Journal of Pedagogy and Education Science (JPES)
Vol. 5, No. 01, pp. 72-83
journal.iistr.org/index.php/JPES
DOI: 10.56741/IISTR.jpes.001170

Analysis of Constraints, Perceptions, and Determining Factors for Success in Implementing the Merdeka Belajar Curriculum in Indonesia

A Case Study at Muhammadiyah Kasihan Bantul Middle School, Special Region of Yogyakarta

[1]Trisna Sukmayadi*, [1]Sumaryati, [1]Ali Tarmuji
Corresponding Author: *trisnasukmayadi@ppkn.uad.ac.id
[1] Universitas Ahmad Dahlan, Yogyakarta, Indonesia

ARTICLE INFO

Article history
Received 28 June 2025
Revised 24 September 2025
Accepted 30 September 2025

Keywords
Civic Education
Curriculum Implementation
Learning Constraints
Merdeka Belajar Curriculum
Muhammadiyah Schools
Teacher Perception

ABSTRACT

This research aims to analyze the obstacles, perceptions, and success factors in implementing the Merdeka Belajar Curriculum at Muhammadiyah Kasihan Middle School. The method is a descriptive qualitative approach, utilizing in-depth interviews with Pancasila and Civic Education (Pendidikan Pancasial dan Kewarganegaraan or PPKn) teachers at various levels. The results showed that the main obstacles lie in understanding the new curriculum, limited references, and a lack of relevant training. Nevertheless, teachers' perceptions of curriculum change tend to be positive when supported by adequate training and sufficient resources. The implications of this study demonstrate the importance of strengthening teacher capacity as well as providing systematic support to make curriculum implementation work more effectively.

This is an open-access article under the CC–BY-SA license.

Introduction

Education is the main foundation for building quality human resources. In the Indonesian context, curriculum changes are part of the government's efforts to adapt the education system to the demands of the times. One of the major innovations launched by the Ministry of Education, Culture, Research, and Technology is the Merdeka Belajar (Independent

Learning) Curriculum [1]. The curriculum is designed to give educational units and teachers discretion in developing learning that is appropriate to the needs of learners and the local context [2].

Ideally, the Merdeka Belajar Curriculum is expected to be able to encourage learning that favors students, shape character, and improve competency in the 21st century [3]. However, in practice, the implementation of this curriculum has not been fully effective in various schools, including Muhammadiyah schools. There are still many teachers who have difficulty in understanding the new structures and approaches in the curriculum, a lack of training and references, and limited resource support [4].

This discrepancy between ideal expectations and reality suggests a problem that needs to be examined in depth. Previous studies have focused more on conceptual and policy aspects, while studies that are contextual and based on teachers' experiences in the field are still limited. Therefore, this research becomes important to provide a real picture of the obstacles faced, teachers' perceptions of curriculum changes, as well as the factors that determine the success or failure of its implementation.

This research aims to analyze the main obstacles in implementing the Merdeka Belajar Curriculum, identify teachers' perceptions of curriculum changes, and explore success factors and support needed to increase the effectiveness of its implementation. This research is expected to make an empirical contribution to policymakers and education stakeholders, especially in improving curriculum implementation strategies in religious-based schools such as Muhammadiyah.

Literature Review

A. Independent Curriculum Concept and Paradigm

The Merdeka Curriculum fundamentally shifts the paradigm from solid content mastery towards developing essential competencies and character. This policy, which is regulated in Keputusan Mendikbudristek No. 262/M/2022, emphasizes three main characteristics: differentiated learning, focus on essential materials, and flexibility for educational units to develop their own operational curriculum [5]. The main principle is to give teachers autonomy to adjust the pace and methods of teaching according to the needs and level of ability of the students. This concept is in line with the learning theory of constructivism, where students actively build their own knowledge through meaningful learning experiences [6], such as through the Pancasila Student Profile Strengthening Project (*Projek Penguatan Profil Pelajar Pancasila* or P5), which is a characteristic of this curriculum. It emphasizes learner autonomy, critical reflection, and contextual problem-solving rooted in real-life situations. Through P5,

students engage collaboratively in value-based projects that integrate knowledge, skills, and character development in an authentic learning context.

B. Constraints in Curriculum Implementation

Even though it is designed with ideal goals, implementing a new curriculum in the field is never free from challenges. Recent studies have consistently highlighted several key constraints. The most frequent constraints are the readiness and competence of teachers. Many teachers reportedly still need adaptation in designing differentiated learning and formative assessments, which are the core of the Merdeka Curriculum [7]. Limited infrastructure and access to adequate digital learning resources are also obstacles, especially in schools with limited resources [8]. Furthermore, challenges also come from managerial aspects, such as teacher time management, which has become more complex because it has to balance between intracurricular teaching and P5 project facilitation. Teachers often feel burdened by administrative and planning demands that differ from previous curricula, potentially reducing the focus on the quality of teaching-learning interactions [9].

C. Stakeholder Perceptions

The successful implementation of the curriculum is greatly influenced by the perception of the actors in it, especially teachers, as the front line [10]. These perceptions can be both positive and negative and directly affect their adoption rate and commitment. Some teachers have a positive perception, viewing the Merdeka Curriculum as an opportunity to be more creative and innovative in teaching [11]. They feel the autonomy granted allows them to be closer to the needs of students. However, quite a few teachers also have negative perceptions or are skeptical. Feelings of anxiety, confusion, and lack of self-confidence often arise due to socialization, which is considered less massive and assistance that is not optimal. This perception is reinforced by the real constraints they face, so that new curricula are often perceived as an additional burden rather than as a solution.

D. Determining Factors for Success

During various challenges, literature has also succeeded in identifying key factors that support the successful implementation of the Merdeka Curriculum. One of the most crucial factors is the principal's leadership (school leadership). Proactive, supportive, and able principles to facilitate the professional development of teachers have proved to be the main motors of change at the school level [12].

Apart from leadership, a culture of collaboration between teachers through the learning community is another determining factor. When teachers have room to discuss, share good practices, and jointly solve implementation-related problems, they tend to be more confident and competent [13]. Other supporting factors include the availability of clear technical

guidance, ongoing mentoring from supervisors or experts, and active support from parents and school committees.

The synthesis of the various literature shows that the implementation of the Independent Curriculum is a complex process influenced by system readiness, individual capacity, and school organizational dynamics. Although an overview of constraints, perceptions, and success factors has been widely identified, in-depth research on specific contexts, such as the Muhammadiyah school in Bantul, is important. The study will provide a more nuanced understanding of how local organizational and cultural values interact with national education policies, thereby filling gaps in understanding curriculum implementation at the micro level.

Material and Methods

This study employed a qualitative research approach using a descriptive qualitative method to provide an in-depth understanding of how the Merdeka Belajar Curriculum is implemented within Muhammadiyah secondary schools in Kasihan, Bantul, Yogyakarta. A qualitative descriptive design was chosen because it allows the researcher to explore participants' experiences, perceptions, and interpretations in their natural context without imposing theoretical assumptions. This approach is appropriate for examining educational practices that are dynamic, socially constructed, and shaped by local school environments.

A. Research Design and Participants

The research focused on four Civics teachers representing three different types of Muhammadiyah educational institutions: a senior high school (*SMA Muhammadiyah*), a vocational high school (*SMK Muhammadiyah*), and an Islamic junior high school (*Madrasah Tsanawiyah Muhammadiyah*). Participants were selected using purposive sampling, ensuring that the individuals involved had direct experience with the implementation of the Merdeka Belajar Curriculum. Their diverse institutional backgrounds provided a comprehensive view of curriculum enactment at the secondary school level. The object of the research was the process of curriculum implementation as reflected in the teachers' real practices, challenges, and insights.

B. Data Collection Procedures

Data collection relied primarily on semi-structured, in-depth interviews. This technique allowed participants to express their experiences openly while also enabling the researcher to probe specific issues. An interview guideline was prepared as a supporting instrument to maintain consistency across interviews while still permitting flexible exploration of new themes that emerged during conversations.

The interviews were organized around five key indicators relevant to curriculum implementation:

1. Obstacles and challenges experienced by teachers in applying the Merdeka Belajar Curriculum at the secondary school level;
2. Teachers' perceptions of curriculum changes, including their views on the rationale, practicality, and alignment of the new curriculum with student needs;
3. Success and failure factors, examining internal and external elements that influence effective curriculum application;
4. Support and resources, such as training, facilities, institutional assistance, and peer collaboration; and
5. Recommendations for improving the effectiveness and sustainability of implementing the curriculum in Muhammadiyah secondary schools.

Each interview was conducted in a comfortable setting chosen by the participants to encourage openness and minimize disruption to their teaching schedules. With participants' consent, all interviews were audio-recorded to ensure accuracy in the analysis phase.

C. Data Analysis Techniques

The data were analyzed using a thematic analysis framework. The analytical process consisted of three main stages: data reduction, data display, and conclusion drawing. Data reduction involved transcribing the interviews, selecting relevant information, and categorizing responses based on the predetermined indicators as well as emergent themes. During data display, the organized data were arranged into thematic patterns that facilitated interpretation and comparison across participants. The final stage, conclusion drawing, involved synthesizing the recurring themes, identifying relationships among the data, and generating insights into teachers' experiences with the Merdeka Belajar Curriculum.

Throughout this process, the researcher remained attentive to the context in which participants operated, recognizing that curriculum implementation is influenced by institutional culture, teacher competence, administrative support, and resource availability.

D. Validation and Trustworthiness of Data

To ensure validity and trustworthiness, the research employed two key strategies: source triangulation and member checking. Source triangulation was achieved by comparing data from teachers across different school levels and institutional settings, allowing the researcher to identify consistent patterns and minimize bias from any single participant. Member checking was conducted by sharing summaries of interview interpretations with participants to verify accuracy, representativeness, and clarity. This step strengthened the credibility of the findings by ensuring that the interpretations aligned with participants' intended meanings.

Results and Discussion

The research results show that the implementation of the Merdeka Belajar Curriculum in Muhammadiyah schools in the Kasihan area faces several complex obstacles. Civics teachers

at various levels of education revealed that the main obstacle lies in understanding the new curriculum and being ready to adapt a more flexible learning approach. This is confirmed by the findings, which state that depth of material, limited references, and lack of technical training are significant obstacles in the learning process. As stated by the Civics Teacher at SMA Muhammadiyah Kasihan, "obstacles come from the teacher, material, and readiness of facilities and time in implementing new learning strategies".

The perception of the Merdeka Belajar Curriculum in general shows a positive attitude, especially because there is space for freedom in designing the learning process. Nevertheless, this perception depends largely on the experience and understanding of the teacher. Teachers with better training experience and access to resources show higher readiness compared to teachers who only receive information independently or are limited to initial socialization [15]. This suggests that perceptions of curricula are closely linked to the level of institutional support and available resources.



Fig. 1. Implementation of the Independent Curriculum by Muhammadiyah Kasihan High School Teachers

The success factors for curriculum implementation are determined by the readiness of teachers and the leadership role of the principal, as well as consistency in the professional development of teachers. Teacher Civics MTs Muhammadiyah Kasihan stated that "training and assistance from schools is very helpful in understanding the direction of curriculum policy". Meanwhile, success is also influenced by the teacher's ability to integrate character values and local wisdom in Civics learning materials [16], in accordance with the spirit of the Independent Curriculum. As for support and resources, almost all respondents underlined the importance of the availability of contextual teaching materials, ongoing technical training, and moral and administrative support from school principals. Implementation of the new curriculum will be effective when supported by a responsive and collaborative school ecosystem [17].

The relationship between teacher perception, institutional support, and resource availability forms a pattern of mutual influence. Teachers who receive adequate support from institutions tend to have positive perceptions and can overcome implementation constraints [18]. Conversely, the absence of support increases the likelihood of failure to implement the curriculum. Thus, capacity-building of teachers and strengthening of the managerial role of schools [19], is the key to accelerating the success of the Merdeka Belajar Curriculum.

Based on the pedagogical strategy side, Civics teachers who are the subjects of research stated that the Merdeka Belajar Curriculum encourages them to be more creative and innovative in designing learning. However, the transition from conventional learning patterns to project-based approaches and differentiation did not go smoothly without consistent mentoring [20]. Muhammadiyah Middle School teacher Kasihan emphasized that "the lack of training and practical examples makes teachers confused in adapting learning to the character of students". This indicates a gap between the ideal objectives of the curriculum and the practical readiness of teachers in the field.

The disparities are also reinforced by the lack of integration of central policies with local conditions of schools. In many cases, teachers feel like technical implementers without full involvement in planning or evaluating curriculum implementation. In fact, the participation of teachers in the process of preparing educational policies is considered important to ensure the relevance and effectiveness of implementation [21]. So, it is not surprising that some teachers say that "curriculum changes feel too fast and have not been followed by system readiness".

However, the results of this research also show the potential for successful implementation of the Merdeka Belajar Curriculum if provided with appropriate support. Among the most significant supporting factors are practice-based training, collaboration between teachers, and monitoring, which is guiding, not supervising [22]. Muhammadiyah Vocational School teacher Bangunjiwo Kasihan, for example, stated that the active involvement of the principal and technical support made him more confident in preparing teaching modules and implementing formative assessments.

The successful implementation of the Merdeka Belajar Curriculum is the result of complex interactions between teacher understanding, perception of policies, resource readiness, and institutional support. The success of curriculum reform does not depend solely on the content of policies, but on the way these policies are translated into learning practices [23]. This research also confirms that teachers are implementers of the curriculum and agents of change. Therefore, efforts to empower teachers through ongoing training, professional discussion forums, and inclusive policy support are very important. If not, then the Merdeka

Belajar Curriculum has the potential to just become a slogan without any real transformation in the classroom.

The research results also show that the level of success in implementing the Merdeka Belajar Curriculum is greatly influenced by the teacher's ability to reflect on the learning process that has been carried out. Teachers who can reflect on obstacles, adjust strategies, and develop innovative approaches tend to be more adaptive in implementing this curriculum [24]. For example, MTs Muhammadiyah teacher Kasihan said that even though it was difficult at first, he began to get used to doing project-based learning and involving students in contextual activities after trying several different approaches and discussing with colleagues.



Fig. 2. Civics MTs Muhammadiyah Kasihan teacher is using project-based learning

This shows that collaboration spaces between teachers are becoming important as a vehicle for joint learning and exchanging good practices. The teacher learning community contributes greatly to building teachers' capacity to adapt to curriculum changes [25]. Unfortunately, not all schools provide space and time for this kind of collaborative activity. Teachers tend to work individually in developing teaching modules and assessments, which ultimately slows down the process of adaptation to the new curriculum.

Apart from that, the Merdeka Belajar Curriculum emphasizes the importance of formative assessment and differentiated learning. However, from findings in the field, teachers still have difficulty implementing these two concepts fully. Muhammadiyah Vocational School teacher Bangunjiwo, for example, said that he still had difficulty mapping students' learning needs due to limited time and initial learning data. In fact, formative assessment is a key element in supporting student-aligned learning and can be used to design more effective teaching strategies [26].

This condition shows the need for more intensive and systematic assistance, especially in operationalizing the main principles in the Merdeka Belajar Curriculum into concrete

classroom practice. Local governments and educational institutions need to be more active in facilitating practice-based training, accompanied by ongoing evaluation. In the absence of structured and relevant interventions, teachers will tend to return to the old pattern of learning oriented solely towards content, rather than towards the development of students' competences and character in the spirit of this curriculum.

Thus, the findings of this study confirm the importance of teachers' conceptual understanding of the curriculum and emphasize the need for continuous and responsive systemic support. The Merdeka Belajar Curriculum will find it difficult to achieve its goals without comprehensive improvements in teacher training mechanisms, providing relevant resources, and strengthening the learning ecosystem that encourages innovation and collaboration. In line with the views of Kandiko Howson & Kingsbury [27], curriculum transformation requires changing the culture of educational organizations, not just changing curriculum documents.

Table 1. Interconnectedness of Issues in the Implementation of the Merdeka Curriculum

No.	Studied Problem	Cause/ Related Factor	Impact/ Consequence	Supporting Factor/ Solution
1	Obstacles in Teacher Understanding and Readiness	The primary obstacles include a lack of in-depth understanding of the new curriculum, limited references and technical training, and the suboptimal readiness of facilities and time.	As a result, the overall learning process is hampered, and teachers find it difficult to apply new, more flexible learning approaches.	The solution requires intensive training and continuous mentoring provided by the school, combined with strong leadership support from the principal.
2	Teacher Perception Depends on Institutional Support	A teacher's perception is heavily influenced by their training experience and access to resources, which is often compounded by a general lack of institutional support.	This directly leads to lower readiness among teachers with minimal support and increases the potential for the curriculum's implementation to fail.	Effective solutions include providing robust institutional support, both moral and administrative, and ensuring the provision of relevant resources like teaching materials.
3	Difficulty Transitioning from Conventional to Project-Based & Differentiated Learning	The difficulty in transitioning is caused by a persistent conventional mindset, a lack of consistent mentoring, and a scarcity of practical examples for teachers to follow.	This leaves many teachers feeling confused about how to adapt learning effectively, creating a noticeable gap between the curriculum's ideal goals and actual classroom practice.	A multi-faceted approach is needed, centered on consistent mentoring, practice-based training, and the establishment of collaborative discussion forums for teachers.

No.	Studied Problem	Cause/ Related Factor	Impact/ Consequence	Supporting Factor/ Solution
4	Gap Between Central Policy and Local Conditions	A significant gap exists because teachers are often not fully involved in the planning and evaluation stages, and they perceive the curriculum changes as being too rapid for the system to adapt.	This disconnect causes teachers to feel like mere technical implementers rather than valued professionals, which diminishes the relevance and effectiveness of the implementation.	To bridge this gap, it is crucial to actively involve teachers in the policy-making process and to adjust central policies to the real conditions of diverse schools.
5	Difficulty Implementing Formative Assessment & Differentiated Learning	The main causes for this difficulty are severe time constraints and a lack of reliable initial data to accurately map student learning needs.	This results in learning that is often not aligned with individual student needs and creates a strong tendency for teachers to revert to older, content-oriented teaching patterns.	The solution is to provide more intensive and systematic assistance to teachers, including practice-based training facilitated by local governments or institutions.
6	Lack of Collaboration and Reflection Among Teachers	This issue is caused by schools not providing the necessary dedicated space and time for collaborative activities, which leads to teachers working in isolation.	This lack of collaboration significantly slows down the curriculum adaptation process and causes teachers to miss invaluable opportunities to learn from their peers' best practices.	The key is to proactively build and nurture teacher learning communities and to foster a school culture that values professional discussion and reflection.
7.	Potential for the Curriculum to Become Just a Slogan	This risk arises when the implementation is not supported by genuine systemic change and when teacher empowerment is treated as a one-time event rather than a continuous process.	If unaddressed, no real transformation will occur in the classroom, and the curriculum's primary goals for student competency and character development will not be achieved.	Averting this requires a commitment to continuous teacher empowerment and, more broadly, a fundamental change in the culture of the educational organization itself.

Conclusion

This research concludes that the implementation of the Merdeka Belajar Curriculum in Muhammadiyah Kasihan schools faces various obstacles, especially in terms of curriculum understanding, limited resources, and a lack of practical training for teachers. Nonetheless, teachers' perceptions of the curriculum are generally positive, particularly when supported by participatory school leadership and adequate system support. Successful implementation is largely determined by the interaction between teacher readiness, the quality of institutional support, and the availability of relevant learning tools. The findings confirm the importance of empowering teachers through continuous training and professional collaboration as a strategic effort to bridge the gap between policy and practice in the field.

Conflict of Interest

The author declares that there is no conflict of interest.

References

[1] Kemdikbud, *Kebijakan Implementasi Kurikulum Merdeka: Tantangan dan Solusi (Kebijakan Implementasi Kurikulum Merdeka: Tantangan dan Solusi*). Jakarta: Kementerian Pendidikan dan Kebudayaan, 2023.

[2] N. Wahlström, "Curriculum Policy, Teaching, and Knowledge Orientations," *Teach. Teach. Theory Pract.*, vol. 29, no. 3, pp. 259–275, 2023.

[3] S. N. Kamila and A. H. Agus RM, "Implementation of Merdeka Curriculum in Improving the Quality of Senior High School," *J. Educ. FKIP UNMA*, vol. 9, no. 1, pp. 394–401, 2023.

[4] A. Haque and S. A. David, "Effective Curriculum Implementation for Optimal Teaching and Learning Experience: A Study from A Private School in Dubai," *Int. J. Curric. Instr.*, vol. 15, no. 1, pp. 1–20, 2022.

[5] Kementerian Pendidikan Kebudayaan Riset dan Teknologi, *Keputusan Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Nomor 262/M/2022 tentang Perubahan atas Keputusan Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Nomor 56/M/2022 tentang Pedoman Penerapan Kurikulum dalam Rangka Pemulihan Pembelajaran (Decree of the Minister of Education, Culture, Research and Technology Number 262/M/2022 concerning Amendments to the Decree of the Minister of Education, Culture, Research and Technology Number 56/M/2022 concerning Guidelines for Implementing the Curriculum in the Context of Learning Recovery)*. Jakarta, Indonesia: Kemendikbudristek, 2022.

[6] S. Wibowo, M. N. Wangid, and F. M. Firdaus, "The Relevance of Vygotsky's Constructivist Learning Theory with the Differentiated Learning Primary Schools," *J. Educ. Learn.*, vol. 19, no. 1, pp. 431–440, 2025, doi: 10.11591/edulearn.v19i1.21197.

[7] I. L. Kusuma, E. Khasanah, and Sukirman, "Teachers' Perceptions of the Implementation of the Merdeka Curriculum at SMA Muhammadiyah 5 Yogyakarta," *Edulab Maj. Ilm. Lab. Pendidik.*, vol. 9, no. 2, pp. 297–317, 2024.

[8] I. Komala, Y. A. Wardani, A. Khairiyah, and B. Arifin, "Resource Constraints: Teachers' Challenges in Implementing Digital Curriculum in Remote Areas," *J. Soc. Sci. Educ. Res.*, vol. 2, no. 3, pp. 152–162, 2025.

[9] K.-N. Kim, "Teachers' administrative workload crowding out instructional activities," *Asia Pacific J. Educ.*, vol. 39, no. 1, pp. 1–19, 2019.

[10] M. Park and Y.-K. Sung, "Teachers' Perceptions of the Recent Curriculum Reforms and Their Implementation: What can we learn from the case of Korean elementary teachers?," *Asia Pacific J. Educ.*, vol. 33, no. 1, 2013.

[11] A. P. Hura, "Teachers' Perception Towards Curriculum Change in Indonesia," *Bhinneka J. Bintang Pendidik. dan Bhs.*, vol. 2, no. 2, pp. 12–20, 2024, [Online]. Available: https://doi.org/10.59024/bhinneka.v2i2.691

[12] F. X. Gamaliel and B. S. Widodo, "Kepemimpinan Transformasional Kepala Sekolah dalam Upaya Peningkatan Mutu Profesionalisme Guru (Transformational Leadership of School Principals in Efforts to Improve the Quality of Teacher Professionalism)," *J. Din. Manaj. Pendidik.*, vol. 8, no. 2, pp. 100–110, 2024.

[13] S. Lakkala, A. Galkienė, J. Navaitienė, T. Cierpiałowska, S. Tomecek, and S. Uusiautti, "Teachers Supporting Students in Collaborative Ways—An Analysis of Collaborative Work Creating Supportive Learning Environments for Every Student in A School: Cases from Austria, Finland, Lithuania, and Poland," *Sustain.*, vol. 13, no. 5, pp. 1–20, 2021, doi: 10.3390/su13052804.

[14] J. W. Creswell, *Research Design: Pendekatan Kualitatif, Kuantitatif, dan Mixed (Qualitative, Quantitative, and Mixed Approaches)*, Tiga. Yoyakarta: Pustaka Pelajar, 2010.

[15] M. Sayed and K. A. Afzal, "Teaching and Learning Process to Enhance Teaching Effectiveness: A Literature Review," *Int. J. Humanit. Innov.*, vol. 4, no. 1, pp. 1–4, 2021.

[16] L. Henderson, "Curriculum Integration of Citizenship Education in Schools: The Importance of Relevance and Creativity," *Curric. Perspect.*, vol. 39, no. 1, pp. 63–71, 2019.

[17] E. A. Nevenglosky, C. Cale, and S. Panesar Aguilar, "Barriers to Effective Curriculum Implementation," *Res. High. Educ. J.*, vol. 36, no. 1, pp. 112–134, 2019.

[18] I. Acun, M. Demir, and N. L. Goz, "The Relationship Between Student Teachers' Citizenship Skills and Critical Thinking Skills," *J. Soc. Stud. Educ. Res.*, vol. 1, no. 1, pp. 107–123, 2010.

[19] E. A. Abedi and A. K. Ametepey, "Leadership Practices and Support Structures Enabling Teachers'

Informal Learning for Educational Technology Use: An Appreciative Inquiry Approach," *Prof. Dev. Educ.*, pp. 1–15, 2024, doi: 10.1080/19415257.2024.2330973.
[20] T. Sukmayadi, A. Abdulkarim, K. Komalasari, and M. Halimi, "Conceptual Model of Citizenship Learning Projects Based on Data Literacy in Citizenship Education Course," in *Proceedings of the 4th Annual Civic Education Conference (ACEC 2022)*, 2023, pp. 659–667.
[21] M. Marić, M. Sakač, V. Lipovac, S. Nikolić, J. Raičević, and M. Saračević, "Teachers and Social Learning As a Factor of Modern Educational Competencies," *Bulg. J. Sci. Educ. Policy*, vol. 11, no. 2, pp. 233–245, 2017.
[22] M. van Geel, T. Keuning, and I. Safar, "How Teachers Develop Skills for Implementing Differentiated Instruction: Helpful and Hindering Factors," *Teach. Teach. Educ. Leadersh. Prof. Dev.*, vol. 1, pp. 1–11, 2022.
[23] G. Karakuş, "A Literary Review on Curriculum Implementation Problems," *Shanlax Int. J. Educ.*, vol. 9, no. 3, pp. 201–220, 2021.
[24] M. S. Ribble, G. D. Bailey, and T. W. Ross, "Digital Citizenship: Addressing Appropriate Technology Behavior," *Learn. Lead. with Technol.*, vol. 32, no. 1, pp. 6–12, 2004.
[25] A. Aytaç, "A Study on Teachers' Perceptions of Curriculum Changes," *Int. J. Innov. Approaches Educ.*, vol. 7, no. 1, pp. 28–41, 2023.
[26] C. Ozan and R. Y. Kıncal, "The Effects of Formative Assessment on Academic Achievement, Attitudes Toward The Lesson, and Self-Regulation Skills," *Kuram ve Uygulamada Egit. Bilim.*, vol. 18, no. 1, pp. 85–118, 2018, doi: 10.12738/estp.2018.1.0216.
[27] C. Kandiko Howson and M. Kingsbury, "Curriculum Change As Transformational Learning," *Teach. High. Educ.*, vol. 28, no. 8, pp. 1847–1866, 2023, doi: 10.1080/13562517.2021.1940923.

Authors



Trisna Sukmayadi is an academic and permanent lecturer dedicated to the Pancasila and Civic Education Study Program at the Faculty of Teacher Training and Education, Universitas Ahmad Dahlan, Indonesia. He is widely known for his expertise in the field of PPKn Learning Strategies, which is a major focus in his academic and research career. (email: trisnasukmayadi@ppkn.uad.ac.id).



Sumaryati has a master's degree in philosophy and a PhD in philosophy from Universitas Gadjah Mada. She is currently working as a Professor in the Faculty of Teacher Training and Education, Universitas Ahmad Dahlan, Indonesia. She has expertise in philosophy of morals, especially in philosophy of value, and the education of national character. Anti-corruption counseling is her additional competency. (email: sumaryati@ppkn.uad.ac.id).



Ali Tarmuji is an academic and permanent lecturer dedicated to the Informatics Study Program at the Faculty of Industrial Technology, Universitas Ahmad Dahlan, Indonesia. He is widely known for his expertise in the fields of Software Engineering (Software Engineering), Mobile Programming, and Information Systems, which is the focus of his academic and research career. (email: alitarmuji@tif.uad.ac.id).