

Evaluation of the Merdeka Curriculum in Educational Institutions: A Systematic Literature Review of Strategies, Challenges, and Student Learning Outcomes

Mujiburrahman^{1*}, I Gede Ratnaya², I Gusti Lanang Agung Parwata³,
I Dewa Ayu Made Budhyani⁴

¹Universitas Pendidikan Mandalika, Indonesia

²⁻⁴Universitas Pendidikan Ganesha, Indonesia

*Corresponding Author. Email: mujiburrahman@undikma.ac.id

Abstract: This study aims to evaluate the implementation of the *Merdeka Curriculum* across various educational institutions in Indonesia through a Systematic Literature Review (SLR) supported by bibliometric analysis. A total of 30 Scopus-indexed articles, were analyzed using the PRISMA protocol to identify implementation strategies, key challenges, and student learning outcomes following the curriculum adoption. The findings indicate that common implementation strategies include teacher professional development, school leadership enhancement, project-based learning, and the integration of local values into the curriculum. Nevertheless, several challenges remain, such as limited pedagogical competencies, inadequate digital infrastructure, and disparities in curriculum quality across regions. In terms of learning outcomes, the *Merdeka Curriculum* has shown potential in enhancing student engagement, critical thinking, and independent learning, particularly in institutions with strong institutional readiness. The study recommends policies to improve teacher capacity, reduce administrative burdens, ensure equitable access to technology, and promote cross-sector collaboration as critical measures to strengthen curriculum implementation. This review contributes valuable insights for policymakers and educational practitioners in designing evidence-based strategies to support the success of Indonesia's national curriculum reform.

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Introduction

In higher education, the “Merdeka Belajar Kampus Merdeka” (MBKM) policy marks a major curricular reform aimed at enhancing student autonomy, interdisciplinary learning, and real-world relevance. Sentiment analysis based on social media data reveals both optimism and skepticism, indicating mixed public responses to this policy shift (Ariefah & Nugraheni, 2023). Meanwhile, changes in the English language curriculum reveal the dominance of political and ideological agendas over pedagogical needs. The current curriculum lacks clarity in terms of content, pedagogy, and assessment strategy, pointing to a need for more contextually grounded and critically informed policymaking (Widodo, 2016).

Despite continued reform efforts, Indonesia struggles to improve student achievement on international assessments such as PISA, where performance remains low. This situation has led to renewed calls for curriculum simplification, digital literacy integration, and greater emphasis on critical thinking and character education (Andi Rachman et al., 2021). Teachers remain crucial agents in the success of these reforms. Although many report challenges in adapting to curriculum changes, they continue to demonstrate resilience and capacity for adaptation with sufficient institutional support and ongoing professional development (Limiansi & Setiawan, 2023).

In sum, curriculum reform in Indonesia represents a long-term, multidimensional endeavor to balance global standards with local educational needs. While meaningful progress has been achieved, issues related to policy coherence, implementation support, and equitable quality remain. Future reforms should prioritize culturally responsive pedagogy, empower educators, and ensure evidence-based policymaking to guarantee that curriculum transformation effectively benefits learners across Indonesia.

Literatur Riview

The *Merdeka Curriculum* represents a major reform in Indonesia's education system, aiming to foster student-centered learning that is adaptive to contemporary needs. According to (Hidayat et al., 2024) and (Umar et al., 2023), the Merdeka Curriculum emphasizes learning flexibility and grants autonomy to teachers in adjusting their instructional methods based on students' needs and developmental progress. Through the integration of the *Profil Pelajar Pancasila* (Pancasila Student Profile), the curriculum guides students to develop creativity, critical thinking, and character. The emphasis on local context and meaningful learning is also a distinctive feature, particularly relevant for early childhood and primary education levels.

Beyond character development and instructional flexibility, the Merdeka Curriculum also prioritizes the strengthening of academic competencies, particularly in subjects such as mathematics and scientific literacy. (Susanto et al., 2024) highlight the importance of reasoning, problem-solving, and mathematical communication skills in real-life contexts. In addition, (Prasetyo et al., 2024) point out that the integration of natural and social sciences into a unified subject (IPAS) aims to create contextual learning experiences and promote scientific literacy through project-based learning and local wisdom. Thus, the curriculum not only strengthens cognitive aspects but also bridges the relevance between education and everyday life.

The Merdeka Curriculum is also designed to address post-pandemic educational challenges by providing space for students to explore their interests and talents. (Halim et al., 2024) and (Syofyan et al., 2024) emphasize that differentiated instruction and flexible approaches are key strategies to mitigate learning gaps exacerbated by the pandemic crisis. In practice, teacher involvement and school readiness are crucial factors for successful implementation. (Rohimajaya et al., 2025), in the context of English language instruction, reveal that the curriculum encourages enjoyable and innovative learning experiences, promoting collaboration between teachers and students in designing meaningful learning environments.

Nevertheless, the implementation of the Merdeka Curriculum requires strong support in leadership, collaboration, and professional development. Wijayanti et al., (2024) and Samsudi et al., (2024) underscore that the success of this curriculum highly depends on teachers' professional competencies, as well as support from school principals and the broader school environment. Emphasis on differentiated instruction and inclusive learning serves as critical indicators in ensuring that each student receives educational experiences suited to their abilities and needs. Therefore, the Merdeka Curriculum demands not only structural changes in curriculum design but also a transformation in the learning culture and educational ecosystem.

The *Merdeka Curriculum* represents a major educational reform in Indonesia that emphasizes student-centered learning, character development, and the strengthening of 21st-century competencies. This curriculum provides flexibility for schools and teachers to design contextual learning tailored to students' needs while integrating the *Pancasila Student Profile* to foster values such as character, critical thinking, creativity, and collaboration. The implementation of differentiated instruction and project-based learning has also become a key strategy to enhance student engagement and academic performance. However, the success of its implementation largely depends on teacher readiness, school leadership, and systemic support including training, a collaborative school culture, and the availability of resources. Therefore, a deep understanding, contextual adaptation, and capacity building at the school level are essential to ensure the sustainability and effectiveness of the *Merdeka Curriculum* across various levels of education.

Conducting a *Systematic Literature Review* (SLR) on the *Merdeka Curriculum* is of significant urgency within the framework of Indonesia's current national education transformation. As a curriculum that emphasizes flexibility, student-centered learning, and the integration of local context into instructional processes, the *Merdeka Curriculum* represents a complex and continuously evolving educational system. Therefore, it requires a thorough and scholarly investigation. The SLR method offers a systematic and rigorous approach to filtering and synthesizing prior research findings, enabling a comprehensive mapping of implementation strategies, pedagogical approaches, and institutional readiness in facing curriculum changes (Ghamrawi et al., 2025; García-Peñalvo, 2022). Through this approach, researchers can identify existing knowledge gaps an essential step in shaping future research agendas and ensuring that educational policies are firmly grounded in empirical evidence (Carrión-Toro et al., 2022).

Furthermore, SLR contributes significantly to educational decision-making by highlighting effective practices and on-the-ground challenges such as school leadership, teacher autonomy, and curriculum integration across educational levels (Wijayanti et al., 2024 ; Jasiah et al., 2024). Specific aspects such as religious-based education, connections with industry, and the development of arts education are also addressed through systematic literature, revealing both potential and barriers in the implementation of the curriculum (Suyetno et al., 2024) ; Munaf et al., 2025). Additional studies indicate how the curriculum interacts with students' diverse learning styles and individual characteristics, emphasizing the need for ongoing adaptation and support from multiple stakeholders (Umar et al., 2025).

By adhering to established protocols such as PRISMA, SLR ensures scientific accountability through transparent processes, replicability, and the validity of findings. This makes SLR a relevant and valuable approach in driving educational innovation and fostering collaboration among stakeholders. Overall, systematic literature reviews on the *Merdeka Curriculum* not only enrich academic discourse but also provide a strong foundation for field-level implementation and educational policy reform in Indonesia.

While the *Merdeka Curriculum* has been widely implemented and discussed, existing literature tends to be fragmented and lacks a comprehensive synthesis that integrates implementation strategies, encountered challenges, and learning outcomes. Moreover, few studies have applied a systematic literature review (SLR) combined with bibliometric analysis to map empirical evidence and research trends on this curriculum. This study addresses that gap by providing an integrative, evidence-based understanding of how the *Merdeka Curriculum* operates in practice across educational contexts.

This study formulates three central research questions:

- *RQ1: What implementation strategies of the Merdeka Curriculum have been adopted across various educational institutions, according to existing studies?*
- *RQ2: What are the main challenges encountered in the implementation of the Merdeka Curriculum at the institutional level?*
- *RQ3: What are the observed student learning outcomes following the implementation of the Merdeka Curriculum, based on evidence from academic literature?*

These three research questions are designed to explore empirical experiences, identify contextual barriers, and evaluate the curriculum's impact on student learning outcomes. Accordingly, the findings are expected to enrich academic discourse while also supporting evidence-based policy formulation that is relevant to local educational needs.

Table 1. Definition of the Merdeka Curriculum

No	Defining factor of Merdeka curriculum	Reference
1	The Merdeka Curriculum is an Indonesian education reform that promotes student-centered, flexible learning. It empowers teachers to adapt instruction, emphasizes contextual learning, and integrates the Pancasila Student Profile to foster creativity, critical thinking, and character development.	(Hidayat et al., 2024)

2 The Merdeka Curriculum, introduced by the Indonesian government, aims to improve educational outcomes by emphasizing reasoning, problem-solving, and communication skills in mathematics, while promoting its relevance and application in real-life contexts. (Susanto et al., 2024)

3 The Merdeka Curriculum promotes diverse intracurricular learning by providing students with ample time to explore concepts and build competencies, while granting teachers the flexibility to select learning tools that suit students' needs and interests. (Hamdi et al., 2024)

4 The Merdeka Curriculum is a reform of Indonesia's English Language Teaching (ELT) framework that emphasizes student-centered learning, critical thinking, and innovation, aiming to create a fun, engaging environment where teachers and students co-design their learning experiences. (Rohimajaya et al., 2025)

5 The Merdeka Curriculum addresses post-pandemic educational challenges by focusing on students' talents and interests, aiming to develop the Pancasila Student Profile, which emphasizes character building and the diverse competencies essential for lifelong learning. (Halim et al., 2024)

6 The Merdeka Curriculum revitalizes Indonesian education by promoting character development and 21st-century skills through contextual learning and the Pancasila Student Profile. It provides schools with flexibility and encourages creative, critical, and collaborative thinking. (Umar et al., 2023)

7 The Merdeka Curriculum, also known as the Independent Curriculum, plays a vital role in sustaining Indonesia's education system. It requires strong teacher readiness to ensure effective implementation and promotes a flexible learning approach centered on student competence and relevant assessment methods. (Syofyan et al., 2024)

8 The Merdeka Curriculum is a major reform in Indonesia's education system, focusing on character development and competency-based learning tailored to local needs. Its success relies on school leadership, collaboration, and adequate support for educators. (Wijayanti et al., 2024)

9 The Merdeka Curriculum gives schools the flexibility to design learning based on students' needs by integrating science and social studies (IPAS), promoting critical thinking through project-based learning, and strengthening scientific literacy with local wisdom. (Prasetyo et al., 2024)

10 The Merdeka Curriculum, or Indonesian National Curriculum (INC), was introduced to modernize the education system by emphasizing student character, attitudes, and academic skills to better achieve educational goals. (Hidayah et al., 2024)

11 The Merdeka Curriculum promotes differentiated instruction to support diverse student needs, fostering inclusive learning aligned with the Pancasila Student Profile. It aims to personalize education and enhance student engagement and achievement. (Samsudi et al., 2024)

Research Method

This study employs a Systematic Literature Review (SLR) integrated with bibliometric analysis to comprehensively and quantitatively map the landscape of scholarly discourse on the Merdeka Curriculum. The methodological integration allows for the identification of influential publications, thematic clusters, and emerging trends, while also ensuring transparency and replicability by adopting standardized protocols such as PRISMA. Similar methods have been

successfully utilized in previous studies to explore research dynamics and scholarly networks (Liu & Chen, 2025).

The Scopus database was selected as the primary data source due to its extensive coverage of peer-reviewed academic literature and its strong bibliographic integrity. Scopus is widely recognized among researchers for purposes such as conducting systematic reviews, identifying experts in specific fields, and tracking current research trends and developments.

The initial phase of this study involved a macro-level (top-down) keyword selection process, starting from a broad search and gradually narrowing to more specific themes. Considering the limited number of systematic reviews addressing this topic, the keyword “Merdeka Curriculum” was chosen as the primary search term, applied to article titles, abstracts, and indexed keywords.

To refine the document pool, inclusion criteria were established as follows: (1) articles published up to July 17, 2025; (2) articles written in English; and (3) studies explicitly discussing the Merdeka Curriculum.

For the bibliometric component, VOSviewer software was utilized to visualize bibliographic data, including citation networks, co-authorship collaborations, and keyword co-occurrence patterns. These outputs enabled a deeper analysis of the intellectual structure and evolving research landscape related to the Merdeka Curriculum.

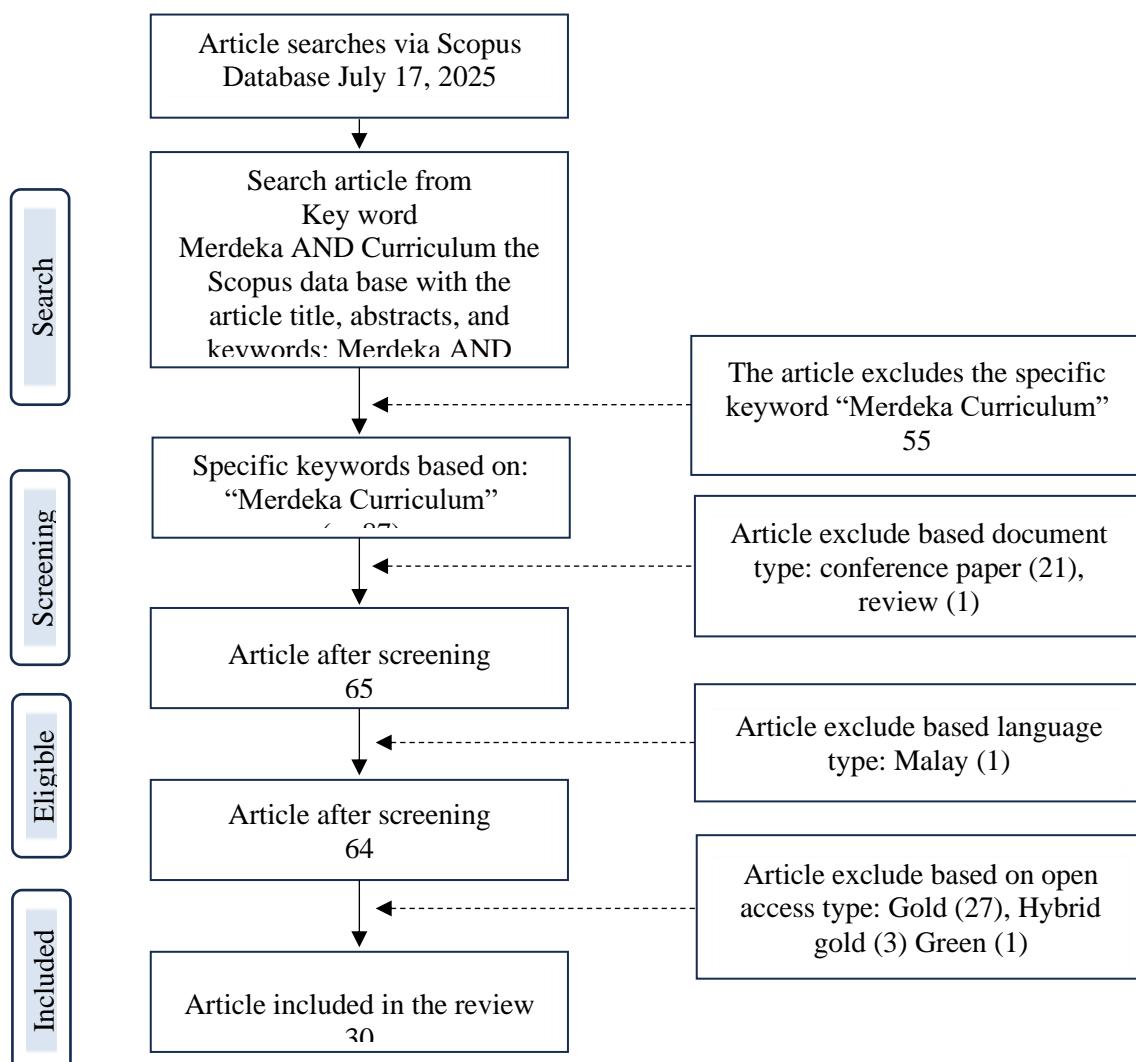


Figure 1. Systematic literature review information flow using PRISMA

Based on the article search results retrieved from the Scopus database up to July 17, 2025, using the keyword "Merdeka Curriculum" searched through article titles, abstracts, and indexed keywords, a total of 142 documents were identified across various academic disciplines. These publications span from 2023 to 2025 (see Figure 1).

Subsequent filtering was conducted based on document type. Excluded items included: reviews (1), conference papers (2), and non-English publications, resulting in 64 relevant documents. From these, 30 articles were purposively selected for in-depth analysis. The selected documents were used to answer the following three research questions.

These questions are designed to evaluate the distribution of existing research focuses and to understand the theoretical relevance and practical implications of the Merdeka Curriculum in shaping future educational research and policy directions. To answer these questions, this study employed a dual approach: thematic synthesis and bibliometric analysis. Thematic analysis was used to categorize and synthesize findings from the selected articles according to three primary dimensions implementation strategies, encountered challenges, and student learning outcomes. Each study was examined for recurring themes such as differentiated instruction, digital integration, project-based learning, and leadership roles.

In parallel, bibliometric techniques were applied using VOSviewer software to generate visualizations of co-citation patterns, keyword co-occurrence, and author collaboration networks. Descriptive statistical analysis was also conducted to assess the distribution of publications by year, country, institution, and journal. This integrative analysis not only enriched the interpretative depth of the findings but also enabled a comprehensive mapping of the scholarly discourse surrounding the Merdeka Curriculum.

Results and Discussion

Based on the analysis of 30 scientific documents retrieved from the Scopus database up to July 17, 2025, the implementation strategies of the Merdeka Curriculum across various educational institutions reveal a diversity that reflects the conditions, resources, and institutional cultures of each setting. Five dominant strategies identified in the literature include teacher competency strengthening, integration of local values and character education, school principal leadership, project-based learning, and the utilization of technology for flexible learning.

The first widely discussed strategy is the strengthening of teacher competencies through self-directed training and learning communities. Studies by (Syofyan et al., 2024) and Zaim et al. (2023) show that ongoing training, both online and offline, has become a foundational element for teachers to understand differentiated learning principles and the competency-based curriculum. This strategy aims to foster professional autonomy while enhancing teachers' adaptability to contextual approaches. Second, the integration of local wisdom and Pancasila character values is a key strategy to bridge the national curriculum with local cultural realities. Research by Rosanawati et al., (2025) and (Arifin et al., 2020) highlights the role of contextual approaches, such as drawing on the educational philosophy of Ki Hajar Dewantara and implementing value-based learning practices, which have been shown to increase student engagement and foster meaningful learning.

Third, the role of school principals as instructional leaders is also identified as a critical strategy. Studies by Yafie et al., (2024) and Kurniawan et al. (2023) emphasize that principals who provide space for innovation and encourage collaboration among school stakeholders are better able to build a responsive educational ecosystem aligned with the spirit of the Merdeka Curriculum. Fourth, the project-based learning (PjBL) approach is widely adopted as a means of reinforcing active learning. Munir et al. (2024) and Hidayat et al., 2024) report that projects grounded in local issues enhance students' critical thinking skills and motivate them to address real-world problems, in alignment with the Pancasila Student Profile.

Fifth, the use of technology to promote flexible learning has also gained notable attention. Studies by Anwar et al. (2023) and Fitria et al. (2024) indicate that the use of Learning Management

Systems (LMS), instructional videos, and digital assessments supports personalized learning and improves digital literacy among both teachers and students.

These findings are further supported by the following data visualization analysis:

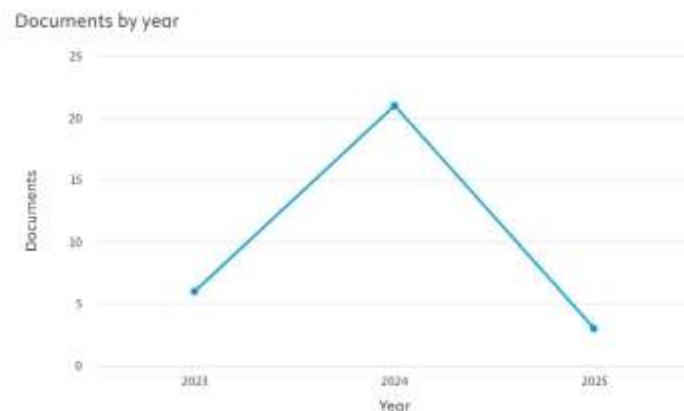


Figure 2. Distribution of Publications per Year

Figure 2 shows a significant increase in the number of publications related to the *Merdeka Curriculum* in 2024, reflecting a surge in academic interest in exploring the implementation strategies of this new curriculum.

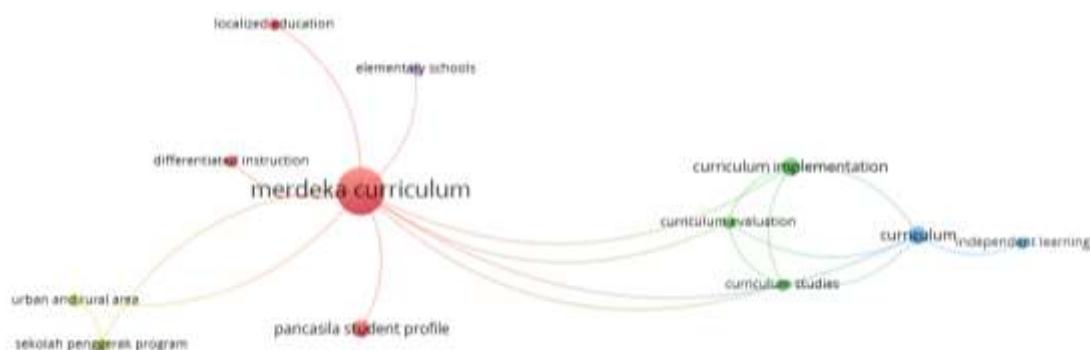


Figure 3. Keyword Network of the Merdeka Curriculum (VOSviewer)

Source by VOSviewer

Figure 3 illustrates the strong interconnection among keywords such as *differentiated instruction*, *Pancasila student profile*, *curriculum implementation*, and *project-based learning*, representing the core themes of implementation strategies discussed in the reviewed studies.

Table 2. List of Most Frequent Keywords by Authors

Rank	Keyword	Total Link Strength
1	Merdeka curriculum	49
2	Curriculum implementation	12
3	curriculum	10
4	Independent curriculum	8
5	Pancasila student profile	7
6	Curriculum studies	7
7	Curriculum evaluation	7
8	Merdeka curriculum innovation	4
9	Sekolah penggerak program	4
10	Implementation of the curriculum	4

Table 2 confirms that “Merdeka Curriculum” has the highest link strength (49), followed by “Curriculum Implementation” and “Independent Curriculum,” indicating a significant focus on implementation strategies at the educational unit level. This suggests that the implementation of the Merdeka Curriculum is not uniform but rather tailored to the specific conditions of each educational institution. Its successful application heavily depends on the synergy between national policy, local capacity, and the readiness of educational stakeholders.

RQ2: Challenges in Implementing the Merdeka Curriculum at the School Level

Although the implementation strategies of the *Merdeka Curriculum* are designed based on principles of flexibility and learner autonomy, the literature reveals several significant challenges in its practical application. Analysis of 30 reviewed articles indicates that obstacles stem from internal school factors, human resource readiness, and structural support from educational policies.

One of the main challenges is the gap in teachers’ competencies and mindsets. Many teachers struggle to implement differentiated instruction and formative assessment due to a lack of intensive training and continuous mentoring (Syofyan et al., 2024); Fajri et al., 2025). This leads to resistance to change, particularly in schools accustomed to content-based and prescriptive curriculum models.

Furthermore, uneven support from school leadership also presents a barrier. Some principals have yet to demonstrate the capacity of instructional leaders who can cultivate a collaborative learning culture within their institutions (Rahmatullah et al., 2024). In the absence of strong guidance, teachers tend to hesitate in adopting the new approaches offered by the *Merdeka Curriculum*.

Infrastructure and technology limitations especially in underdeveloped areas are critical obstacles to utilizing digital platforms. Studies by Haryati et al. (2024) and Ningsih et al. (2025) highlight the lack of internet access, ICT devices, and digital-friendly teaching materials as hindrances to flexible learning implementation.

In addition, the varying interpretations of the *Merdeka Curriculum* among local governments, school supervisors, and educational institutions lead to inconsistencies in implementation patterns. This lack of alignment affects the effectiveness of technical assistance, supervision, and evaluation processes (Putri et al., 2025).

Administrative burdens are also reported as a challenge that diverts teachers’ attention from instructional processes. In some cases, teachers are required to independently develop teaching modules, assessment instruments, and administrative reports without sufficient time and institutional support (Sari et al., 2024).

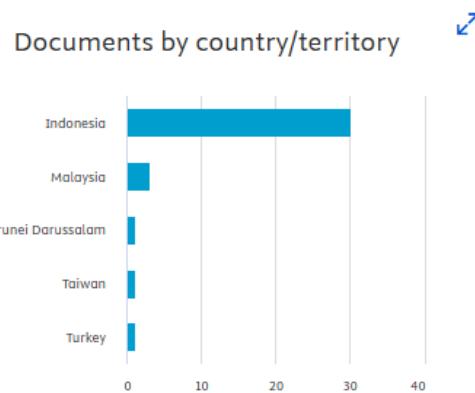


Figure 4. Number of Documents by Country

Figure 4 shows that the majority of research on the *Merdeka Curriculum* originates from Indonesia, reflecting its relevance to local policy contexts, while contributions from other countries such as Malaysia and Brunei remain very limited.

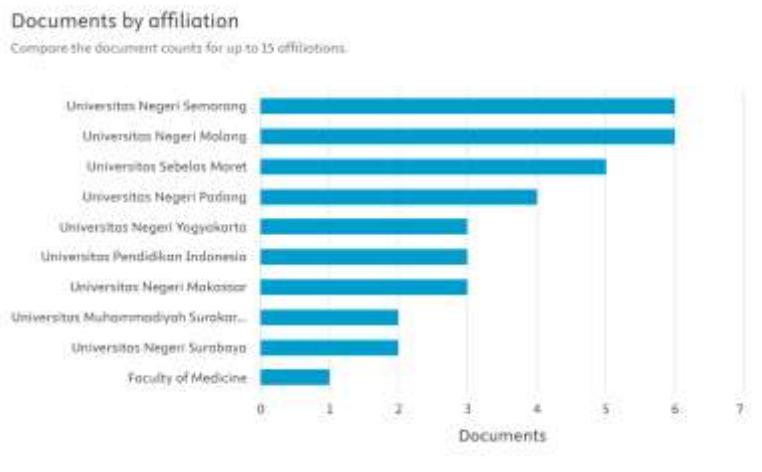


Figure 5. Institutional Affiliations of Article Authors

Figure 5 highlights the leading institutions in publishing articles on the *Merdeka Curriculum*, such as Universitas Negeri Semarang, Universitas Negeri Malang, and Universitas Sebelas Maret. This institutional diversity reflects the geographically and contextually varied distribution of implementation studies.

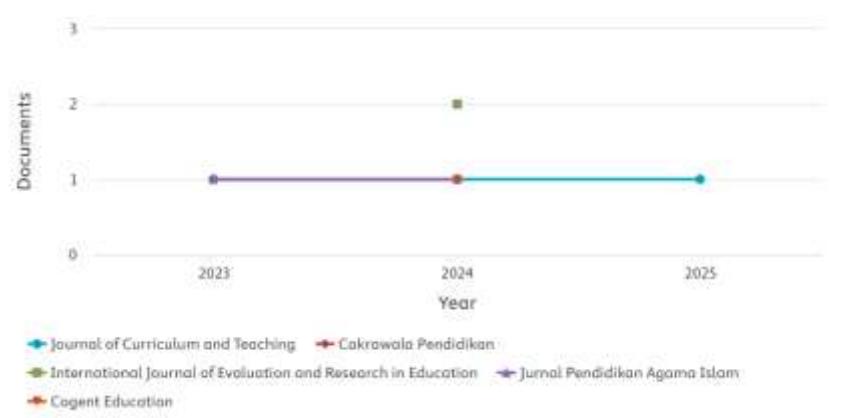


Figure 6. Distribution of Journals of Publication

Figure 6 displays the journals that have published articles related to the *Merdeka Curriculum*, indicating that this topic is discussed across various academic platforms, including the *Journal of Curriculum and Teaching*, *Cakrawala Pendidikan*, and the *International Journal of Evaluation and Research in Education*.

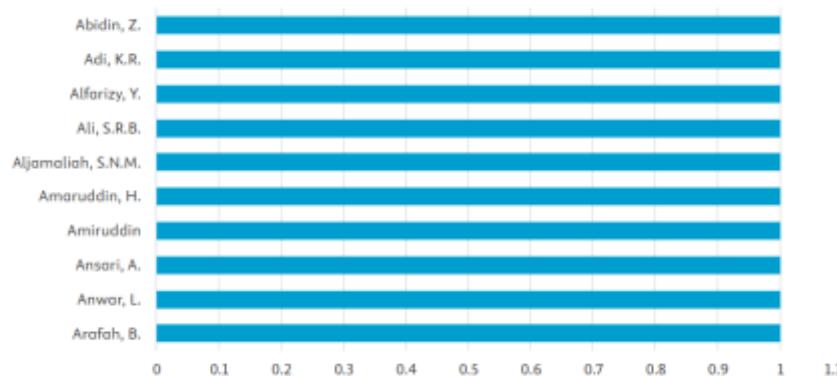


Figure 7. Contributing Article Authors

Figure 7 shows that author contributions are relatively dispersed and not dominated by any single individual or research group. This reflects the diversity of approaches and research contexts across Indonesia.

Based on the overall analysis, it can be concluded that the challenges in implementing the *Merdeka Curriculum* are multidimensional, encompassing pedagogical, structural, and technological aspects. Therefore, systematic mitigation strategies are required, including the development of policies that are responsive to the specific needs of educational institutions in diverse settings.

RQ3: How Have Student Learning Outcomes Been Affected by the Implementation of the Merdeka Curriculum, Based on Academic Literature?

Student learning outcomes are a key indicator of the effectiveness of the Merdeka Curriculum's implementation and have become a major focus in various academic studies. The literature indicates that the application of the Merdeka Curriculum has led to diverse responses and findings related to student competency development. Studies by Wulandari et al. (2024) and Yuliana et al. (2023) conclude that project-based learning strategies and differentiated instruction have fostered increased student participation, creativity, and reflective thinking. Flexible learning models also demonstrate a positive impact on student engagement, particularly in self-directed and contextual learning environments.

However, not all educational units have shown consistent learning outcomes. Several studies, such as those by Halomoan et al., (2024) and Rahayu et al. (2025), indicate that the success of learning outcomes is strongly influenced by teacher readiness in designing formative assessments, the use of educational technology, and support from school management. Specifically, aspects of the *Pancasila Student Profile* a foundational pillar of the Merdeka Curriculum such as critical reasoning, independence, and collaboration, are reflected in studies that report improvements in student character and values across various regions (Safitri et al., 2025; Sutrisno et al., 2024).

To complement this discussion, Figure 8 presents a co-citation network visualization that reflects the interconnections between key literature underpinning the study of learning outcomes within the Merdeka Curriculum context.

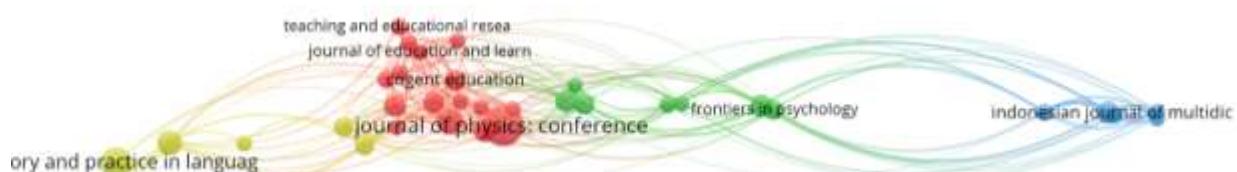


Figure 8. Co-citation Network Visualization Based on Frequently Co-cited Sources in Merdeka Curriculum Literature.

Source by VOSviewer

This network highlights central references commonly cited together in research discussing student learning outcomes. It underscores the prominence of themes such as student-centered learning, formative assessment, project-based models, and character education all of which are key dimensions of the curriculum's impact. The clustering of sources in this visualization suggests strong scholarly agreement on the importance of integrating pedagogical innovation and local contextualization in improving student achievement under the Merdeka Curriculum.

The color-coded clusters in the co-citation visualization represent interconnected topic groups that form the conceptual foundation of research on the Merdeka Curriculum. From the visualization, the red cluster features key literature sources such as *Cogent Education*, *Journal of Physics: Conference Series*, and *Teaching and Educational Research*, which play a significant role in shaping theories of learning evaluation and participatory pedagogical approaches. The green cluster connects studies on environment-based and science education, emphasizing the integration of academic achievement with sustainability issues. Other clusters, such as blue and yellow, illustrate links to language-based learning and localized education approaches.

Overall, this network indicates that student learning outcomes under the Merdeka Curriculum are being explored through diverse contexts ranging from academic performance and character development to literacy improvement and active participation. The literature collectively affirms that learning outcomes cannot be separated from context-driven implementation strategies and the presence of adaptive learning environments.

Conclusion

This study concludes that the *Merdeka Curriculum* represents a major educational innovation in Indonesia, emphasizing flexibility and contextual learning. Its implementation at the school level has demonstrated the application of several key strategies, such as teacher competence development, project-based learning, and the integration of local values into learning activities. However, its successful implementation remains challenged by issues such as limited pedagogical skills among teachers, lack of transformative leadership, administrative burdens, unequal access to technology, and insufficient cross-sector collaboration.

Despite these challenges, various studies have shown that the *Merdeka Curriculum* has positively impacted student learning outcomes, particularly in developing critical thinking, creativity, and learner independence. These improvements are especially evident in schools that successfully and consistently apply the curriculum's core principles.

Therefore, the success of the *Merdeka Curriculum* depends not only on the strength of its policy design but also on the quality of its implementation. For the curriculum to achieve optimal impact, it must be supported by a system that is inclusive, collaborative, and sustainable.

Recommendation

Based on the analysis and conclusions obtained, several strategic recommendations are proposed to support and strengthen the implementation of the Merdeka Curriculum. First, the government and educational institutions are encouraged to provide continuous and context-sensitive professional development programs for teachers, particularly in differentiated instruction, formative assessment, and instructional module design. These training initiatives should be rooted in practical experience and tailored to each school's local context. Second, principals must be empowered with transformational leadership skills so they can act as agents of change and foster collaborative learning environments. Adaptive leadership is crucial to nurturing a culture of innovation that aligns with the spirit of the curriculum.

Third, efforts should be made to reduce teachers' administrative burdens through streamlined systems, enhanced support from administrative personnel, or the adoption of digital school management tools. Fourth, national and local authorities must ensure equitable access to infrastructure and technology, especially in underserved and remote areas. Reliable internet connectivity and adequate digital tools are essential to support flexible and self-directed learning. Fifth, multi-stakeholder collaboration should be reinforced through partnerships between schools, industries, higher education institutions, and local communities to enrich project-based learning and contextualized curriculum practices. These collaborations also play a role in integrating local wisdom and cultural values into educational content.

Sixth, monitoring and evaluation mechanisms should be adaptive, participatory, and data-informed. Evaluation frameworks must assess not only learning outcomes but also the quality of implementation processes, innovative practices, and field-based challenges. Lastly, the development and dissemination of open educational resource platforms are highly recommended. Creating accessible repositories of teaching materials, instructional modules, and best practices can empower teachers and learners, particularly in schools that lack sufficient resources to develop their own learning tools. Together, these recommendations aim to build a more inclusive, sustainable, and context-responsive educational ecosystem under the Merdeka Curriculum.

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