**Hipkin Journal of Educational Research**
http://ejournal-hipkin.or.id/index.php/hipkin-jer/

# Teacher and technology roles in Kurikulum Merdeka at SD Muhammadiyah 4 Bandung

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**ABSTRACT**

This research examines the implementation of Kurikulum Merdeka, which is gradually being introduced across basic education units in Indonesia. This curriculum is designed to provide flexibility for learner-centered learning and adapt education to the dynamics of the times and the individual needs of students. In this context, SD Muhammadiyah 4 Bandung is one of the schools that has adopted the Kurikulum Merdeka and implemented it in the Informatics subjects. This study aims to assess the implementation of Kurikulum Merdeka at SD Muhammadiyah 4 Bandung, focusing on the implementation of Informatics learning and student learning outcomes. The method used is a descriptive qualitative approach, involving in-depth interviews with the principal, the vice principal for curriculum, and the Informatics teachers. The results showed that although this curriculum provides teachers with flexibility to customize learning, there are still challenges, such as teacher readiness with technology and differences in students' ability to operate devices. Therefore, continuous teacher training and additional support for students are needed to optimize the implementation of the curriculum. This research provides recommendations to strengthen teacher training, increase evaluation time, and improve support systems to be more responsive to evolving educational needs.

**ARTICLE INFO**

***Article History:***
*Received: 17 Oct 2025*
*Revised: 6 Feb 2026*
*Accepted: 12 Feb 2026*
*Publish online: 22 Feb 2026*

***Keywords:***
*curriculum evaluation; Informatics learning; Kurikulum Merdeka; primary education; technology in education*

**Open access**
Hipkin Journal of Educational Research is a peer-reviewed open-access journal.

***ABSTRAK***

*Penelitian ini mengkaji implementasi Kurikulum Merdeka yang saat ini sedang diterapkan secara bertahap di berbagai satuan pendidikan dasar di Indonesia. Kurikulum ini dirancang untuk memberikan fleksibilitas pembelajaran yang berpusat pada murid serta menyesuaikan pendidikan dengan dinamika zaman dan kebutuhan individu murid. Dalam konteks tersebut, SD Muhammadiyah 4 Bandung menjadi salah satu sekolah yang telah mengadopsi Kurikulum Merdeka dan menerapkannya dalam mata pelajaran Informatika. Penelitian ini bertujuan untuk menilai penerapan Kurikulum Merdeka di SD Muhammadiyah 4 Bandung, dengan fokus pada pelaksanaan pembelajaran Informatika dan hasil belajar murid. Metode yang digunakan adalah pendekatan kualitatif deskriptif, melalui wawancara mendalam dengan kepala sekolah, wakil kepala sekolah bidang kurikulum, dan guru Informatika. Hasil penelitian menunjukkan bahwa meskipun kurikulum ini memberikan fleksibilitas bagi guru dalam menyesuaikan pembelajaran, namun masih terdapat tantangan seperti kesiapan guru dalam penggunaan teknologi serta perbedaan kemampuan murid dalam mengoperasikan perangkat. Oleh karena itu, pelatihan berkelanjutan bagi guru dan dukungan tambahan bagi murid sangat diperlukan untuk mengoptimalkan implementasi kurikulum. Penelitian ini memberikan rekomendasi untuk memperkuat pelatihan guru, meningkatkan waktu untuk evaluasi, dan memperbaiki sistem dukungan agar lebih responsif terhadap kebutuhan pendidikan yang terus berkembang.*

***Kata Kunci:*** *evaluasi kurikulum; Kurikulum Merdeka; pembelajaran Informatika; pendidikan dasar; teknologi pada pendidikan*

**How to cite (APA 7)**
Ayunina, H. Q., & Hadiapurwa, A. (2026). Teacher and technology roles in Kurikulum Merdeka at SD Muhammadiyah 4 Bandung. *Hipkin Journal of Educational Research, 3*(1), 37-46.

**Peer review**
This article has been peer-reviewed through the journal's standard double-blind peer review, where both the reviewers and authors are anonymised during review.





https://doi.org/10.64014/hipkin-jer.v3i1.274

## INTRODUCTION

*Kurikulum Merdeka* is a strategic step taken by the Indonesian government in response to significant changes in the education landscape. Introduced as part of efforts to improve the quality of education, Kurikulum Merdeka provides greater flexibility and autonomy in the learning process. With this approach, it is hoped that students can learn according to their needs and interests, making the learning process more effective and enjoyable. This curriculum focuses on students' active role in learning, making them the center of the educational process. This approach aims to develop communication skills essential for their future success. (Asfiati, 2023). *Kurikulum Merdeka* also emphasized the importance of integrating character and national values into learning, ensuring that students are not only academically intelligent but also possess a strong social awareness. Thus, education is expected to produce a generation that excels not only in knowledge but also possesses integrity and responsibility as citizens (Fauzan *et al*., 2023).

In its implementation, *Kurikulum Merdeka* requires support from various parties, including teachers, parents, and the community. One crucial aspect to ensuring the curriculum's success is training and professional development for educators (Maryani *et al*., 20424). Systematic and structured training is needed to improve teachers' understanding and skills in effectively implementing *Kurikulum Merdeka*. This way, teachers can facilitate student-centered learning and optimally support the development of student character and competencies (Sabeliana *et al*., 2024). For example, at Muhammadiyah 4 Elementary School in Bandung, the implementation of *Kurikulum Merdeka* aligns with government policy, including the use of Basic Education Data (Dapodik), which requires every school to follow this curriculum systematically. *Kurikulum Merdeka* is implemented in stages, according to the government's phases. The Deputy Head of Curriculum at SD Muhammadiyah 4 Bandung explained that the curriculum changes began with phase A, followed by phase B the following year, which were then adapted to local needs and student characteristics. The school also adjusted the curriculum to focus on students being more active than teachers, with teachers acting as learning facilitators.

The Curriculum Development Team at SD Muhammadiyah 4 Bandung consists of teachers selected by the previous curriculum team and the principal. The team meets monthly to assign tasks and organize the teachers' needs for implementing the curriculum. With study groups at each phase, teachers can reflect on ongoing learning and develop more effective learning programs (Azmi *et al*., 2023). However, implementing Kurikulum Merdeka in this school is not without challenges.

One of the main challenges is limited resources and teacher readiness, especially those who will soon retire (Syofyan *et al*., 2024). To this end, schools provide study groups and training to enhance teachers' understanding of how to use technology in learning. Furthermore, another challenge is ensuring that digital-based learning is not merely viewed as a game or entertainment, but as a serious part of education. Therefore, classroom discipline and consensus are crucial in maximizing the benefits of technology in learning (Harefa *et al*., 2024). Thus, the success of implementing Kurikulum Merdeka at SD Muhammadiyah 4 Bandung is highly dependent on close collaboration among teachers, schools, and parents.

Readiness to address the various challenges that arise with this major change is also a crucial factor. The readiness of human resources and technological infrastructure is a common challenge across various regions in implementing Kurikulum Merdeka (Harefa *et al*., 2024). One of the main issues faced at this school is the disparity in technology proficiency between teachers and students. Some teachers still struggle to use digital devices optimally, while some students are not yet accustomed to using learning technology devices independently in the learning process. The success of this curriculum depends heavily on intensive training and a continuous mentoring system for teachers (Sabeliana *et al*., 2024). Therefore, the implementation of a student-focused curriculum is expected not only to produce intelligent students



https://doi.org/10.64014/hipkin-jer.v3i1.274

but also to develop high social and moral skills, with comprehensive support from the education ecosystem.

Considering these challenges, it is crucial to conduct a comprehensive evaluation of the implementation of *Kurikulum Merdeka* at the elementary education level, particularly in technology-oriented disciplines such as Informatics. Therefore, this study aims to assess the implementation of *Kurikulum Merdeka* at SD Muhammadiyah 4 Bandung, focusing on Informatics instruction and its impact on students' academic achievement. Furthermore, this study seeks to identify the challenges faced and propose strategic recommendations to improve the efficacy of curriculum implementation through technological advancements and educator professional development.

## LITERATURE REVIEW

### *Kurikulum Merdeka*: Concept and Implementation

*Kurikulum Merdeka* is an educational framework that gives educators and students the freedom to design and implement a curriculum tailored to their needs and interests, without adhering to a standardized curriculum. *Kurikulum Merdeka* aims to create a more dynamic learning environment that can adapt to changing times. It also encourages creativity and innovation among teachers and students, while prioritizing student-centered learning (Asfiati, 2023; Rambe & Aisyah, 2023).

Implementing *Kurikulum Merdeka* involves several stages to ensure its success. Some of the steps frequently taken include: (Lubis, 2024; Pawartani & Suciptaningsih, 2024; Wahyuni *et al*., 2024):

1. Needs assessment: conducting surveys or discussions with students, parents, and educators to identify interests, strengths, and areas for development;
2. Curriculum design: coordinate with stakeholders to design key themes, projects, and learning objectives that can enhance interconnectedness between subjects;
3. Resource allocation: providing resources that support curriculum implementation, such as teaching materials, technology, and partnerships with the community;
4. Teacher professional development: providing training to teachers on *Kurikulum Merdeka* design, student-centered teaching methods, and community assessment strategies;
5. Pilot program: implementing the curriculum on a small scale to gather feedback before wider implementation;
6. Continuous evaluation: Establish a continuous evaluation system to assess the effectiveness of the curriculum, including student performance and engagement levels.

By adopting the *Kurikulum Merdeka*, educational institutions can create a more relevant and engaging learning environment for students and prepare them to face the challenges of the modern world. The success of this curriculum depends heavily on the active involvement of all parties, including teachers, students, and the community. Implementing *Kurikulum Merdeka* at the elementary school level contributes to increased student motivation, the development of creativity and 21st-century skills, and the strengthening of character and national values aligned with the six dimensions of the Pancasila Student Profile (*Profil Pelajar Pancasila*) (Zumrotun *et al*., 2024).

### The Role of Technology in Learning in Elementary Schools

The use of technology in education is increasingly important in supporting *Kurikulum Merdeka*. Technology can increase student interactivity and enable more personalized learning experiences. The use of digital tools and AI platforms allows teachers to create learning environments that are more responsive to individual student needs (Chen & Singh, 2025). The integration of technology, especially artificial



https://doi.org/10.64014/hipkin-jer.v3i1.274

intelligence-based technology, supports project-based learning and personalized feedback, thereby significantly improving digital literacy and student engagement (Huang *et al*., 2025).

The use of technology in learning can increase student engagement, accelerate conceptual understanding, and provide a variety of resources that can be accessed anytime. The use of technology can increase student engagement and strengthen their understanding of learning materials. However, challenges such as disparities in access to and in students' technological skills can affect learning effectiveness (Aisyah *et al*., 2024). Technology also allows students to learn at their own pace, creating a learning experience tailored to individual needs. This requires ongoing training and support from the school to ensure that technology is used optimally to achieve curriculum goals.

## Challenges in Implementing the New Curriculum in Elementary Schools

The implementation of *Kurikulum Merdeka* in elementary schools faces several challenges, including technological readiness, changes in teacher mindsets, and a mismatch between the curriculum and realities on the ground. These challenges include limited educator training, inadequate school infrastructure, and a lack of public understanding of the essence of *Kurikulum Merdeka*. (Astuti *et al*., 2025). In addition, teachers still experience difficulties in independently compiling learning tools, conducting diagnostic assessments, and managing imbalances in student readiness and high workloads (Hadi & Retnawati, 2025).

Many teachers are unfamiliar with a more flexible, student-centered curriculum, requiring more intensive training and support to adapt to this approach. Furthermore, limited technological devices and inadequate infrastructure are also significant obstacles to implementing this curriculum in many elementary schools. Therefore, providing teachers with the necessary equipment and technical training is crucial in overcoming these barriers.

The implementation of *Kurikulum Merdeka* demands a cultural transformation in educational institutions that prioritizes collaboration and innovation over conventional methods (Nurjanah & Mustofa, 2024). This transformation involves not only training teachers in new pedagogical strategies but also creating an ecosystem that supports experimentation and feedback. The success of curriculum reform depends heavily on a balance between technical skills, emotional dimensions, and a conducive work environment, including the freedom to try new approaches. Therefore, teacher well-being and the effectiveness of systematic transitions are closely linked to the level of flexibility and support provided during the change process.

Schools must create forums for teachers to share best practices and challenges, thus building communities of practice that support continuous improvement. Successful curriculum reform requires attention not only to teachers' technical skills but also to the emotional dimension and to a supportive work environment, including the freedom to try new approaches and to receive constructive feedback (Yang & Sato, 2025). Additionally, involving students in designing their learning experiences can increase motivation and ownership of their education, thereby reinforcing the principles of *Kurikulum Merdeka* (Khatter *et al*., 2024; Randi & Corno, 2022). Thus, integrating student feedback into curriculum development can significantly improve the relevance and applicability of learning materials, ensuring that they meet the diverse interests and needs of students (Siswadi, 2023).

## Developing Teacher Professionalism in *Kurikulum Merdeka*

Teacher professional development is key to the successful implementation of *Kurikulum Merdeka*. Teachers need to be trained to manage a more flexible curriculum and increase student engagement in learning. Furthermore, teachers need to be educated on the use of technology in teaching and a wider



https://doi.org/10.64014/hipkin-jer.v3i1.274

variety of assessment methods. As part of professional development, teachers should also be given space for reflection and sharing experiences through structured study groups (Hendrianty *et al*., 2024). This will help them improve their teaching skills and enrich their learning approaches. Training that integrates formal approaches, such as workshops, with informal learning through mentoring and teacher collaboration can increase learning effectiveness and teachers' confidence in implementing new teaching strategies (Makhmetova *et al*., 2025). In addition, intensive practice-based training can improve the quality of teachers' instructional practice (Williams *et al*., 2025).

Beyond teacher professional development, community engagement is essential to the successful implementation of *Kurikulum Merdeka*. Schools that actively involve parents and local stakeholders in the educational process often see increased support for students' learning journeys. This collaborative approach not only fosters a sense of ownership among parents but also provides valuable insights that can inform curriculum adjustments to meet community needs better. When parents are involved, students tend to demonstrate higher levels of motivation and academic achievement, thus reinforcing the principles of an inclusive educational environment (Prasetyo, 2024). By partnering with local organizations and businesses, schools can also gain access to additional resources and expertise, enriching the educational experience and ensuring the curriculum remains relevant and responsive to evolving societal demands.

## METHODS

This study uses a descriptive qualitative approach to describe the implementation of *Kurikulum Merdeka* at SD Muhammadiyah 4 Bandung. The study focused on the implementation of Informatics subjects at the school. Data were collected through in-depth interviews with three key informants: the principal, the vice principal for curriculum, and the Informatics teacher at Muhammadiyah 4 Elementary School, Bandung. The instrument used in this interview was a semi-structured interview guide compiled based on *Kurikulum Merdeka* implementation indicators, which cover aspects of school policy, curriculum planning, and technology-based learning practices.

The principal was interviewed to gain insights into institutional-level curriculum implementation policies and strategies. The vice principal shared perspectives on the curriculum team's role and the challenges of developing materials that address student needs. Meanwhile, the Informatics teacher provided a firsthand account of the curriculum's implementation in learning practices, particularly the use of technology devices. Interviews were conducted openly and flexibly, allowing researchers to explore each informant's perspectives, experiences, and suggestions. Data analysis employed a thematic approach, grouping data based on key themes emerging from the interview transcripts. The analysis phase included transcription, initial coding, data categorization, and drawing conclusions that represent key findings in the context of the implementation of *Kurikulum Merdeka* in elementary schools.

## RESULTS AND DISCUSSION

The implementation of *Kurikulum Merdeka* at SD Muhammadiyah 4 Bandung, demonstrated various dynamics. This curriculum provides teachers with the flexibility to design learning tailored to students' needs. However, challenges remain regarding teachers' readiness to integrate technology into the learning process. Furthermore, the curriculum planning and evaluation process has not been fully optimized due to ongoing coordination challenges between teachers and the curriculum team, as well as the need to align educators' understanding of the basic principles of *Kurikulum Merdeka*.

The use of learning devices supports the implementation of informatics learning in schools. However, students' abilities to operate these devices vary, necessitating additional support during the learning process. Furthermore, the use of relevant learning applications has not been optimal and needs


https://doi.org/10.64014/hipkin-jer.v3i1.274

improvement. These findings align with the emphasis on the importance of technology training for teachers to optimize digital integration in learning (Ramadhan & Arifin, 2024). Overall, improving teacher competency, particularly in the use of educational technology, is an urgent need to strengthen the implementation of *Kurikulum Merdeka* in schools.

### Implementation of *Kurikulum Merdeka* and Learning Flexibility

The implementation of *Kurikulum Merdeka* at SD Muhammadiyah 4 Bandung has contributed to increased learning flexibility. A curriculum that emphasizes flexibility provides teachers with the freedom to design learning that is more relevant and aligned with students' needs. This adaptive curriculum approach also helps increase student engagement and creativity in the learning process. *Kurikulum Merdeka* has the potential to create a more dynamic and engaging learning environment in which students are actively involved in learning activities. However, ongoing evaluation remains necessary to ensure the effectiveness of curriculum implementation and support optimal achievement of educational goals (Ibrahim *et al*., 2023).

The main challenges faced in implementing learning technology are technological readiness and teacher skills in integrating these devices into teaching and learning activities. The use of devices offers significant opportunities to increase student interactivity, but it also demands teacher mastery of the technology. Effective technology integration requires ongoing training and adequate technical support for teachers (Ghavifekr *et al*., 2020; Tondeur *et al*., 2020). Continuous digital professional development has been shown to increase teacher readiness to integrate technology into STEM learning.

Therefore, increasing teacher capacity through training and technical assistance is crucial to ensuring that technology is used effectively to support learning. Furthermore, institutional support from schools in providing adequate resources and infrastructure, including access to devices and internet connectivity, is also a key factor in the successful implementation of *Kurikulum Merdeka* (Khlaif *et al*., 2024).

### Utilization of Technology in Implementation of *Kurikulum Merdeka*

The use of technology is very helpful in increasing student engagement with the subject matter. However, a challenge is the varying levels of student ability with these devices, which requires teachers to provide additional support for students who are struggling. Therefore, teachers need to provide additional guidance to students who are struggling, so that no one is left behind. Thus, an inclusive approach will help create a more effective and equitable learning environment for all students.

The use of technological devices in elementary school learning, as implemented at SD Muhammadiyah 4 Bandung, can support more engaging, relevant learning aligned with technological developments. Technology not only increases student engagement but also provides a learning experience tailored to each student's individual pace (Theodorio *et al*., 2024). The application of technology in learning not only supports *Kurikulum Merdeka* but also contributes to the development of 21st-century skills that students need (Mantau & Talango, 2023). It is important to ensure that all students have equal access to the technology and training necessary to utilize these tools effectively (Widiansyah *et al*., 2024). Collaboration between teachers and parents can also play a crucial role in helping students better understand and use technology in their learning. By involving parents in technology-based learning processes, schools can strengthen teaching beyond the classroom and ensure students receive the support they need.



https://doi.org/10.64014/hipkin-jer.v3i1.274

### Curriculum Coordination and Evaluation

In addition to technological challenges, there is limited time to conduct a comprehensive curriculum evaluation and reflection. Although evaluations are conducted monthly, some teachers feel that the available time is insufficient for in-depth reflection on the learning process. Evaluation and reflection are essential parts of the learning process. Continuous evaluation can help teachers identify strengths and weaknesses in learning and make necessary improvements (Briede & Drelinga, 2023).

Time constraints are a major obstacle to implementing evaluation and reflection. One of the main obstacles is the lack of training and mentoring for teachers in developing learning materials and methods that align with the principles of *Kurikulum Merdeka*. Furthermore, time constraints also hinder the evaluation and reflection process. It is crucial for schools and the government to provide sufficient time for teachers to conduct evaluation and reflection. The Ministry of Education and Culture recommends that educators provide time for teachers to read, analyze, and reflect on assessment results. Furthermore, teachers should use assessment results as discussion material to determine what went well and areas that need improvement. By providing sufficient time for evaluation and reflection, it is hoped that teachers can improve the quality of learning and effectively achieve the goals of *Kurikulum Merdeka*.

## Discussion

The implementation of *Kurikulum Merdeka* at SD Muhammadiyah 4 Bandung has had a positive impact on the learning process. However, challenges remain related to technological readiness and teachers' skills in integrating technology into learning. Furthermore, differences in students' abilities to operate learning devices are a barrier that requires special attention through additional support for students and more intensive teacher training. Continuous technology training is a key factor in increasing the effectiveness of technology-based learning. Training based on the Technological Pedagogical Content Knowledge (TPACK) framework has been shown to help teachers integrate digital technology more effectively while strengthening pedagogical understanding in technology-based classroom management (Hanifah *et al*., 2025). Technology readiness and differences in students' device use are challenges that require intensive teacher training and additional support for students who struggle (Ramadhan & Arifin, 2024). Intensive practice-based training can also improve the overall quality of teachers' instructional practices (Makhmetova *et al*., 2025; Williams *et al*., 2025).

The importance of coordination between teachers and the curriculum team has also proven crucial to successful curriculum implementation. This coordination allows for open dialogue in developing and adapting lesson plans to suit the context of each class. Teachers can coordinate by conducting learning reflections from each phase of the learning group, allowing for more effective learning program development based on on-the-ground needs (Azmi *et al.,* 2023). Adaptation of the curriculum by teachers in real contexts requires the support of a program culture that encourages open communication between curriculum developers and teachers, so that curriculum implementation is not rigid but more contextually responsive (Cousins dan Brereton, 2025). The vice principal for curriculum suggested that collaboration between teachers and the curriculum team be intensified. This aims to ensure more effective curriculum planning and evaluation.

Therefore, to optimize the implementation of *Kurikulum Merdeka*, schools need to provide ongoing training for teachers. Furthermore, improving technical support and providing adequate resources is also crucial. Effective collaboration between all relevant parties will significantly contribute to the curriculum's success and facilitate students' holistic development.


https://doi.org/10.64014/hipkin-jer.v3i1.274

## CONCLUSION

The implementation of *Kurikulum Merdeka* in Informatics at SD Muhammadiyah 4 Bandung, provides teachers with flexibility in adapting learning to student needs. This curriculum allows for more contextual and student-centered learning. However, its implementation still faces challenges, particularly related to teacher readiness to utilize learning technology and differences in student abilities in operating technological devices. Optimizing the implementation of *Kurikulum Merdeka* requires ongoing technology training for teachers and additional support for students who experience difficulties using digital devices. Furthermore, increased learning evaluation time and mechanisms are needed to ensure ongoing improvements and be more responsive to educational needs. Therefore, strengthening teacher competencies, providing adequate learning support, and developing a sustainable evaluation system are crucial steps in increasing the effectiveness of *Kurikulum Merdeka* implementation in elementary schools.

## AUTHOR'S NOTE

The author declares that there is no conflict of interest regarding the publication of this article. The author also confirms that the data and content of this article are free from plagiarism. We would like to express our gratitude to SD Muhammadiyah 4 Bandung for granting permission and support to conduct this research, as well as to all parties who contributed to the research process.

## REFERENCES

Aisyah, S., Sholeh, M., Lestari, I. B., Yanti, L. D., Nuraini, N., Mayangsari, P., & Mukti, R. A. (2024). Peran penggunaan teknologi dalam pembelajaran IPS di era digital. *Jurnal Inovasi, Evaluasi dan Pengembangan Pembelajaran (JIEPP), 4*(1), 44-52.

Asfiati, A. (2023). Merdeka curriculum: Encouraging creativity and innovation of Islamic religious education teachers in madrasah. *Al-Hayat: Journal of Islamic Education, 7*(2), 681-698.

Astuti, M., Ismail, F., Herlina, H., Ayuni, A. Q., Nurazizah, N., Tahira, R., Salsabila, Y., & Salika, J. (2025). Tantangan dan peluang pengimplementasian kurikulum merdeka di SD/MI Sumatera Selatan. *Indo-MathEdu Intellectuals Journal, 6*(1), 595-607.

Azmi, C., Hadiyanto, H., & Rusdinal, R. (2023). National curriculum education policy “Curriculum Merdeka and its implementation”. *International Journal of Educational Dynamics, 6*(1), 303-309.

Briede, L., & Drelinga, E. (2023). A more sustainable approach to evaluating teacher’s work. *Journal of Teacher Education for Sustainability, 25*(2), 187-200.

Chen, Z., & Singh, C. (2025). Opportunities and challenges in harnessing digital technology for effective teaching and learning. *Trends in Higher Education, 4*(1), 1-20.

Cousins, E. Y., & Brereton, P. (2025). Practitioners respond to Kathleen Graves ‘Mind the gap: a tale of two curriculum fallacies’. *Language Teaching, 58*(4), 573-576.

Fauzan, F., Ansori, R. A. M., Dannur, M., Pratama, A., & Hairit, A. (2023). The implementation of the merdeka curriculum (independent curriculum) in strengthening students’ character in Indonesia. *Aqlamuna: Journal of Educational Studies, 1*(1), 137-155.

Ghavifekr, S. (2020). Collaborative learning: a key to enhance students’social interaction skills. *Mojes: Malaysian Online Journal of Educational Sciences*, *8*(4), 9-21.

Hadi, F. S., & Retnawati, H. (2025). Exploring mathematics teachers’ knowledge and challenges in curriculum change implementation: case study in Indonesia. *International Journal of Scientific Research and Management, 13*(1), 3888-3907.

Hanifah, U., Budayasa, I. K., & Sulaiman, R. (2025). Technology, pedagogy, and content knowledge in Mathematics education: a systematic literature review. *Journal of Education and Learning, 19*(1), 579-586.



https://doi.org/10.64014/hipkin-jer.v3i1.274

Harefa, M. M., Usman, H., & Lestari, I. (2024). Analysis of the implementation of the merdeka curriculum in 3T areas (underdeveloped, frontier, and outermost). *Jurnal Elementaria Edukasia, 7*(1), 2195-2207.

Hendrianty, B. J., Ibrahim, A., Iskandar, S., & Mulyasari, E. (2024). Membangun pola pikir deep learning guru sekolah dasar. *Kalam Cendekia: Jurnal Ilmiah Kependidikan, 12*(3), 1348-1358.

Huang, S., Jin, F., & Lu, Q. (2025). Exploring the role of generative AI in advancing pre-service teachers' digital literacy through educational technology courses. *Journal of Education and Educational Research, 12*(1), 29-34.

Ibrahim, I., Zakaria, M., Pratiwi, R., Adelia, M., & Zakira, D. F. (2024). Evaluasi terhadap implementasi kurikulum merdeka. *Jurnal Yudistira, 2*(1), 137-149.

Khatter, A., Thalaachawr, K., & Blyth, M. (2024). Student engagement and fostering ownership of learning. *Journal of Applied Learning and Teaching, 7*(1), 291-302.

Khlaif, Z. N., Ayyoub, A., Hamamra, B., Bensalem, E., Mitwally, M. A., Ayyoub, A., ... & Shadid, F. (2024). University teachers' views on the adoption and integration of generative AI tools for student assessment in higher education. *Education Sciences, 14*(10), 1-24.

Lubis, S. (2024). Implementasi kurikulum merdeka di tingkat madrasah ibtidaiyah. *Journal of Islamic Education, 4*(2), 49-56.

Makhmetova, Z., Karabassova, L., Zhakim, A., & Karinov, A. (2025). Exploring the effects of professional learning experiences on in-service teachers' growth: a systematic review. *Education Sciences, 15*(2), 1-28.

Mantau, B. A. K., & Talango, S. R. (2023). Pengintegrasian keterampilan abad 21 dalam proses pembelajaran (literature review). *Irfani, 19*(1), 86-107.

Maryani, I., Irsalinda, N., Jaya, P. H., Sukma, H. H., & Raman, A. (2024). Teachers' professional competence profile during implementation of merdeka curriculum. *Jurnal Fundadikdas, 7*(1), 51-59.

Nurjanah, E. A., & Mustofa, R. H. (2024). Transformasi pendidikan: menganalisis pelaksanaan implementasi kurikulum merdeka pada 3 SMA Penggerak di Jawa Tengah. *Didaktika: Jurnal Kependidikan*, *13*(1), 69-86.

Pawartani, T., & Suciptaningsih, O. A. (2024). Pengembangan kompetensi guru untuk mendukung implementasi kurikulum merdeka. *JIIP-Jurnal Ilmiah Ilmu Pendidikan, 7*(3), 2182-2191.

Prasetyo, A. (2024). Implementasi pendekatan teknologi dalam pengembangan kurikulum merdeka di sekolah dasar. *Dharmas Education Journal (DE_Journal), 5*(1), 32-39.

Ramadhan, K., & Arifin, S. (2024). Pengembangan kurikulum merdeka belajar untuk meningkatkan keterampilan berkomunikasi siswa. *Al-Iltizam: Jurnal Pendidikan Agama Islam, 9*(1), 13-22.

Rambe, A. H., & Aisyah, S. (2023). Correlation of Auditory, Intellectually, Repetition (AIR) learning models on student achievement. *Molang, 1*(1), 1-10.

Randi, J., & Corno, L. (2022). Addressing student motivation and learning experiences when taking teaching online. *Theory Into Practice, 61*(1), 129-139.

Sabeliana, D. M., Suryani, M. D., Pratiwi, T., Hernina, T. M., & Septihana, V. W. (2024). Merdeka curriculum and merdeka mengajar platform to improve teacher pedagogical competence. *Jupe: Jurnal Pendidikan Mandala, 9*(2), 528.

Siswadi, G. A. (2023). Relevansi kurikulum merdeka dengan pemikiran filosofis Ki Hadjar Dewantara. *Sang Acharya: Jurnal Profesi Guru*, *4*(2), 159-177.

Syofyan, H., Rosyid, A., Fadli, M. R., & Yusuff, A. A. (2024). Teacher readiness factors that influence the implementation of the merdeka curriculum in elementary schools. *Journal of Curriculum and Teaching, 13*(5), 168-180.

Theodorio, A. O., Waghid, Z., & Wambua, A. (2024). Technology integration in teacher education: challenges and adaptations in the post-pandemic era. *Discover Education, 3*(1), 242.

Tondeur, J., Scherer, R., Siddiq, F., & Baran, E. (2020). Enhancing pre-service teachers' Technological Pedagogical Content Knowledge (TPACK): a mixed-method study. *Educational Technology Research and Development*, *68*(1), 319-343.

Wahyuni, S., Iqbal, M. S., & Baharuddin, B. (2024). Evaluasi efektivitas penerapan kurikulum merdeka dalam meningkatkan hasil belajar dan keterampilan literasi siswa sekolah dasar. *Idarah Tarbawiyah, 5*(3), 360-368.



https://doi.org/10.64014/hipkin-jer.v3i1.274

Widiansyah, S., Hidayat, S. P., Kamil, S. I., Purba, I. D. L. B., Rahmawati, U., & Khairo, F. M. A. (2024). Kesiapan guru dalam menghadapi tantangan implementasi kurikulum merdeka. *Harmoni Pendidikan: Jurnal Ilmu Pendidikan, 2*(1), 344-362.

Williams, C. T., Protacio, M. S., David, V., & Piazza, S. V. (2025). Improving K-12 teachers' use of sheltered instructional practices to support multilingual learners: results from a National Professional Development Grant. *TESOL Journal*, *16*(1), 1-10.

Yang, S., & Sato, M. (2025). Unlocking language teacher wellbeing amid curriculum reform: a focus on emotion. *Language Teaching Research, 2025*(1), 1-19.

Zumrotun, E., Widyastuti, E., Sutama, S., Sutopo, A., & Murtiyasa, B. (2024). Peran kurikulum merdeka dalam meningkatkan mutu pendidikan di sekolah dasar. *Ideguru: Jurnal Karya Ilmiah Guru, 9*(2), 1003-1009.



https://doi.org/10.64014/hipkin-jer.v3i1.274