

A Case Study of Differentiated Instruction at Elementary School

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ABSTRACT

The objective of this research is to determine whether there is improvement in learning through the use of product differentiation learning. The research was carried out at a private elementary school in Surakarta during the academic year 2022/2023. This is a *sekolah penggerak* that utilises varied learning methods. Starting in the 2022/2023 academic year, the practice of differentiated learning will be introduced in grades 1 and 4. This study employs a qualitative research approach, specifically utilising a case study methodology. The data in this study consisted of documentation, field notes obtained through direct participant observation, and excerpts from interviews. Interviews were carried out with school principals, instructors in first and fourth grades, and students in first and fourth grades. The Simultaneous Inductive analysis technique was employed to analyse the data, which involved three distinct stages: data reduction, data reading, and data interpretation. The findings of this study suggest that the implementation of differentiated instruction, in conjunction with a thorough comprehension of differentiated learning by the teacher, can effectively yield the intended positive learning outcomes. The learning conducted caters to the diverse learning demands of every students, encompassing their readiness, profiles, and interests. The use of differentiated learning has yielded positive outcomes, as evidenced by increased student enthusiasm, active participation, and enhanced innovation in every session. Success indicators are evident in the process and learning outcomes. Students exhibit a sense of ease in their learning experience, while demonstrating growth in both hard and soft skills. Additionally, students are capable of self-reflection through the creation of diverse learning products.

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1. INTRODUCTION

Quality education refers to an educational system that effectively meets the individual needs and requirements of every student. Education employs a pedagogical approach that presume uniformity among all children, prioritises the role of the teacher, and fails to provide every student with the chance to engage actively in the learning process. Each youngster possesses distinct attributes and individual qualities (Andini, 2022). According to Dewantara (2013), providing children with a quality education that aligns with their growth and development is essential. Hence, education should be flexible enough to cater to diverse individualities and address the specific requirements of every student (Helmi et al., 2023). The multitude of cultures and languages possessed by students necessitates the use of a range of tactics in order to cater to their individual learning requirements. Teachers have the ability to start the learning process by considering the individual requirements, preparedness, and interests of their students. They can employ various teaching models and instructional methods to guarantee that students successfully reach their objectives (Arends, 2008). Such learning is based on the concept of differentiated learning, as proposed by Tomlinson in 2001.

The goal of differentiated learning is to adapt classroom instruction to each student's unique strengths and weaknesses. Interests, learning profiles, and student readiness to reach enhanced learning outcomes are all factors that can be considered while making these adjustments (Herwina, 2021). Hermawan argues in Diar and Ekasatya (2016) that students are significant players in the educational system who need to have their voices heard and their dreams fully acknowledged. Education should be seen as a nurturing environment where students can fully blossom because they are individuals with inherent potential and skills. As a result, every student has the chance to develop to his fullest potential in line with his actual and potential levels of ability through the learning that takes place.

The teacher as a learning facilitator cannot avoid the diversity of students that occurs in a class, especially in deciding what strategies to use in learning. Along with the development of the times, today's teachers are required to be innovative, creative in choosing and developing learning methods. The purpose of choosing the right strategy in learning is so that learning is carried out effectively, meets student learning needs, and maximizes student learning potential. The success of students in a lesson can be seen from the ability of students to learn independently, so that the learning outcomes carried out are knowledge that they master themselves.

Tomlinson, Carol A. (2001) asserts that every student is unique in their aptitudes, passions, cultural heritage, and preferred methods of learning. Differentiated instruction, often known as varying instruction, is one method that can accommodate pupils with a wide range of skills. Each student's learning style, interests, and requirements are taken into account when classes are differentiated (Heacox, 2012). In order to cater to their students' individual learning styles, speed up or speed up their lessons, and ensure that every student has the chance to learn and grow, teachers need to become experts in varied instruction, also known as differentiated learning. Differentiated instruction, or differentiation learning, is a method that enables educators to tailor their lessons to the unique requirements of their students (Corley in Evi Lailiyah, 2016). Differentiated instruction, according to Champan and King in Sion Stepani Simanjuntak and Tanti Listiani (2020), is tailored to each student's unique background, interests, and level of preparedness. Adriany in Lailiyah (2016) states that differentiated learning, often known as differentiated instruction, is a philosophy of learning that proposes tailoring lessons to each student's unique set of circumstances.

Differentiated instruction, according to Heacox in Candra Ditasona (2017) is carried out to respond to student learning progress on an ongoing basis, what they already know and what they have learned. If likened to a food menu, in differentiation learning each individual will get a learning menu

that suits their tastes. Learning is designed in such a way that students can enjoy learning menus that they like, and still do not lack nutrition or learning goals that must be achieved. Based on student characteristics, Tomlinson in Candra Ditasona (2017) suggests that differentiation learning can be done in three ways: (1) learning readiness→ if the task given by the teacher is in accordance with the ability of students, (2) learning profile→ if the task given by the teacher is able to encourage students to learn in the way they like, (3) interest→ if the task given by the teacher is able to stimulate the curiosity and passion of student learning. Thus, educators in designing learning to be carried out must pay attention to student learning readiness, student learning profiles and student learning interests, so that learning can respond to student learning progress in a sustainable manner.

Given the wide range of student backgrounds and abilities, the field of education is currently focusing on differentiation as a teaching strategy. It is believed that differentiated learning can improve both the quality of instruction and the results students achieve in class. Proof for this claim comes from prior research that has reached similar conclusions and has had similar discussions: initially, studies carried out by Helmi et al. (2023). According to this research, students' capacity to create a variety of high-quality learning products can be positively impacted by learning using Differentiated Instruction (DI). It was determined via this research that (1). When it comes to identifying high-quality items, teachers' impressions of their pupils' sensory learning styles are quite comparable. (2). Videos, graphs and curves, posters, models, powerpoints, and practicum results reports are all examples of high-quality products that can be determined by combining teacher perspectives with students' sensory learning styles. Second, according to Sulistianingrum et al. (2023), when it comes to using students' sensory learning styles to create differentiated content, such as videos, reading materials/text, Student Activity Sheets (LKPD), charts, graphs, and curves, there is a correlation between teachers' perceptions and how students actually use their sensory learning styles to create differentiated content.

In a study conducted by Evi Lailiyah (2016) on the Differentiated Instruction Approach to Enhance Critical Thinking, Mathematical Creativity, and Self-Confidence of Junior High School Students, the findings indicate that students' critical thinking skills improve more significantly with differentiation learning compared to those who receive traditional instruction. Iskandar (2021) conducted research on improving student learning outcomes in report text material through differentiated learning in Class IX.A of SMP Negeri 1 Sape for the academic year 2020/2021. The study found that differentiated learning led to improved learning outcomes in the report text material. The achievement of learning mastery increased from 36.36% in the initial pre-cycle conditions to 66.67% in cycle I, and further increased to 90.91% in cycle II. In a study conducted by Herwina, W. (2021) on Optimising Student Needs and Learning Outcomes using Differentiated Learning, it was found that (1). Implementing differentiated learning can facilitate students in attaining optimal learning outcomes by tailoring the products they generate to align with their individual interests. Through the use of differentiated learning activities, all students' learning requirements are met in accordance with their specific interests or learning profiles. Second. Differentiated learning techniques allow students to showcase their acquired knowledge, hence indirectly fostering student creativity.

In a study conducted by Pratama, A. (2022) on Differentiated Learning Strategies to Enhance Students' Reading Comprehension Literacy Ability, the findings indicate that differentiated learning can serve as a novel approach to reinforce literacy activities throughout the stages of habituation, development, and learning, ultimately leading to an improvement in students' reading comprehension. Prior to the implementation of differentiated learning, only a limited number of students were able to comprehend the reading material. However, by employing the differentiated learning strategy of mapping, selecting, and sorting reading materials based on students' individual needs and reading abilities, students' reading skills improved significantly. As a result, students gained a deeper understanding of the content within the books they read. Upon engaging in differentiated learning, pupils demonstrate the ability to respond to inquiries regarding the literature they have perused, as well as compose critiques or appraise the books they have completed. Furthermore, a study conducted by Bendriyanti, R. P. et al., (2022) has been conducted. The implementation of the differentiation model

in Indonesian language learning has been found to enhance student engagement and foster students' high levels of creativity, hence improving the overall quality of student learning. Implementing differentiated learning methods in education can enhance the enthusiasm of both students and teachers during the learning process.

This study examines the implementation of differentiated learning in SD Ta'mirul Islam Innovative Surakarta, with a specific focus on teacher perceptions and practices, learning progress, and student responses to learning differences. The problem statement in this study is as follows: (1). What is the teacher's perspective on diversified learning at SD Ta'mirul Islam Innovative Surakarta? Second. What is the efficacy of the teacher's implementation of differentiated learning? 3. Has there been any improvement in learning outcomes following the implementation of differentiated learning? 4. What is the student's reaction or response to differentiated learning? The objective of this study is to ascertain: 1. In SD Ta'mirul Islam Innovative Surakarta, teachers' perceptions of learning are distinct. Second. Teacher implementation of differentiated learning. Number 3. Evaluating the learning progress following the implementation of differentiated learning, (4). Student feedback or feedback regarding differentiated instruction. The anticipated advantages of this research are: (1). This research is anticipated to yield theoretical advantages that would enhance scientific knowledge and broaden the scope of education. My main contribution is to enhance the quality of learning outcomes, education, and human resources through the implementation of differentiated learning. Second point. The practical advantages are twofold. Firstly, schools can utilise this information to assess and enhance students' capabilities, interests, and talents. Secondly, it can serve as valuable input for selecting the most effective methods of instruction. Students are likely to experience heightened motivation, improved academic performance, increased involvement in learning, greater diversity in the classroom, and enhanced preparation for living in a multicultural society. (c). This resource aims to be beneficial for teachers in facilitating the teaching and learning process by providing information on the importance of learning motivation and student engagement. Second point. Suggest additional options for educators in terms of instructional methodologies that might be employed during the educational process. Therefore. Researchers are anticipated to contribute valuable insights and knowledge on the implementation of differentiation learning. This information can then be utilised for educational purposes, such as instructional material, training, and overall improvement of the teaching and learning process.

2. METHODS

This study employs a qualitative research approach, which focuses on obtaining high-quality and meaningful data through descriptive, inductive, and analytical methods (Sutama, 2022). It utilises a case study design to investigate a complex phenomenon or event within its natural context (Sutama, 2022). Case study research offers academics the chance to investigate and depict occurrences from many data sources and perspectives (Yin, 2003). The researchers employed this approach to investigate the application of differentiated learning in Civics lessons at SD Ta'mirul Islam Innovative Surakarta. The study examined various aspects, including the teachers' perception of differentiated learning, their practices in implementing differentiated learning, the progress of student learning after the implementation, and the students' responses to differentiated learning. The research was carried out at SD Ta'mirul Islam Innovative Surakarta during the academic year 2022/2023. The participants in this study consisted of school principals, teachers instructing students in grades 1 and 4, and students enrolled in grades 1 and 4.

The research data consists of field notes and snippets from interviews. The criteria for data selection is their capacity to successfully undergo the data triangulation stage, which involves subjecting the data to rigorous testing using triangulation methods and procedures (Creswell, 2015). The provided content consists of interview excerpts that describe the various elements involved in the implementation of differentiated learning at SD Ta'mirul Islam Innovative Surakarta, a primary school.

The collection of research data employs several methodologies, specifically include conducting in-depth interviews with informants, engaging in participant observation processes, and conducting documentation studies. Data was collected through interviews and observations to gather information regarding the teacher's perspective on differentiated learning, the implementation of differentiated learning by the teacher, the impact of differentiated learning on learning progress, and the students' perception of differentiated learning. The interviews were carried out in Indonesian language with the school principal, teachers instructing in grades 1 and grade 4, and a number of students from grades 1 and grade 4. The researchers conducted non-participant observations, in which they did not actively engage in the activity being observed. The observations were conducted using methods such as direct observation, questionnaires, and picture capturing. During the documentation analysis, the researcher examined many components including the operational curriculum, learning outcomes, teaching modules, learning result products, diagnostic assessment documents, post-test documents, reflection documents, and learning videos.

The data analysis technique uses simultaneous inductive analysis. These stages are carried out through data reduction activities, data reading, data coding, and data interpretation (Creswell, 2015). In the early stages the researcher focused on the results of the existing data collection, namely observation data, data from online news, and data from interviews with 7 informants in accordance with the themes discussed. Descriptions are made by establishing relationships between different types of data to build correlations between the patterns of information conveyed. Data coding is done in the form of categorization according to its aspects. Interpretation is done to reveal the meaning of the symbols conveyed by informants. Interpretation activities are carried out by considering actual events in the field. The technique of drawing conclusions is done by comparing the data collected, such as data that has been obtained from one informant to another, then compared.

This research encompasses the following stages: identifying the topics to be addressed, identifying the sources of data and individuals providing information, gathering data, cross-referencing data from several sources, performing data analysis, and assembling reports. The ultimate phase of scientific inquiry involves acquiring a comprehensive comprehension of the topic under investigation.

3. FINDINGS AND DISCUSSION

SD Ta'mirul Islam Innovative Surakarta is one of the driving elementary schools that has implemented the independent curriculum. In the independent curriculum, the learning that is carried out is learning that is oriented to the learning needs of students. The learning needs of each student are different. The different learning needs of each student, it is necessary to implement a learning that fits the needs. The learning model implemented in the independent curriculum is differentiated learning. Implementation of differentiated learning at SD Ta'mirul Islam Innovative Surakarta, seen from several aspects, namely teacher perceptions of differentiated learning, teacher practices in differentiated learning, learning progress after implementing differentiated learning and student responses or responses to differentiated learning.

3.1. Teacher Perceptions of Differentiated Learning

Prior to the implementation of actual learning, it is crucial for the teacher to possess a comprehensive perspective and grasp of the notion of differentiated learning. The teacher's discernment and comprehension of authentic differentiated learning will significantly facilitate the learning process conducted in the classroom. According to the findings from interviews with instructors at SD Ta'mirul Islam Innovative, diversified learning refers to the process of addressing the many features, learning requirements, and learning styles of students. Classroom-based learning aims

to fulfil all the educational requirements of students. The learning supplied employs several methodologies and pre-existing resources to ensure that pupils can effectively assimilate knowledge or materials. Table 1 presents the findings of interviews performed by researchers on teacher perspectives of varied learning.

Table 1. Teacher Perceptions of Differentiated Learning

Informants	interview	Aspect
Jnh, Wldr, Krnwt	Learning is carried out by meeting the diversity of students, so teaching by providing a variety of ways to understand new information for all students in a diverse classroom community	Aspect : Meet the diversity of students Description : Learning is designed in a variety of ways to meet the diverse needs of students.
Mrdh, Rhmh	Efforts to adjust the learning process in the classroom to meet the individual learning needs of each student.	Aspect: The learning process Description: the learning process is designed to meet the learning needs of students.
Neck	Learning that accommodates students' learning needs, according to their needs, because each student has different characteristics.	Aspect: Accommodating student needs. Description : Every student has different characteristics so that these needs must be accommodated
Stdv	Differentiated learning is learning that focuses on meeting students' needs, both from learning readiness and character.	Aspect : Focus on meeting the needs of students Description : Differentiated learning focuses on meeting students' needs

3.2. Teacher practice in differentiated learning

Based on the teachers' perception and understanding of the concept of differentiated learning, they have implemented differentiated learning in the classroom. The learning that is carried out begins with a diagnostic assessment and the creation of differentiated teaching modules. Diagnostic assessment, carried out to collect information carried out by teachers related to abilities, learning styles and students' needs in learning. Diagnostic assessment is carried out by observing and interviewing students and parents. The results of the diagnostic assessment are applied to the teaching modules that are made, then the teaching modules are used as a reference in the learning process carried out in class. At the end of each lesson, the teacher carried out a learning assessment with a post-test, debriefed students, and reflected on the learning that had been done. The results of interviews and observations conducted by researchers regarding teacher perceptions of differentiated learning are presented in table 2.

Table 2. Teacher practice in differentiated learning

Informants	interview	Aspect
John	Create differentiated teaching modules and carry out learning according to teaching modules. Perform diagnostic assessment. Look at diagnostic assessments, observations, interviews to suit the teaching modules. Evaluate learning with summative and formative post tests and reflect on ongoing learning with question and answer or post tests	Aspect: Teaching Module Description: Teacher practice in differentiated learning composes teaching modules, conducts diagnostic assessments, evaluates and reflects on learning.
Mrdh, Krnt	Planning content (access to learning and materials), planning processes and products produced by students after learning, then mapping student needs from learning readiness, interests, student learning styles. Develop a	Aspects: Content, process and product Description: The teacher before learning has planned content, processes and products and mapped out the needs and readiness,

	learning process that is in accordance with the initial assessment data. Then evaluate with formative and summative assessments, reflect on evaluating results, learning processes and self.	interests and learning styles of students to accommodate students' needs.
Wdd, Rch	Mapping learning needs, planning lessons, evaluating and reflecting on ongoing learning. In mapping student needs with surveys through questionnaires, interviews, communication with other subject teachers or supervisors, counseling, analyzing student achievement results at the time before us. The preparation of the evaluation measures the learning process according to the assessment data. Evaluate learning with assessment, then reflect on learning outcomes.	Aspect: Mapping learning needs Description: The teacher maps students' learning needs then plans, implements, evaluates and reflects on learning.
Stdv, wldr	Preparing the content to be given can be visual, auditory, or auditory visual. Determining students' learning needs with cognitive and non-cognitive diagnostic tests. Differentiate process, content and product Evaluate learning by assessing work results with written rubrics or performance assessments Conduct guided reflection	Aspect: Learning content Description: The teacher prepares content that will be given to students through visual, auditory and auditory visual according to student learning needs

The teachers at SD Ta'mirul Islam Innovative Surakarta have implemented differentiated learning, which involves mapping learning needs based on three aspects: learning readiness, learning interest, and student learning profiles. Based on the mapping results, a differentiated learning process is planned, offering various choices in strategies, materials, and ways of learning. Finally, an evaluation and reflection are conducted to assess the learning outcomes. The implemented differentiation strategies include content differentiation, where materials and tools are tailored to meet the individual learning needs of students. Process differentiation involves the design of tiered activities, individual or collaborative agendas, and the provision of diverse challenges and tasks. Lastly, product differentiation entails offering a range of options for students to choose from in order to express their learning outcomes based on their preferences. The research was carried out by a team of researchers over a period of 3 months, consisting of 5 meetings each week, each lasting one JTM (Joint Task Meeting). The picture record documentation findings are displayed in figures 1, 2, and 3.



Figure 1. The learning process of students with visual and auditory learning styles



Figure 2. Learning Process of students with Kinesthetic learning styles

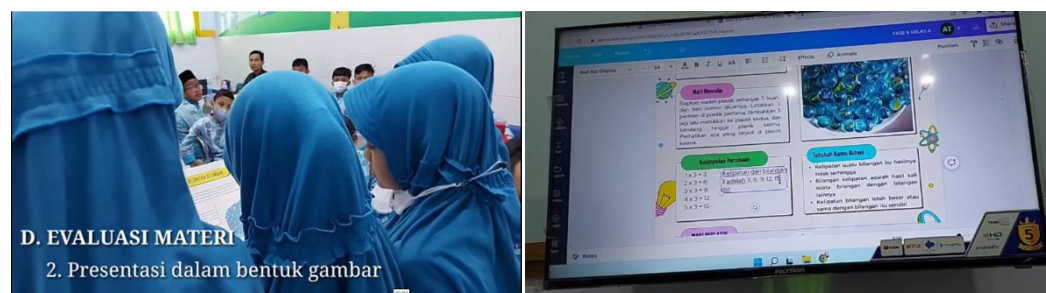


Figure 3. The learning process with a visual learning style

3.3. Learning Progress after Applying Differentiated Learning

The progress of learning shown by the students after applying differentiated learning, according to the teachers of SD Ta'mirul Islam Innovative, this improvement can be seen in: a). increasing understanding, increasing students' ability to understand learning material can be seen from the explanation, application and way of connecting concepts and information from the material that has been studied, b). Improvement of skills. This increase in skills can be seen when students read, write and talk about the subject matter being studied. c). Improved social and emotional skills, can be seen when they are working on group assignments. Students can work together, solve problems, overcome difficulties, and interact positively with classmates. d). Increased creativity and innovation. Increased student creativity and innovation can be seen from the ability of students to create new solutions to problems and show creativity in making projects or assignments. The results of interviews conducted by researchers about the progress of learning after applying differentiated learning are presented in table 3.

Table 3. Learning progress after applying differentiated learning

Informants	interview	Aspect
Jnh, Mrdh, Krnt, Wdd, Rch, Stv and Wldr	There is progress	Aspect: learning progress Description: Differentiated learning is able to provide progress in learning seen in student learning motivation, activeness when students learn and differentiated products.

3.4. Student responses/responses to differentiated learning.

The students of SD Takmirul Islam Inovasi are highly satisfied with the teacher's implementation of differentiated learning. The teachers of SD Ta'mirul Islam Innovative indicate the satisfaction of students in participating in learning through their active engagement. Students actively engage in classroom discourse, actively inquire and respond to inquiries, and complete tasks with eagerness, demonstrating a genuine interest in the subject matter being studied. Students have a propensity for seeking further information regarding their learning materials, posing intriguing inquiries, and desiring a more comprehensive understanding of the subject matter. c) Experience a sense of ease and relaxation in the educational setting. Students experience a sense of ease and security within the educational setting. They get a sense of acceptance and appreciation from their teachers and peers, which enhances their motivation to learn and ultimately leads to achieving good outcomes. Students can attain adequate academic outcomes by cultivating positive relationships with their professors and classmates. Students maintain a positive rapport with both their professors and classmates. They exhibit ease and confidence in their interactions with teachers and peers, while also showcasing their inventiveness in the learning process. Students demonstrate ingenuity in their approach to learning. They exhibit a proclivity for seeking novel approaches to accomplish tasks and generate innovative ideas. The findings from researchers' interviews and observations on student reactions to differentiated learning are displayed in Table 4.

Table 4. Student responses/responses to differentiated learning

Informants	interview	Aspect
Jnh, Mrdh, Krnrt, Wdd, Rch, Stv and Wldr	Students really like differentiation learning	Aspect: Students' responses when learning are differentiated. Description: Students really like differentiation learning so that learning motivation increases and is active in learning.

Asmani, N, K (2022) states that the Independent Curriculum adopted by driving schools is a curriculum that offers a diverse range of intracurricular learning. This approach allows for more effective material delivery, enabling students to have sufficient time to delve into subjects and enhance their skills. Teachers possess the autonomy to select diverse instructional resources in order to align learning with the individual learning requirements and preferences of pupils. An essential feature of the independent curriculum is the ability for teachers to implement individualised instruction based on students' skills and adapt the context and local content accordingly. Prior to the implementation of actual learning, it is crucial for the instructor to possess a comprehensive vision and grasp of the notion of differentiated learning, particularly within the context of driving schools. The teacher's discernment and comprehension of authentic differentiated learning will significantly enhance the learning process conducted in the classroom. According to Heacox in Candra Ditasona (2017: 45), differentiation learning can be employed to continuously address students' learning development, taking into account their existing knowledge and acquired skills.

Learning that is carried out in class is endeavored to meet all the learning needs needed by students. The learning provided uses various methods and pre-facilities so that information or material from learning can be absorbed by students properly. Tomlinson (2001) says that one of the learning strategies that can meet the learning needs of students who have diverse abilities is differentiation learning (differentiated instruction). Differentiation learning and independent curriculum are two interrelated concepts in education. Differentiated learning is a teaching strategy that aims to meet the individual learning needs of students by providing various types of learning materials and teaching

methods according to the needs of each student. In differentiation learning, teachers can accommodate differences in learning styles, ability levels, interests, and needs of students to ensure that each student learns in a way that is effective for them. Classes characterized by cultural and linguistic diversity demand a variety of strategies to differentiate teaching so that the diverse and many needs of students will be met. In a differentiated classroom, the teacher will initiate teaching based on needs, readiness (where students stand), interests and then use multiple teaching models and instructional arrangements to ensure that students achieve (Arends, 2008).

Based on the teacher's perception and understanding of the concept of differentiated learning, the teachers have implemented differentiated learning in the classroom. The learning that is carried out begins with a diagnostic assessment and the creation of differentiated teaching modules. Diagnostic assessment, carried out to collect the information needed by the teacher, related to the abilities, learning styles and needs of students in learning. According to Andini (2022), assessments are carried out to collect useful information, to set goals in guiding learning. The rationale behind this assessment is that every student is different. Different on the level of readiness in receiving the learning content to be taught, interest or interest and also how they learn well. The important points assessed in the diagnostic assessment are presented in table 5.

Table 5. Important points assessed in the diagnostic assessment

Readiness	Interest	Learning Profile
<ul style="list-style-type: none"> ● The level of skill and understanding of each student. ● Comprehensible content. ● Understood concept. 	<ul style="list-style-type: none"> ● Hobby ● Likes and dislikes. 	<ul style="list-style-type: none"> ● Social and emotional factors. <ul style="list-style-type: none"> - Language. - Culture - Health. - Family situation. - Other special circumstances. ● Learning style. ● The multiple intelligences of each student in the class.

Source :Journal of Elementary Education, Vol. 2, Number 3, May 2016, p. 340-349

The diagnostic assessment data is used to develop differentiated training modules, encompassing content, process, and product variations. The created instructional modules serve as a point of reference during the learning process. This aligns with the findings of Sulistianingrum et. al. (2023) about the utilisation of students' sensory learning styles to develop content differentiation. The findings of his research indicate that films are specifically designed to cater to the requirements of students with visual and auditory learning preferences. The driving instructor's films exhibit variability based on the subject matter being instructed. The videos are sourced from YouTube, student creations, and Google Meet recordings from the previous year's educational journey. Video content and corresponding links are shared in the class WhatsApp group the evening before to the implementation of educational tasks (2). Customized reading material designed to cater to the requirements of pupils with a preference for visual learning. Reading materials are enhanced with illustrations to elucidate the content being learned. (3) Student Activity Sheets (LKPD) are designed to cater to the requirements of students who possess kinesthetic learning preferences. The LKPD consists of instructional materials that provide students with clear and structured stages to facilitate their learning process. Graphs are specifically designed to cater to the requirements of pupils who possess visual learning preferences. Charta was developed with the purpose of facilitating pupils' acquisition of knowledge. The figure 4 illustrates the many levels of differentiated learning.

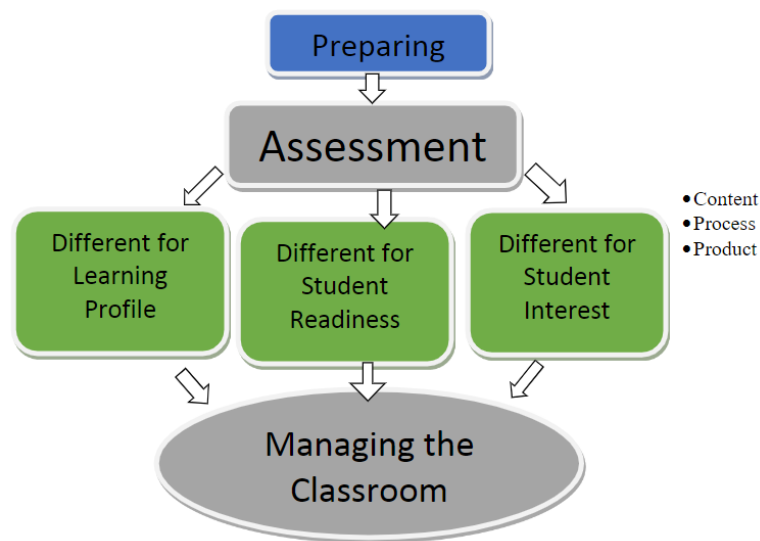


Figure 4. Components of differentiating learning stages

Differentiation learning uses various approaches in content, process and product. These three elements, according to Andini (2022), will be modified and adapted based on the assessment that has been carried out according to the level of student readiness, interest and learning profile. Tomlinson (2018) says that the three main elements of learning differentiation are:

(1) Content.

Differentiation in learning content means teaching the same material in different ways, so that each student understands it in the way that is best for them. Examples of differentiation in content include providing different reading materials with different levels of difficulty, providing different research activities, or providing different projects related to the same topic.

(2) Process.

Differentiation in the learning process means providing various ways or strategies for teaching the same material, so that students with different learning styles can understand and practice it. Examples of differentiation in the learning process include providing more guidance, providing peer-to-peer support, or providing repeated formative assessments.

(3) Product.

Differentiation in learning products means providing various ways for students to express their understanding of the material that has been taught. Examples of differentiation in learning products include providing options in the type of task to be completed, providing options in the format of an assessment, or providing additional time to complete the task (Andini, 2022).

At the end of the differentiated learning carried out, an evaluation and reflection is given on the learning that has been going on, related to student learning readiness, student learning profiles and student learning interests. This evaluation and reflection is to improve the learning process that will be carried out in the future. The application of differentiated learning that has been carried out has provided a lot of progress that can be felt by students and teachers. In the study, students who participated in differentiated learning showed higher levels of participation and motivation in class, and also showed improvements in critical and creative thinking skills. Learning progress shown by students after implementing differentiated learning, including increased understanding, increased skills, increased social and emotional skills, as well as increased creativity and innovation. Helmi et al., (2023) stated that Differentiated Instruction learning has a positive influence on students' ability to

make differentiated and superior learning products. This is also in line with research that has been conducted by Pratama, A. (2022) concerning Differentiated Learning Strategies to Improve Students' Reading Literacy and Comprehension, the results obtained are that Differentiated learning can be a new strategy in strengthening literacy activities both at the habituation, development, and learning stages which have an impact on increasing students' reading comprehension.

The application of this differentiated learning also received a positive response from students. The positive response is shown in active participation in learning, student interest in the topic being studied, feeling comfortable in the learning environment, achieving satisfactory results in learning, having good relationships with teachers and classmates, and showing creativity in learning. As with the results of Evi Lailiyah's (2016) research, it was found that the increase in students' critical thinking skills with differentiation learning was better than students who received ordinary learning. In this study, students who took differentiated learning showed a higher level of interest and motivation than students who took regular learning. Research conducted by Wei and Yuan (2018) also shows that differentiated learning can increase students' interest and motivation towards learning. In this study, students who took differentiated learning showed a higher level of interest and motivation than students who took regular learning. Research that has been conducted by Bendriyanti R. P., et al., (2022), also obtained results that the differentiated learning model carried out in learning can expand the excitement of students and teachers in the learning process.

4. CONCLUSION

According to the findings presented in this article, the researchers reached the conclusion that teachers possess positive perspectives and a comprehensive understanding of differentiated learning. The learning activities have been specifically designed to cater to the wide range of student characteristics, while also addressing the individual learning needs and preferences of students. Learning endeavours employ diverse methodologies and preparatory resources to ensure that pupils effectively assimilate information or materials. Classroom instruction has used varied learning strategies to facilitate teaching and learning activities. The learning process commences with a diagnostic evaluation, followed by the development of customised training modules. The purpose of diagnostic assessment is to gather the necessary information about students' talents, interests, and learning profiles for the teacher. The implementation of individualised learning has resulted in noticeable advancements in various areas of learning, including enhanced comprehension of educational content, improved social and emotional skills, and increased creativity and inventiveness. The kids expressed great satisfaction with the teacher's adoption of diversified learning. The teachers' perception of students' enjoyment in learning is demonstrated through their active engagement in the learning process, genuine interest in the subject matter, sense of ease within the learning environment, positive rapport with both teachers and peers, and display of creativity during the learning activities.

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