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# **Evaluation of Differentiated Learning for Social Studies in the Independent Curriculum at Semarang Middle Schools**

Alvina Ajeng Sritanti<sup>1™</sup>, Juhadi<sup>2</sup>, Eko Handoyo<sup>2</sup>

# **Article Info**

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### **Abstract**

Differentiated learning is a fundamental aspect of the Independent Curriculum, officially adopted as Indonesia's national curriculum in the 2024/2025 academic year. Although the curriculum promotes adaptive and inclusive learning tailored to individual student needs, its implementation in Social Studies (IPS) instruction in middle schools in Semarang City encounters significant challenges. This study evaluates the application of differentiated learning strategies, focusing on planning, implementation, and evaluation stages while identifying obstacles faced by teachers. A mixed-methods approach with an embedded concurrent design was employed, combining quantitative data from ANOVA and Pearson correlation tests with qualitative insights from interviews, classroom observations, and document analysis. Data were collected from four representative schools, with Sekolah Mandiri Berbagi emerging as a model for effective implementation through innovative and adaptive instructional strategies. The findings indicate that schools with comprehensive planning and responsive implementation achieve better learning outcomes. However, challenges such as insufficient teacher training, limited resources, and time constraints hinder the overall effectiveness of differentiated learning. These results underscore the need for strengthening teacher competencies, improving educational infrastructure, and adopting more adaptive teaching approaches. This study offers actionable insights to enhance differentiated instruction under the Independent Curriculum, contributing to educational reform in Indonesia.

<sup>™</sup>Correspondence address:

Jl Sukunraya A10 A11, Kel. Srondol Wetan, Kec. Banyumanik

E-mail: alvinaajeng77@students.unnes.ac.id

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<sup>&</sup>lt;sup>1</sup> Brain Academy Center Banyumanik

<sup>&</sup>lt;sup>2</sup> Universitas Negeri Semarang

### INTRODUCTION

Education aims to shape a superior generation in alignment with cultural values and the principles of Pancasila, facilitated by a curriculum that evolves alongside advancements in information technology (Anastasia et al., 2022). Launched in 2022, the Merdeka Curriculum seeks to foster a superior generation through a flexible learning approach tailored to students' needs (Ainia, 2020).

The evaluation of innovative and dynamic curricula plays a critical role in enhancing teaching quality (Khasanah et al., 2023; Langelaan et al., 2024). In this context, Indonesia's Ministry of Education, Culture, Research, and Technology (Kemdikbud) has begun implementing the Merdeka Curriculum as the National Curriculum starting from the 2024/2025 academic year (Kurikulum Pada Pendidikan Anak Usia Dini, Jenjang Pendidikan Dasar, Dan Jenjang Pendidikan Menengah, 2024).

Ramadhan (2023) highlights both the support and challenges faced in implementing the Merdeka Curriculum, particularly regarding understanding its components. Differentiated instruction within this curriculum adapts to students' classroom abilities based on their learning styles—whether auditory, visual, or audio-visual—and integrates key elements such as learning assessments, minimum competency assessments, and the development of teaching and project modules(Sahara et al., 2024).

Research by Elviya and Sukartiningsih (2023) indicates that differentiated instruction, involving needs mapping, planning, and evaluation, can significantly enhance student enthusiasm and engagement. Addressing gaps in existing literature, their study evaluates the implementation of differentiated instruction under the Merdeka Curriculum in social studies (IPS) at secondary schools in Semarang, focusing on challenges in planning, execution, and evaluation phases.

This study aims to evaluate the implementation of differentiated instruction in social studies (IPS) under the Merdeka Curriculum in Semarang secondary schools, focusing on the planning, execution, and evaluation stages, as well as identifying challenges faced by teachers. The findings are expected to support efforts to enhance the effectiveness of differentiated instruction in IPS

at secondary schools in Semarang. The evaluation conducted will offer better guidance for teachers in designing, implementing, and assessing social studies instruction that is more inclusive, adaptive, and aligned with the individual needs of students.

### **METHOD**

This study employed a mixed-methods approach with an embedded concurrent design, where qualitative and quantitative data were collected simultaneously to achieve a comprehensive understanding (Onwuegbuzie et al., 2022). Quantitative data were utilized to assess the feasibility of teaching modules and the implementation level of differentiated instruction, while qualitative data focused on evaluating the learning process and identifying challenges in implementing this teaching model

The research population includes all social studies teachers and 7th-grade students in junior high schools (SMP) in Semarang City that have adopted the Merdeka Curriculum. According to data from the Education Department, 171 junior high schools in Semarang City have implemented the Merdeka Curriculum, categorized into four types: Sekolah Penggerak (Driving Schools), Sekolah Mandiri Berbagi (Independent Sharing Schools), Sekolah Mandiri Berubah (Independent Transforming Schools), and Sekolah Mandiri Belajar (Independent Learning Schools). The research sample was selected using proportionate stratified random sampling to ensure balanced representation from each school category (Adnyana, 2021). The schools sampled for this were SMPN 8 Semarang (Sekolah Penggerak), SMP Semesta 2 (Sekolah Mandiri Berbagi), SMPN 22 Semarang (Sekolah Mandiri Berubah), and SMP Sepuluh Nopember 2 (Sekolah Mandiri Belajar). Each school was represented by 7th-grade social studies teachers and 7th-grade students in the even semester of the 2023/2024 academic year.

Data collection was conducted through interviews, direct classroom observations, and documentation reviews. Interviews with social studies teachers explored their experiences, challenges, and strategies in implementing differentiated instruction. Classroom observations were conducted during three instructional sessions

in each school, using observation guidelines to document key aspects such as teaching method variations and support for students. Documentation collected included teaching modules, assessment records, and student evaluation results. The research instruments were validated by two experts, achieving an average score of 92%, and demonstrated a reliability coefficient of >0.60.

The data analysis incorporated both qualitative quantitative approaches. and Quantitative analysis involved descriptive techniques to calculate frequency distributions and mean scores from questionnaires, as well as ANOVA tests to compare student learning outcomes across school categories. Normality and homogeneity tests were conducted to ensure statistical assumptions, followed by a Pearson Correlation Test to examine the relationship between planning and implementation across the four schools. Qualitative analysis adopted the Miles & Huberman model (1994), which includes data reduction, data display, and conclusion drawing. This process involved simplifying and organizing data from interviews, observations, and documentation, presented in tables and graphs to facilitate interpretation.

# RESULT AND DISCUSSION

# **Evaluation of Differentiated Lesson Planning**

Lesson planning plays a pivotal role in the success of teaching and learning processes. According to Purwinda Anggrella (2023) lesson planning involves a systematic approach to defining objectives, strategies, and evaluation methods for learning.

In the *Merdeka Curriculum*, teaching modules serve as primary instruments due to their flexibility in structuring goals, methods, and assessments tailored to the individual needs of students (2023). These modules enable structured and differentiated learning, allowing each student to learn according to their potential (Ndiung et al., 2023).

An evaluation of teaching modules in several schools in Semarang City revealed variations in their feasibility, depending on the extent to which teachers integrated differentiation principles into their planning. Table 1 summarizes the module evaluation results across four schools:

TABLE 1 TEACHING MODULE EVALUATION RESULTS

School	Module Feasibility	Category	
	Percentage		
SMPN 8	80 %	Good	
Semarang			
SMP Semesta 2	85 %	Very Good	
SMPN 22	78 %	Good	
Semarang			
SMP Sepuluh	72 %	Fair	
Nopember 2			

Based on the evaluation results, it is evident that differentiated teaching modules for social studies subjects in the four middle schools exhibit variation in quality. As shown in Table 1, SMP Semesta 2 achieved the highest module feasibility score (85%), which aligns with the differentiated approach implemented by Ms. Murtafiah. She explained that her module preparation begins with understanding student characteristics through observation and communication with school counselors identify individual needs. Furthermore, despite not being actively involved in the Social Studies Teacher Working Group (MGMP) in Semarang City, Ms. Murtafiah consistently participates in module preparation training offered on the Ministry of Education's official Merdeka Mengajar website.

Conversely, SMP Sepuluh Nopember 2 faced significant challenges in applying differentiation principles to its teaching modules, as reflected in its relatively low feasibility score. Ms. Anik Sumaryati, a social studies teacher at the school, noted that limited infrastructure, time, and resources are key obstacles in designing learning activities responsive to students' needs. During an interview, she stated, "Adjusting teaching methods is often difficult due to the lack of facilities and resources available for teaching. As a result, I focus on developing modules that cater to students' needs collectively rather than individually."

Ms. Anik noted that the module preparation process remains suboptimal as the school, newly designated as an Independent Learning institution in

2023/2024, has not received MGMP training. Consequently, teaching modules largely rely on examples from the Merdeka Mengajar website. Interviews with teachers in Semarang revealed limited time as a key obstacle in developing adequate differentiated modules. While schools like SMPN 8 Semarang and SMPN 22 Semarang have received training and use diverse media, assessments tailored to individual needs still require improvement.

The main challenge in preparing modules under the Merdeka Curriculum lies in aligning learning scenarios with its essence to enhance outcomes (Priyanto et al., 2023; Sriyanto et al., 2024). Gunawardena (2024) emphasized that must effective planning involve deep understanding of student characteristics, enabling module development to facilitate personalized learning. Recent studies further underscore the critical importance of thorough planning in differentiated learning processes.

# Implementation of Differentiated Learning

The implementation of the Merdeka Curriculum in junior high schools across Semarang City begins with diagnostic assessments to identify differences in students' readiness levels. This allows teachers to design instructional methods tailored to individual needs. Below is a summary of observations conducted on the implementation of social studies instruction in Semarang City:

TABLE 2 OBSERVED IMPLEMENTATION OF DIFFERENTIATED LEARNING

School	Implementation (%)	Category		
SMPN 8	82 %	Good		
Semarang				
SMP Semesta	88 %	Very		
2		Good		
SMPN 22	74 %	Fair		
Semarang				
SMP Sepuluh	70 %	Fair		
Nopember 2				

Table 2 shows that SMPN 8 Semarang and SMP Semesta 2 are rated "Very Good" for differentiated learning implementation, while SMPN 22 Semarang is rated "Good," and SMP Sepuluh Nopember 2 is rated "Fair." This highlights

varying levels of success in integrating Merdeka Curriculum principles. Tomlinson (2001) emphasized the importance of tailoring content, processes, products, and learning environments to student needs. For example, SMP Semesta 2 offers diverse product options, such as posters, videos, and presentations, as explained by Ms. Murtafiah. Observations indicate that schools rated "Very Good" make specific adjustments based on diagnostic assessments, adapting content and processes to learning styles and offering product choices.

At SMPN 8 Semarang, "Very Good" implementation begins with diagnostic assessments mapping students' readiness, interests, and learning profiles. Ms. Novi Endri Astuti uses discussions, presentations, and visual media to address students' needs. However, supporting low-performing students, especially in summative assessments, remains a challenge. Ms. Novi addresses this by guiding students to create essays, presentations, or videos aligned with their learning styles and creativity.

Similarly, SMP Semesta 2 applies problembased learning (PBL), focusing on case analysis to enhance critical thinking. Teachers differentiate content by offering materials tailored to students' interests, such as posters and videos. However, maintaining the motivation of high-achieving students who quickly complete tasks remains an issue, addressed through enrichment assignments.

In contrast, SMPN 22 Semarang, rated "Good," faces challenges in differentiation. According to Mr. Zabidi Agus Wiranto, formative assessments are used to map abilities, with simple questions for low-performing students and analytical tasks for high-performing ones. However, inadequate infrastructure, such as broken projectors and speakers, often forces reliance on lectures, limiting learning style accommodation.

At SMP Sepuluh Nopember 2, rated "Fair," differentiation remains limited. Ms. Anik noted that instructional content and tasks are delivered uniformly, neglecting individual learning styles. Resource constraints, such as outdated books and broken equipment, along with limited preparation time, further impede the effective implementation of differentiated instruction.

A Pearson correlation analysis was conducted to examine the relationship between planning and implementation of differentiated learning across the four schools. The results are presented in Table 3:

TABLE 3 THE RELATIONSHIP BETWEEN LESSON PLANNING AND IMPLEMENTATION Correlations

		Perencanaan Pembelajaran	Pelaksanaan Pembelajaran
Perencanaan Pembelajaran	Pearson Correlation	1	.957 <sup>*</sup>
	Sig. (2- tailed)		.043
	N	4	4
Pelaksanaan Pembelajaran	Pearson Correlation	.957 <sup>*</sup>	1
	Sig. (2- tailed)	.043	
	N	4	4

\*. Correlation is significant at the 0.05 level (2-tailed).

The Pearson correlation analysis in Table 3 indicates a strong positive relationship between lesson planning and implementation, with a coefficient of .957 and a significance value of .043 (p < .05), signifying a significant correlation at the 95% confidence level. This suggests that better lesson planning contributes significantly to more effective implementation of differentiated learning.

Schools like SMPN 8 Semarang and SMP Semesta 2, which scored high in both planning and implementation, exemplify how effective planning supports optimal execution. Conversely, SMPN 22 Semarang and SMP Sepuluh Nopember 2 encounter resource and infrastructure challenges that limit their ability to apply differentiated instruction effectively.

The findings align with Eikeland'(2022) assertion that differentiated learning succeeds when teachers engage in comprehensive and flexible planning, supported by effective classroom management. To improve the implementation of differentiated learning, several strategies can be recommended. First, expanding teacher training programs focused on differentiated instruction is essential to equip educators with the skills needed to tailor their teaching to diverse student needs. Second, upgrading school infrastructure is crucial to ensure the availability of adequate resources, such as technology and learning materials, to support varied instructional methods. Finally, revising curricula to better support inclusive and adaptive

learning approaches can provide a solid foundation for differentiated instruction. By addressing these challenges, schools can significantly enhance their ability to deliver effective differentiated learning, ultimately fostering equitable learning opportunities for all students.

# Implementation of Evaluation in Differentiated Learning

Evaluation plays a crucial role in assessing the effectiveness of teaching and the achievement of learning objectives. It helps both teachers and students understand progress and identify areas for improvement (Fischer et al., 2024). Mr. Agus Zabidi, a social studies teacher at SMPN 22 Semarang, emphasized the importance of evaluation in monitoring student development and identifying individual needs. The Merdeka Curriculum incorporates both formative and summative evaluations. Formative evaluation is conducted during the learning process to adjust teaching strategies, while summative evaluation assesses the final outcomes of learning (Ismail et al., 2022). Both types are designed to support flexible learning, ensuring that assessments focus not only on end results but also on the continuous learning process.

These evaluations provide not only a collective overview of class progress but also insights into the individual development of each student. A social studies teacher at SMPN 22 Semarang explained, "Differentiated learning requires us to understand each student's abilities and provide evaluations that align with their individual progress." This aligns with Tomlinson's (2001), research, which underscores the importance of differentiation in evaluation to ensure effective learning.

Teachers in Semarang City apply various evaluation methods in differentiated learning, ranging from direct observation to the use of digital tools such as Google Classroom and project-based assessments. At SMPN 8 Semarang, however, several challenges emerged in implementing evaluations. Teachers at SMPN 22 Semarang highlighted the difficulty of designing assessment tools suitable for students with varying ability levels. Limited time and resources often necessitate the use of uniform test questions for all students, despite their differing abilities. Additionally,

inadequate technological infrastructure, such as unstable internet connections, hampers the implementation of digital-based evaluations in some schools. These findings are consistent with Aulia's (2023), study, which stresses the importance of adequate technological support for successful implementation of differentiated learning.

Effective evaluation depends not only on teachers' ability to understand and assess student abilities but also on the availability of adequate infrastructure and training for teachers in designing varied evaluation methods. Subiyantari's (2019) research highlights that to support differentiated learning, it is essential for teachers to receive continuous training and have access to sufficient resources. These enable them to design flexible and effective evaluation systems that meet the diverse needs of their students.

# **Effectiveness of Differentiated Social Studies Instruction**

Teachers play a crucial role in ensuring that every student, regardless of their differences, has an equal opportunity to achieve learning objectives. One of the tools used to measure the attainment of these objectives is the Learning Objective Achievement Criteria (Kriteria Ketercapaian Tujuan Pembelajaran, KKTP). KKTP serves as a standard evaluation framework that helps teachers assess the extent to which students have met the specified objectives and aids in designing instructional strategies tailored to students' needs.

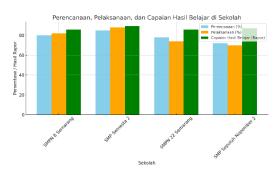
In this study, student learning outcomes were gathered from several schools in Semarang City to examine the relationship between planning, implementation, and learning achievements. The findings indicated that schools with well-executed planning and implementation generally demonstrated higher learning outcomes among seventh-grade students.

The planning and implementation of instruction were evaluated based on specific criteria. A "Very Good" rating was given to schools with comprehensive planning that included diagnostic assessments, mapping of learning styles, and the incorporation of relevant and inclusive teaching strategies. This category also required the responsive application of differentiated strategies during implementation. The "Good" category

encompassed schools where planning and implementation addressed most of these elements but exhibited certain limitations. Finally, the "Fair" category was assigned to schools where planning and implementation faced challenges in meeting essential aspects effectively.

Below is a summary table of learning outcomes based on student report cards from four schools in Semarang City, categorized according to established percentage thresholds:

FIGURE 1 EVALUATION RESULTS FOR PLANNING, IMPLEMENTATION, AND LEARNING OUTCOMES



The learning outcomes were then analyzed using ANOVA, with the results presented in Table 4

TABLE 4 ANOVA TEST RESULTS

ANOVA Test Result

	Sum of		Mean		
	Squares	df	Square	F	Sig.
Between	364.438	3	121.479	18.852	<.001
Groups					
Within	4156.354	645	6.444		
Groups					
Total	4520.792	648			

The ANOVA results indicate an F-value of 18.852 with a significance level of <0.001, suggesting significant differences in learning outcomes among the school groups. This implies that variations in planning and implementation of instruction across schools significantly impact students' learning achievements.

SMP Sepuluh Nopember, despite having relatively lower planning (72.00%) and implementation (70.00%) scores, achieved a "Very Good" category in learning outcomes with an average score of 87.11%. This suggests that

effective instructional delivery can compensate for shortcomings in planning. Conversely, SMP Semesta 2, with the highest planning (85.00%) and implementation (88.00%) scores, achieved optimal learning outcomes, scoring 89.17%. SMPN 8 Semarang, with planning at 80.00% implementation at 82.00%, recorded a learning outcome of 85.92%. Similarly, SMPN 22 Semarang, with planning at 78.00% and implementation at 74.00%, achieved a learning outcome of 85.87%. These findings underscore the importance of high-quality instructional delivery and the adaptation of teaching methods to meet the specific needs of students, ensuring that all students can achieve the desired learning objectives.

Comprehensive planning and effective implementation are the keys to successful differentiated instruction. These processes enable teachers to design strategies that engage students, enhance their understanding of the material, and encourage active participation in class. Teachers must adapt their instructional methods to individual student needs, including providing additional support when necessary (Dewi Fajaryati et al., 2023; Liou et al., 2023). Withley (2019) found that student engagement and learning outcomes improve when teachers implement appropriate strategies. However, good planning alone is insufficient without optimal implementation. Teachers must continuously reflect and evaluate to balance effective planning with delivery to ensure sustained success in differentiated instruction.

# Challenges in Implementing the Merdeka Curriculum for Differentiated Learning in Junior High Schools in Semarang City

The implementation of the Merdeka Curriculum in differentiated learning across middle schools in Semarang City encounters various issues that affect the effectiveness of teaching and learning processes. These challenges can be grouped into two categories: internal and external factors.

## **Internal Challenges**

Several internal factors hinder the effective implementation of differentiated learning under the Merdeka Curriculum. These challenges include limited teacher competencies, insufficient time, and a lack of in-depth understanding of differentiation approaches. At SMP Semesta 2, for example, most

teachers have not participated in formal training and instead rely on self-directed learning through the Platform Merdeka Mengajar (PMM). While this platform is beneficial, self-learning does not provide comprehensive knowledge, particularly addressing the diverse needs of students. A similar situation exists at SMP Sepuluh Nopember 2, where teachers' limited understanding of differentiation methods results in an overreliance on PMM modules with minimal adaptation. This dependency restricts teachers' ability to adjust instructional strategies for lower-performing students, leading to imbalances in addressing both struggling and highachieving learners. Research by Umayrah and Wahyudin (2024) have noted that limited teacher skills are one of the main factors affecting the effectiveness of differentiated learning.

At SMPN 8 Semarang, teachers also experience difficulties in adapting teaching modules each year due to periodic changes in curriculum content. Time constraints further limit their ability to create materials that align with the principles of differentiated learning. Research by Mardhatillah & Suharyadi (2023) identifies limited time as a key factor in reducing the effectiveness of implementation.

In addition, traditional teaching methods, which are still widely applied across schools, impact the implementation of differentiated learning. At SMPN 22 Semarang, for instance, students with varying abilities are placed in the same classroom, making it challenging for teachers to address individual needs.. This situation widens the gap between high-achieving students and those with lower academic performance. High-potential students are often underchallenged, while struggling students lack sufficient support, leading to disparities in learning outcomes.

# **External Challenges**

External factors further complicate the implementation of differentiated learning, such as limited access to facilities and infrastructure essential for teaching. At SMPN 22 Semarang and SMP Sepuluh Nopember 2, the lack of essential tools like LCD projectors and other teaching equipment frequently disrupts instructional activities. Malfunctioning or inadequate facilities restrict the variety of teaching methods and media

that can be used, reducing opportunities to create engaging and diverse learning experiences. To cope with these limitations, teachers at these schools resort to alternative methods such as oral tests and observational assessments. Hermansyah (2023) supports these findings, highlighting that insufficient facilities significantly impact the success of differentiated learning in schools.

Similarly, limited access to educational resources also affects the implementation of differentiated learning. At SMP Sepuluh Nopember 2, for instance, a shortage of textbooks forces students to share learning materials, reducing the effectiveness of the learning process and limiting opportunities for personalized instruction.

Another significant factor is the lack of adequate training and technological support for teachers. At SMP Sepuluh Nopember 2, most teachers rely on PMM modules without developing additional innovative teaching methods. Interviews revealed that the last time teachers participated in the Semarang City Social Studies Teacher Working Group (MGMP IPS) was three years ago. Without regular training, teachers struggle to develop strategies that align with differentiation principles (Azizah et al., 2023; Nur Rahmadani Muthaharoh et al., 2024).

To overcome the challenges in implementing the Merdeka Curriculum, it is crucial to focus on enhancing teacher competencies, improving educational infrastructure, and developing more inclusive and adaptive teaching strategies. Lince (2022) emphasizes that without addressing these factors, the effectiveness of the Merdeka Curriculum will remain limited, making it difficult to achieve meaningful and relevant learning experiences for students. Similarly, Rahayu et al. (2022) highlight the importance of providing more training opportunities, technological support, and better facilities to address these issues effectively. By addressing these concerns, the implementation of the Merdeka Curriculum can be more successful, resulting in significant positive impacts on student development in junior high schools across Semarang City.

## CONCLUSION

This study highlights that the implementation of differentiated learning under the Merdeka

Curriculum in middle schools in Semarang City has been generally effective, yet certain challenges persist. While most schools have successfully adopted adaptive and inclusive strategies, some areas still require improvement. Insufficient planning, along with limitations in execution and evaluation, hinders the achievement of optimal learning outcomes. Specifically, the lack of teacher training and inadequate infrastructure are identified as major obstacles. To address these issues, greater investment in teacher training and educational infrastructure is essential. These enhancements would empower teachers to design and implement more effective learning strategies tailored to individual student needs, thereby enriching the learning experience in alignment with the principles of the Merdeka Curriculum.

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