

# Differentiated Learning Strategies: Creating an Adaptive and Inclusive Indonesian Classroom

Eka Chandra Saputra<sup>1</sup>

Farida Nugrahani<sup>2</sup>

Nurnaningsih<sup>3</sup>

<sup>123</sup>Indonesian Language Education, Veteran Bangun Nusantara University, Indonesia

<sup>1</sup>saputraekachandra2@gmail.com

<sup>2</sup>faridanugrahani@univetbantara.ac.id

<sup>3</sup>nurnaning1912@gmail.com

## Abstract

Differentiated learning strategies play an important role in Indonesian language subjects at the elementary school level. This study aims to describe: (1) the implementation of differentiated learning strategies in Indonesian language learning; (2) supporting factors in their implementation; (3) obstacles encountered; and (4) solutions adopted by teachers to overcome challenges in the implementation of differentiated learning strategies in Grade V of SD Negeri 1 Pare Mondokan Sragen, Central Java. The research method employed is descriptive qualitative with a case study approach. Primary data were obtained through classroom observations, in-depth interviews with teachers, students, and parents, as well as documentation. Secondary data consisted of lesson plans and teaching materials. A purposive sampling technique was applied, focusing on Grade V teachers, students, and parents actively involved in learning activities. The validity of the data was tested through source and method triangulation, while the data were analyzed using an interactive model consisting of data collection, data reduction, data presentation, and conclusion drawing. The findings indicate that the implementation of differentiated learning strategies in Grade V has made a significant contribution to improving students' comprehension, particularly by accommodating diverse learning styles in Indonesian language subjects. This success was supported by initial diagnostic assessments, the use of simple technologies, and collaboration between teachers and parents. However, challenges remain in terms of limited resources and teachers' readiness to manage heterogeneous classrooms. Solutions undertaken include strengthening teacher training, optimizing the use of technology, and enhancing communication with parents.

**Keywords:** *learning strategies, differentiated learning, Indonesian Language, elementary school, Creating learning*

## Introduction

Modern education demands a flexible approach to meet the diverse learning needs of students (Firdausya et al., 2020; Hanun et al., 2025; Sholeh et al., 2025). One of the methods that has received attention in the field of education is different teaching, especially in Indonesian classes at the elementary school level. This approach is very much in line with the Independent Curriculum, which emphasizes the individuality and flexibility of students in understanding the subject matter (Crozier, 2013; Masjid & Pamungkas, 2024; Radovic-Markovic & Markovic, 2012; Tsatsaroni & Sarakinioti, 2018). However, the reality on the ground reveals that Indonesian language teaching still largely

relies on uniform conventional methods, failing to fully accommodate the diverse learning styles, interests, and readiness levels of students (Gerasimova et al., 2015; Koolivand et al., 2024; Rozhkova & Stepanova, 2016). As a result, high-achieving students often feel unchallenged, while those who experience learning difficulties tend to fall behind. This situation leads to reduced student engagement, lack of motivation, and limited development of literacy skills (Hussin et al., 2012; Whitehurst & Lonigan, 1998; Wong & Li, 2021; Xerri et al., 2018). In addition, this challenge is exacerbated by the limited resources of schools in providing diverse teaching materials. Teachers often struggle to adapt their teaching methods to students' individual backgrounds and needs. Therefore, there is an urgent need to improve a more inclusive and differentiation-oriented approach to learning (Marlina et al., 2019; Westwood, 2001).

The main challenge in this study lies in the application of different learning strategies in Indonesian classes at the elementary school level, especially at SD Negeri Pare 1 Mondokan Sragen. Despite the significant potential of this approach to improve student understanding, various obstacles remain in its implementation (Bos & Schneider, 2009; Harris & Brown, 2013; Hodges, 2023). Educators face difficulties in adapting teaching methods to the needs of individual students, especially when managing diverse classrooms with limited resources. In addition, the use of technology as a learning aid is still not optimal, and the lack of teacher training in implementing different learning strategies contributes to these obstacles (Faltis & Valdés, 2016; Kristiawan & Muhaimin, 2019; Rothstein-Fisch & Trumbull, 2008). Parental involvement in supporting student learning has also not reached its full potential, resulting in ongoing challenges in creating more inclusive and personalized learning experiences. In some cases, the implementation of these strategies is sporadic and unsustainable due to inadequate systematic support from school administrations (Molnar & Mulvihill, 2003; Saiger, 1999; Stein et al., 2004). Teachers who want to implement different learning often have to find solutions independently without clear guidelines from school policies (Hilton et al., 2013; Rosenholtz, 1985). This indicates that the implementation of differentiated learning still needs improvement in terms of policies, training, and adequate infrastructure support (Bose, 2004; Ntorukiri et al., 2022).

The significance of this study stems from the gap between different learning concepts and their actual implementation in primary schools. This study aims to describe how differentiated learning strategies are applied in the Indonesian class for fifth grade students at SD Negeri Pare 1 Mondokan Sragen (Harvey & Kamvounias, 2008; Parding & Abrahamsson, 2010). In addition, it examines the supporting factors and challenges faced in implementing these strategies, while proposing solutions that can be implemented to improve learning effectiveness (Bol & Garner, 2011; Rahmawati et al., 2024). These findings are expected to contribute to the implementation of more effective learning strategies, have a positive impact on students' literacy skills, learning motivation, and foster a more inclusive learning environment in elementary schools (Mohseni Takaloo & Ahmadi, 2017; Prakoso et al., 2019; Sulisworo & Suryani, 2014). The results of the study can be a reference for policymakers in designing teacher training programs that focus on different learning. Furthermore, this research aims to provide practical insights for educators in adapting their teaching methods to diverse student characteristics. As a result, the long-term sustainability of the implementation of this strategy can be more ensured (Darling-Hammond et al., 2005; Luneta, 2012; Stuart & Tatto, 2000).

## Method

The type of research method used is descriptive qualitative research with a pinned case study approach (Creswell et al., 2014; Nugrahani, 2014). The qualitative research design is relevant to describe in detail the phenomena that occur in the context of the implementation of differentiated learning strategies. This study aims to describe (1) the implementation of differentiated learning strategies in Indonesian subjects; (2) supporting factors in the implementation of the deferred learning strategy in Indonesian subjects; (3) obstacles in the implementation of the Differential Learning Strategy in Indonesian subjects; and (4) solutions sought by teachers in overcoming problems in the implementation of deferential learning strategies in Indonesian subjects in grade V of SD Negeri Pare 1 Mondokan Sragen, Central Java, for the 2024/2025 school year.

The data used in this study consists of primary and secondary data. Primary data were obtained from structured observations, in-depth interviews with teachers, students, and parents. Primary data sources include student conditions, teacher efforts, and parents' perceptions of grade V students of SD Negeri Pare 1 Mondokan Sragen. Meanwhile, secondary data includes supporting documents, such as lesson plans and teaching materials used in the classroom. The research sample was selected using a purposive sampling technique, which focused on grade V teachers, students, and parents who have an active role in learning activities at the school. Data collection was carried out through in-depth interviews, participatory observations, and documentation. In-depth interviews are conducted with teachers to explore students' understanding and experience in implementing differentiated learning strategies. Participatory observation is used to see firsthand how the implementation of the strategy takes place in the classroom, while documentation includes the collection of lesson plans, teaching materials, and notes related to learning activities.

The research instruments used in this study are interview guidelines prepared based on the focus of the research problem, observation sheets to record activities that occur during the learning process, and learning documents as supporting materials for analysis. The validity of the data was tested through the triangulation technique of sources and methods, namely by comparing data from interviews, observations, and documentation to ensure the accuracy of the information obtained. Data analysis is carried out in an interactive way focusing on research data. These stages include data collection, data reduction, data presentation, and conclusion drawn. The first step is to organize the data that has been collected, then categorize the information based on the process of implementing a differentiated learning strategy that is relevant to the research objectives. Furthermore, the data is analyzed inductively, namely by drawing conclusions based on the findings that appear during the data collection process, which is then presented in the form of a descriptive description.

## Results

Differentiated learning is one of the important strategies in the world of education to accommodate the diversity of students' learning needs. In the context of learning Indonesian at the elementary school level, the implementation of this strategy has its own challenges related to teacher readiness, supporting facilities, and diverse student characteristics. Therefore, this study aims to describe how the application of differentiated learning strategies in Indonesian subjects in SD Negeri Pare 1, Sragen, Central Java. This study also examines the factors that support the successful implementation of the strategy, as well as various obstacles faced by educators in the process of implementing it. By understanding the challenges that arise, this study seeks

to identify solutions that can be implemented to improve the effectiveness of differentiated learning. The results of this study are expected to provide insight for educators, policy makers, and other stakeholders in developing more inclusive and adaptive learning strategies to the needs of students in the elementary school environment.

### Application of Differentiated Learning Strategies in Indonesian Subjects in Elementary Schools

This study reveals how differentiated learning strategies are applied in Indonesian subjects in grade V of SD Negeri Pare 1 Mondokan, Sragen, Central Java. Based on the results of observations, interviews, and documentation, the findings show that the differentiated learning strategy is applied by teachers by adjusting learning methods based on students' needs, interests, and learning readiness. Teachers use a variety of approaches, such as content, process, and product differentiation, to ensure that each student has an optimal learning experience according to their potential. For this, a comparison of conventional and differentiated method is shown as follows.

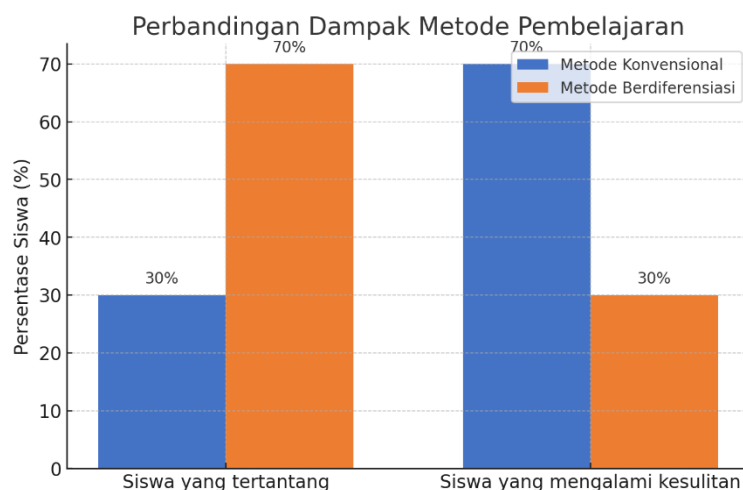


Figure 1. Comparison of the Impact of Learning Methods

Diagram 1 provides a clear illustration of the impact between conventional and different learning approaches. This shows that with conventional methods, 70% of students struggle while only 30% feel challenged. In contrast, the differentiation method resulted in 70% of students feeling challenged and only 30% experiencing difficulties. Based on the data, it can be concluded that the second method is very effective in motivating students, which ultimately leads to increased understanding and other benefits. By using this approach, students who understand the material and feel challenged can improve their understanding. Therefore, this learning method helps bridge the gap in the educational process. Nevertheless, after examining the capture or image, it becomes clear that there are still some uncertainties and necessary parameters that need to be addressed.

For this, an investigation of different learning strategies applied to Indonesian subjects in the fifth grade of SD Negeri Pare 1 Mondokan, Sragen, Central Java needs to be carried out. Based on observation, interviews, and documentation, teachers choose the most appropriate and relevant type of teaching according to the student's circumstances, interests, and learning readiness. It is very important that learning activities in the

classroom are different from others to align with students' potentials and abilities. The main approach chosen is the differentiation of content, processes, and products. The goal is to ensure students get an optimal learning experience tailored to their potential. To implement this strategy more specifically, several key aspects are considered in its implementation:

**Teachers design learning by providing a variety of teaching materials, both in the form of text, images, and audio-visual, to meet the differences in students' learning styles**

Teachers in grade V of SD Negeri Pare 1 Mondokan, Sragen, implement differentiated learning strategies by adjusting teaching methods and materials based on students' needs and characteristics. One of the main approaches used is the variation in the presentation of teaching materials. Teachers realize that each student has a different learning style, so learning materials are presented in various forms, such as text, images, and audio-visuals. In the learning process, texts are used as the main source of understanding Indonesian concepts, both in the form of textbooks, modules, and readings that are adjusted to the level of student understanding. Images are a tool to clarify concepts, especially in learning that involves visual elements such as illustrated stories, concept maps, or simple infographics. Meanwhile, audio-visual media, such as learning videos and story recordings, are used to attract students who more easily understand the material through auditory and visual stimuli at the same time.

The delivery of material in this varied way aims to ensure that each student can access information in a way that best suits his or her learning style. Students who are more comfortable learning through reading can understand the material from the text given, while other individuals who are more visually responsive get support from pictures and illustrations. For students who find it easier to understand the material through audio, the use of videos and voice recordings provides a more effective learning alternative. In addition to the variety of teaching materials, teachers also apply a flexible approach in delivering material. Some students were given the opportunity to read independently, while others were provided with further assistance through group discussions or additional explanations in the form of questions and answers. This process not only helps students understand the material better, but it also increases student engagement in learning. The application of this strategy shows that differentiated learning in grade V of SD Negeri Pare 1 Mondokan, Sragen, focuses on the diversity of students' ways of absorbing information. By providing various forms of teaching materials, teachers are able to create a more inclusive learning environment and provide equal opportunities for each student to understand the subject matter according to their own learning style.

**The assignments given to students are also made diverse, ranging from individual assignments, group discussions, to collaboration-based projects**

The differentiation resulting from the use of strategies in the learning process can also be seen from the use of various methods, such as interactive discussions, project-based learning, and the use of simple educational technology. Teachers design diverse assignments to accommodate students' different abilities, interests, and learning styles. These tasks include individual tasks, group discussions, as well as collaboration-based projects. Individual assignments are given to help students understand concepts independently, so that students can learn at their own pace. In group assignments, students are invited to discuss, share understanding, and solve problems together.

Meanwhile, collaboration-based projects are designed to encourage students to work together in completing more complex tasks, which not only hone academic skills but also social skills.

### **Differentiated learning strategies in Indonesian subjects are applied in the learning process through a variety of methods used**

Teachers utilize a variety of approaches to create a more engaging and effective learning atmosphere. Interactive discussions are often used to practice students' speaking and critical thinking skills, while project-based learning allows students to explore the material in more depth through hands-on experience. Educational technology is also used to support the learning process. Teachers use simple learning media, such as educational videos or interactive presentations, to help students understand the material better. The use of this technology not only enriches the learning experience of students but also helps overcome the limitations of conventional resources in the classroom. The implementation of this strategy has a positive impact on students because they can learn in a way that is more in accordance with the needs and characteristics of students. With variations in assignments and learning methods, students are more motivated to be actively involved in the learning process, so that students' understanding of the subject matter becomes more optimal.

### **Supporting Factors in the Implementation of Differentiated Learning Strategies in Indonesian Subjects**

The success of the implementation of differentiated learning strategies in class V is supported by several main factors. Teachers' readiness in understanding the concept and implementation of differentiation is a key factor in creating an inclusive learning environment. In addition, the active involvement of students in the learning process also supports the effectiveness of this strategy. Support from schools, both in the provision of learning resources and in the form of policies that encourage pedagogical innovation, also plays an important role in the successful implementation of this strategy. The explanation of several supporting factors for the implementation of the Differential Learning Strategy in Indonesian subjects in grade V of SD Negeri Pare 1 Mondokan Sragen for the 2024/2025 school year. These supporting factors include aspects of teachers, students, infrastructure, and support from the school and parents.

| Table 1. Supporting factors and level of support |                          |
|--------------------------------------------------|--------------------------|
| <b>Supporting Factors</b>                        | <b>Support Level (%)</b> |
| Initial Diagnostic Assessment                    | 85                       |
| Utilization of Simple Technology                 | 75                       |
| Teacher and Parent Collaboration                 | 70                       |
| School Policy Support                            | 65                       |
| Variety of Learning Methods                      | 60                       |

The data in table 1 shows that the implementation of differentiated learning strategies in class V Pare 1 Mondokan Sragen SD Negeri during the 2024/2025 school year is supported by several main factors. Early diagnostic assessments scored the highest level of support (85%), which indicates the importance of early identification of students'

needs and ability to implement strategies. The use of simple technology is also an important factor to increase the effectiveness of the strategy because the profit from interactive and digital media is 75%. Collaboration with parents also contributes to creating a more supportive and sustainable learning environment. The support of school policies and various learning methods shows that the success of the strategy is highly dependent on school policies and teachers' flexibility in teaching. The success of implementation does not depend on a single variable but is the result of cooperation between teachers and students and the learning environment provided by the school and parents. To provide a more thorough understanding of how each factor contributes to the success of different learning strategies, further analysis will be based on aspects of teachers, student conditions, facilities and infrastructure, as well as school and committee support.

### **Teacher/Educator Aspect**

One of the main factors that supports the success of differentiated learning strategies is the competence and readiness of teachers in adapting teaching methods according to the differences in student characteristics. Teachers have a good understanding of differentiated learning concepts and are able to design and implement strategies that are appropriate to the student's level of readiness, interests, and learning profiles. This readiness is supported by teaching experience and participation in training and workshops that address differentiated approaches in learning.

### **Student Conditions**

In addition to the role of teachers, the diversity of student characteristics is also a factor that encourages the implementation of differentiated learning strategies. Students have different levels of ability in understanding the subject matter, so this approach helps students to learn according to their respective learning speed and style. Student involvement in varied learning activities, such as group discussions, creative projects, as well as choice-based individual assignments, allows students to be more active in the learning process.

### **Facilities and Infrastructure**

Support for school facilities and infrastructure is also an important element in supporting differentiated learning strategies. The availability of varied textbooks, technology-based learning media, and a conducive classroom environment make it easier to implement this method. Teachers can take advantage of a variety of learning resources, including digital teaching materials and visual aids, to help students better understand the material according to the learning style relevant to the learning culture in the school.

In addition to internal school factors, support from the principal and other educators also strengthens the implementation of this strategy. The principal plays a role in encouraging learning innovation and providing freedom for teachers to apply an approach that suits the needs of students. Regular supervision and evaluation programs also help ensure that differentiated learning strategies are implemented effectively.

### **Schools and Committees**

Parental support is an external factor that is no less important. Communication between teachers and parents in understanding students' learning needs helps to increase the effectiveness of differentiated learning. Parents who actively support learning activities at home, both through assistance in completing assignments and in

providing motivation to children, can help students more easily adapt to the learning methods applied at school.

Overall, the application of differentiated learning strategies in Indonesian subjects in grade V of SD Negeri Pare 1 Mondokan, Sragen, is supported by various interrelated factors. Teacher readiness and competence, student diversity, adequate facilities and infrastructure, support from school principals, and the active role of parents are elements that contribute to creating more inclusive and effective learning. With these supporting factors, differentiated learning can run optimally, provide a learning experience that is more in line with student needs, and increase students' understanding of the subject matter.

### **Obstacles in the implementation of differentiated learning strategies in Indonesian language subjects**

Differentiated learning strategies are difficult for teachers to implement when applied to Indonesian language learning because there are a number of challenges from internal and external schools. Some of the obstacles in the implementation of the strategy are limited time, group learning practices with a large number of students, school resources, and facilities, as well as teacher readiness. Another challenge is the arrogance-students of heterogeneous characteristics that allow no one to have the same level of understanding, motivation, and learning style. Data shows that the strategy faces another obstacle in the form of parental involvement. The lack of communication between teachers and parents is not an assumption because existing research and data prove that families and parents do not support the implementation of this strategy. To further resolve all these constraints, the following Figure 2 visualization illustrates the data based on factors that hinder the efficiency of differentiated learning strategies.

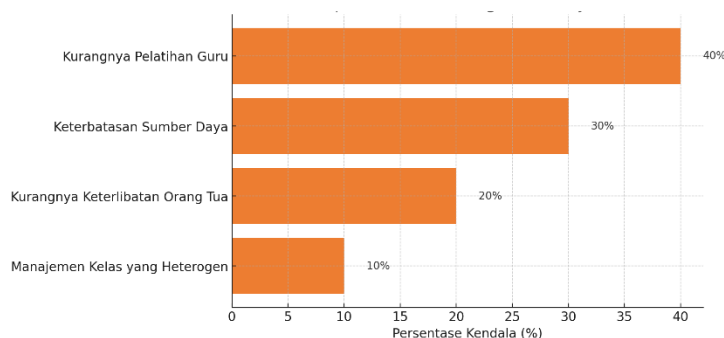


Figure 2. Obstacles in the Implementation of Differentiated Learning Strategies

Based on figure 2, it is illustrated that inadequate teacher training is the most significant obstacle, with 40%. This shows that many educators are still hesitant about the learning styles they should adopt and struggle to adapt their teaching methods to meet the diverse needs of students. Without adequate training, teachers can quickly become discouraged and fall back to conventional teaching approaches that fail to meet the needs of individual students. The next big challenge, representing 30%, is limited resources. Many schools, including SD Negeri Pare 1 Monokan Sragen, experience a lack of access to a variety of educational materials, whether in the form of textbooks or digital resources. This scarcity of resources makes it difficult for teachers to create completely different teaching. Lack of investment constitutes 20% of the challenge. Some parents may not understand or prefer different learning over traditional methods. Poor communication with parents makes it more difficult to implement this learning approach outside of the

school environment. Lastly, managing heterogeneous classrooms accounts for 10% of the challenge. Students have different levels of comprehension, learning styles, and speeds, which teachers must navigate. This requires a more complex and dynamic classroom management approach to ensure effective learning.

For this, there is limited time in designing and adapting learning materials that suit the needs of various students. In addition, the large number of students in the class is a challenge in itself in giving individual attention to each student. Not all students also have the same motivation to participate in varied learning, so teachers need to take a more intensive approach to ensure all students are actively engaged. One of the main challenges faced is the readiness of teachers in implementing differentiated learning strategies. Although teachers have an understanding of the importance of these strategies, limitations in mastering the right methods are often an obstacle. Teachers need to adapt teaching approaches based on different learning needs in a single class, which requires more complex and flexible learning planning. The difficulty in designing learning materials and activities that are suitable for different levels of student understanding is one of the significant challenges. In addition, the high workload of teachers also affects students' readiness to develop more personalized learning strategies.

Diverse student characteristics are also an obstacle factor in the implementation of differentiated learning strategies. Each student has a different level of understanding, interests, and learning styles. However, in practice, accommodating all these needs optimally is a challenge in itself. Some students need more intensive guidance, while others are more independent in learning. These differences are often difficult to manage in a single learning session, especially when the number of students in the class is quite large. The limitations of facilities and infrastructure in schools are also an obstacle in the implementation of this strategy. Differentiated learning often requires a variety of teaching materials, both in print and digital form. However, at SD Negeri Pare 1 Mondokan, access to diverse learning resources is still limited. The availability of textbooks, interactive learning media, and supporting facilities such as flexible learning spaces have not fully supported the optimal implementation of this strategy. In addition, support from the school environment and parents is also a factor that affects the success of differentiated learning. Parents' participation in supporting children to learn according to their individual needs is not evenly distributed. Some parents still think that conventional learning methods are more effective and lack understanding of the concept of differentiated learning. The lack of communication between teachers and parents in understanding the specific needs of students is also an obstacle in ensuring the sustainability of this strategy outside the school environment.

### **Solutions in overcoming obstacles encountered during the implementation of the Differentiated Learning Strategy in Indonesian Language Subjects in Elementary Schools**

To overcome the obstacles encountered during the process of implementing the deferred learning strategy in Indonesian subjects, teachers apply several solution strategies, such as the use of initial diagnostic assessments to identify students' learning needs more effectively. In addition, the use of simple technology, such as learning videos and digital teaching materials, helps in providing a wider variety of materials without overloading teachers. Collaboration with fellow teachers and support from parents are also part of the solution in increasing the effectiveness of implementing this strategy. In depth, each solution that the teacher strives for provides maximum results, as explained in table 2.

Table 2. Solutions and impacts of differentiated learning

| <b>Solution</b>                        | <b>Positive Impact</b>                                                                        |
|----------------------------------------|-----------------------------------------------------------------------------------------------|
| Strengthening Formative Assessment     | Evaluate student development more accurately                                                  |
| Sustainable Utilization of Technology  | Learning is more engaging and flexible                                                        |
| Improves Interaction and Collaboration | Students are more active and motivated<br>The implementation of strategies is more systematic |
| School Policy Support                  | More optimal learning support at home                                                         |
| Increased Parental Role                |                                                                                               |

Based on table 2, a systematic approach has been used to address several challenges in implementing different learning strategies for Indonesian language teaching in primary schools, with solutions that focus on the needs of students. The main step involves strengthening formative assessments before starting teaching. These diagnostic formative assessments give teachers the flexibility to more accurately differentiate students' levels of understanding, interests, and learning styles. With this information, teachers can undoubtedly create a more effective learning experience, including customized content and methods. This approach not only facilitates student understanding but also minimizes the learning gap among students in heterogeneous classes. Furthermore, the next method related to formative assessment involves technology. By utilizing instructional videos, digital materials, interactive content, and a variety of applications, teachers can try to make learning more frequent and engaging for students. Visual and auditory learners will definitely be better able to understand the material being explained. Additionally, teachers can use classroom methods with more flexible resources, allowing students to be more open in presenting content in a more creative way than an inflexible approach. A common problem is limited education funding, which is essentially unproblematic. Limited learning resources only pose a challenge if students cannot access standard content. As a result, with excellent additional training for teachers and access to downloadable or impactful features, these considerations further enable continuous and differentiated learning.

Collaborative practices are an important element in education. Educators teach different subjects with diverse teaching methods. No teacher works alone; They are always supported by shared learning. This is reflected in regular discussions between teachers, including sharing experiences and guidelines for assignments, as well as information on administrative work and how to handle other important matters. Daily teacher meetings facilitate the exchange of ideas in informal forums and allow teachers to understand the impact of their teaching methods that they may not have been aware of before. Collaboration between teachers can serve as a catalyst for innovation in learning environments and teaching methods. In a collaborative environment, changes in teaching methods can be adapted to the needs of students. Supporting an active and dynamic classroom allows teachers to set up methods that suit the needs of students, such as paying special attention to students who have learning difficulties. Education policymakers who work closely with information technology experts can provide top-notch services, such as providing training and access to online resources, that help teachers integrate technology into their teaching. This creates a sustainable learning environment and is more effective than traditional teaching methods. In addition, parental involvement is very beneficial in the educational process. Teachers and

principals should ensure good communication with parents through various channels, such as brochures, telephones, or face-to-face meetings. Parents have a good understanding of their children and can provide valuable insights into their learning needs. The combination of parental support and an efficient school system can improve students' academic achievement. Therefore, effective collaboration between teachers, parents, and the school system is essential in creating an optimal learning environment and supporting student development.

The findings in the process of implementing the denominated learning strategy show that the variety of teaching materials designed by teachers in the form of text, images, and audio-visual is a relevant strategy to accommodate differences in students' learning styles, as emphasized by Sariyati et al., (2024) that differentiated learning requires flexibility in the presentation of material to improve students' understanding with various cognitive preferences. The results of this finding are in line with research conducted by Damayanti et al., (2024) which shows that the use of multimodal teaching materials increases student engagement and expands access to learning materials. In practical terms, this strategy has positive implications in increasing the effectiveness of Indonesian learning at the elementary school level, because it provides opportunities for students with various learning styles to understand the material better (Abidin et al., 2024). However, the main limitation in the implementation of this strategy is the readiness of teachers to develop and integrate appropriate teaching materials, as found in research by Jumani et al., (2024) which explains that the lack of pedagogical training in the use of multimodal media can hinder the effectiveness of differentiated learning. Therefore, this finding emphasizes the importance of training and professional development support for teachers in the use of diverse teaching materials so that the implementation of differentiated learning strategies can run optimally.

Assigning diverse tasks, such as individual assignments, group discussions, and collaboration-based projects, is an effective approach to differentiated learning, which is in line with the findings Subekti et al., (2024) which states that variations in task types can increase student engagement as well as meet different learning needs. It is also supported by research by Sulistyorini et al., (2024) which emphasized that collaboration between students in the form of group discussions or projects can strengthen students' understanding of material and social skills. The implications of these findings are that the application of diverse tasks can improve the quality of learning, provide opportunities for students to actively learn both individually and in groups, and encourage the development of collaborative skills that are essential for future life (Sani et al., 2024). However, the limitation of this approach is the challenge of managing and evaluating different types of tasks efficiently, as revealed by Sani et al., (2024) who found that teachers often had difficulty providing constructive feedback for each type of assignment in a limited amount of time. Therefore, the application of diverse tasks needs to be balanced with a clear evaluation system and sufficient time for teachers to provide comprehensive assessments.

Differentiated learning strategies applied through a variety of methods in Indonesian subjects show that the application of diverse methods can increase student engagement and understanding in a more adaptive way to individual needs (Sawitri et al., 2024; Wahyu & Pamungkas, 2025). Research by Luthfi & Rakhmawati, (2016) supports these findings, by showing that the use of various methods, such as group discussions, project-based learning, and cooperative learning, provides opportunities for students to learn according to their individual style and pace. The implications of these findings are very conducive to improving the quality of learning because it allows students who have

various levels of abilities and learning needs to more easily access the material delivered (Septonanto et al., 2024). However, the limitations found in this study, as also explained by Gunawan & Hasan, (2023) that not all teachers have sufficient skills in designing and managing classes with a variety of effective methods, so the success of this strategy is highly dependent on the professional experience and training possessed by educators.

The findings also reveal that the use of educational technology in supporting the learning process has become one of the increasingly important approaches in today's digital era. Educational technology can improve the quality of learning by providing wider access to materials, accelerating interactions, and enabling more personalized learning. The results of these findings are relevant to the research conducted by Hartini et al., (2021) which states that the integration of technology in the classroom can increase student motivation and engagement, as well as support pace-based learning and the needs of each individual. The contributing implications of these findings are that the use of technology can increase learning effectiveness, allow teachers to be more flexible in presenting material and optimize student learning time (Kurniawan et al., 2024). However, the limitations of the application of educational technology lie in the need for adequate infrastructure and professional training for teachers, which is often an obstacle to its implementation, as found by Sariyati et al., (2024) which states that without sufficient training, the use of technology in the classroom cannot be optimal.

In addition to the process of implementing the differentiated learning strategy in Indonesian subjects involving internal and external conditions, several supporting factors were found that contributed effectively to the stimulation of differentiated learning in Indonesian subjects in grade V of SD Negeri Pare 1 Mondokan Sragen, Central Java. Supporting factors that include aspects of teachers, students, infrastructure, and support from schools and parents are key elements in the successful implementation of differentiated learning strategies. This is in accordance with the previous findings presented by Damayanti et al., (2024) which states that internal factors such as teacher competence and student motivation as well as external factors such as educational facilities and family support have an important role in supporting effective learning implementation.

The quality of good teaching is greatly influenced by the availability of adequate infrastructure and parental involvement in the educational process. The implications of these findings suggest that in order to create optimal differentiated learning, not only the teacher aspect must be considered, but also the systemic support of the school and the involvement of parents in supporting student learning outside the classroom (Abidin et al., 2024). However, the limitations in this study lie in the limited resources in some schools, which often hinders the maximum implementation of this strategy, as found by Subekti et al., (2024) which states that the lack of facility support can limit the potential of teachers in designing learning that is more responsive to student needs.

The limited time in designing and adapting learning materials and the large number of students is a significant challenge in the implementation of differentiated learning strategies, according to the findings of the research by Sulistyorini et al., (2024) which states that these factors can hinder the teacher's ability to give individual attention to each student. This is influenced by the limitations of facilities and infrastructure in schools, which is in line with research by Sani et al., (2024) which reveals that inadequate facilities can limit the effectiveness of the use of technology in differentiated learning. In addition, parental participation in supporting children to learn according to individual needs is also a challenge, as explained by Sawitri et al., (2024) which states that family support plays a significant role in the successful implementation of more personalized

learning, but is often unevenly distributed across communities. The implication of these findings is the importance of efforts to strengthen teacher capacity through intensive training and improvement of school facilities and infrastructure to support differentiated learning. The limitations found in this study are in accordance with previous research by Luthfi & Rakhmawati, (2016) which shows that despite these challenges, more systematic and collaborative support can improve the effective implementation of this strategy.

The use of early diagnostic assessment to identify students' learning needs more effectively is in line with learning theory that emphasizes the importance of an early understanding of students' abilities and needs, which can then help teachers design more targeted learning. It is also relevant to previous research by Septonanto et al., (2024) which states that diagnostic assessments conducted before learning can improve teaching effectiveness by providing the necessary information to tailor teaching approaches to the individual needs of students. In addition, the use of simple technologies, such as learning videos and digital teaching materials, has been shown to increase student engagement and facilitate the delivery of more varied materials, which supports the theory of multimodal learning as expressed by Kurniawan et al., (2024) that the Differentiated Learning Strategy shows that digital technology can provide wider and flexible access to learning resources, thus helping students with different learning styles. Collaboration with fellow teachers and parental support adds a contextual dimension to more holistic learning, which is in line with the professional learning community approach (Budiyo, 2020).

## Conclusion

The conclusion of this study shows that the application of differentiated learning strategies in Indonesian subjects in grade V of SD Negeri Pare 1 Mondokan Sragen has been carried out by paying attention to the diversity of students' learning styles. The main supporting factors found were the use of early diagnostic assessments, the use of simple technologies such as learning videos, and collaboration between teachers and parental support. However, the obstacles faced include limited learning resources, teacher readiness in managing heterogeneous classes, and suboptimal parental involvement. As a solution, teachers adapt a more flexible approach and improve communication with parents. The implication of this study is the importance of professional development for teachers to strengthen skills in implementing differentiated learning and expand access to educational technology. The recommendations given are the need for further training for teachers in the use of digital media and diagnostic assessments, as well as increasing cooperation between schools and parents to support the success of differentiated learning.

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