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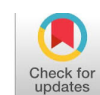
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## Implementation of Differentiated Instruction in the Merdeka Curriculum to Enhance Critical and Creative Thinking Dimensions

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### ABSTRACT

The diversity of students' abilities, interests, and learning styles requires adaptive learning strategies, making differentiated instruction a relevant approach to explore in greater depth. This study aims to examine the implementation of differentiated instruction within the Merdeka Curriculum regarding the critical and creative thinking dimensions of the Pancasila Student Profile at SMP Negeri 1 Anak Ratu Aji. Data collection was conducted through observation, in-depth interviews, *Focus Group Discussions* (FGDs), and documentation, with the research subjects being mathematics teachers and students. Data analysis utilized the *General Inductive Analysis* (GIA) technique with triangulation to ensure data validity. The research results indicate that teachers have implemented differentiated instruction by adapting content, processes, and products to students' readiness, interests, and learning profiles, thereby enhancing the critical and creative thinking dimensions within the Pancasila student profile. This is evident in increased student engagement, the ability to articulate ideas, and creativity in completing tasks. However, implementation still faces challenges in the form of time constraints, teachers' workloads, and variations in students' abilities to understand diverse learning instructions. Therefore, teachers need to enhance their capacity in designing differentiation-based formative assessments; educational institutions can integrate differentiation training into *in-service training* programs; and further research can develop differentiation-based assessments of critical and creative thinking.



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### Introduction

The curriculum plays a vital and fundamental role in the world of education (Anggraini et al., 2022). The curriculum is the lifeblood of education and must be evaluated periodically to

keep pace with the times and advancements in science and technology. The curriculum holds a central position in the world of education; furthermore, it serves as the framework for all educational policies implemented by school administrators or the government. The Merdeka Curriculum is part of a government initiative aimed at granting schools the freedom to design and implement a curriculum tailored to local needs and student characteristics (Azmy & Fanny, 2023a; Wahyudin et al., 2024). The Merdeka Curriculum is designed to provide educational institutions and teachers with the flexibility to organize learning in accordance with the needs and context of students (Aminah & Sya'bani, 2023; Dwitami et al., 2025).

The curriculum determines the material taught in the classroom. The pace and teaching methods used by teachers to meet students' needs are also influenced by the curriculum (Tunas et al., 2024). For this reason, the Ministry of Education and Culture has developed the Merdeka Curriculum as a crucial component of efforts to revitalize education following the crisis we have long faced. The implementation of the Merdeka Curriculum is considered highly relevant because it aligns with its philosophy—the concept of “merdeka belajar” (independent learning)—which allows students to experience freedom in the learning process without feeling burdened (Tunas et al., 2024; Muliawan, 2024). The character development implemented in the independent curriculum is known as the Pancasila Student Profile, which describes the ideal student based on the principles of Pancasila (Didik et al., 2023; Setyowati & Putri Yanuarita Sutikno, 2024). The development of the Pancasila student profile is a strategic effort to improve the quality of education through the formation of students' personalities (Wijayanti et al., 2024; Shofia Rohmah et al., 2023). Among the six dimensions of the Pancasila student profile are being devout to God Almighty and having noble character, embracing global diversity, being independent, practicing mutual cooperation, thinking critically, and being creative (Kemendikbudristek, 2022; Anggraena et al., 2020). The dimensions of critical and creative thinking serve as an important foundation that equips students to face learning challenges (Anggraena et al., 2020; Rahman et al., 2025).

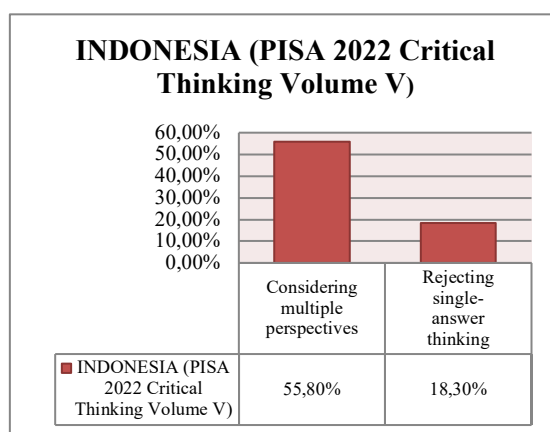
The concept of Merdeka Belajar (Freedom of Learning), designed by Nadiem Makarim, is freedom in thinking (Istiq'faroh, 2020). As the primary component of education, teachers have the right to interpret the established curriculum, enabling them to respond to students' needs in the teaching-learning process. Merdeka Belajar encompasses freedom in achieving learning objectives, methods, materials, and evaluation for both teachers and students. Currently, most teachers still use conventional teaching methods, resulting in learning activities that tend to be rigid, monotonous, and boring. Particularly in mathematics education, the material presented has not yet been internalized by students in a rational, cognitive, and affective manner. The use of conventional teaching methods contributes to students' low proficiency in mathematics. Furthermore, such learning conditions reflect students' inability to develop their knowledge and computational skills effectively and accurately. Teachers have a responsibility to understand each student's interests based on the skills they possess. A teacher's ability to select an appropriate instructional model is crucial, as the success of learning depends on the teacher. The Differentiated Instruction model is an instructional approach that can serve as an alternative for presenting material in an engaging manner (Saputra et al., 2023). Differentiated instruction involves adapting classroom practices to meet students' learning needs. The adjustments considered relate to students' interests, learning profiles, and readiness to achieve better learning outcomes. This differentiated learning is closely aligned with the “Merdeka Belajar” curriculum currently being promoted in educational institutions.

Differentiated instruction is one of the relevant instructional approaches in the Merdeka Curriculum (Rosyah & Puguh Darmawan, 2023; Rosaliana & Nursalim, 2025). Differentiated instruction is an approach to the teaching and learning process designed to meet the individual

needs and abilities of each student in the classroom (Tomlinson, 2014; Puspitasari et al., 2020), based on students' varying readiness, learning profiles, and interests (Kanevsky, 2020). This approach is crucial because every student has distinct learning needs, including visual, auditory, and kinesthetic learning styles that require different instructional strategies (Almujab, 2023; Fitriyah & Bisri, 2023).

Differentiated instruction aims to address the issue of inequality in learning, which often arises due to differences in student characteristics. This approach focuses on student needs, as articulated by Ki Hajar Dewantara, who emphasized a student-centered approach. This approach not only enhances student participation but also helps them develop metacognitive skills—the ability to understand and manage their own learning processes. The learning approach implemented in the Merdeka Curriculum is oriented toward the concept of differentiated instruction. This approach is expected to achieve learning effectiveness and efficiency, and teachers will find it easier to determine information and manage learning stages effectively and optimally.

Mathematics learning within the context of the Pancasila Student Profile is no longer merely about memorizing formulas and procedures (Sarah et al., 2024), but rather encourages students to develop analytical skills, solve complex mathematical problems, and engage in structured algorithmic thinking (Nicomse & Naibaho, 2022). Learning is designed so that students can apply abstract concepts in real-life contexts relevant to Indonesia's socio-cultural conditions (Sujadi, 2022), foster the spirit of cooperation through collaborative activities, and build strong numeracy skills (Rochaendi et al., 2025). The government's concerns regarding the competitiveness of Indonesia's human resources on the global stage have also been a key driver behind the creation of the Merdeka Curriculum (Siregar et al., 2024; Zuhuda et al., 2024). PISA (*Programme for International Student Assessment*) test results indicate that Indonesian students' proficiency in literacy, mathematics, and science remains low (OECD 2024; Suparyana et al., 2022). PISA data from 2022, Volume V, reveals a gap in Indonesian students' critical thinking skills. Figure 1 shows that 55.80% of students are able to consider various perspectives, but only 18.30% are able to reject a single-answer mindset (PISA, 2022).



**Figure1.** Critical Thinking PISA 2022 Volume V

The latest international survey results from PISA also highlight the importance of students' critical thinking skills in Indonesia. The OECD average score also indicates that the majority of students believe creativity can be developed through practice, whereas in Indonesia only a portion of students hold this view. The following data on students' creative thinking in Indonesia in 2022 (Volume III) can be .

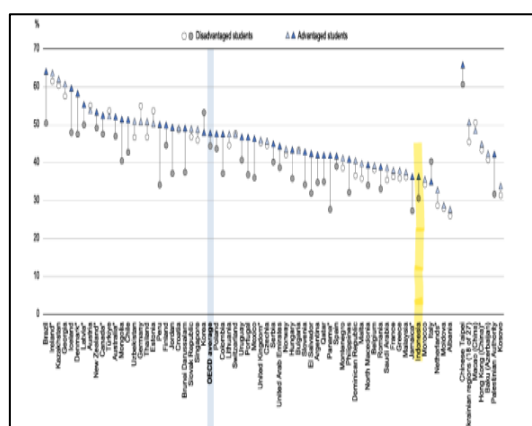


Figure 2. OECD Creative Thinking Score

These findings indicate that the majority of students in Indonesia view creativity as an innate talent that cannot be developed, leading them to be less willing to innovate and explore new ideas in their learning. On the other hand, Indonesia's ranking rose by 6 positions in the ". Indonesian students' confidence in their ability to think creatively also remains relatively low. The graph shows a comparison among the countries surveyed, where students in countries such as Brazil, South Korea, and Finland demonstrate higher levels of *growth mindset* compared to Indonesia. Based on research data from the SMERU *Research Institute*, the implementation of the Merdeka Curriculum in Indonesia faces significant challenges. The low capacity of teachers to implement the new curriculum requires them to use more creative and student-centered learning approaches (SMERU *Research Institute*, 2024). Given the gap between the demands of the Merdeka Curriculum and actual teaching practices in the field, researchers believe that differentiated instruction needs to be examined more deeply to ensure that the strengthening of critical and creative thinking skills is truly realized among students.

A case study at SMPN 1 Anak Ratu Aji demonstrates the implementation of differentiated instruction during the 2025/2026 school year by adapting instructional modules based on students' abilities in terms of content, process, and product. Students were grouped into three categories based on their learning pace, and their learning styles were mapped through observation, questionnaires, and interviews. Although educators have integrated the values of the Pancasila Student Profile into instruction, challenges remain, such as inconsistencies in the time allotted for assignments and limited student involvement in instructional planning.

Although studies on differentiated instruction within the context of the Merdeka Curriculum have expanded, most previous research has focused on general descriptions of implementation without analytically linking them to the constructs of critical thinking and creative thinking as measurement dimensions of the Pancasila Student Profile. Previous studies tend to examine differentiated instruction from the perspective of achieving learning objectives rather than from the perspective of strengthening higher-order cognitive dimensions (Sulistiyosari et al., 2022; Azmy & Fanny, 2023b; Gani & Nasri, 2023). This study aims to analyze how the implementation of differentiated instruction in the Merdeka Curriculum serves as a pedagogical strategy capable of strengthening the dimensions of critical and creative reasoning within the Pancasila Student Profile by producing a descriptive-analytical model that can serve as a conceptual and operational reference for the development of teaching practices in junior high schools.

## Method

### Type of Research

This study employs a qualitative method with a case study design. This design was chosen because it allows the researcher to gain an in-depth understanding of the implementation of differentiated instruction in the real-world context of the 9th-grade class at SMPN 1 Anak Ratu Aji. The case study also provides an opportunity to comprehensively explore the experiences of teachers and students regarding the reinforcement of the values of cooperation and independent learning within the framework of the Merdeka Curriculum

### Subject

The research subjects consisted of mathematics teachers and ninth-grade students at SMPN 1 Anak Ratu Aji during the first semester of the 2025/2026 academic year. Subjects were selected through purposive sampling based on their direct involvement in the implementation of differentiated instruction and the development of the Pancasila learner profile, as well as students' learning ability levels and learning profiles. Data sources included primary data—specifically interview results, observations, and *Focus Group Discussions* (FGDs)—as well as secondary data in the form of relevant school documents.

### Instruments

The research instruments used were non-test instruments, including: Observation—used to observe the differentiated learning process, student behavior, the dynamics of collaboration, and teacher practices in the classroom; unstructured interviews with teachers to explore differentiation strategies, perceptions, and their impact on the values of cooperation and independent learning; and *Focus Group Discussions* (FGD) Conducted with six students to obtain student perspectives regarding differentiation-based learning experiences, and Documentation in the form of teaching modules, photos of activities, and school archives. The Observation, *Focus Group Discussion* (FGD), and Interview instruments used the indicators (Heny Kristiani et al., 2021), as follows:

**Table 1. Indicators of Critical Thinking and Creative Thinking**

No	Observed Aspect	Indicator
1	Differentiated Instructional Planning	Instructional planning Learning facilitator Learning motivator Diagnostic assessment
2	Implementation of Differentiated Instruction	Curriculum Analysis Content Differentiation Process Differentiation Product Differentiation
3	Differentiated Learning Assessment	Formative assessment Summative Assessment

### Data Collection

Data collection was conducted in several stages: initial observation to map the learning context and identify the implementation of differentiation; interviews with teachers to obtain data on the planning, implementation, and evaluation of differentiated instruction; *focus group discussions* (FGDs) with students to explore their learning experiences regarding cooperation

and independence; and documentation to supplement the primary data. Triangulation techniques were used to ensure data credibility by comparing the results of observations, interviews, FGDs (*Focus Group Discussions*), and documents. The number of FGD participants in this study was six ninth-grade students who had participated in the differentiated learning process and received reinforcement regarding the dimensions of the Pancasila Student Profile.

## Data Analysis

The data analysis in this study follows Bogdan and Biklen's concept that analysis is a systematic process for organizing data, identifying patterns, and determining relevant findings. The technique used is General Inductive Analysis (GIA) according to Thomas, which allows for the inductive derivation of themes without relying on a rigid theoretical framework.

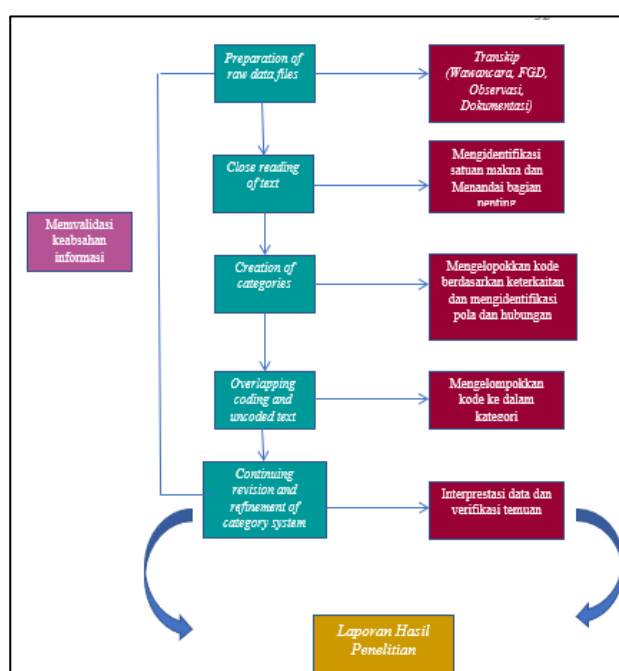


Figure 3. Stages of Data Analysis

The data analysis process includes: (1) data preparation, namely cleaning and standardizing the format of the transcripts; (2) intensive reading, to mark units of meaning emerging from the text; (3) coding and category formation, based on content similarities; (4) category refinement, by merging overlapping codes and reviewing uncoded text; and (5) theme development, as the basis for drawing conclusions regarding the impact of differentiated learning on the Pancasila Student Profile. The researcher served as the primary instrument, directly involved in all stages of data collection, coding, and analysis. The researcher acted as *the sole coder*, conducting a re-reading of all transcripts before assigning codes.

## Research Findings

The implementation of differentiated instruction at SMPN 1 Anak Ratu Aji demonstrates teachers' efforts to accommodate the diversity of student characteristics through an adaptive and responsive approach. Teachers began the learning process by conducting diagnostic assessments to map students' initial conditions, encompassing cognitive, affective, and

psychomotor aspects. In the initial stage, the assessment was still general in nature; however, over time, teachers developed a more in-depth approach through reflective discussions and non-verbal observations to understand students' levels of understanding, moral values, independence, and readiness to learn. This approach made students feel more valued and motivated to actively participate in learning. When developing lesson plans, teachers do not merely use Learning Outcomes (LO) as formal documents but also adapt them to the actual conditions in the classroom. Teachers design Learning Objectives (LO) and Learning Objective Sequences (LOS) by considering student characteristics, such as a tendency toward active or passive learning. To accommodate differences in ability, teachers develop tiered learning objectives: a basic version that all students must master and an advanced version for students who grasp the material more quickly. Although this requires extra time and effort, this strategy helps teachers avoid a one-size-fits-all approach to learning and provides every student with the opportunity to develop according to their potential. The implementation of differentiated instruction at SMPN 1 Anak Ratu Aji has shown a significant impact on the development of students' critical thinking skills. The results of the Nvivo analysis on critical thinking can be seen in the following figure.

Pemikiran kritis 17.4%	Bernalar	kritis	Merefleksi
	10%	10%	10%
Mengidentifikasi soal 11%			
Mengevaluasi soal 11%	Kritik		Konsep
	9.3%		9
Menganalisis soal 11%	Bertanya		
	9.3%		
	Terbuka		
	9%		

**Figure 4 . Hierarchy of Critical Thinking**

The results of the NVivo analysis of critical thinking skills showed a percentage of 117%, which falls into the “fairly good” category and indicates that students' critical thinking skills have developed relatively optimally through differentiated instruction. This was also evident in the FGD, where students expressed liking this variety, but some felt confused when asked to “*be creative*” because they were not yet accustomed to the freedom of ideas. Most felt that the teachers' planning had made learning more varied and enjoyable, such as the use of video media, posters, and group activities. However, there were some complaints regarding the teachers' instructions, which sometimes differed for each group, causing some students to feel confused. Differentiated instruction also opens up opportunities for students to develop their creativity through the freedom to choose the form of their learning products. The results of the analysis of the impact of implementing differentiated instruction on students' critical thinking can be seen in the following figure.

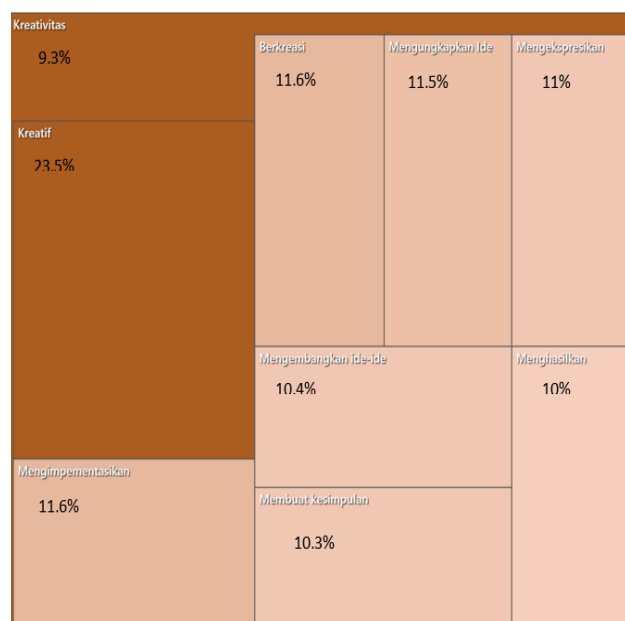


Figure 5. Hierarchy of Creative Thinking

Based on Figure 5 regarding the Nvivo analysis results, the total percentage for the creativity dimension was 9.3%, which falls into the “fairly good” category. This indicates that differentiated instruction makes a tangible contribution to the development of students’ creative thinking, both in the ideation process and in implementation. Based on the above results, it can be concluded that the evaluation of differentiated instruction implemented in the Merdeka Curriculum at SMP Negeri 1 Anak Ratu Aji demonstrates a serious effort by teachers to assess the aspects of shaping the Pancasila Student Profile holistically within the dimensions of critical thinking and creative thinking. However, regarding creativity, teachers face challenges in encouraging students to dare to express ideas or solve problems in unconventional ways. When given tasks to create their own questions or solve problems using different strategies, some students struggle and lack confidence. This indicates that the learning environment has not yet fully created a safe space for students to express themselves without fear of making mistakes. This aligns with what the mathematics teacher for 9th grade stated, as follows:

GR: “For example, I ask them to create their own problems based on situations around them. Some create problems about the price of fried rice, or other things! But, well, not all students want to be creative. Sometimes they’re afraid of making mistakes or feel embarrassed, so it really takes time and motivation.”

Based on the results of the FGD, interviews and observations, teachers frequently conduct group work; however, even though teachers have formed groups and assigned roles, student participation remains uneven. There is a tendency for active students to take over the role, while others tend to be passive or merely follow along. The challenge for teachers is how to design group strategies that encourage active and balanced engagement from all group members. Teachers have attempted to implement various strategies and diverse evaluation tools ranging from diagnostic, formative, to summative assessments. The success of implementing differentiated instruction in developing students’ critical and creative thinking skills is closely tied to various factors influencing its implementation process. Below is a network of inhibiting and supporting factors, along with a *word cloud* visualization in the image below .



diverse student characteristics through strategies that adapt learning content, processes, and products (Setiawan et al., 2024). The adaptation of Learning Objectives (LO) and the Learning Objective Sequence (LOS) to student characteristics reflects the implementation of adaptive and contextual differentiated instruction. Differentiation of content, process, and products constitutes the three main pillars of instructional implementation. Regarding content, teachers present material at varying levels of difficulty and adapt it to the context of students' daily lives. This content differentiation encompasses learning readiness, student interests, and student profiles. Mapping learning readiness involves several perspectives that can serve as indicators. Teachers must also spark students' interest by delivering lessons with enthusiasm, with the expectation that if the teacher is enthusiastic, the students will be too. Teachers play a crucial role in fostering students' interest in learning to support the achievement of successful learning outcomes (Taupik & Fitriani, 2021). Process differentiation is implemented through group discussions, collaborative work, and individual assignments that utilize various learning media, thereby encouraging interaction and collaboration among students. Meanwhile, product differentiation gives students the freedom to choose the form of work that suits their learning style, such as creating posters, videos, presentations, or story problems. This flexibility not only fosters creativity but also cultivates students' independence in managing their learning process.

According to Faiz in Gunadi et al., (2024), process differentiation includes: 1) tiered activities, meaning that at this stage students are required to build a shared understanding of the material being studied while still accommodating existing differences; 2) providing guiding questions to prompt students in exploring the material being studied; 3) creating individual plans for students, such as task lists that include assignments tailored to their needs, 4) providing time for students to complete tasks, 5) developing learning styles, and 6) grouping students according to their abilities and interests. Students' ability to identify, analyze, and evaluate questions demonstrates their skills in understanding the essence of the problem and breaking down the key components of the question. These findings align with Santos's view in "that differentiated instruction serves as a means to develop critical thinking skills and foster creativity. Limited learning resources, students' still-low reflective abilities, and a lack of study discipline also hinder the optimal and equitable development of critical and creative thinking skills. Based on the research results Gunadi et al. (2024), it is shown that the challenges faced by prospective educators when developing instructional materials are difficulties in creating teaching modules. This is influenced by the Merdeka Curriculum and the concept of " " as the "Proyek Penguatan Profil Pelajar Pancasila (P5)" is relatively new in elementary schools, necessitating adjustments for teachers who have not yet fully mastered it. A potential solution is to participate in training on the implementation of the Merdeka Curriculum.

The research findings align with the mainstream global discourse on differentiated instruction, which has evolved since the 1990s and emphasizes that effective learning must respond to students' diversity, interests, and learning profiles. In Indonesia, research on differentiated learning is still relatively emerging, coinciding with the implementation of the Merdeka Curriculum since 2022, which explicitly integrates differentiation principles into the learning structure. This study contributes to enriching the literature map regarding educational levels and the context of local and contemporary curriculum policies. The differentiation of content, process, and product identified in this study is conceptually aligned with Tomlinson's three pillars of differentiation but demonstrates conceptual adaptation. This study aligns with research conducted Taupik & Fitriani (2021), which found that differentiated instruction can strengthen students' critical reasoning and creative thinking skills.

This study differs from previous research because it specifically documents the implementation of differentiated instruction at the junior high school level within the

framework of the Merdeka Curriculum using NVivo analysis, thereby producing a more systematic thematic map compared to previous descriptive studies. Furthermore, this study not only confirms the impact of differentiation on cognitive abilities, but explicitly links it to the dimensions of the Pancasila Student Profile. This study also uses Nvivo software as a qualitative analysis tool that allows for a more structured and auditable exploration of thematic patterns.

## Conclusion

Based on data obtained through observation, in-depth interviews, and Focus Group Discussions (FGDs), along with thematic analysis using NVivo, this study concludes that teachers at SMPN 1 Anak Ratu Aji have successfully implemented differentiated instruction through three main pillars: content differentiation, process differentiation, and product differentiation. This implementation was carried out systematically through three main pillars: content differentiation, process differentiation, and product differentiation. The process began with a diagnostic assessment to map student characteristics, followed by the development of Learning Objectives (LO) and a tiered Learning Objective Sequence (LOS) aligned with students' abilities. Instruction is designed by considering students' readiness, interests, and learning profiles, thereby providing a more meaningful and personalized learning experience. The results of the NVivo analysis indicate a positive impact of differentiated instruction on the development of critical and creative thinking. Factors supporting differentiated instruction in developing students' critical and creative thinking skills include internal school support, teacher readiness, availability of facilities and infrastructure, and the integration of Pancasila learner profile values. Consequently, the most noticeable impact is seen in increased active participation, students' ability to express ideas, and their creativity in completing tasks. Limiting factors include time constraints, teachers' difficulties in developing assessment instruments aligned with individual learning needs and their workload, limited resources, and inconsistent implementation due to the pressure to cover the curriculum. Consequently, teachers need to enhance their capacity in designing differentiation-based formative assessments; educational institutions can integrate differentiation training into in-service training programs; and further research can develop differentiation-based assessments of critical and creative thinking.

## Conflict of Interest

The authors declare that there is no conflict of interest.

## Auhor Contributions

All authors declare that the final version of this manuscript has been read and approved. D.D.P. conceptualized the research idea and collected the data. The second author (R.A.) actively participated in the development of the theoretical framework, methodology, organization and analysis of the data, and discussion of the findings. The third author (F.A.P.) contributed to data interpretation, manuscript revision, and approval of the final version of the manuscript. The percentage contribution to the conceptualization, preparation, and revision of this manuscript was as follows: D.D.P.: 40%, R.A.: 30%, and F.A.P.: 30%.

## Data Availability Statement

The authors declare that the data supporting the findings of this study will be made available by the corresponding author, [D.D.P.], upon reasonable request.



## References

- Almujab, S. (2023). Pembelajaran berdiferensiasi: Pendekatan efektif dalam menjawab kebutuhan diversitas siswa. *Oikos: Jurnal Kajian Pendidikan Ekonomi dan Ilmu Ekonomi*, 8(1), 1–17. <http://repo.iain-tulungagung.ac.id/5510/5/BAB%202.pdf>
- Althamiranda, A., Fitria, N., Nurrohmat, T., Fatimah, A., Suwangsih, E., & Nurussama, A. (2025). Analisis kemampuan pemecahan masalah peserta didik kelas 4 sekolah dasar pada materi bangun datar dengan pendekatan Polya. *Jurnal Pendidikan Dasar*, 10(2). <https://journal.unpas.ac.id/index.php/pendas/article/view/27279/14144>
- Aminah, I. A. N., & Sya'bani, M. A. Y. (2023). Implementasi kurikulum merdeka dalam pembelajaran pendidikan agama Islam. *Jurnal Pendidikan Islam Al-Ilmi*, 6(2), 293. <https://doi.org/10.32529/al-ilmi.v6i2.2804>
- Anggraena, Y., Sufyadi, S., Maisura, R., Chodidjah, I., Takwin, B., Cahyadi, S., Felicia, N., et al. (2020). *Kajian pengembangan profil pelajar Pancasila*. <https://doi.org/10.36312/ej.v4i2.1646>
- Azmy, B., & Fanny, A. M. (2023). Pembelajaran berdiferensiasi dalam kurikulum. *Inventa: Jurnal Pendidikan Guru Sekolah Dasar*, 7(2), 217–223. <https://doi.org/10.36456/inventa.7.2.a8739>
- Barokah, N., & Kamal, R. (2025). Pembelajaran kontekstual sebagai inovasi kreatif dalam menjadikan materi ajar lebih bermakna. *Jurnal Ilmu Sosial, Pendidikan dan Humaniora*, 4(2), 95–103. <https://doi.org/10.56910/jispendiora.v4i2.2197>
- Dwitami, D., Khotimah, H. H., Kulsum, M. U., & Ash Shidiqqa, Q. Q. (2025). Efektivitas kurikulum merdeka terhadap guru dan siswa: Transformasi pembelajaran yang adaptif dan inklusif. *Jurnal Ilmu Pengetahuan Naratif*, 6(1), 221–233. <https://ijurnal.com/1/index.php/jipn/article/view/506>
- Fitriyah, & Bisri, M. (2023). Pembelajaran berdiferensiasi berdasarkan keragaman dan keunikan siswa sekolah dasar. *Jurnal Kajian Pendidikan dan Hasil Penelitian*, 9(2). <https://j-innovative.org/index.php/Innovative/article/view/1568>
- Gunadi, S. S., Hanifah, N., & Nugraha, R. G. (2024). Analisis strategi penerapan profil pelajar Pancasila dalam penguatan karakter peserta didik di sekolah dasar. *Jurnal Kependidikan*, 13(1), 177–184. <https://doi.org/10.58230/27454312.468>
- Habibah, S., Junaidi, M., & Sholikhah, K. (2024). Implementasi profil pelajar Pancasila di SD Ar-Roudloh Miru Sekaran Lamongan. *Jurnal Keagamaan, Pendidikan dan Humaniora*, 11(1), 1–20. <https://doi.org/10.52166/darelilmi.v11i1.4900>
- Ibrahim, S., & Haerudin, H. (2024). Pembelajaran berbasis pendekatan diferensiasi. *Lingua Rima: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, 13(2), 277–290. <https://doi.org/10.31000/lgrm.v13i2.11913>
- Kanevsky, L. (2020). Differential differentiation: What types of differentiation do students want? <https://doi.org/10.1177/0016986211422098>
- Kemendikbudristek. (2022). *Dimensi, elemen, dan subelemen profil pelajar Pancasila*. Badan Standar, Kurikulum, dan Asesmen Pendidikan, Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia.
- Kemendikbudristek. (2023). *PISA 2022 dan pemulihan pembelajaran di Indonesia*. Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi.
- Muliawan, P. (2024). Analisis penerapan kurikulum merdeka dalam pengajaran bahasa Indonesia: Tinjauan literatur terhadap isu dan tantangan terkini. *Jurnal Intelek dan Cendekiawan Nusantara*, 7932–7942. <http://jicnusantara.com/index.php/jicn/article/view/1394>

- Nicomse, N., & Naibaho, T. (2022). Penguatan literasi dan numerasi untuk mendukung profil pelajar Pancasila sebagai inovasi pembelajaran matematika. *Sepren*, 111–117. <https://doi.org/10.36655/sepren.v4i0.841>
- OECD. (2024a). *PISA 2022 results (Volume I): Creative minds, creative schools – Factsheets*. OECD Publishing. <https://www.oecd.org/publication/pisa-2022-results/>
- OECD. (2024b). *PISA 2022 results (Volume I): Learning strategies and attitudes for life – Factsheets*. OECD Publishing. <https://www.oecd.org/publication/pisa-2022-results/>
- PISA. (2022). *PISA 2022: Insights and interpretations*. OECD Publishing.
- Puspitasari, V., Rufi'i, & Walujo, D. A. (2020). Pengembangan perangkat pembelajaran dengan model diferensiasi menggunakan Book Creator untuk pembelajaran BIPA di kelas yang memiliki kemampuan beragam. *Jurnal Education and Development Institut*, 8(4), 310–319. <http://journal.ipts.ac.id/index.php/ed/article/view/2173>
- Rahman, R. N., Suja'i, I. S., & Anasrulloh, M. (2025). Analisis implementasi profil pelajar Pancasila dimensi bernalar kritis dan kreatif dalam pembelajaran IPAS. *Jurnal Inovasi Pendidikan IPS*, 5(3), 1107–1118. <https://doi.org/10.51878/social.v5i3.6518>
- Rochaendi, E., Ma, S., Supriadi, A., & Hardianto, D. (2025). Inisiasi penguatan kemampuan literasi dan numerasi siswa sekolah dasar melalui program literasi berbasis rumah. *Indonesian Journal of Elementary Education and Teaching Innovation*, 4(2), 120–140. [https://doi.org/10.21927/ijeeti.2025.4\(2\).120-140](https://doi.org/10.21927/ijeeti.2025.4(2).120-140)
- Rosaliana, & Nursalim, E. (2025). Peran guru PAI dalam implementasi pembelajaran diferensiasi pada kurikulum merdeka. *Jurnal Kajian Islam dan Sosial Keagamaan*, 2(3), 403–409. <https://garuda.kemdiktisaintek.go.id/documents/detail/4692799>
- Rosyah, D. L. A., & Darmawan, P. (2023). Analisis relevansi pembelajaran diferensiasi pada kurikulum merdeka dengan konsep visi pedagogik Ki Hajar Dewantara. *Jurnal Ekonomi, Bisnis dan Pendidikan*, 3(9). <https://doi.org/10.17977/um066.v3.i9.2023.5>
- Rohmah, N. N. S., Markhamah, Narimo, S., & Widyasari, C. (2023). Strategi penguatan profil pelajar Pancasila dimensi berkebhinekaan global di sekolah dasar. *Jurnal Elementaria Edukasia*, 6(3), 1254–1269. <https://doi.org/10.31949/jee.v6i3.6124>
- Sarah, C. R., Sugiman, & Munahefi, D. N. (2024). Pembelajaran matematika dalam mengintegrasikan nilai karakter di era kurikulum merdeka technology society 5.0. *Prisma, Prosiding Seminar Nasional Matematika*, 16–23. <https://proceeding.unnes.ac.id/prisma/article/view/2927>
- Setyowati, N., & Sutikno, P. Y. (2024). Habitiasi pendidikan karakter pada paradigma baru kurikulum merdeka untuk mewujudkan profil pelajar Pancasila. *Journal of Education Action Research*, 8(1), 100–109. <https://doi.org/10.23887/jear.v8i1.76457>
- Siregar, I., Anwar, K., & Munte, R. S. (2024). Isu-isu global pengembangan kurikulum merdeka dan pemagangan life skill world class education. *Jurnal Review Pendidikan dan Pengajaran*, 7(4), 12887–12895. <https://doi.org/10.31004/jrpp.v7i4.34247>
- SMERU Research Institute. (2024). *Publikasi dan laporan penelitian tentang kebijakan dan implementasi kurikulum merdeka*. <https://jurnal.peneliti.net/index.php/JIWP/article/view/13763>
- Sobirin, M., dkk. (2023). Analisis keterlaksanaan pembelajaran berdiferensiasi ditinjau dari kesiapan guru dan siswa di kelas X. *Jurnal Pustaka Cendekia Hukum dan Ilmu Sosial*, 1(3), 266–279. <https://doi.org/10.70292/pchukumsosial.v1i3.117>
- Sujadi, I. (2022). Inovasi pembelajaran matematika yang menguatkan literasi dan numerasi untuk mendukung profil pelajar Pancasila. *Seminar Nasional Pendidikan Matematika*, 22(22), 1–13. <https://e-journal.unmas.ac.id/index.php/Proseminasmatematika/article/view/4145>

- Suparyana, I. K., Suastra, I. W., & Arnyana, I. B. P. (2022). Rendahnya literasi sains: Faktor penyebab dan alternatif solusinya. *Jurnal Ilmiah Pendidikan Citra Bakti*, 9(1), 153–166. <https://doi.org/10.38048/jipcb.v9i1.580>
- Taupik, R. P., & Fitriani, Y. (2021). Mengembangkan motivasi belajar siswa melalui strategi pembelajaran berdiferensiasi: Sebuah kajian pembelajaran dalam perspektif pedagogik-filosofis. *Jurnal Basicedu*, 5(5), 1525–1531. <https://doi.org/10.31004/basicedu.v6i4.3116>
- Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all learners*. ASCD.
- Tunas, K. O., Daniel, R., & Pangkey, H. (2024). Kurikulum merdeka: Meningkatkan kualitas pembelajaran dengan kebebasan dan fleksibilitas. *Journal on Education*, 6(4), 22031–22040. <https://doi.org/10.31004/joe.v6i4.6324>
- Purwandari, W., Safitri, I. N., & Karimah, M. M. (2024). Eksplorasi hakikat pembelajaran matematika di madrasah ibtidaiyah konteks kurikulum merdeka. *Indonesian Research Journal on Education*, 4, 1045–1060. <https://garuda.kemdiktisaintek.go.id/documents/detail/5069313>
- Wahyudin, D., Subkhan, E., Malik, A., Hakim, M. A., Sudiapermana, E., Alhapip, L., Anggraena, Y., et al. (2024). *Kurikulum merdeka*. Badan Standar, Kurikulum, dan Asesmen Pendidikan, Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia.
- Wijayanti, N., Agusdianita, N., & Oktariya, B. (2024). Analisis penerapan profil pelajar Pancasila dalam pembentukan karakter peserta didik di Sekolah Dasar Negeri 20 Kota Bengkulu. *Social, Humanities, and Educational Studies (SHES): Conference Series*, 7(3), 1310–1322. <https://doi.org/10.20961/shes.v7i3.91960>
- Zulhuda, R., Cicia, O. Y., Aldi, A., & Fera, Z. (2024). Telaah kurikulum pendidikan di Indonesia: Evaluasi, implementasi, dan tantangan di era modern. *Jurnal Ilmiah Pendidikan Scholastic*, 3(3), 17–24. <https://doi.org/10.36057/jips.v8i3.695>

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