

**DIFFERENTIATED LEARNING IN THE MERDEKA BELAJAR CURRICULUM TO IMPROVE THE LEARNING OUTCOME OF ISLAMIC EDUCATION IN THE ELEMENTARY SCHOOL**

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**ABSTRACT**

This study aims to evaluate the effectiveness and impact of differentiated learning in the context of the Merdeka Belajar Curriculum on the learning outcomes of Islamic Religious Education in Elementary Schools. The Systematic Literature Review (SLR) method is used to identify and analyze related research findings from various sources. The SLR results highlight that the application of differentiated learning can make a positive contribution to increasing student understanding and achievement in Islamic Education. Learning differentiation through the Merdeka Belajar Curriculum approach can facilitate the individual needs of students, thus creating an inclusive and responsive learning environment. In order to improve the learning outcomes of Islamic Education in Elementary Schools, this study suggests the application of a broader and measurable differentiated strategy in the implementation of the Merdeka Belajar Curriculum. The findings of this study can provide practical guidance for educators, curriculum developers, and education policies in optimizing learning methods to achieve holistic Islamic education goals at the elementary level.

**Keywords:** Differentiated Learning, Curriculum Merdeka Belajar, Islamic Education, Elementary School.

**1. INTRODUCTION**

The learning that facilitates learning styles and unlocking the potential of students remain challenges (still homework) for education in Indonesia (Mahsun, 2013). Education, as a system, comprises various components, including educators, students, educational goals, educational tools, and learning environment (Saat, 2015). According to Crow and Crow, education is a program encompassing diverse activities tailored to accommodate the needs of every individual, such as social, cultural, and traditional aspects (Yuristia, 2018). Furthermore, education also has a mission to shape individuals' personalities to be devout and ethical. In other words, education places high values on each student's learning style tendencies and the religious needs of each individual (Jannah, 2013). However, preliminary research results indicate that some schools in Yogyakarta that have been implementing differentiated learning have not yet demonstrated positive outcomes in improving students' learning achievements (Qolbiyah, 2022).

Meanwhile, the existence of differentiated learning is considered as one alternative concept of student-centered learning (Aprima & Sari, 2022). Within this framework encompassing the diverse interests and potential of students can be maximized through a series of learning activities that facilitate each student's learning style according to their individual needs (Faiz et al., 2020). This approach indirectly motivates students to be more diligent in their self-development (Daga,

2021). The suboptimal implementation of differentiated learning requires a learning model to guide the Islamic Religious Education learning process. The goal is to realize learning that accommodates, guides and appreciates the diversity within students. In order to achieve differentiated learning that can improve students' learning outcomes while addressing the diverse learning needs of students, this research endeavors to present a model of differentiated learning.

The problem statement to be investigated. Firstly, it addresses the question of how to develop a differentiated learning model for Islamic Education at the elementary school level. The second aspect of the problem statement investigates the effectiveness of the differentiated learning model in enhancing students' learning outcomes. The primary objective of this research is to formulate a differentiated learning model specifically designed for Islamic Education at the elementary school level. The significance of this research lies in the provision of a differentiated learning model applicable to elementary schools, particularly those affiliated with Muhammadiyah in Yogyakarta. The rationale behind selecting this research is a continuation of a prior analysis and problem potential study related to learning with the Merdeka curriculum with one critical point identified in the analysis being the necessity for specific guidance in the implementation of differentiated learning.

Differentiated learning endeavors to accommodate, guide, and appreciate the diversity among students (Sugiarti, 2022). In other words, it is based on students' preferences (Farid et al., 2022). Nevertheless, despite this student-centered approach, differentiated learning still underscores the importance of teacher quality (Swandewi, 2019). Therefore, teachers must comprehend the significance of the zone of proximal development, recognizing the diverse potential of students (Amaliyah & Rahmat, 2021), this involves transitioning the learning system from teacher-centered learning to a student-centered learning (Sulistiyosari et al., 2022). Consequently, teachers need to creatively devise engaging learning concepts (Saprudin & Nurwahidin, 2021)(Oktarina, 2019). Education functions as a medium for the transfer of knowledge, skills, and values, aiming to counteract the moral degradation of the nation's youth (Salasiah, 2021).

Differentiated learning is one of the learning alternative concepts in to student-centered learning (Aprima & Sari, 2022). Within this learning framework, the diverse interests and potential of students can be maximized through a series of learning facilitating students' learning styles (Lukitaningtyas, 2022) (Faiz et al., 2020) (Daga, 2021). Differentiated learning is implemented by way of creating various classes to maximize students' potential (Yuristia, 2018) (Suwartiningsih, 2021), as a result, teachers must innovate content, mindset, operational systems, and even the selected evaluation materials taking into consideration the aspects, such as interests, multiple intelligences, characteristics, and the readiness level of the students (Andini, 2016). Differentiation consists of three aspects: content, process, and product (Subhan, 2022).

The values of the Islamic religion are derived from the Qur'an and Hadith, which contain meanings encompassing all words, actions, and exemplary behavior of Prophet Muhammad (Jaya, 2019) (Haris, 2015), thus capable of being transposed and internalized in human life (Ristianah, 2020). The scope of Islamic Education consists of six aspects, namely the Qur'an, Hadith, creed (*aqidah*), jurisprudence (*fiqih*), morals (*akhlak*), and the history of Islamic culture (Hidayah, 2019). However, the implementation of Islamic education itself lies in the embedding of Islamic values in students as the result of learning (Nabila, 2021; Suryani et al., 2021; Warasto, 2018). In the general explanation in the Indonesian Law No. 12 of 1954, article 20 regarding Islamic education in the state educational institutions states that religious education can be provided to students

according to educational levels (Hendrik, 2015)(Sari & Shunhaji, 2020). Islamic education is an effort to invest in knowledge based on Islamic teachings (Astuti, 2022)(Haris, 2015). According to Al-Abrasy, Islamic education has five objectives, namely cultivating good behavior or attitudes, providing useful knowledge for life, preparing every student to engage in professional endeavors, and fostering a spirit of seeking knowledge (Syafe'i, 2015).

The Islamic values referred to in this research are, firstly, I'tiqodiyah values (creed), which can soothe the soul and free it from confusion (Prasetyo, 2020)(Suryani et al., 2021). Secondly, the *Khuluqiyah* values (morality) (Sormin et al., 2020). Moral values are manifested in behavior or actions (Warasto, 2018) (Rahmah, 2021). In fact, the Prophet Muhammad was sent to the Earth to perfect human morality (Mz, 2018). Thirdly, Amaliyah values (worship and transactions) (Basir, 2022) (Asbar & Setiawan, 2021). Worship is the embodiment of the deepest love for Allah (Kallang, 2018). (Elihami, 2018). Meanwhile, transactions (*Muamalah*) according to Mustofa are the rules from Allah regarding the relationship between one person and another (Nurrachmi & Setiawan, 2020).

Meanwhile, the learning outcomes of Islamic education encompass attitudes, values, understanding, comprehension, and skills as a result of learning actions and activities (Andriani & Rasto, 2019). Learning outcomes are a reflection of the abilities or achievements possessed by an individual after undergoing the learning process (Nurhasanah & Sobandi, 2016) (Nurrita, 2018) (Firmansyah, 2015). Learning outcomes are related to the changes in an individual after participating in learning activities (I. Lestari, 2015). These outcomes can be assessed through evaluation activities (Kurniawan et al., 2017).(Husna & Arif, 2021).

State of the art and novelty: Based on previous research, it can be observed that differentiated learning is a new learning concept developed in response to the *Merdeka* curriculum. Differentiated learning aims to provide opportunities for students to learn according to their potential and appreciate diversity. Thus, this research introduces novelty and originality in the differentiated learning model. The chosen research title aligns with several relevant previous studies, including “Implementation of Differentiation Method in the Reflection of Islamic Religious Education Learning” (Oktarina, 2019). and “Analysis of the Implementation of Differentiated Learning in the Implementation of the *Merdeka* Curriculum” (Salasiah, 2021).

## 2. RESEARCH METHOD

The method employed in this research is a Systematic Literature Review (SLR). This method involves the identification, examination, evaluation, and interpretation of all available research. Researchers use this method to systematically review and identify journals, following established steps at each stage of the process (Syelitjar & Putra, 2021).

Data collection is carried out by documenting all articles obtained in this research report. The data used are articles published in the last 10 years (2014–2023) that examine the adaptation of technology for teachers. This research utilizes journals indexed in Google Scholar, Sinta, and Scopus. To identify articles relevant to the research objectives, keywords used include curriculum development and self-esteem. The specific search term used is (“differentiated learning to improve learning outcomes”). Consequently, the search keywords for this research are limited. Selected articles are those with similar research, which are then analyzed and summarized. The research findings are then incorporated into a comprehensive discussion in this article.

## 3. RESULT AND DISCUSSION

The research data included in this literature review consists of analyses and summaries from documented articles related to differentiated learning to improve learning outcomes, presented as follows:

**Table 1. Research Findings on Differentiated Learning to Improve Learning Outcomes**

No	Authors	Title	Method	Research Result
1	Tien-Chi Huang, Chun-Yu Lin	From 3D modeling to 3D printing: Development of a differentiated spatial ability teaching model	The research methodology involves systematic steps, including needs analysis, model design, and implementation within the teaching context. This study not only enriches the spatial ability learning approach but also integrates cutting-edge technologies such as 3D modeling and 3D printing into the teaching process.	This research specifically explores the transition from 3D modeling to 3D printing in the context of developing a differentiated spatial ability teaching model. Through this study, it is anticipated that empirical evidence supporting the effectiveness of this teaching model will be found, providing new insights into the integration of cutting-edge technology to enhance spatial ability learning.
2	R. A. Ogunkunle And Onwunedo Azuka Henrietta	Effect Of Differentiated Instructional Strategies On Students' Retention In Geometry In Fct Senior Secondary Schools, Abuja, Nigeria	This research employs an experimental pretest-posttest research design with a control group. The research area is the Abuja Municipal Area Council, Federal Capital Territory. The target population comprises all Senior Secondary School 2 (SS2) mathematics students in the area. The simple	The conclusion drawn from these findings leads to the recommendation that teachers and mathematics educators should adopt differentiated learning strategies as an innovative, efficient, and effective approach in teaching mathematical geometry concepts.

			random sampling technique is adopted and utilized to select two senior secondary schools and 100 subjects for the research.	
3	Kado, Nedup Dorji, Nim Dem, Dorji Om	The Effect Of Differentiated Instruction On Academic Achievement Of Grade Eleven Students In The Field Of Derivative In Bhutan	The framework of the quasi-experimental research method involves pre-test and post-test. 64 eleventh-grade students participated in this study.	Statistically, differentiated learning supports the experimental group compared to the control group, as found in the post-test analysis.
4	Awofala, A. O. A. Lawani, Abisola O	<b>Increasing Mathematics Achievement of Senior Secondary School Students through Differentiated Instruction</b>	This study examines the impact of different teaching methods on the academic achievement of high school students in mathematics in Nigeria using the blueprint of a quasi-experimental research design with a nonequivalent pre-test, post-test control group. The sample consists of 220 students, with three research questions and three null hypotheses guiding the research.	The research results encompass an improvement in students' mathematics achievement in high school after implementing differentiated instruction. This can be reflected in increased test scores, student engagement, or even enhanced learning outcomes.
5	Andika Setyo Budi Lestari,	Plan –Do –See: Lesson Study-	The research method employed	The research results conducted through Lesson

	Anton Wahyono, Yavuz Erdem Akkuşci, Purwanto, Khoirul Anas, Yessi Nurmalasari, Rachma Bibi, dan Mohamad Yunus	Based Differentiated Learning in Middle Schools	is a qualitative descriptive method. The study subjects are junior high school students. The Lesson Study process consists of planning (Plan), implementation (Do), and reflection (See), conducted with a facilitator as the supervisor (lecturer) and teachers from the partner school as model teachers and observers.	Study, implemented collaboratively with teachers at school using differentiated instruction, indicate that a significant portion of students achieved proficiency in their learning outcomes.
6	Altangerel Balgan, Tsolmon Renchin, Khulan Ojgoosh	An Experiment in Applying Differentiated Instruction in STEAM Disciplines	This research develops a teaching approach based on the nine multiple intelligences and learning styles. To create the teaching approach, Gardner’s test and the Visual, Auditory, Kinesthetic (VAK) behavior test were administered to 76 students.	This research identified a differentiated approach suitable for intellectual abilities and learning styles. The findings revealed a correlation between VAK, intelligence abilities, and students’ temperament.
7	Jing-Hua Chen <sup>1</sup> & Yi-Chou Chen	Differentiated Instruction in a Calculus Curriculum for College Students in Taiwan	Method: Quasi-experimental design. Data were collected from new Army recruits, with a sample size of 60 (30 in the experimental group and 30 in the control group).	As hypothesized, the results indicate a significant difference in calculus achievement between the experimental group and the control group. The findings support the effectiveness of differentiated learning in the calculus curriculum.



8	Naida Bikić, Sanja M. Maričić, Milenko Pikula	The Effects of Differentiation of Content in Problem-solving in Learning Geometry in Secondary School	In this context, an experimental study was conducted on a sample of high school students (N = 165) to examine whether the methodological approach designed based on the principles of problem-based learning with content differentiation yields better effects in learning compared to the traditional mode.	The results indicate that differentiated learning contributes to better student performance in teaching geometry, and the most significant progress is achieved in the group of students with average success and those below average.
9	Hani Morgan	Maximizing Student Success with Differentiated Learning	This method employs qualitative descriptive research. The author presents differentiated theories based on and provides practical strategies that teachers can use to implement this teaching method.	The research findings encompass insights into how this approach can align learning with the individual needs of students, enhance motivation, and ultimately improve academic achievements on a comprehensive scale. keseluruhan.
10	Brodersen, R. Marc; Melluzzo, Daniel	Summary of Research on Online and Blended Learning Programs That Offer Differentiated Learning Options. REL 2017-228	Approximately 45 percent of the investigated blended learning programs (5 out of 11) offer differentiation in face-to-face teaching components. In some of the most thorough studies,	The differentiation approach in online and blended learning can enhance students' learning experiences. Furthermore, this research examines the challenges and opportunities that arise in the implementation of these programs, providing a foundation for further development in enhancing

			statistically significant positive effects were found for four blended learning programs: Cognitive Tutor Algebra I, LeapTrack, READ 180, and Time To Know.	technology-based learning designs.
11	Aldjon Nixon Dapa	Differentiated Learning Model For Student with Reading Difficulties	This study is an analytical descriptive research. The methods employed in the classroom include lectures and assignments. Two methods were utilized: the Gap Method and Glass Analysis.	The implementation of differentiated learning can facilitate an adaptive learning process tailored to the abilities of students experiencing difficulties in reading..
12	Dinç, Emre	Differentiated Learning Environment--A Classroom for Quadratic Equation, Function and Graphs	This study employs the Differentiated Learning Environment (DLE) approach to enhance students' understanding of quadratic equations, functions, and graphs.	The research findings indicate that DLE is effective in creating a classroom environment that facilitates better understanding of the material. Students demonstrated improvement in mastering the concepts of quadratic equations, functions, and graphical abilities, illustrating the success of the differentiated approach in enhancing mathematical learning outcomes in the classroom.



13	Aguanda, Agus Setiawan, M. Saidun Anwar, Muhammad Rafli Faishal Wardana, dan Rebecca Alicia Yambasu	The Effect of Differentiated Learning on Improving Student Learning Outcomes	This study employs a quantitative approach with a quasi-experimental research method using a non-equivalent control group design.	The significance value is $< 0.05$ ; therefore, it can be concluded that the research results indicate the influence of differentiated learning assisted by RME-based matrix teaching materials on the mathematical reasoning abilities of eleventh-grade students in APHP class at SMK Negeri 2 Metro Lampung.
14	Purwoko Haryadi Santoso, Edi Istiyono dan Haryanto	Physics Teachers' Perceptions about Their Judgments within Differentiated Learning Environments: A Case for the Implementation of Technology	A semi-structured online interview (~50 minutes) was conducted by the first author with all the physics teachers involved. Other authors contributed to reviewing the interview protocol and providing training for the first author's mock interviews.	These findings provide empirical support for the implementation of technology in the context of differentiated physics learning, laying the foundation for the development of more adaptive and responsive teaching strategies to meet the individual needs of students in physics education.
15	Azmy Almas Dalila, Siti Rahmah, Winny Liliawati, Ida Kaniawati	The Effect of Differentiated Learning in Problem Based Learning on Cognitive Learning Outcomes of High School Students	This research employed a quasi-experimental approach with a Nonequivalent Control Group research design. The research sample was selected using purposive sampling techniques, involving a total of 70 tenth-grade students from one of the high schools	These findings make a significant contribution to understanding how to optimize students' learning experiences through the integration of Differentiated Learning in problem-based learning models at the secondary school level.

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By implementing differentiated learning, it is anticipated that the learning outcomes of Islamic religious education in elementary schools can improve. This is because differentiated learning can cater to the needs, interests, and learning styles of learners, enabling them to learn more easily, enjoyably, and meaningfully. Differentiated learning can also foster the development of learners' potential, interests, and talents, allowing them to excel or become champions in their respective fields of interest. Additionally, differentiated learning can cultivate positive attitudes in learners toward Islamic religious education, such as love, respect, pride, and concern for the religion and Islamic values.

Various studies have demonstrated the effectiveness of differentiated learning. Differentiated learning is a teaching strategy that adjusts the material, process, and learning products according to the needs, interests, and abilities of students. Differentiated learning can enhance students' academic achievements, particularly in the field of mathematics, such as geometry and derivatives. It can also develop students' spatial abilities, including the capacity to understand, visualize, and manipulate two or three-dimensional objects. Differentiated learning can be implemented in various ways, such as using 3D modeling technology and 3D printing, providing diverse and challenging assignments, or conducting lesson studies with teachers and lecturers.

Several studies have been conducted to test the effectiveness of differentiated learning in improving academic achievement and spatial abilities among students. Some of these studies include:

Huang and Lin conducted a quasi-experimental study to develop a differentiated spatial ability teaching model using 3D modeling technology and 3D printing. They found that this teaching model had a positive effect on students' spatial abilities (Huang & Lin, 2017).

Ogunkunle and Henrietta conducted the experimental pretest-posttest study, they investigated the impact of differentiated learning strategies on students' retention in geometry at a high school in Abuja, Nigeria. They recommended that teachers and mathematics educators adopt differentiated learning strategies as an innovative, efficient, and effective approach to teaching mathematical geometry concepts (Ogunkunle & Henrietta, 2018).

Kado, Dorji, Dem, and Om conducted a quasi-experimental study to investigate the impact of differentiated learning on the academic achievement of eleventh-grade students in the field of derivatives in Bhutan. They found that differentiated learning statistically supported the experimental group compared to the control group (Kado et al., 2021).

Awofala and Lawani conducted a quasi-experimental study to test the influence of different teaching methods on the academic performance of high school students in mathematics in Nigeria. They found that diverse teaching methods improved students' mathematical achievements, as reflected in increased test scores, student engagement, or even enhanced learning outcomes (O. A. Awofala & O. Lawani, 2020).

Lestari, Wahyono, Akkuşci, Purwanto, Anas, Nurmallasari, Bibi, and Yunus conducted a qualitative descriptive study to understand the learning outcomes of junior high school students who participated in differentiated learning based on lesson study. They found that the learning outcomes of students were mostly satisfactory after going through the stages of lesson study, namely planning, implementation, and reflection (A. S. B. L. Lestari et al., 2023).

This approach aims to enhance student motivation, engagement, and academic achievement by providing choices and suitable challenges. Various studies have been conducted to test the effectiveness and implementation of differentiated learning in various fields and contexts.

One field that can apply differentiated learning is STEAM (Science, Technology, Engineering, Art, and Mathematics). Research conducted by Altangerel et al. developed a different teaching approach based on nine multiple intelligences and learning styles. This study found an appropriate differentiated approach for intelligent abilities and learning styles. The research findings revealed correlations between VAK (Visual, Auditory, Kinesthetic), intelligence abilities, and student temperaments (Balgan et al., 2022).

Another field that can implement differentiated learning is calculus. Research conducted by Chen and Chen used a quasi-experimental design to test the effects of differentiated learning on a calculus curriculum for students in Taiwan. The results showed a significant difference in calculus achievement between the experimental group and the control group, supporting the effectiveness of differentiated learning in the calculus curriculum (Chen & Chen, 2017).

Geometry is another field that can implement differentiated learning. Research conducted by Bikić et al. involved an experimental study with a sample of high school students to test whether a methodological approach designed based on problem-based learning principles and differentiated content would have a better effect on learning compared to the traditional mode. The results showed that differentiated learning contributed to better student performance in geometry teaching and the most significant progress was achieved in the group of students with average and below-average success rates (Bikić et al., 2016) (Morgan, 2014).

In addition to the mentioned fields, differentiated learning can also be applied in online and blended learning. Research conducted by Brodersen and Melluzzo provides a summary of studies on online and blended learning programs that offer differentiated learning options. This research examines programs that provide differentiation in both face-to-face and online teaching components, as well as the challenges and opportunities that arise in the implementation of these programs. The differentiation approach in online and blended learning can enhance the learning experience for students (Brodersen & Melluzzo, 2017).

Indeed, the conducted studies indicate that differentiated learning can enhance students' learning outcomes across various fields, including reading, mathematics, and physics. Differentiated learning can also be integrated with other teaching models, such as problem-based learning and technology-assisted learning.

One area that can be enhanced through differentiated learning is reading ability. Research conducted by Aldjon Nixon Dapa indicates that the implementation of differentiated learning can facilitate an adaptive learning process that aligns with the abilities of students experiencing difficulties in reading. This study employed the Rumpang method and Glass Analysis as differentiated learning techniques (Dapa, 2020).

Another area that can benefit from differentiated learning is mathematics. Research conducted by Dinç utilized the Differentiated Learning Environment (DLE) approach to enhance students' understanding of quadratic equations, functions, and graphs. The study's results demonstrated the effectiveness of DLE in creating a classroom environment that facilitates better comprehension of the material (Dinç, 2017). Another study by Aguanda et al. revealed that differentiated learning, supported by matrix-based RME teaching materials, can improve the

mathematical reasoning abilities of 11th-grade APHP students at SMK Negeri 2 Metro Lampung (Aguanda et al., 2023).

In addition to mathematics, differentiated learning can also be applied in the field of physics. Research conducted by Purwoko Haryadi Santoso et al. reveals physics teachers' perceptions of their assessment in a differentiated learning environment. This study also indicates that the implementation of technology can support differentiated physics learning by providing more adaptive and responsive teaching strategies to individual student needs (Santoso et al., 2022). Research conducted by Azmy Almas Dalila et al. shows that differentiated learning in a problem-based learning model can enhance cognitive learning outcomes for high school students (Dalila et al., 2022).

From the results of these studies, it can be concluded that differentiated learning is an effective and beneficial teaching strategy to enhance academic achievement and spatial abilities in the field of mathematics. Differentiated learning also provides an enjoyable and engaging learning experience for students by leveraging cutting-edge technology and collaboration between teachers and lecturers. Differentiated learning can be combined with other teaching models, such as problem-based learning and technology-assisted learning, to create a more optimal and enjoyable learning environment for students. The mentioned research provides both empirical and theoretical evidence regarding the effectiveness and implementation of differentiated learning. However, further research is still needed to develop and evaluate differentiated teaching approaches that align with the diverse characteristics and needs of students.

The analysis of research findings on differentiated learning indicates a positive potential for improving learning outcomes. In general, this approach offers adaptive learning tailored to the individual needs of students, allowing them to learn at levels that align with their abilities and learning styles. Differentiated learning has also proven effective in enhancing academic achievement. Students who receive support and materials aligned with their readiness levels have a greater chance of achieving higher learning outcomes. These results suggest that personalized learning can be a key factor in improving students' understanding of concepts and skills.

However, it must be acknowledged that the implementation of differentiated learning requires extra effort from educators. They need to have a solid understanding of individual student needs and the ability to design and deliver appropriate instructional materials. Therefore, adequate training and support for teachers are crucial for the success of this approach.

Furthermore, research also highlights the importance of using different assessment tools to monitor student progress in differentiated learning. This approach recognizes that each student may demonstrate their understanding in different ways, so assessments should encompass various forms, such as projects, presentations, or written assignments. Thus, assessment results can provide a more holistic picture of student achievement.

However, challenges that may arise involve time management and resources. Teachers need to plan carefully to ensure that each student receives sufficient attention without sacrificing the coverage of the curriculum. Additionally, the availability of resources, both in terms of technology and instructional materials, can influence the extent to which differentiated learning can be effectively implemented.

#### 4. CONCLUSION

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In conclusion, the research findings indicate that differentiated learning has a positive impact on student motivation and learning outcomes. Meanwhile, successful implementation requires commitment and involvement from teachers, as well as support from the school or educational institution. Despite potential challenges, the long-term benefits of differentiated learning in improving student learning outcomes make it an appealing approach to be applied in diverse educational contexts. The research results also demonstrate that differentiated learning can help address learning gaps among students. By providing additional support to students who need it and accelerating the progress of students who grasp the material more quickly, this approach can create an environment where all students have a more equitable opportunity for success.

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