

## Teachers' Perceptions of the Implementation of the Merdeka Curriculum at SMA Muhammadiyah 5 Yogyakarta

Ica Lalitya Kusuma<sup>✉</sup>

Universitas Ahmad Dahlan, Indonesia

Enung Khasanah

Universitas Ahmad Dahlan, Indonesia

Sukirman

Universitas Ahmad Dahlan, Indonesia

### ABSTRACT

**Purpose** – This study explores teachers' perceptions of the implementation of the Merdeka Curriculum at SMA Muhammadiyah 5 Yogyakarta. It aims to identify challenges and conveniences faced by teachers during its application, focusing on how the curriculum's core principles align with modern educational needs.

**Design/methods/approach** – A qualitative descriptive approach was used, collecting data through semi-structured questionnaires completed by 21 teachers from various disciplines. The responses were analyzed thematically to highlight significant themes related to curriculum adaptation and execution.

**Findings** – Key conveniences identified include enhanced teacher collaboration (33% of teachers reported positive experiences), relevance of teaching materials to students' real lives (19% of teachers appreciated this aspect), effective facilitation of the "Proyek Penguatan Profil Pancasila" (P5) (29% highlighted the benefits), and streamlined instructional content (19% acknowledged its positive impact). Conversely, challenges include implementing differentiated learning (24% of teachers found this particularly challenging), preparing for P5 (19% of teachers reported difficulties), developing the Alur Tujuan Pembelajaran (ATP) (14% of teachers faced difficulties in developing ATP), and understanding students' individual characteristics (24% of teachers faced challenges in this area). These findings present areas requiring further support and emphasize the curriculum's transformative potential.

**Research implications/limitations** – The study is limited to one institution with a relatively small sample size. Findings suggest successful curriculum implementation requires improved teacher training, resources, and structured guidance, especially for differentiated learning and P5 management.

**Originality/value** – This research contributes to the limited literature on Kurikulum Merdeka in Indonesia. It provides insights for policymakers and practitioners to optimize teacher readiness and resource allocation, enhancing the curriculum's impact on teaching efficacy and student outcomes.

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**CONTACT:** <sup>✉</sup>[ichz.tamz11@gmail.com](mailto:ichz.tamz11@gmail.com)

## Introduction

The implementation of the Merdeka Curriculum policy by the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia marks a significant milestone in the transformation of the national education system (Utami et al., 2022). As of 2024, the implementation of the Merdeka Curriculum has reached more than 95% of formal educational institutions in Indonesia, indicating near-universal adoption across various educational levels (Kemdikbudristek, 2024). This curriculum is designed to provide learning flexibility, enhance students' independence, and foster their holistic potential development (Tans et al., 2022; Tuerah & Tuerah, 2023). Moreover, the project-based approach and differentiated learning, which form the core of the Merdeka Curriculum, are expected to create a learning environment that is more relevant to students' needs in the modern era (Ritonga et al., 2024).

In practice, the transition from the 2013 Curriculum to the Merdeka Curriculum has not always been smooth. As the frontline implementers of the curriculum, teachers face various challenges, including adapting to the new learning structure, mastering new teaching methods, and developing instructional materials that align with the principles of the Merdeka Curriculum (Amnita & Murniarti, 2024; Ramadhan, 2023). From the perspective of Tyler's (2013) curriculum development theory, the implementation of the Merdeka Curriculum must consider the alignment between educational objectives, learning experiences, instructional organization, and evaluation.

One of the key aspects of this implementation is the development of Learning Objective Flow (Alur Tujuan Pembelajaran, ATP), which poses a challenge for teachers in translating curriculum objectives into structured learning activities. This adaptation process requires training support and flexible policies to enhance teachers' readiness in facing significant changes (Qomariyah & Maghfiroh, 2022; Fahlevi, 2022). Studies have shown that teachers' involvement in the planning and implementation of a new curriculum plays a crucial role in determining its success, particularly in the context of senior high school education (Damayanti, 2023).

Previous studies have shown that the successful implementation of a new curriculum is highly influenced by teachers' readiness and perceptions of the policy. For example, Rofi'ah et al. (2024) stated that teachers' preparedness in facing curriculum changes is a crucial factor affecting the success of implementation. A positive perception of the new policy also plays a significant role in determining the extent to which teachers can adapt their teaching methods to align with the principles of the implemented curriculum. This aligns with the findings of Mantra et al. (2022), who revealed that teachers with a positive perception and a deep understanding of the curriculum tend to be more prepared for its implementation.

Factors such as training support, technical guidance, and resource availability serve as key variables influencing teachers' readiness. Another study by Rahayuningsih & Hanif (2024) also highlighted that the success of implementation depends on the extent to which teachers understand and support the principles of differentiated learning and character reinforcement through the Pancasila Student Profile Project. Additionally, administrative support and school facilities contribute to the effective implementation of this curriculum.

In the Merdeka Curriculum, the concepts of Project-Based Learning and differentiated instruction require teachers to possess adequate managerial and pedagogical skills to support a more personalized and relevant learning process (Ambarita & Simanullang, 2023). Putri & Nuvitalia (2024) stated that the project-based learning

approach within the framework of the Merdeka Curriculum has successfully enhanced students' communication skills, particularly through strategies that integrate project-based learning with differentiation principles. This underscores the importance of teachers' adaptation to new methods to ensure more effective learning.

Sakti & Ainiyah (2024) also found that project-based differentiated learning can improve students' learning outcomes in the context of 21st-century education, particularly by providing teachers with the flexibility to adjust instructional strategies according to individual student needs. Their study also highlights the technical challenges faced by teachers, such as time management and the complexity of lesson design. Meanwhile, Halimah (2023) emphasized that differentiated instruction in the implementation of the Merdeka Curriculum policy provides opportunities to accommodate students' diverse characteristics. However, this approach requires additional effort from teachers to deeply understand students' needs and design materials that align with their real-life contexts.

These references indicate that teachers' technical readiness and mental attitudes are crucial elements in ensuring that the new curriculum can be effectively implemented and provide maximum benefits for students. However, most existing studies do not specifically highlight the challenges faced by private schools, which have different resource conditions compared to public schools, such as SMA Muhammadiyah 5 Yogyakarta. Therefore, this study aims to bridge this gap by exploring local factors that influence curriculum implementation in private schools.

SMA Muhammadiyah 5 Yogyakarta is one of the private schools that has actively implemented the Merdeka Curriculum since the 2023/2024 academic year. As an educational institution committed to improving learning quality, this school faces unique challenges not encountered by public schools, such as operational funding constraints and limited facilities. Nevertheless, SMA Muhammadiyah 5 Yogyakarta has significant potential for adopting the Merdeka Curriculum, supported by strong internal backing and the commitment of its educators. Therefore, it is essential to explore teachers' experiences in overcoming challenges and identifying solutions that can be applied to schools with similar conditions.

Unlike previous studies, which have primarily examined the implementation of the Merdeka Curriculum on a broader or national scale, this research offers a more in-depth and contextual perspective by focusing on teachers' experiences at SMA Muhammadiyah 5 Yogyakarta. This study is particularly significant due to the limited number of studies focusing on the implementation of the Merdeka Curriculum in private schools. Most prior research has primarily reviewed public schools, which generally receive greater institutional support.

Therefore, this study aims to identify specific factors influencing teachers' readiness in private schools and provide recommendations applicable to similar contexts. By doing so, this research is expected to expand insights into more inclusive implementation strategies within Indonesia's educational landscape. The primary focus of this study is to explore teachers' perceptions of the implementation of the Merdeka Curriculum, highlighting the challenges and facilitators they experience.

Through this study, a deeper understanding of the challenges and advantages of implementing the Merdeka Curriculum at SMA Muhammadiyah 5 Yogyakarta is expected to be gained. Furthermore, the study aims to provide strategic recommendations for policymakers and educational institutions to strengthen the curriculum's implementation in schools with similar characteristics.

## Methods

### 1. Research Design

This study employs a descriptive qualitative approach to explore teachers' perceptions of the implementation of the Merdeka Curriculum at SMA Muhammadiyah 5 Yogyakarta. This approach was chosen as it allows researchers to gain an in-depth understanding of participants' experiences, including both the challenges and facilitators they encountered during the curriculum implementation. A descriptive qualitative approach enables researchers to develop a deeper comprehension of the phenomenon within a specific context (Sanjaya, 2014; Creswell & Poth, 2016; Sukmadinata, 2019).

### 2. Population and Sample of Research

The population of this study consists of all teachers at SMA Muhammadiyah 5 Yogyakarta who have been implementing the Merdeka Curriculum since the 2023/2024 academic year. Out of a total of 24 teachers at the school, 21 were selected as research participants, while three were excluded as they were not directly involved in the development of Learning Objective Flow (ATP) or Project-Based Learning (P5). The sample was selected using purposive sampling, with the criteria that teachers must have implemented the Merdeka Curriculum for at least one academic year, participated in the development of ATP and P5, and represented various subjects to ensure a broader perspective on curriculum implementation.

The characteristics of the respondents in this study include an age range of 24 to 50 years, teaching experience ranging from 2 to 25 years, and an educational background of at least a bachelor's degree (S1), with some teachers holding a master's degree (S2) in education. Based on the subjects taught, 14 teachers specialize in general subjects (Civics, Science, Social Studies, Indonesian Language, English, and Mathematics), 4 teachers focus on religious and character education subjects (ISMUBA), and 3 teachers teach Physical Education, Arts and Culture, and local content subjects.

### 3. Data Collection Techniques

Data collection was conducted through a Google Form questionnaire designed to address semi-structured interview questions. The questionnaire was developed based on key indicators from Tyler's theory, focusing on (1) teachers' readiness in understanding the Merdeka Curriculum, (2) challenges in implementing differentiated instruction, (3) the execution of curriculum-based projects (P5), and (4) the facilitators and barriers in designing the Learning Objective Flow (ATP). The questionnaire was distributed via Google Form to allow participants greater flexibility in responding. Before completing the questionnaire, participants were provided with an explanation of the research objectives and asked to voluntarily give their consent.

Since Google Forms have limitations in capturing in-depth information, follow-up interviews were conducted with five key informants using probing techniques to further explore their responses. The interviews aimed to gain deeper insights into teachers' experiences, particularly regarding difficulties in differentiated instruction and curriculum-based projects, as well as how they adapted learning activities to the ATP framework.

Additionally, direct classroom observations were carried out to understand how teachers implemented the principles of the Merdeka Curriculum in their teaching practices. The observations focused on differentiated learning strategies, the application of curriculum-based projects (P5), and student engagement in the learning process. The data collected were recorded using a structured observation sheet and analyzed alongside interview data to enhance the validity of the research findings.

#### 4. Instrument Validity

The validity of the research instruments was assessed through expert judgment, involving two curriculum experts and one education practitioner who reviewed the questionnaire items and interview guidelines before their implementation. This process aimed to ensure that the research instruments effectively measured relevant aspects of the Merdeka Curriculum's implementation. To further enhance research validity, data triangulation was conducted by comparing findings from the questionnaire, interviews, and classroom observations.

#### 5. Data Analysis

Data analysis was carried out using the thematic analysis approach developed by Braun & Clarke (2013) with the aid of Atlas.ti software. The analysis followed six stages: (1) familiarizing with the data by rereading questionnaire and interview transcripts, (2) coding the data by identifying key patterns, (3) searching for themes based on groups of similar codes, (4) reviewing themes within Atlas.ti to ensure data validity, (5) defining and naming themes based on research findings, and (6) reporting the data by interpreting findings in relation to curriculum theory and educational challenges.

By utilizing Atlas.ti, the coding process was conducted more systematically, allowing for a more precise identification of patterns and relationships between themes.

To ensure the validity of the analysis results, several measures were undertaken. Cross-checking among researchers was conducted, in which coding results and themes identified in Atlas.ti were independently reviewed by multiple researchers. Additionally, methodological triangulation was performed by comparing data from questionnaires, interviews, and classroom observations to enhance the accuracy of the findings.

In this study, the researchers acted as active observers, particularly during the interview and classroom observation processes, to gain a deeper understanding of the implementation of the Merdeka Curriculum.

The study was conducted over four months, from August to November 2024, with the following stages:

- a. August–September 2024: Distribution of questionnaires and initial data collection.
- b. October 2024: In-depth interviews and classroom observations.
- c. November 2024: Data analysis and interpretation of research findings.

This structured approach ensured a systematic and comprehensive examination of teachers' experiences in implementing the Merdeka Curriculum.

## Result

The implementation of the Merdeka Curriculum at SMA Muhammadiyah 5 Yogyakarta provides in-depth insights into the adaptation dynamics experienced by teachers. Teachers have diverse experiences in adapting to this curriculum, both in terms of the facilitating factors and the challenges they encounter during the learning process. The implementation of the Merdeka Curriculum not only influences teaching strategies but also requires adjustments in lesson planning, collaboration among teachers, and student engagement in the learning process.

The research findings indicate that teachers' initial experiences in implementing the Merdeka Curriculum vary. The majority of teachers (28.6%) found the implementation engaging and enjoyable, while an equal percentage (28.6%) felt challenged during the initial phase of adoption. This suggests the need for further support, particularly in the adaptation process and initial understanding of the curriculum. The detailed distribution of teachers' responses regarding their initial experiences with the implementation of the Merdeka Curriculum is presented in the following table:

**Table 1**

### Distribution of Teachers' Feelings During the Initial Implementation of the Merdeka Curriculum

Feeling Category	Number of Teachers	Percentage
Engaging/Enjoyable	6	29%
Challenged	6	29%
Difficult/Confusing	4	19%
No Difference	3	14%
Less Enthusiastic	2	9%

After some time implementing the Merdeka Curriculum, the majority of teachers (61.9%) reported that they began to find it easier to adapt. This suggests that with experience and better understanding, teachers can adjust to the changes introduced by the curriculum. However, 14.3% of teachers still found the implementation challenging, indicating the need for further evaluation and support to enhance curriculum adoption. The details of the teachers' changing perceptions toward the Merdeka Curriculum are presented in the following table.

**Table 2**

### Distribution of Teachers' Feelings After Implementing the Merdeka Curriculum at SMA Muhammadiyah 5 Yogyakarta

Feeling Category	Number of Teachers	Percentage
Easier	13	62%
Remained the Same	5	24%
More Difficult	3	14%

In this study, 21 teachers at SMA Muhammadiyah 5 Yogyakarta were asked to share the ease and challenges they experienced while implementing the Merdeka Curriculum. The teachers were interviewed regarding various aspects that influenced the curriculum implementation process, including both positive experiences and challenges they faced.

The interview findings provided insights into the factors that facilitated or hindered the implementation of the curriculum in the school.

The ease of implementing the Merdeka Curriculum at SMA Muhammadiyah 5 Yogyakarta was reflected in several aspects that supported curriculum adaptation. These factors included teacher collaboration, the relevance of learning materials to students' real-life contexts, guidance in the Strengthening the Profile of Pancasila Students (P5) Project, and the simplification of teaching materials. The following table presents the distribution of ease factors perceived by the teachers:

**Table 3**

**Ease of Implementing the Merdeka Curriculum at SMA Muhammadiyah 5 Yogyakarta**

Ease Category	Number of Teachers	Percentage
Teacher Collaboration	7	33%
Relevance of Materials to Students' Real-Life Contexts	4	19%
Guidance in the P5 Project	6	29%
Simplification of Teaching Materials	4	19%

The main challenges in implementing the Merdeka Curriculum include the preparation of the P5 project and understanding student characteristics, which were experienced by the majority of teachers. Additionally, differentiated instruction and the development of Learning Outcome Achievement Plans (ATP) also posed challenges in the implementation process. However, some teachers reported that they did not experience significant difficulties. The distribution of teachers' challenges is presented in the following table:

**Table 4**

**Challenges in Implementing the Merdeka Curriculum at SMA Muhammadiyah 5 Yogyakarta**

Challenge Category	Number of Teachers	Percentage
Differentiated Instruction	5	24%
P5 Project Development	4	19%
Development of ATP	3	14%
Understanding Student Characteristics	5	24%
No Significant Challenges	4	19%

Based on the data analysis gathered from teachers at SMA Muhammadiyah 5 Yogyakarta, two main themes emerged, reflecting their experiences in implementing the Merdeka Curriculum.

**1. Ease of Implementing the Merdeka Curriculum**

The findings indicate that teachers at SMA Muhammadiyah 5 Yogyakarta identified several aspects that facilitated the implementation of the Merdeka Curriculum. These aspects include teacher collaboration, the relevance of learning materials to students' real-life experiences, support in the Strengthening Pancasila Student Profile Project (P5), and the simplification of learning materials.

**1.1. Teacher Collaboration**

Teacher collaboration was recognized as a key factor that facilitated the implementation of the Merdeka Curriculum. Teachers acknowledged that working together with colleagues provided significant support in developing lesson plans and conducting learning activities, including the P5 project.

Collaboration played a crucial role in creating a more integrated learning process. Teachers were able to exchange ideas on teaching methods and design learning activities aligned with the objectives of the Merdeka Curriculum. For instance, joint planning of P5 projects enabled a more coordinated and applied teaching approach, allowing students to see connections between various subjects and apply their knowledge in real-world situations. This not only improved teaching quality but also positively impacted students' comprehension and curriculum goal achievement, emphasizing skill-based learning.

Respondent P2 stated:

*"Collaboration among teachers is very helpful because we can share experiences and strategies."*

Meanwhile, Respondent P18 added that teacher discussions made the curriculum preparation and implementation process more efficient:

*"Discussions with fellow teachers speed up the preparation and implementation of P5, making everything feel lighter."*

The support from colleagues also accelerated teachers' adaptation to new elements of the Merdeka Curriculum. Collaboration allowed teachers to exchange ideas and share experiences, particularly in adopting methods that differed from previous curricula.

Moreover, this teamwork helped teachers manage what were previously seen as heavy workloads, leading to a more structured and efficient preparation process. The active involvement of teachers in supporting each other fostered a positive working environment, where every teacher felt empowered to navigate the challenges of the new curriculum.

In summary, teacher collaboration not only facilitated the curriculum's implementation but also improved student learning outcomes. With a more coordinated approach, students benefited from a more cohesive learning experience, where they could see the real-world applications of different subjects. To further optimize the role of collaboration, integrating project-based learning (PBL) strategies and more frequent collaborative training sessions is recommended. This would enable teachers to continuously adapt to the evolving curriculum, aligning with the Merdeka Curriculum's goal of developing students' competencies holistically.

## 1.2. Relevance of Learning Materials to Students' Real-Life Experiences

Teachers at SMA Muhammadiyah 5 Yogyakarta acknowledged that the Merdeka Curriculum is designed to be more relevant to students' real-life experiences. This aspect was considered a key facilitator in delivering lessons in the classroom. Teachers believed that this relevance enhanced students' comprehension, as they could easily relate the theories taught to their everyday experiences.

The alignment of learning materials with real-world contexts not only improved students' understanding but also accelerated their grasp of key concepts. By linking theory with practice, students could comprehend and apply knowledge more quickly.



This approach also made learning more engaging and meaningful, as students saw the practical benefits of what they were studying. This aspect strongly supports the Merdeka Curriculum's emphasis on contextual learning, which aims to equip students with applicable skills for life beyond school.

Respondent P9 highlighted:

*"Materials that are adapted to students' daily lives make learning more interesting."*

Beyond making lessons more engaging, the relevance of the materials also enhanced student participation in the classroom. Teachers observed that students were more active and enthusiastic when lessons connected academic concepts with real-world applications. This had a positive impact on students' involvement throughout the learning process.

Respondent P7 shared a similar sentiment:

*"The simplified materials make classroom delivery much easier."*

This approach enabled teachers to explain abstract concepts more effectively by providing concrete and relatable examples. Additionally, teachers found that the relevance of the materials reduced the need for additional modifications, allowing them to focus more on enhancing the quality of instruction.

With more targeted and contextualized learning materials, teachers were able to create meaningful learning experiences, where students not only absorbed information but also understood its practical applications. To further optimize this approach, teachers could be empowered to incorporate more hands-on and interactive learning experiences that directly relate to students' lives. For instance, integrating community-based projects or real-world challenges relevant to the subjects taught. This strategy would not only help students develop practical skills but also reinforce the Merdeka Curriculum's goals, which emphasize relevant and applicable learning.

### 1.3. Mentoring in P5 Implementation

Another key advantage reported by teachers in the implementation of the Merdeka Curriculum is the mentoring process for students during the Pancasila Student Profile Strengthening Project (P5). While the preparation phase of P5 requires considerable time and effort, many teachers found that conducting the project in the classroom was relatively easier than the preparation itself.

P5 mentoring allows students to engage in active, independent, and project-based learning. Through this project, students are given the freedom to develop their creativity and collaborative skills, which are essential for 21st-century competencies. Teachers observed that detailed instructions were not always necessary, as students were already capable of working independently within their groups. This indicates that project-based learning has a positive impact on fostering student independence.

Respondent P18 stated:

*"Mentoring P5 activities is easier because students can already work independently in groups."*

Student independence emerged as a crucial factor in the successful facilitation of P5. Teachers found that minimal guidance was needed once students understood the project objectives and workflow.

Respondent P10 added:

*"Students appear more creative and independent in carrying out P5 compared to conventional teaching methods."*

Teachers also noted that P5 provides students with opportunities to explore creative ideas and collaborate effectively with their peers. This not only enriches the student learning experience but also makes it easier for teachers to supervise activities. With this project-based approach, students become active learners, while teachers act as facilitators, offering guidance only when needed.

Additionally, P5 mentoring strengthens teacher-student interactions, creating a more harmonious and productive learning environment. Teachers felt that this approach helped them better understand students' individual characteristics and potential, ultimately supporting more personalized learning outcomes.

To further optimize the effectiveness of P5 mentoring, teachers should be equipped with training programs on group dynamics management and effective facilitation techniques. This would enable them to enhance student collaboration processes, ensuring that learning outcomes are maximized while maintaining the core objectives of the Merdeka Curriculum.

#### 1.4. Simplification of Learning Materials

Another ease experienced by teachers in implementing the Merdeka Curriculum is the simplification of learning materials. Teachers noted that the more concise and focused curriculum content facilitates the teaching process. Additionally, it allows more time to explore essential aspects that were previously difficult to cover due to an overloaded curriculum.

The simplification of learning materials enables teachers to focus on core concepts that are most relevant to students. With more structured and focused materials, teachers can deliver lessons in greater depth, ensuring students have sufficient time to grasp complex topics. This aligns with the goals of the Merdeka Curriculum, which emphasizes meaningful and applicable learning. It also allows students to thoroughly understand and master the content without feeling overwhelmed by excessive, less relevant information.

Respondent P2 expressed:

*"The condensed material makes teaching easier and minimizes student confusion."*

With this simplification, teachers find it easier to explain concepts without rushing through the available content. Moreover, this approach allows for more interactive and creative teaching methods, such as group discussions or project-based learning.

Respondent P7 added:

*"I can focus more on teaching essential aspects because the material is more streamlined."*

The simplification of learning materials contributes to better student learning outcomes by providing more time to focus on mastering key concepts. When learning materials are structured and relevant, students can engage in deeper and more applicable learning, leading to faster comprehension of lesson content.

This approach aligns with the Merdeka Curriculum's emphasis on deep and relevant learning, helping students develop critical thinking, analytical, and creative skills that can be applied in real-life situations. To maximize the benefits of material simplification, it is essential for teachers to be more innovative in designing learning activities that not only emphasize core content but also allow students to explore these concepts more deeply and practically.

Overall, the simplification of teaching materials in the Merdeka Curriculum not only facilitates teachers' tasks but also provides significant benefits for students. With more focused and relevant learning materials, students can more easily grasp key concepts without being overwhelmed by excessive or irrelevant information.

This advantage makes material simplification one of the most appreciated aspects by teachers at SMA Muhammadiyah 5 Yogyakarta. With more focused and applicable content, teachers can allocate more time for in-depth discussions, concept exploration, and interactive learning activities. This approach aligns with the core objectives of the Merdeka Curriculum, which aim to create meaningful, flexible learning experiences tailored to students' development and needs.

## 2. Difficulties in Implementing the Merdeka Curriculum

Despite the various facilitating factors, teachers at SMA Muhammadiyah 5 Yogyakarta also encountered several challenges in implementing the Merdeka Curriculum. These challenges include differentiated learning, preparation for the Pancasila Student Profile Strengthening Project (P5), and the development of Learning Objectives Flow (ATP).

### 2.1. Implementation of Differentiated Learning

The implementation of differentiated learning is one of the most significant challenges for teachers. This method requires teachers to understand each student's individual needs and adjust teaching strategies accordingly to match their abilities and potential.

One of the main difficulties faced by teachers is time constraints in the learning process. Teachers feel that the allocated time is insufficient to prepare and implement learning methods tailored to each student's needs. The variation in the number of Lesson Hours (JP) per subject also contributes to this issue. For example, the PPKn (Civics) subject is allocated only 2 JP per week, while Mathematics receives 4 JP per week. Teachers with fewer allocated hours find it more challenging to assess individual student needs and adjust their teaching methods accordingly.

Respondent P4 stated:

*"Implementing differentiated learning is very difficult because it requires time to understand each student's abilities."*

Respondent P10 added:

*"The limited time makes it difficult to tailor assessments to students' abilities."*

Another obstacle is the lack of training provided to help teachers effectively implement differentiated learning. Many teachers feel that they need practical guidance and additional support to apply this method efficiently.

To enhance the implementation of differentiated learning, educational policies should focus more on practice-based training, equipping teachers with practical skills

to handle student diversity in the classroom. Additionally, collaboration between experienced and new teachers can serve as an effective strategy to share best practices in differentiated instruction. Furthermore, providing teachers with more time for lesson planning and stronger administrative support can enable them to design more personalized learning approaches, ensuring that every student's needs are met.

## 2.2. Preparation for the P5 Project

The Pancasila Student Profile Strengthening Project (P5) is a key element of the Merdeka Curriculum, designed to develop students' competencies holistically. However, many teachers feel that preparing for P5 requires significant time, effort, and creativity. Teachers must design projects that are not only aligned with curriculum objectives but also tailored to students' characteristics and interests. Many teachers struggle with concept development, assessment instruments, and budgeting for these projects.

For teachers, P5 is a new component that was not present in previous curricula, making them feel unprepared due to a lack of experience or sufficient references for designing and implementing the project effectively.

Respondent P13 stated:

*"Preparing for P5 takes a long time, as we have to design the activity concepts, assessment instruments, and budget."*

The preparation of P5 not only requires teachers to understand the project concept but also to align it with students' needs and curriculum targets. Additionally, limited facilities and resources pose further challenges to its implementation.

Respondent P17 added:

*"I find it difficult to align P5 with students' needs and curriculum objectives."*

These challenges indicate that P5 implementation requires careful planning and stronger support from schools, including training, adequate facilities, and clear technical guidance.

## 2.3. Developing Learning Objective Flow (ATP)

Another challenge faced by teachers is developing the Learning Objective Flow (ATP). This process requires a deep understanding of the curriculum, learning objectives, and how to structure a sequence that meets students' needs. Difficulties in developing ATP arise not only from the complexity of the curriculum but also from the lack of practical training and support. Many teachers feel they need more intensive training on how to design an effective ATP, especially in aligning learning objectives with students' needs.

Respondent P1 stated:

*"Developing ATP is very challenging, especially when it has to be aligned with students' needs."*

The main obstacle in ATP development is the lack of clear guidelines and adequate training. Teachers often struggle to determine appropriate learning steps that align with the principles of the Merdeka Curriculum.

Respondent P6 added:

*"We need more intensive training to understand and properly develop ATP."*

Teachers also note that ATP development is time-consuming, reducing the time available for lesson preparation and student evaluation.

To optimize the ATP development process, it is crucial to provide more intensive and well-structured training, focusing on practical applications relevant to students' characteristics. Schools can also facilitate collaboration among teachers, allowing them to co-develop ATP that aligns with both curriculum objectives and students' needs. Additionally, providing examples of well-implemented ATP could serve as a useful reference for teachers who still face difficulties. Allocating more time for ATP planning would also help teachers gain a deeper understanding of the material and create more effective learning objectives.

#### 2.4. Understanding Student Characteristics

Understanding student characteristics is one of the key challenges faced by teachers in implementing the Merdeka Curriculum. Teachers note that each student has different abilities, needs, and interests, requiring special attention in the learning process. A more personalized and student-centered approach is one of the core principles of the Merdeka Curriculum. However, its implementation often poses difficulties for teachers, as they must adapt their teaching methods to accommodate the diverse characteristics of students.

Respondent P4 explained:

*"In my opinion, the most difficult aspect of implementing the Merdeka Curriculum is understanding the character and abilities of each student, as it involves differentiated learning."*

Teachers find that understanding student characteristics takes more time compared to conventional teaching methods. This challenge is further exacerbated by the lack of structured tools or methods to identify students' individual strengths and weaknesses.

Respondent P15 added:

*"The diverse characteristics of students, both active and passive, present a challenge. For passive students, learning tends to be less progressive."*

Difficulties in understanding student characteristics also impact the effectiveness of differentiated learning, as teachers must adjust their methods and teaching materials based on each student's abilities.

To optimize the implementation of differentiated learning, comprehensive training should be provided, covering various instructional strategies that can be adapted to classrooms with diverse student characteristics. Additionally, a deeper understanding of effective assessment methods will help teachers tailor their teaching more accurately and effectively, ensuring that learning meets the varying abilities and needs of students.

## Discussion

Based on interview results, teachers at SMA Muhammadiyah 5 Yogyakarta who had previously experienced curriculum transitions from KTSP to the 2013 Curriculum tended to adapt more easily to the implementation of the Merdeka Curriculum. These teachers found it easier to understand curriculum policy changes, which required adjustments in teaching strategies, competency-based learning, and evaluation methods. Their prior experience

provided them with additional skills in adapting to changes and developing more flexible teaching materials.

However, the majority of teachers at SMA Muhammadiyah 5 Yogyakarta are relatively new. Out of 21 respondents, only 6 teachers had more than 10 years of experience and had previously undergone curriculum changes. Teachers with less than 10 years of teaching experience tended to face greater difficulties in adjusting their teaching methods, particularly in differentiated learning, which requires a deep understanding of student characteristics.

The implementation of the Merdeka Curriculum at SMA Muhammadiyah 5 Yogyakarta has demonstrated several advantages for teachers. One of the most notable aspects is teacher collaboration. According to Mulyasa (2023), effective collaboration among educators can enhance learning quality and facilitate adaptation to curriculum changes. At this school, teachers work together in designing teaching materials and projects, which accelerates the preparation and implementation process of the curriculum. This finding aligns with Lubis et al. (2024), who emphasize that teacher collaboration is essential for addressing the challenges of implementing a new curriculum.

In teacher collaboration, disparities in experience and understanding of the Merdeka Curriculum may arise. More experienced teachers, who have previously undergone curriculum changes, may feel more prepared and confident in collaboration. In contrast, newer or less experienced teachers often feel anxious or uncertain about their contributions. This dynamic can slow down the adaptation process and affect the quality of collaboration. Therefore, it is crucial for schools to provide structured training that not only focuses on curriculum comprehension but also on optimizing teacher collaboration by involving experienced teachers in mentoring their colleagues.

Additionally, the relevance of learning materials to students' real-life experiences is one of the key advantages perceived in the implementation of the Merdeka Curriculum. Contextualized materials make it easier for students to understand lessons and enhance their motivation to learn. Nasarudin et al. (2024) state that learning materials relevant to students' lives can improve engagement and comprehension in the learning process. This reinforces the importance of material relevance in bridging theoretical concepts with students' everyday experiences.

At SMA Muhammadiyah 5 Yogyakarta, students come from a relatively homogeneous cultural background. However, schools with greater social and cultural diversity may face challenges in ensuring that learning materials remain relevant to all students. Thus, it is essential for schools to develop more flexible learning modules and teaching strategies that can be adapted to students' local contexts, ensuring that learning materials are not only relevant but also inclusive in addressing diverse backgrounds and perspectives.

The findings on the relevance of learning materials to students' real-life experiences align with the principles of constructivist theory, which emphasizes that learning is more effective when students can connect new knowledge to their direct experiences. In this regard, the Merdeka Curriculum enables students to see the direct relationship between theory and practice, thereby strengthening their understanding and engagement in the learning process.

Furthermore, mentoring in the Pancasila Student Profile Strengthening Project (P5) has been perceived as more manageable by teachers. Students who are able to work independently after receiving guidance demonstrate that this approach is effective in

fostering autonomy and creativity. Trisnani et al. (2024) highlight that the Merdeka Curriculum encourages students to become more independent and creative, making it easier for teachers to facilitate projects such as P5.

However, not all students exhibit the same level of independence. Some students, particularly those who are less proactive or less self-motivated, may require more intensive guidance from teachers during project activities. Some teachers reported that more structured mentoring is necessary to ensure that all students receive equal attention, especially those who tend to be less active in projects. Therefore, it is crucial to develop teaching methods that emphasize personalized mentoring and the strengthening of students' independent learning skills. Additionally, the provision of extra resources and sufficient time for teachers to conduct in-depth mentoring is essential to ensure that every student can maximize their potential in P5 activities.

The simplification of teaching materials provides convenience for teachers in delivering lessons. More concise materials allow teachers to focus on developing students' competencies in greater depth. According to Kurniati et al. (2022), essentialized content in the Merdeka Curriculum supports more effective and efficient lesson planning.

However, curriculum simplification also has the potential to reduce the depth of topics that can be taught. Teachers who are accustomed to a more content-heavy curriculum may feel that simplification limits opportunities for deeper conceptual understanding. This concern is particularly relevant given the demands of state university entrance exams (PTN), which often require students to master more complex and in-depth materials. Admission to PTNs through UTBK exams assesses not only basic knowledge but also requires students to think critically and apply knowledge in more abstract and complex contexts.

Therefore, education policies must strike a balance between material simplification and content depth to ensure that fundamental competencies are optimally achieved while maintaining the quality of instruction and comprehensive conceptual understanding. Additionally, education policies should ensure that curriculum simplification does not compromise students' preparedness for crucial exams such as PTN entrance tests, which require higher-order thinking skills and deeper analytical abilities.

The research conducted at SMA Muhammadiyah 5 Yogyakarta represents a limited sample from a single school. Therefore, the ease of implementing the Merdeka Curriculum experienced at this institution may not be generalizable to other schools with different contexts or characteristics. Schools in different settings, whether public or private, with varying policies and institutional cultures, may encounter different challenges in implementing the curriculum. Further research with a broader sample, including various types of schools across different regions, would provide a more comprehensive and nuanced understanding of the curriculum's implementation in Indonesia.

On the other hand, several challenges also arise in implementing the Merdeka Curriculum. One of the main difficulties is the application of differentiated learning. Teachers are required to adjust their instructional strategies according to individual student needs, which demands additional time and skills. According to Rofiah et al. (2024), differentiated learning requires teachers to understand each student's characteristics and design instruction accordingly. Koimah et al. (2024) further emphasize that teachers must develop flexible and adaptive strategies to cater to diverse student needs.

This challenge significantly affects teachers' effectiveness in delivering the curriculum, as they must identify and address individual student needs, which can vary

widely. Teachers who lack sufficient time or training in differentiated instruction may feel overwhelmed, ultimately reducing the quality of learning. If differentiation is not properly implemented, some students may struggle to keep up, while others may feel insufficiently challenged. The mismatch between students' needs and teaching approaches can hinder learning effectiveness and impede the achievement of learning objectives. Therefore, differentiated instruction must be supported through intensive training and ongoing professional development.

The challenges in implementing differentiated learning align with the principles of Universal Design for Learning (UDL), which advocates for flexible teaching approaches to meet the needs of all students, regardless of learning styles and individual requirements. In the context of the Merdeka Curriculum, UDL offers a structured solution by providing multiple ways for students to access content, engage in learning, and demonstrate their understanding.

The Merdeka Mengajar Platform (PMM) can serve as a solution to overcome differentiated learning challenges. PMM offers various training materials to help teachers understand and implement more effective differentiated instruction techniques. Additionally, PMM provides tools and modules that assist teachers in designing adaptive learning experiences tailored to students' characteristics. By leveraging PMM resources, teachers can access curriculum-aligned learning content and receive continuous professional support to enhance their understanding and application of differentiated teaching strategies. This platform facilitates teachers in grasping and applying differentiation techniques directly in the classroom without requiring significant additional time investments.

The preparation of the Pancasila Student Profile Strengthening Project (P5) presents a significant challenge in the implementation of the Merdeka Curriculum. Project planning requires time, resources, and a well-structured concept to ensure effective execution and a positive impact on students. Ningsih et al. (2023) emphasize the importance of comprehensive planning in ensuring the success of P5, while Sutanto (2024) highlights the crucial role of administrative support and school resources in facilitating project implementation and enhancing its effectiveness.

Most teachers consider collaboration among teachers as a key factor in overcoming challenges in implementing the Merdeka Curriculum, including in the design and execution of P5. Collaboration enables teachers to share experiences and strategies, develop teaching materials, and discuss challenges encountered during project implementation. With professional support from colleagues, difficulties in designing and carrying out P5 can be minimized, particularly concerning time constraints and limited resources, which are often major obstacles in curriculum-based project implementation.

Additionally, another challenge faced by teachers is developing the Learning Objectives Flow (ATP). Creating an ATP requires a deep understanding of curriculum structure and student needs, making it a complex task for many educators. Nurnaifah (2024) asserts that intensive training is essential to equip teachers with the necessary skills to develop ATPs in alignment with the principles of the Merdeka Curriculum. Continuous support through the Merdeka Mengajar Platform (PMM) can serve as a potential solution to assist teachers in effectively structuring their ATPs (Putu et al., 2023).

Currently, PMM provides various ATP examples to support teachers in understanding and developing ATPs in accordance with the Merdeka Curriculum. However, many teachers still experience difficulties in formulating ATPs due to the wide variety of available examples



and the lack of a standardized format. Consequently, teachers often feel uncertain when selecting and adapting ATPs that best suit their classroom needs. Therefore, further training on ATP development is necessary to enable teachers to adjust it systematically and effectively to their specific classroom conditions.

Finally, understanding student characteristics also poses a significant challenge in the implementation of the Merdeka Curriculum. Each student has unique characteristics, including learning styles, backgrounds, and personalities, which greatly influence the learning process. Maulidia & Prafitasari (2023) state that teachers must develop flexible teaching strategies to meet the diverse needs of students, while Estari (2020) emphasizes that a deep understanding of student characteristics is crucial in creating an effective and conducive learning environment.

Student diversity results in differences in the speed of understanding concepts and the ways they absorb information. Some students may grasp certain concepts quickly, while others require more time or a different approach. Teachers who lack skills in identifying student characteristics may struggle to manage this diversity, which could ultimately hinder the effectiveness of instruction. Therefore, curriculum policies and educational strategies should provide ongoing training for teachers to help them recognize and respond to the needs of each student more personally and effectively, ensuring that the learning process within the Merdeka Curriculum is carried out optimally.

## Conclusion

This study examines teachers' perceptions of the implementation of the Kurikulum Merdeka at SMA Muhammadiyah 5 Yogyakarta, highlighting both the advantages and challenges they encounter. Teachers reported several benefits, including collaboration among teachers, the relevance of teaching materials to students' real-life experiences, student independence in the Pancasila Student Profile Strengthening Project (P5), and the simplification of learning materials. These factors contribute to improving the quality of learning and facilitating teachers' adaptation to the curriculum. However, teachers also face challenges, such as difficulties in implementing differentiated learning, preparing P5, developing Learning Objective Flow (ATP), and understanding students' diverse characteristics, which underscores the need for more structured training, practical technical guidelines, and adequate administrative support.

Based on these findings, this study recommends regular teacher training focused on project-based and differentiated learning, the development of resources such as ATP templates and technical guidelines, and the strengthening of teacher collaboration. Furthermore, administrative support from schools should be enhanced to address operational challenges. Further research is also necessary to assess the long-term impact of the Kurikulum Merdeka on student learning outcomes and the development of more effective teacher training models.

However, this study is limited in scope as it was conducted in a single school, meaning its findings may not be generalizable to other schools with different characteristics. Therefore, further research with a broader sample, including public, private, and Islamic schools (madrasahs) across different regions, is needed to provide a more comprehensive understanding.

Additionally, future studies could compare the implementation of the Kurikulum Merdeka in schools with varying characteristics and explore the impact of technology and digital platforms, such as the Merdeka Mengajar Platform (PMM), in enhancing teachers' skills and improving curriculum implementation. By identifying both the advantages and challenges of the Kurikulum Merdeka, this study aims to contribute to educational reform in Indonesia.

## Declarations

### Author Contribution Statement

This study is the result of a collaboration among three authors. The first author served as the research initiator, responsible for data collection, data analysis, and drafting the initial manuscript. The second and third authors contributed to editing, validating the analysis results, and refining the manuscript for publication.

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### Data Availability Statement

The data supporting the findings of this study can be accessed by contacting the first author. Additional data, including survey results and interview transcripts, are available upon request and subject to the privacy regulations of the relevant institution.

### Declaration of Interests Statement

The authors declare no financial or personal interests that could influence the work reported in this article.

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