

Implementation of Differentiated Learning as An Effort to Fulfill Curriculum Outcomes

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Abstract: Differentiated learning is a learning process tailored to the needs of students as individuals, implemented to meet the demands of the independent curriculum, which emphasizes learner-centered learning. The method used in writing this article is a literature study, collecting related articles and summarizing them into a cohesive piece on new topics. Based on the literature study results, it is evident that teachers need to understand various aspects, strategies, and steps of differentiated learning to implement it effectively and achieve the goals outlined by the independent curriculum. Implementing Differentiated learning requires a deep comprehension of individual student needs, the ability to adapt teaching methods, and a commitment to creating a dynamic and inclusive classroom environment where all students can thrive. The result of this study will give comprehensive information to all teachers who plan to implement Differentiated learning.

Keywords: Differentiated Learning, Learners, Curriculum Outcome

INTRODUCTION

Differentiated learning is an effort made by teachers to recognize and teach based on the needs of different learners. So far, the education curriculum in Indonesia has yet to be able to accommodate students in developing their reasoning skills, which has significantly impacted their performance on international assessments. For instance, Indonesian students scored among the lowest on the 2018 PISA test, which evaluates reading, math, and science skills. In the reading category, Indonesia's rank declined to 74th out of 79 countries, a drop from 64th place in 2015, making it the sixth lowest. In mathematics, the ranking fell from 63rd in 2015 to 73rd in 2018 (OECD, 2018), placing Indonesia seventh from the bottom. In the science category, Indonesia ranked 71st with an average score of 396, down from 62nd in 2015, making it ninth from the bottom. These poor results on the PISA 2018 were attributed to several factors: a low percentage of high-achieving students, a high percentage of students repeating grades, and significant student absenteeism. These issues collectively suggest low student motivation and engagement in the learning process.

As an alumnus of public schools from elementary to secondary levels, the author reflects on the low motivation to learn during students' school years. One of the primary motivations was to achieve high grades and be accepted into a favorite school at the next level. However, in recent years, policymakers have begun to eliminate the stereotypes surrounding favorite schools and have changed the admission system to be based on residential zones rather than grades (Permendikbud Nomor 44 Tahun 2019, n.d.). This shift has resulted in a tendency for current students to have even lower motivation to learn compared to students in previous years, as the external pressure to achieve high grades for school admissions has decreased.

To address this issue, today's teachers must consider that each student possesses unique potential and individuality. Recognizing and addressing learners' diverse needs is essential for effectively motivating students. When teachers can understand and cater to the specific needs of each student, they can create a more engaging and supportive learning environment that fosters motivation and enthusiasm for learning. However, despite these insights, the reality of education in Indonesia still involves many learning practices that prioritize curriculum completion over students' individual learning needs. This focus on meeting curriculum demands

often needs to be more focused on engaging students, which is vital for their overall academic and personal development.

Teachers' teaching practices that have not been able to accommodate the different needs of students are the impact of the demands to fulfill the curriculum that the central ministry has formulated. However, the ministry of education and culture, research, and technology has established a new paradigm curriculum called the independent curriculum (Puskur Dikbud Ristek, 2021). In this independent curriculum, teachers or education units can more freely develop learning objectives according to the conditions of the school environment and the needs of students. Implementing the independent curriculum can help teachers and education units to implement the learning that is entirely centered on the needs of learners. Teachers today need to develop their knowledge and skills in implementing differentiated learning to achieve the demands of the curriculum.

An Independent curriculum has diverse intra-curricular learning where content will be optimized, so learners have enough time to explore concepts and strengthen competencies. Teachers have the flexibility to choose various teaching tools so that learning can be tailored to learners' learning needs and interests. Projects to strengthen the achievement of the Pancasila learning profile are developed based on specific themes set by the government. The project is not directed to achieve specific learning outcomes targets, so it is not tied to subject content (Kemendikbudristek, 2022a). Three main characteristics of an independent curriculum are 1) the simplification of content, focus on essential materials, 2) collaborative project-based learning, applicative, and cross-subject, and 3) formulation of learning outcomes and arrangement of arrangements that provide flexibility to design operational curriculum and to learn according to the ability level of learners (Kementrian Pendidikan, Kebudayaan, 2022).

Various national and international studies show that Indonesia has been experiencing a learning crisis for quite some time. These studies show that many Indonesian children cannot comprehend simple reading or apply basic math concepts. The findings also show steep educational disparities across regions and social groups in Indonesia. This situation is further exacerbated by the outbreak of the Covid-19 pandemic (Kemendikbudristek, 2022a). It made the policymakers realize there was a need for changes in the education system by focusing on innovative and adaptive education. To avoid unexpected changes, the government appointed several schools, teachers, and facilitators to initiate the implementation of the independent curriculum.

Changes to the curriculum framework require adaptation by all elements of the education system. The process requires careful management to produce the desired impact, namely improving the quality of learning and education in Indonesia. Therefore, the ministry of education and culture provides curriculum options as one of the change management efforts. This phased approach gives teachers, principals, and education offices time to learn. The learning process of these critical actors is essential because this learning process is the foundation of the educational transformation we aspire to (Kemendikbudristek, 2022b).

METHOD

The method used to obtain the data to be processed was the literature study method. The author used this method because the primary source for this article is published online articles (Creswell, 2012). The keyword used to select the literature were "Independent Curriculum", Differentiated instruction", Differentiated learning. The literature study results were then summarized into a research topic on differentiated learning and its relation to the fulfillment of curriculum outcomes.

RESULTS AND DISCUSSION

Differentiated Learning

Differentiated learning is one of the learning strategies that today's teachers are learning to implement the independent curriculum as the government expects. The purpose of differentiated learning is to adjust learning by focusing on the needs of learners. If it is associated with Ki Hajar Dewantara's thought that the teacher's job is to guide the child's nature to achieve happiness, differentiated learning technically has something in common: learner-centered (Moningka, 2022a). For students to achieve what is expected by the Father of Indonesian Education, teachers as facilitators must be able to arrange learning by adjusting to the fulfillment of students' learning needs. In arranging differentiated learning, several things need to be considered by teachers, including aspects of differentiated learning, differentiated learning strategies, and steps for

implementing differentiated learning strategies. The aspects of differentiated learning include content, process, product, and learning environment. Teachers must pay attention to these aspects to determine which can be applied in the class according to the student's needs. Then the differentiated learning strategy also needs to be considered for teachers to plan activities that will be carried out in the classroom. Something carried out without a plan is more prone to failure, so teachers must plan differentiated learning well (Tomlinson & Imbeau, 2010).

The current independent curriculum provides space for teachers to develop learning objectives according to the conditions of students in their respective school environments. If this can be adequately understood, it can make it easier for teachers to determine the appropriate strategies to be applied in the classroom and used to achieve the learning objectives that have been formulated. In general, the independent curriculum has differentiated one school from another. Then in the execution in the field, teachers need to pay attention to aspects of differentiated learning to meet the demands of the independent curriculum.

Theories in the Implementation of Differentiated Learning

Differentiated learning needs to be implemented because it is based on several theories: *ecological theory*, *multiple intelligences theory*, *Zone of Proximal Development (ZPD) theory*, and *Learning modalities* (Moningka, 2022b).

a. **Ecological Theory**

According to human ecology theory, learners are closely related to their environment. The developmental ecology is the learning environment, which is a place to describe, explain, predict, and control the dynamic interactions and transactions between individuals and the environment (Na'imah, 2012). This theory is one of the theories that underlie the need for differentiated learning because, according to the concept of ecological theory, each learner has a different character because each learner has a different environment that affects their development process. Consequently, differentiated learning acknowledges these individual differences by tailoring educational experiences to meet the diverse needs, interests, and developmental stages of each student. By considering the various environmental factors that impact learners, educators can create more effective and personalized learning environments that support optimal growth and development for every student.

b. **Theory of Multiple Intelligences**

According to (Morgan, 2014), teachers need to engage a wide range of intelligence rather than just focusing on one or two because each learner has a different way of learning and goes through multiple intelligences. Learners usually rely on their most excellent intelligence to complete a task. Therefore, when teachers allow learners to solve problems, tasks, or projects according to their intelligence preferences, they encourage and create more significant opportunities for learners to succeed.

Learners typically rely on their most developed intelligence to complete tasks. Therefore, when teachers allow students to approach problems, tasks, or projects according to their intelligence preferences, they create more significant opportunities for students to succeed (Thapliyal et al., 2022). This approach not only boosts students' confidence but also enhances their engagement and motivation. By valuing and utilizing each learner's preferred mode of intelligence, teachers can foster a more dynamic and supportive classroom environment. This tailored method of instruction helps students to perform at their best, promoting a deeper understanding and retention of the material. Consequently, this strategy leads to improved educational outcomes and helps each student to reach their full potential.

c. **Zone of Proximal Development (ZPD) Theory**

Vygotsky's Zone of Proximal Development (ZPD) underpins differentiated learning, positing that learners can solve tasks with assistance from more advanced individuals, such as teachers or peers. Differentiated learning tailors education to individual levels, offering direct guidance to learners with below-average abilities and presenting more challenging tasks to those with above-average abilities (Morgan, 2014). This approach applies the ZPD concept by customizing educational experiences to the diverse abilities of students (Berliana et al., 2024). Learners with lower abilities receive targeted instruction to bridge understanding gaps, while advanced learners engage in complex tasks that promote higher-order thinking and deeper exploration. This method ensures all students are engaged and supported to maximize

their potential. By aligning tasks with each learner's ZPD, differentiated learning fosters an inclusive classroom environment where every student has the opportunity to succeed and grow.

d. *Learning Modalities*

Based on sensory modalities closely related to learning, individuals are classified as visual, auditory, or kinaesthetic learners (Lodge et al., 2016). Auditory learners excel in environments where they can listen to information and participate in discussions. These learners benefit significantly from lectures, audio recordings, and verbal instructions, as they can process and remember information through hearing. Group discussions, debates, and interactive dialogues further enhance their comprehension and retention. By engaging in verbal interactions, auditory learners can solidify their understanding and make meaningful connections with the material presented.

Visual learners, on the other hand, prefer to receive information through visual aids such as pictures, diagrams, graphs, and other visual communication tools. These learners thrive when they can see the material organized in a structured, visual format, which helps them to understand better and remember the content. Visual learners find charts, illustrations, videos, and written notes particularly effective, as these tools allow them to process and recall information visually. Meanwhile, kinaesthetic learners learn best through hands-on experiences and physical activities. They grasp concepts more effectively by engaging in practical, real-world tasks. Experiments, simulations, interactive projects, and other activities that involve movement and manipulation are ideal for kinaesthetic learners, as they learn by doing and experiencing. Understanding these different sensory modalities is crucial for educators to design instructional strategies that cater to the diverse preferences and strengths of their students, ultimately enhancing the overall learning experience and ensuring that all learners have the opportunity to succeed.

Challenge in the imolementation of differentiated learning

Implementing differentiated learning in teaching is a calling that requires resilience and creativity, yet teachers often face some challenges in implementing differentiated learning and instruction. Berliana et al. (2024) report that it is crucial for teachers to recognize their competencies in implementing differentiated approaches, especially in employing the three differentiation strategies (content, process, product). Teachers often find it challenging to apply strategies to facilitate differentiated activities for the students.

A study done by Ginja and Chen (2020) report that a primary factor influencing teachers' ability to implement differentiated instruction/learning was identified as their need for experience. Furthermore, the study's interview results revealed several challenges teachers face in implementing differentiated learning. These include the time-consuming nature of differentiated learning, insufficient training, lack of commitment among teacher educators, misunderstandings the concept and practice of differentiated learning, large class sizes in the school, inadequate facilities in colleges and universities, and limited access to professional development on differentiated learning topics.

In addition, Shareefa (2021) reveals several challenges teachers face in implementing differentiated learning. First, there is a lack of teacher competence in applying differentiated instruction strategies. Although teachers and the principal mentioned that some teachers had participated in workshops related to differentiated learning, they still need direct support to implement these strategies effectively in the classroom. This indicates a gap between theoretical training and practical application, emphasizing the need for ongoing, hands-on support and mentoring. Second, teachers face heavy workloads, which limit the time available for preparing differentiated learning activities. The demanding nature of their responsibilities leaves little room for the meticulous planning required for effective differentiation. Third, teachers are still adapting to the continuous assessment of students, a crucial component of differentiated learning. This adaptation process can be challenging and time-consuming, requiring additional training and resources to ensure that assessments are effectively integrated into everyday teaching practices.

CONCLUSION

Differentiated learning is a strategic effort by teachers to tailor the educational process in a way that benefits each student's unique needs, strengths, and interests. By recognizing and addressing the diverse learning styles and abilities within a classroom, teachers can create a more inclusive and effective learning environment. This approach ensures that every student has the opportunity to succeed and thrive, thereby

promoting a more personalized and engaging educational experience. This concept aligns closely with the educational philosophy of Ki Hajar Dewantara, who advocated for a learner-centered approach. Dewantara believed that education should be designed to make students not only knowledgeable but also joyful and well-rounded individuals. By focusing on the needs and well-being of the student, differentiated learning helps in nurturing happier and more fulfilled learners, which is a core principle of Dewantara's vision.

However, implementing differentiated learning requires careful consideration of various aspects to ensure it meets the demands of the curriculum. Teachers need to be mindful of curriculum standards and learning objectives while designing activities and assessments that cater to different learning styles. This involves ongoing assessment, flexible grouping, and the use of diverse instructional strategies and materials. Additionally, teachers must be adequately trained and supported, as effective differentiated instruction demands a deep understanding of student needs, as well as creativity and adaptability in teaching methods.

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