

Implementation of Differentiated Instruction in Meeting the Learning Needs of Students in Schools

Fahreza Erico Pratama, Diky Febranto, Krisna Aji Suryanto, Nanda Vian Ariyanto, Rangga Edy Purwanto

Faculty of Teacher Training and Education
Jember University
Jember, Indonesia

ericoprata@gmail.com, dikyfebrianto94@gmail.com, krisnaaji444@gmail.com, nandavian10@gmail.com,
rangga.edwan@gmail.com

Abstract: *This study discusses the implementation of Differentiated Instruction as a teaching strategy tailored to the characteristics, interests, and learning readiness of students in achieving educational goals in the Merdeka Belajar (Independent Learning) era. Using a descriptive qualitative method, this research explores how differentiated instruction can improve the quality of learning by addressing individual student needs. Differentiated Instruction involves content, process, and product differentiation, as well as adjusting teaching styles to accommodate students' academic levels, interests, and learning styles. The implementation of this strategy aims to create a supportive learning environment that fosters students' psychological well-being, which is crucial for personal development and achieving educational objectives. The approach allows students to demonstrate their understanding through various learning outputs that align with their preferences and needs, such as articles, videos, posters, or songs. This study highlights the importance of Differentiated Instruction in enhancing the quality of Indonesian education by optimally meeting students' learning needs.*

Keywords— Differentiated Instruction; student characteristics; psychological well-being.

1. INTRODUCTION

Learning becomes a component in the education system so achieving good quality education needs to be continuously supported by maximally improving the quality of learning. Good quality learning is in line with effective learning and learning outcomes are met. Supardi (Rohmawati, 2015) said that learning will be effective if there is a combination of humans, procedures, equipment, facilities, and materials that aim to make students behave better by the learning objectives that have been set. So, it can be concluded that learning can be effective if it can change humans in this case students to be better in acting, behaving, and behaving. This means that the purpose of implementing learning is not only to achieve good intellectuality but also good morality. Effective learning provides broad learning opportunities according to the characteristics and needs of students to achieve quality Indonesian education, namely by rolling out the Merdeka Belajar program.

The implementation of this independent learning is supported by the development of the Merdeka Curriculum as stated in the Decree of the Minister of Education, Culture, Research and Technology No. 56 of 2022. According to Hariyati et al. (2021), Merdeka Belajar is a form of transformation of educational management that makes well-being the main orientation in learning. A person needs psychological well-being in their learning environment. Well-being, which is also known as psychological well-being, is very important for students in their teenage years because it will affect strong personal development, as well as affect the goals, direction, and values of life chosen (Wanisis, 2023). The

psychological well-being of each student is a need that has different levels. This is because the differences in student characteristics in a class are not only in cognitive, psychological, or affective aspects but also in physical aspects.

According to Suprayogi (2014), each student has diverse potential and uniqueness that is inherent in each of them. The diversity and uniqueness of students include 1) learning styles such as auditory, visual, and kinesthetic; 2) academic abilities are divided into three stages of high academic, medium academic, and low academic; 3) the speed of understanding lessons is fast, medium, or slow; 4) learning orientation (mastery, performance approach, performance avoidance); high, medium, and low motivation; 5) high, medium, and low self-efficacy (a person's confidence in their ability to perform a particular task); 6) interest in a particular subject; 7) personality can be introverted or extroverted; and 8) socio-economic status.

The differences in student characteristics require differentiation also known as Differentiated instruction. This Differentiated instruction is carried out by paying attention to the different needs of each student and does not mean that the teaching is based on the principle of one teacher with one student only. As stated by Andiri (in Warsiyah, 2021) Differentiated instruction mixes all the differences in students to obtain information, create ideas, and express what students learn. Differentiated instruction adjusts to students' interests, readiness, and learning profiles, and must apply to all subjects.

2. RESEARCH METHODS

This study attempts to find out and describe the problems in the implementation of learning evaluation in achieving educational goals in the era of independent learning. In this

case, the researcher conducted the research using a descriptive research method using a qualitative approach. According to Nurdin and Hartati (2019), qualitative research is research that is sourced from data, utilizes existing theories as explanatory material, and ends with a theory. The data collection technique used in this study is adjusted to the purpose of this study, namely library studies. The variables in library studies are non-standard. The data obtained are poured into sub-chapters so that they answer the formulation of the research problem. According to Zed in Melfianora (2019), in library research, literature searches are not only for the initial step in preparing a research framework (research design) but also utilize several library sources. These library sources are used to obtain research data. The sources of library research in this study were taken from printed books, scientific journals, and online news articles that contain information about the problems that will be discussed in this study.

3. RESULTS AND DISCUSSION

3.1 Characteristics of Student Learning

The process of cognitive development of children since birth has been classified by Piaget into 4 stages, namely the first stage called sensorimotor at the age of 18-24 months, then the second stage is preoperational at the age of 2-7 years, and then the concrete operational stage at the age of 7-11 years, and the formal operational stage at the age of 12 years and above. This classification is only general in the age range, but each individual at the same stage has a relatively different development (Ulfie, 2017). Likewise, the characteristics of students in learning have different levels of understanding. There are three student characters in learning mathematics (Astini & Purwati, 2020), namely those who like to play, those who like to move, and those who like to feel or do. Therefore, the role of teachers in creating learning materials and using media in the learning process greatly determines the success of students who have a playing character. Then group learning can accommodate students who like to move, and then the teacher allows students to do certain practices or simulations in learning (Syarifuddin & Nurmi, 2022).

The importance of understanding student characteristics as a basis for teachers in developing learning methods and strategies (Magdalena et al., 2021). These characteristics include learning styles, intelligence levels, student origins, and student social interactions. Other characteristics that teachers can understand include willingness, responsibility, commitment, motivation, and cooperation (Mufidah, 2021). For this reason, it is necessary to look at the student's background, culture is not based on the results of non-cognitive assessments or so-called diagnostic assessments carried out by the teacher before learning.

Diagnostic Assessment is an assessment that is carried out specifically to identify the competencies, strengths, and weaknesses of students so that learning can be designed according to the competencies and conditions of students. This

is as stated by Kuswara, et al. (2021) that this learning style diagnostic assessment activity aims to help students and teachers recognize learning styles that should be used as a reference in learning both at school and at home and teachers can easily compile teaching materials and apply methods according to their students' learning styles. This assessment is used as a reference in determining the background, learning style, and learning readiness in implementing Differentiated instruction

3.2 Differentiated instruction

Differentiated instruction is a teaching and learning process in which students can learn subject matter according to their abilities, interests, and needs so that students do not get frustrated and feel like they have failed in their learning experience (Tomlinson, 2017). Every child who is born is special and has been equipped with unique and extraordinary abilities, interests, and talents. This learning provides breadth and support to all students to develop their potential based on the differences and needs of each individual, both in terms of learning style, interests, and learning readiness.

Meanwhile, according to Marlina (2019), Differentiated instruction is a cyclical process of finding out about students and responding to their learning based on differences. When teachers continue to learn about the diversity of their students, professional, efficient, and effective learning will be realized. Therefore, every teacher must be able to map and use this potential to improve the potential and learning achievements of students (Heryahya, et al., 2022). These learning activities can be in the form of content, processes, and products to achieve learning objectives regarding understanding the five human senses.

One of the most important aspects of a Differentiated instruction strategy is the aspect of learning readiness. Readiness to learn is the capacity to learn new material Pratama (2022). A task that takes into account the level of student readiness will take students out of their comfort zone, but with the right learning environment and adequate support, they can still master the new material. Intertwined with this, of course, seeing the extent to which students understand the subject matter that will be delivered by the teacher (Marlina, 2019). Furthermore, so that learning readiness is detected properly, the teacher conducts a diagnostic assessment to measure and find the uniqueness of the level of student understanding so that the teacher will provide different treatments to students in the classroom. According to Suprayogi (2014) various definitions of Differentiated instruction, there are dimensions of the definition of teaching differentiation that emerge can be formulated in five dimensions, namely:

1. Accommodating student diversity,
2. Varying teaching strategies,
3. Varying learning activities,
4. Meeting student needs,

5. Creating optimal learning outcomes

Based on the above, in the implementation of Differentiated instruction, teachers create strategies to meet student learning characteristics with three types of differences, including content differentiation, process differentiation, and product differentiation. Content is input from the teaching and learning process. Process differentiation is by adjusting the complexity of tasks according to student skills and linking them to student learning interests through the process of providing understanding in encouraging students to understand ideas in a preferred way, for example expressing through visuals, kinesthetics, or audio

Students' motivation in learning PJOK has been measured using a questionnaire with 25 questions. The results of filling out the questionnaire were analyzed and data were obtained, namely from 64 students, 22 students were in the very high category, 30 students were in the high category, 7 students were in the medium category, and 5 students were in the low category. Based on the results of the data analysis, the motivation of class VIII students of SMP Negeri 4 Kepanjen in participating in PJOK learning obtained an average value of 61% with a very high category.

3.3 Implementation of Differentiated instruction

Before implementing Differentiated instruction, a mature plan is certainly needed. This Differentiated instruction plan is certainly based on the mapping of students' learning needs that have been analyzed by the teacher. According to Wahyuningsari, et al. (2022), four aspects of Differentiated instruction can be chosen by teachers in learning activities, namely content, process, product, and learning environment aspects. In the planning carried out by the teacher. In the process of implementing Differentiated instruction strategies, teachers must be able to have the latest ideas and innovations in the use of learning methods and models that will be used so that students are more motivated to follow the entire series of learning activities. So, to improve the quality of learning in the classroom for students, the task of a teacher is very important in realizing learning success (Sukendra in Herwina, 2021). Simply put, differentiated instruction is a series of reasonable decisions made by teachers as learning leaders that are centered on meeting students' learning needs (Kusuma, & Luthfah, 2020). A teacher who responds to the fulfillment of student's learning needs, then the teacher modifies learning by adding, expanding, and adjusting time to achieve learning outcomes

There are five (5) ways to differentiate learning, teachers can combine several methods according to the needs and characteristics of students, (Prasetyo & Suciptaningsih, 2022):

1. Differentiation by level. Accommodating different levels of learning achievement. For example, in learning about money, there is a group of students who learn the concept of addition and subtraction, a group of students who learn

the use of money, and a group of students who learn shopping activities.

2. Differentiation by interest. Making student interests a trigger for learning motivation. For example, learning about graphs, the names of the categories in the graph are made based on student interests.
3. Differentiation by response. Accommodating student responses according to their learning modality. For example, learning about responses from a picture. Some students explain the picture verbally to the cassette, some students copy the picture back, and some students use the computer to vary the picture.
4. Differentiation by sequence and structure. Accommodating learning materials into blocks. Learning objectives are adjusted to the high, medium, and low levels of student thinking.
5. Differentiation with teaching style. The teaching style must facilitate student involvement and activeness. Teachers teach according to students' learning styles, not the other way around.

According to Marlina (2019), there are three components in the implementation of differentiation learning strategies, namely content, learning process, and learning outcomes. The first is content or content differentiation is what will or will be learned by students, which is related to the curriculum and learning materials. In this component, a teacher is expected to be able to adjust the curriculum and learning materials according to the learning styles of students and facilitate the conditions of disabilities possessed by students. The content or content of the curriculum must be adjusted to the conditions and abilities of students. Second, differentiation of the learning process, namely students' efforts to be able to process ideas and information obtained including how students choose their learning styles, how students communicate and interact with the material, and how these interactions become part of determining students' learning choices. Third, differentiation of learning outcomes, namely students show what they have learned (Wasih in Aprima, 2022). Product differentiation is another way for students to demonstrate their knowledge and understanding.

Teachers can use students' learning outcomes to determine what they have mastered and what they need to learn next. The learning outcomes that will be conveyed to teachers are also determined by the student's learning styles. Conceptually, this study proves that the role of the teacher changes to become a facilitator (Sapdi, 2023). Viewed from the perspective of educational psychology, the application of Differentiated instruction provides students with the freedom to think, act, and act because they are taught according to their learning choices. This finding is related to the concept of joyful learning. A pleasant teaching and learning atmosphere can focus students' full attention on learning so that their attention span (time on task) is high.

4. CONCLUSION

Differentiated instruction strategies can help students in schools to succeed in their learning process because the output of learning outcomes is by the learning needs of the students themselves. Learning outcomes produced from the entire series of student learning processes can be in the form of articles, songs, poems, infographics, posters, video performances, animated videos, or other forms according to the concept of the material being studied, both individual skills and learning interests in groups. Therefore, with Differentiated instruction, students have ample opportunity to demonstrate what they have learned in the learning process carried out according to their learning needs, so the results of the learning process can be presented in the form of written articles, songs, poems, posters and so on that are adjusted to the material. In addition, the Differentiated instruction strategy is a strategy or approach that is highly recommended to be used because, in the learning process, it can meet and optimize the learning needs of students and will continue to develop in this 21st century.

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