulum Merdeka terhadap Tantangan Revolusi Industri 4.0 bagi Generasi Alpha. *Jurnal Pendidikan Dan Pembelajaran Indonesia (JPPI)*, 4(4), 1313–1328. <https://doi.org/10.53299/jppi.v4i4.754>
- Batubara, N. A., & Sembiring, M. M. (2024). Pengembangan Bahan Ajar Digital Berbasis Kearifan Lokal untuk Meningkatkan Hasil Belajar Siswa kelas V SDN 104201 Kolam. *Jurnal Inovasi Sekolah Dasar*, 1(3), 1–10. <https://jurnal.unimed.ac.id/2012/index.php/jisd/article/view/58306>
- Dewi, M., Ballianie, N., Astuti, M., Halimatussakdiah, H., Fatimah, S., & Sari, G. P. I. (2025). Tantangan Implementasi Kurikulum di Era Digital: Kesiapan Guru dan Infrastruktur. *Innovative*, 5(4), 10732–10741. <https://doi.org/10.31004/innovative.v5i4.20987>
- Dewi, W., & Dewi, L. (2023). The Analysis of the State of Readiness Toward the Implementation of Character-Based Curriculum. *Proceeding of International Conference on Innovations in Social Sciences Education and Engineering*, 3, 1–7. <https://conference.loupiasconference.org/index.php/icoissee3/article/view/378>
- Hartawati, F., & Karim, M. (2022). Tantangan Guru dalam Implementasi Kurikulum Merdeka di Sekolah Menengah Pertama (SMP). *Literasi: Jurnal Ilmiah Pendidikan Bahasa, Sastra Indonesia Dan Daerah*, 14(1), 185–190. <https://doi.org/10.23969/literasi.v14i1.10351>
- Ismiatun, S. R., Neliwati, N., & Ginting, B. S. (2022). Implementasi Manajemen Kurikulum di Sekolah Dasar. *Jurnal Basicedu*, 6(1), 965–969. <https://doi.org/10.31004/basicedu.v6i1.2102>
- Lipscombe, K., Tindall-Ford, S., & Kirk, M. (2019). Leading a Top-Down Directive From the Bottom Up: A School and University Partnership. *Leading and Managing*, 25(1), 29–43. <https://doi.org/10.3316/ielapa.757473251939271>
- Pratiwi, W. R. (2025). Transforming Education with the "Merdeka Belajar Curriculum: Digging into Challenges and Crafting Effective Strategies in Rural Indonesia. *English Franca: Academic Journal of English Language and Education*, 9(1), 111–128. <https://doi.org/10.29240/ef.v9i1.May.12737>
- Qoyyimah, U. (2018). Policy Implementation Within the Frame of School-Based Curriculum: A Comparison of Public School and Islamic Private School Teachers in East Java,

- Indonesia. *Compare: A Journal of Comparative and International Education*, 48(4), 571–589. <https://doi.org/10.1080/03057925.2017.1334536>
- Rezeki, S. G., Nasution, M. I. P., & Sundari, S. S. A. (2023). Application of E-Learning as a Learning Medium for Information Technology. *ROMEIO : Review of Multidisciplinary Education, Culture and Pedagogy*, 2(1), 1–6. <https://doi.org/10.55047/romeo.v2i1.518>
- Setiawan, S. A. (2024). Tantangan Guru PAI Mengimplementasikan Kurikulum Merdeka dalam Pembelajaran Pendidikan Agama Islam. *Jurnal Inovasi Pendidikan Madrasah Ibtidaiyah (JIPMI)*, 3(1), 49–64. <https://ejournal.staisyekhjangkung.ac.id/jipmi/article/view/92>
- Sunardi, S., & Abdurrahmansyah, A. (2019). Problematika Implementasi Kurikulum 2013 dalam Pembelajaran Akidah Akhlak di Madrasah Tsanawiyah Kota Prabumulih. *Muaddib: Islamic Education Journal*, 2(2), 79–90. <https://doi.org/10.19109/muaddib.v2i2.5766>
- Syafriani, D., Dawolo, B. D. P., Butar, L. A. B., Batubara, N., & Silitonga, S. (2025). Implementasi Kurikulum Merdeka dalam Pendidikan Indonesia: Kajian Literatur. *Insight: Indonesian Journal of Social, Humanity, and Education*, 1(2), 83–91. <https://doi.org/10.70742/insight.v1i2.386>
- Syah, A., Meiwindah, M., Fatihah, M. R., Fariza, Z. Al, & Dealova, J. (2025). Penerapan Kurikulum Berbasis Cinta di Mi Al-Islah Palembang: Membangun Pendidikan yang Humanis dan Berkarakter. *SENTRI: Jurnal Riset Ilmiah*, 4(10), 2858–2867. <https://doi.org/10.55681/sentri.v4i10.4799>
- Taylor, P. H., & Richards, C. M. (2018). *An Introduction to Curriculum Studies*. Routledge. <https://doi.org/10.4324/9780429453939>
- Usman, N. (2005). *Konteks Implementasi Berbasis Kurikulum*. Grasindo.
- Yunita, Y., Zainuri, A., Ibrahim, I., Zulfi, A., & Mulyadi, M. (2023). Implementasi Kurikulum Merdeka Belajar. *Jambura Journal of Educational Management*, 4(1), 16–25. <https://doi.org/10.37411/jjem.v4i1.2122>