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Institutional Evaluation in Improving Student Literacy Through the Implementation of the Merdeka Curriculum

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Abstract

Literacy is essential for academic success, social engagement, and long-term career prospects. This study analyzes literacy improvements under the Independent Curriculum from 2023 to 2025 using the Education Report Card. The analysis evaluates the curriculum's impact on literacy, readiness for high school, and the role of literacy in social engagement. The study used a longitudinal approach, collecting education reports, teacher and student interviews, and annual surveys. This provided a comprehensive view of literacy development. Results showed significant improvement during the study. By 2025, all students will have achieved minimum literacy competencies, and 73.68% exceeded the standards. The findings highlight the value of collaborative projects, such as fake news analysis and gender equality campaigns, in strengthening text evaluation and critical thinking. However, challenges remain, including limited funding for technology and achievement disparities. The study emphasizes the need for coordination between curriculum policies, teacher training, and inclusive learning environments to maintain literacy gains. The findings should help policymakers and educators design effective and sustainable literacy strategies to meet future educational demands.

Keywords: *Literacy Improvement, Merdeka Curriculum, Institutional Evaluation, Critical Literacy, Project-Based Learning*

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INTRODUCTION

Literacy is a critical foundation for academic success, social participation, and long-term career prospects. According to the 2024 Programme for International Student Assessment (PISA, 2024), Indonesia's reading literacy score is 396, which is significantly lower than the OECD average of 476 and Southeast Asian countries such as Singapore (543) and Malaysia (424) (OECD, 2023). This disparity highlights the challenges Indonesian students face in developing key literacy skills such as reading comprehension, critical thinking, and information processing, all of which are essential for thriving in today's complex, information-driven world (OECD, 2023; Kwan et al., 2011).

In response to these challenges, the Indonesian government launched the Merdeka Curriculum in 2022, aiming to transform the educational landscape by promoting a more flexible, student-centered approach. The curriculum focuses on project-based learning, critical literacy, and the integration of digital technologies. It seeks to equip students with the skills necessary to navigate and participate actively in the 21st century (Sahlberg, 2014). The Merdeka Curriculum encourages students to engage with real-world issues, such as fake news and gender equality, fostering both academic and social literacy (UNESCO Institute for Statistics, 2018; Burns & Gottschalk, 2020). At SMPIT Al-Khoiriyah Al-Husna, a model school implementing the Merdeka Curriculum, a social constructivist approach (Vygotsky, 1978) has been adopted, which aims to strengthen students' literacy skills while promoting active engagement with societal issues.

Despite the promise of such reforms, research on the Merdeka Curriculum's effectiveness remains limited, particularly with regard to its impact on students' readiness for higher education and their ability to engage in critical literacy and social participation (Freire, 2007; Sahlberg, 2014). Previous studies have evaluated curriculum reforms primarily through the lens of academic performance, but few have examined how these reforms influence critical literacy, social participation, and career readiness (Hammond et al., 2017). This study aims to fill this gap by investigating: (1) the effectiveness of the Merdeka Curriculum in improving literacy, (2) its role in preparing students for high school, and (3) how literacy development contributes to social participation and future career opportunities. The results of this study will provide valuable insights for policymakers and educators working to enhance literacy outcomes and develop effective educational frameworks for future generations.

The importance of integrating critical literacy with project-based learning has been widely recognized in the literature. Vygotsky's social constructivist theory (1978) underpins the approach of the Merdeka Curriculum, which emphasizes the role of social interaction and collaborative learning in developing literacy. Sharma & Hannafin (2004) and Tomlinson (2001) highlight the importance of differentiated instruction to cater to diverse literacy levels, which is crucial for ensuring that all students benefit from these reforms. Furthermore, technology integration in the classroom has been shown to foster critical thinking skills and enhance literacy development (Chen et al., 2024; Sahlberg, 2014).

METHOD

This study employs a descriptive, qualitative design with a case study approach to explore the implementation and outcomes of the Independent Curriculum, as outlined in the Education Report Card. The case study approach is ideal for this context, as it allows for an in-depth assessment of literacy development in this specific educational setting over the three-year period 2023–2025 (Kemendikdasmen, 2025), providing qualitative and quantitative insights into the curriculum's impact on students' literacy and social participation (Chen et al., 2024).

The participants in this study include 5 teachers, 10 students (5 from high-achieving groups and 5 from lower-achieving groups), and 2 randomly selected parents. Additionally, a survey was distributed to 100 students from various socio-economic backgrounds to ensure a diverse representation of the program's impact on different student groups. This sampling approach aims to capture a comprehensive view of the literacy outcomes across different demographic profiles, ensuring the findings are generalizable within the local context (Kooli & Yusuf, 2025; Mercer, 2019).
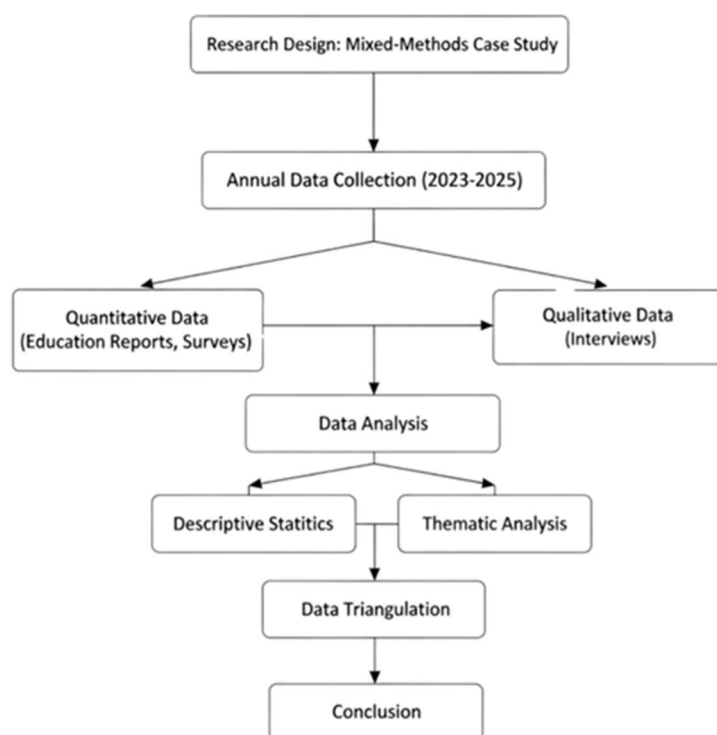

Figure 1. Research Procedure Diagram

Figure 1 illustrates the research design. This mixed-methods case study was conducted longitudinally over a three-year period, with annual data collection from 2023 to 2025. This approach enables the tracking of literacy skill development and the observation of how critical literacy competencies evolve over time. It provides a comprehensive picture of the short- and long-term impacts of the Independent Curriculum (OECD, 2023; Tomlinson, 2001). Data were obtained through both quantitative and qualitative methods. Quantitatively, Education Reports recorded students' literacy achievements and academic performance. These reports were analyzed to track the dynamics of literacy competencies during the three years of curriculum implementation (OECD, 2023; Kooli & Yusuf, 2025). Qualitatively, semi-structured interviews were conducted with five teachers, ten students, and two parents. These interviews explored experiences, perceptions, teaching strategies, and challenges during implementation (Mercer, 2019; Tomlinson, 2001). Additionally, a survey was distributed annually to one hundred students. The survey featured both closed-ended and open-ended questions to collect quantitative data on literacy skills, student engagement, and personalized feedback on learning experiences (Hammond et al., 2017; Kwan et al., 2011).

Data analysis was conducted through two channels. Quantitative data from the Education Report Card were analyzed using descriptive statistics. This mapped trends in literacy scores from year to year (Burns & Gottschalk, 2020; Kooli & Yusuf, 2025). Meanwhile, qualitative data from interviews were transcribed and thematically coded. This process identified patterns, key themes, and factors influencing literacy improvement, such as learning strategies, levels of student engagement, and the development of critical literacy (Freire, 2007; Mercer, 2019). Furthermore, data from the education report, interviews, and surveys were compared using triangulation methods. This tested the consistency and reliability of the findings. Triangulation strengthened the validity of the research findings and provided a more comprehensive understanding of the impact of the Independent Curriculum on student literacy (Tomlinson, 2001; Chen et al., 2024). This process led to the development of conclusions that reflect a comprehensive picture of student literacy development over the three years of curriculum implementation.

RESULTS AND DISCUSSION

Based on education reports for the three-year period (2023–2025), there has been a significant increase in literacy skills, with 100% of students achieving minimum literacy skills by the end of 2025. The overall success of this program reflects the positive impact of project-based learning, the integration of critical literacy skills, and the use of digital tools, as emphasized in the curriculum design. In addition, 73.68% of students exceeded the minimum standards, demonstrating that the Merdeka Curriculum not only meets literacy standards but also encourages students to achieve higher levels of attainment.

Table 1. Literacy Achievement During The Three-Year Period (2023–2025)

Year	Minimum Competency	Above Competency	Below Competency	Far Below Competency
2023	86.36%	13.64%	13.64%	0%
2024	95.00%	60.00%	0%	5%
2025	100.00%	73.68%	0%	0%

As shown in Table 1, the progress made by students in terms of literacy competency was remarkable. In 2023, 86.36% of students reached the minimum literacy competency, while by 2024, this figure increased to 95%. By 2025, 100% of students had met or exceeded the minimum standard. More importantly, the percentage of students who surpassed the expected literacy competencies grew each year, culminating in 73.68% of students exceeding the required standard by 2025. These improvements support the findings of Sahlberg (2014), who highlights the importance of well-structured educational reforms that center around student needs and capabilities.

Further analysis of literacy sub-indicators revealed substantial improvements in various dimensions of literacy. Notably, the most significant gains were seen in Text Evaluation and Reflection, with an increase of 17.71% from 2023 to 2025. This improvement is particularly noteworthy, as it demonstrates the success of the project-based learning (PBL) approach in fostering critical thinking, reflection, and deep engagement with texts. These findings resonate with Freire's (2007) pedagogy of critical literacy, which emphasizes the need for students to go beyond basic comprehension to critically engage with texts and the world around them.

The sub-indicators presented in Table 2 show increases in competencies related to reading informational and literary texts, interpreting texts, and accessing information. These gains reflect the curriculum's focus on

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equipping students with both the foundational and higher-order literacy skills necessary for thriving in a knowledge-based society. As observed by Sharma & Hannafin (2004), integrating scaffolding and critical thinking in literacy education encourages a deeper understanding of content, which was achieved through the use of collaborative projects and real-world applications in the classroom.

Table 2. Improvement in Literacy Sub-Indicators (2023–2025)

Sub-Indicator	2023	2024	2025	Increase (2023–2025)
A.1.1: Reading Informational Texts	71.12	82.11	87.81	+16.69
A.1.2: Reading Literary Texts	75.03	82.52	89.14	+14.11
A.1.3: Accessing and Finding Info	75.60	83.09	91.07	+15.47
A.1.4: Text Interpretation	72.67	83.15	85.30	+12.63
A.1.5: Text Evaluation and Reflection	70.06	81.18	87.77	+17.71

A deeper analysis of Table 2 reveals that the most significant increase was in Text Evaluation and Reflection, which surged by 17.71%. This figure strongly suggests the success of project-based learning (PBL) activities like fake news analysis and gender equality campaigns. These projects required students not just to understand texts but to assess their validity, reflect on biases, and connect them to real-world contexts. Furthermore, foundational competencies such as Reading Informational Texts (+16.69%) and Accessing and Finding Info (+15.47%) also showed robust growth. This demonstrates that the Merdeka Curriculum successfully cultivated a balanced range of literacy skills, from foundational abilities to higher-order critical thinking.

The focus on project-based learning (PBL) was integral to the success of the Merdeka Curriculum. Collaborative projects, such as fake news analysis and gender equality campaigns, not only contributed to literacy improvement but also encouraged students to apply their learning to real-world issues. The projects enabled students to engage critically with complex topics, developing both academic and social literacy (Krajcik & Shin, 2014). According to Vygotsky's (1978) social constructivist theory, students learn most effectively when they interact with their peers and actively construct knowledge in a social context. This approach was pivotal in fostering a deeper understanding of texts, as students were encouraged to discuss, debate, and reflect on the content.

In addition, the gender equality campaign allowed students to explore societal issues and take an active role in addressing them, thus connecting literacy with civic engagement. This aligns with the view of Freire (2007), who emphasized that literacy is not just an academic skill but also a tool for social empowerment. By engaging with real-world issues, students were able to see the relevance of literacy skills beyond the classroom and understand the impact of their learning on the world around them.

The integration of digital tools and the Merdeka Mengajar Platform (PMM) played a significant role in supporting literacy development. The use of digital resources enhanced students' research skills and enabled them to critically evaluate information from various online sources. As highlighted by Chen et al. (2024) and OECD (2023), digital literacy is a key component of modern education, helping students navigate the vast amount of information available in the digital age.

Despite the advantages of digital tools, the study revealed a challenge in technology funding. The allocation for technology was only 21.12%, which is significantly lower than the World Bank's recommended 35% (Burns & Gottschalk, 2020). This budget limitation restricted the ability to fully integrate technology into the learning process. As Sahlberg (2014) asserts, adequate funding is essential for the successful integration of technology in education, and this study supports that view. Increased funding would allow for better access to digital resources, enabling students to fully benefit from the technology-enhanced learning opportunities that the curriculum offers.

While the achievement of 100% minimum literacy competency by 2025 is a significant success, the fact that a substantial portion of students (26.32%) did not advance beyond this baseline reveals a critical underlying challenge: student variability. This finding strongly advocates for a deeper implementation of differentiated instruction, as championed by Lailiyah & Mas'ud (2024), to ensure that the curriculum's benefits extend equitably to all learners. From a theoretical standpoint, this achievement gap can be understood through the lens of Vygotsky's Zone of Proximal Development (ZPD). For the 26.32% of students, the standard project-based activities may lie outside their current ZPD, requiring more intensive and targeted scaffolding to bridge the gap between their current abilities and the learning objectives.

In practice, the application of differentiation within the framework of project-based learning (PBL) in the Merdeka Curriculum is very important. For example, in a project focused on analyzing fake news, teachers can assign tiered tasks according to students' competency levels. For students with basic competencies, the task is to identify the main claims, important facts, and opinions in a text. Meanwhile, students with higher competency levels can be asked to compare the text with other sources to assess the credibility and bias of the author. Students with the most advanced abilities can be directed to analyze the rhetorical strategies in the text and reflect on the social impact it may have.

This approach ensures all students are engaged with the core topic at an appropriate level of challenge. It is plausible that this group of students demonstrated slower growth in higher-order thinking skills, such as "Text Evaluation and Reflection," which saw the largest overall increase in the study. This highlights a crucial implication for teacher professional development: educators require specific training not only on PBL but also on designing and managing a differentiated classroom to address diverse learning needs effectively (Rehani & Mustofa, 2023). Ultimately, this finding suggests that the true measure of the curriculum's success lies not just in meeting minimum benchmarks but in its capacity to foster growth for every student. Future research should therefore focus on identifying the most effective intervention strategies for this demographic to ensure the Merdeka Curriculum achieves truly equitable outcomes.

Differentiated instruction allows teachers to adapt their teaching methods to cater to the unique needs and abilities of each student. As noted by Tomlinson (2001), personalized learning pathways can help struggling students catch up to their peers and ensure that no student is left behind. Implementing more personalized learning strategies, such as targeted interventions, additional support for students who are struggling, and scaffolding, would help to close the achievement gap and ensure that all students benefit equally from the curriculum.

The success of the Merdeka Curriculum was also facilitated by the significant emphasis on teacher professional development. Teachers participated in ongoing training and workshops to enhance their skills in using technology, implementing differentiated instruction, and applying project-based learning strategies in the classroom. As Kohnke (2024) notes, teacher professional development is crucial for the effective implementation of any educational reform. In this study, the teachers' preparedness and willingness to embrace new teaching methods were key factors in the success of the curriculum. Moreover, ongoing professional development provided teachers with the tools and strategies to support students effectively. Teachers' increased competence in using technology and differentiated instruction ensured that they could provide the necessary support to students at various levels of literacy.

Despite its valuable insights, this study has several limitations that should be acknowledged. Firstly, its case study design, centered on a single model school, limits the generalizability of the findings to other educational contexts with different resources and student demographics. Secondly, the qualitative data was drawn from a relatively small sample of teachers, students, and parents, which may not capture the full spectrum of experiences within the school. Lastly, while the three-year longitudinal approach provides a dynamic view of literacy development, it may not be sufficient to evaluate the long-term effects of the Merdeka Curriculum on students' academic trajectories and career readiness. These factors suggest that the conclusions should be interpreted as specific to the context studied, highlighting the need for broader, more extensive research.

Nonetheless, this research offers significant practical and theoretical implications for the field of education. Practically, it provides concrete evidence of the Merdeka Curriculum's effectiveness in enhancing student literacy, offering a valuable model for other institutions. The study underscores the success of specific pedagogical strategies, such as project-based learning focused on real-world issues like fake news analysis, which can be directly adopted by educators. Theoretically, the findings reinforce the principles of social constructivism and critical literacy, demonstrating how these frameworks can be successfully operationalized in a modern curriculum to foster both foundational skills and higher-order thinking. By identifying key challenges, including technology funding and the necessity for differentiated instruction, this study provides a clear roadmap for policymakers to refine curriculum implementation, ensuring more equitable and sustainable educational reform for future generations.

CONCLUSION

This study confirms that the Merdeka Curriculum is effective in improving students' literacy skills. Through a project-based learning approach, which strengthens critical literacy and integrates technology, students demonstrate significant progress in reading, writing, and critical thinking skills. Real-world projects,

such as analyzing fake news and promoting gender equality, have been proven to actively engage students while equipping them with 21st-century skills. The integration of digital devices has also had a positive impact on digital literacy, although challenges such as limited funding for technology and variations in student abilities remain issues that need to be addressed. Furthermore, the results of this study provide valuable input for the further development of the Merdeka Curriculum. Efforts such as implementing microlearning, differentiated learning, and strengthening teacher capacity through professional training are expected to meet the needs of students with varying levels of literacy. Thus, the findings of this study can serve as an important basis for more holistic, inclusive, and future-oriented education reform, so that literacy is understood not only as an academic ability but also as a provision for meaningful social participation.

AUTHOR CONTRIBUTIONS

Riky Sheptian: Conceptualization, Methodology, Writing - Original Draft, Data Curation, and Project Administration; **Soeprijanto**: Supervision, Review & Editing, and Validation; **Riyadi**: Methodology, Formal Analysis, and Writing - Review & Editing; and **Aip Badrujaman**: Writing - Review & Editing, Data Curation, and Validation.

DECLARATION OF COMPETING INTEREST

The authors declare no known financial conflicts of interest or personal relationships that could have influenced the work reported in this manuscript.

DECLARATION OF ETHIC0053

The authors declare that the research and writing of this manuscript adhere to ethical standards of research and publication, in accordance with scientific principles, and are free from plagiarism.

DECLARATION OF ASSISTIVE TECHNOLOGIES IN THE WRITING PROCESS

The authors declare that generative artificial intelligence (Gen AI) and other AI-assisted tools were used prudently, not excessively, during the research and preparation of this manuscript. Specifically, Specifically, Gemini AI was used to search for data and connect the logic of the research and Perplexity AI was used to answer questions using web sources and cite links in the text responses. All AI-generated material was reviewed and edited for accuracy, completeness, and compliance with ethical and scholarly standards. The authors accept full responsibility for the final content of the manuscript.

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