

Synergy of Social and Managerial Strategies in 21st-Century Inclusive Differentiated Learning

Imroatun Hasana*, Nita Afriani, Maulana Yusuf, Nida Hamidah, Pragiwati Setiana, Rizky Ulfa
Rini Safitri, Farhah Millaty Kamalya, Efri Gresinta

Universitas Indraprasta PGRI, Indonesia

*Corresponding Author: imroatunhasana@gmail.com

Abstract - Learning in the 21st century demands an approach that is responsive to the diversity of learners. Differentiated learning is a strategic solution to accommodate diverse needs, interests, and abilities, and to create an inclusive learning environment. This article analyzes the synergy between social and managerial aspects in the implementation of differentiated learning, emphasizing four main elements: differentiation of content, process, product, and learning environment. This approach is supported by educational theories such as Gardner's multiple intelligences and Piaget's cognitive development, which emphasize the importance of adjusting learning methods based on learner characteristics. Differentiated learning also supports the implementation of a flexible Independent Curriculum, the use of technology, and the integration of 21st-century skills (4C). However, its implementation faces challenges such as limited resources, time management, and resistance to change. Through teacher training support, collaboration between school management, teachers, and parents, and a culture-based approach, differentiated learning can reduce educational disparities. This strategy has been shown to increase student engagement, motivation, and achievement, while creating relevant, inclusive, and equitable learning experiences in the era of globalization.

Keywords: Differentiated learning, social synergy, managerial, inclusion, Independent Curriculum, 21st century skills, student diversity.

I. INTRODUCTION

Learning in the 21st century education era places students as active subjects in the learning process. Students are no longer seen as passive objects, but as unique individuals with an active role in learning (O'Neill & McMahon, 2020). A uniform learning approach is no longer adequate to accommodate diverse backgrounds, interests, and needs. In the other hand, inequality in access to quality education, the digital divide, and the lack of empathy and collaboration in the learning environment hinder the creation of an inclusive education ecosystem. When viewed from a managerial perspective, many teachers and education stakeholders face limitations in strategic planning, effective classroom management, and the application of relevant evaluation methods to support learning in the modern era.

This problem is further exacerbated by the impact of the COVID-19 pandemic which has given rise to the phenomenon of *learning loss*, namely a decrease in learning achievement due to disruption to the education process. Based on research by Muthmainnah and Rohmah (2022), online learning activities during the pandemic can be boring for children so that many children can experience the phenomenon of *learning loss*. This can increase the diversity of student abilities.

Diversity in the classroom is an important issue in today's education world. The existence of various abilities and learning styles of students requires teachers to create relevant and meaningful learning experiences for all students. Therefore, differentiated learning emerges as a strategic solution to meet this diversity. As stated by Frey and Fisher (2013), differentiated learning encourages teachers to be more responsive to diverse learning needs, thus creating an inclusive learning environment and supporting the potential of each learner. This approach is increasingly relevant in the 21st century given the social challenges and the complexity of the ever-evolving world of education.

Differentiated learning aims to meet the learning needs of students by considering four main aspects: content, process, product, and learning environment (Tomlinson, 2014). This approach allows teachers to design responsive and flexible learning to various abilities, learning styles, and needs of students. Therefore, the purpose

of this article is to explore the synergy between social and managerial aspects in the implementation of differentiated learning. This synergy is important to create an inclusive learning environment, where each student feels valued and supported according to their unique needs.

II. METHOD

The method used in this study is literature study and analysis. Literature study is a method that involves collecting data from various sources such as journals, books, and articles, which are then read and processed to obtain relevant information. The analysis method is used to process information and theories obtained from these sources. Researchers collect data by studying various previous studies, then analyzing and evaluating the information obtained.

III. DISCUSSION

Discussion

Differentiated learning is an approach to education designed to accommodate the diversity of learning needs of students. The word “differentiation” itself means the process of distinguishing or making something different (Merriam-Webster, 2020). This concept emphasizes the importance of adapting teaching methods and materials to suit the needs, interests, abilities, and learning styles of each student.

According to Tomlinson (2001), differentiated learning allows learners with diverse backgrounds and learning styles to receive relevant and meaningful learning experiences. This approach is based on the recognition of learner diversity as the basis for developing the learning process (Santika & Khoiriyah, 2023). This strategy includes adjusting learning content, processes, and products according to the individual characteristics of learners. Educational theories support the implementation of differentiated learning. For example, Gardner's theory of multiple intelligences states that intelligence consists of various types, such as kinesthetic, logical-mathematical, and linguistic (Romadhina & Ruja, 2024). By understanding that students have different intelligence tendencies, teachers can design learning activities that support the development of these various types of intelligence. In addition, Piaget's theory of cognitive development emphasizes that each individual develops at a different pace, so instruction must be tailored to the cognitive development needs of each student (Wardi *et al.*, 2021).

According to Subban (2006), differentiated learning involves various strategies to ensure that all learners have access to the curriculum, regardless of their diverse characteristics. This includes identifying the level of understanding, learning readiness, and cultural background of learners (Huda, 2024). The strategies used include variations in the way material is delivered, grouping learners, and assessing learning outcomes.

This approach also supports the creation of more meaningful and effective learning experiences. According to Benjamin (2002), learning that is relevant to students' interests, needs, and learning styles can increase their involvement in the learning process. Reeve (2012) added that a supportive learning environment can increase students' motivation, make them more involved, and ultimately contribute to better learning outcomes.

Differentiated learning aims to enable students to develop optimally according to their respective potentials (Manzis, 2024). As a first step, teachers need to identify various characteristics of students, including their level of understanding, readiness to learn, learning styles, and stages of emotional, cognitive, and motor development. Therefore, differentiated learning is not only a teaching strategy, but also a comprehensive framework that supports students' academic and personal success.

Differentiated learning is an approach designed to meet the learning needs of students by adjusting *the* content, process, and product *of* learning. This approach aims to create an inclusive and relevant learning environment, so that each student can learn according to their individual characteristics. The main principles of differentiated learning are recognition of individual differences, flexibility in teaching, and a focus on learning outcomes. Teachers need to understand the learning styles, interests, and abilities of students and be able to adapt teaching strategies based on their needs (Tomlinson, 2001; Heacox, 2017).

Differentiation of content is related to the learning materials provided to students. Teachers can modify the level of difficulty of the content based on the abilities and learning styles of students (Marlina, 2020). For example, additional materials can be given to students who need further study, while simpler materials are provided for those with basic abilities. Through this approach, each student can access learning optimally according to their needs. The use of visual media, such as images, PowerPoint, and audio-visual-based videos, has been shown to increase active participation of students in differentiated learning (Jhon & Alfiandra, 2024).

Process differentiation emphasizes how students process information and process ideas given. Teachers need to design varied learning activities, such as the use of *scaffolding* or tiered support, to help students understand the material (Subban, 2006). For example, tasks with different levels of difficulty can be given to match students' initial abilities. Strategies such as tiered activities and collaborative and independent activities allow students to face challenges according to their abilities. It is important for teachers to quickly and accurately identify students' learning needs in order to support effective learning processes (Anderson & Algozzine, 2007).

Product differentiation provides students with a variety of options to demonstrate their understanding of the material being studied. Teachers can offer a variety of methods, such as written reports, multimedia presentations, or creative posters, so that students can choose according to their interests and learning styles (Morgan, 2014; Heacox, 2012). *The Understanding by Design (UbD)* framework helps teachers design targeted learning objectives and offers product options as an assessment of understanding. In this way, product differentiation not only evaluates the outcome but also pays attention to the learning process of students, providing a more meaningful learning experience (Sousa & Tomlinson, 2018; Bailey & Williams-Black, 2008).

Differentiated learning supports increased motivation, understanding, and retention of student material. This approach views students as unique individuals influenced by their environment and culture. Teachers are expected to use a variety of methods to understand students' interests and talents (Faiz *et al.*, 2022). For example, visual media-based learning strategies can increase student engagement in differentiated content learning (Aprima & Sari, 2022). Through flexible learning design activities, providing multiple paths or task options, and providing continuous constructive feedback, teachers can create relevant, effective, and inclusive learning experiences (Heacox, 2017).

The differentiated learning paradigm is based on the principles of equity, inclusion, and personalization. This approach provides a fair opportunity for all students to succeed in learning, while creating a learning environment that is responsive to diverse needs. Through this strategy, teachers can support the development of students' potential to the maximum, create meaningful learning experiences, and encourage active student involvement during the learning process.

Socio-economic inequality is one of the main challenges in education. Differences in access to resources, quality of education, and equal learning opportunities often prevent students from low-income backgrounds from reaching their full potential. In this context, differentiated learning provides a strategic solution to create more equitable access to education for all students. This approach allows teachers to design teaching strategies that are responsive to the unique needs of each student, including those from less supportive socio-economic conditions (Tomlinson, 2014). By accommodating differences in learning styles, readiness levels, and interests of students, differentiated learning helps reduce gaps in academic achievement. Teachers can utilize a variety of methods, such as providing simple but meaningful learning materials, or using affordable technology to ensure that all students receive an equal learning experience (Heacox, 2017).

In addition, this approach provides space for students to demonstrate their understanding through various forms of learning products that do not rely on access to expensive resources. For example, students can choose to create simple posters, oral presentations, or community-based projects as alternatives to expensive assignments, such as multimedia reports (Subban, 2006). This approach focuses on the individual potential of students rather than comparing them directly, thus creating an inclusive learning environment, where students feel valued and supported regardless of their socio-economic background (Tomlinson, 2014). This is in line with the principle of equity in education, namely providing different treatment according to need to achieve equal results (Sousa & Tomlinson, 2018).

In addition to addressing socio-economic disparities, differentiated learning is also effective in supporting learners with special needs or from diverse social and cultural backgrounds. Teachers can use content, process, and product differentiation strategies to ensure learners can actively participate in learning. For example, learners with visual impairments can be given learning materials in audio format, while learners with kinesthetics needs can be involved in activities that utilize movement to understand certain concepts (Heacox, 2017). This approach also supports learners from diverse cultural backgrounds by inserting elements of their culture into the learning materials, so that they feel valued and more motivated to learn (Subban, 2006). This is in line with Vygotsky's view that emphasizes the importance of social and cultural interactions in the learning process (Vygotsky, 1978).

Differentiated learning approaches not only help reduce barriers to learning but also create inclusive and empowering learning environments. Teachers who are sensitive to the needs of students from diverse backgrounds can provide *scaffolding* or tiered support according to the needs of each student. In this way, students can develop their abilities gradually without feeling left behind or isolated from their classmates (Santangelo & Tomlinson, 2009). Through the implementation of differentiated learning, schools can act as agents of change that reduce the

impact of socio-economic inequality and create equitable opportunities for all students to develop according to their potential.

Differentiated learning not only strengthens inclusivity in the classroom but also builds social awareness and empathy among students. Through collaboration in a learning environment that values diversity, students learn to accept differences and understand others' perspectives. This approach utilizes heterogeneous group work and tailored tasks to support the development of empathy and tolerance, while promoting equity and social inclusion more broadly (Sousa & Tomlinson, 2018).

According to Tomlinson (2014), heterogeneous group work provides opportunities for students with different abilities to support each other and build mutual respect. When students from different backgrounds or ability levels work together, they are encouraged to listen, communicate, and understand each other's ways of thinking. This helps them develop social skills relevant to an increasingly diverse world. For example, students with special needs can provide unique perspectives during group discussions, while other students learn to value those contributions.

Adapted tasks also play an important role in supporting differentiated learning. By providing tasks according to individual abilities and interests, teachers ensure that all students feel valued in the learning process. For example, students who are interested in art can create posters, while those who prefer to talk can present ideas. This approach not only increases participation, but also helps students understand that everyone has different strengths and ways of learning (Heacox, 2012).

This approach is in line with Vygotsky's social learning theory, which emphasizes the importance of social interaction in learning. Through group work, students learn from each other and develop better social skills. The inclusive environment created makes differences an asset, not a barrier (Vygotsky, 1978). In this way, differentiated learning not only improves academic outcomes but also shapes students into more empathetic and tolerant individuals, ready to live in an inclusive society (Subban, 2006).

The ever-evolving curriculum, including the Merdeka Curriculum launched in 2022, aims to provide flexibility and responsiveness to the diverse needs of learners. This is necessary because the previous curriculum approach, such as the 2013 Curriculum, was considered too rigid and oriented towards high uniform standards, making it difficult for teachers to adjust learning to the individual needs of learners (Mubarok *et al.*, 2021; Ornstein & Hunkins, 2018). The excessive material load in the previous curriculum often caused teachers to focus more on completing the material than ensuring student understanding (Sisdiana, 2019).

As a solution, the Independent Curriculum emphasizes the principles of flexibility and student-centered learning. A differentiated learning approach is an important element in the Independent Curriculum, because it allows teachers to adjust learning strategies, methods, and tasks based on the unique needs and potential of each student. Thus, students can learn in a way and at a pace that suits them, which ultimately helps them achieve their optimal potential, both academically and socially-emotionally (Heacox, 2012).

Differentiated learning also supports the development of students into independent, critical, and integrated individuals, in line with the demands of the changing times. Through this approach, teachers can create an inclusive and adaptive learning environment, which not only accommodates the diversity of student characteristics but also utilizes this diversity as a strength. By understanding students' learning styles, interests, and abilities, teachers can design relevant and interesting learning, thereby increasing students' motivation, and learning skills (Iriawan *et al.*, 2024; Putra *et al.*, 2024). In addition, students learn to collaborate, empathize, and appreciate diversity, which are important provisions for facing challenges in an increasingly heterogeneous society (van Geel *et al.*, 2019). Through the flexibility provided by the Merdeka Curriculum, differentiated learning is able to create meaningful and empowering learning experiences for each student.

Differentiated learning emphasizes the importance of adaptive assessment to measure students' progress based on their unique competencies, needs, interests, and abilities. One effective strategy is diagnostic assessment, which provides a snapshot of students' prior abilities and learning preferences. This assessment helps teachers recognize individual differences so they can differentiate instruction more appropriately (Black & Wiliam, 2009; Tomlinson, 2001). Based on the assessment results, teachers can determine which students need additional support or more challenges on a particular topic, allowing for differentiation of content and process as needed.

Differentiated learning also applies the principle of continuous assessment, where teachers consistently conduct formative assessments to improve student understanding, identify obstacles, and determine steps for improvement. This process allows teachers to dynamically adjust learning, provide constructive feedback, and ensure that each student develops according to their potential (Dian *et al.*, 2024). Through an adaptive and continuous assessment approach, differentiated learning creates a learning experience that is relevant, inclusive, and empowering for each student (Nazilah & Ferdianto, 2024).

In addition to accommodating academic needs, differentiated learning also supports the formation of student character in line with the Pancasila Student Profile. This approach can be enriched through a social-

emotional (SEL) approach, which aims to develop social and emotional skills, as well as positive values that are important throughout life (Pratiwi *et al.*, 2024). Teachers act as guides or "pamong," as in the philosophy of Ki Hajar Dewantara (KHD) in the among system, which places students as the center of learning with the freedom to actively participate, while maintaining moral values and responsibility (Tua & Tamba, 2023).

Rapid technological developments have also had a significant impact on the world of education, including in the management of differentiated learning. Technology provides opportunities to enrich learning resources and interesting learning media and allows learning to be adjusted to students' needs more effectively and efficiently. Digital platforms such as YouTube can present interesting learning materials that are tailored to students' characteristics, while applications such as Canva support the creation of creative products, and Kahoot or Quizizz provide interactive and fun assessments (Isma, Rahmi, and Jamin, 2022). In addition, *Learning Management Systems* (LMS) help present materials and manage assignments systematically, while educational games provide a more enjoyable and relevant learning experience (Rannu, Salija, & Sulaiman, 2024).

Technology also supports the integration of learning models and methods that are appropriate to students' learning styles, which are important elements in the success of differentiated learning. According to Farman, Arbain, and Hali (2021), the suitability between learning styles, learning models, and media use greatly determines the success of the learning process. Through the use of technology, teachers can create more meaningful learning methods, increase the effectiveness, efficiency, and relevance of learning (Wulandari, Santoso, and Ardianti, 2021).

However, the application of technology in education also faces challenges, such as limited access to technology, lack of digital skills among teachers and students, and data security issues (Sakinah, Mahya, & Santoso, 2022). These challenges require a wise approach by optimally utilizing technology to meet educational needs, while encouraging innovation in learning. Educators need to continue to follow technological developments to align them with educational goals, and create relevant and inclusive learning experiences (Hutagalung and Andriany, 2024).

Proper use of technology, differentiated learning can provide a more personal and engaging learning experience, and support students to develop according to their potential. Technology not only improves learning outcomes, but also helps achieve the learning objectives expected in the curriculum, making education more adaptive and responsive to the needs of the times.

Education in the 21st century requires students to develop more complex skills, such as critical thinking, creativity, communication, and collaboration, known as the 4C skills. These skills are essential in facing global challenges and rapid technological developments, enabling students to communicate effectively, share information, solve complex problems, and adapt and innovate (Septicasari & Frasandy, 2018). Differentiated learning plays an important role in preparing students to face a changing world, as this approach allows teachers to adapt teaching methods to the diverse needs, interests, and abilities of students. Through project-based or collaborative learning, for example, students can improve their creativity and critical thinking skills, while group discussions or presentations can strengthen communication and collaboration skills.

Integration of 4C skills in differentiated learning not only provides academic knowledge, but also life skills that are essential to adapt to an increasingly complex and connected world. This approach prepares learners to contribute positively to society and face the challenges of rapid globalization. Globalization has changed the paradigm of education, requiring learners to not only master academic knowledge, but also skills that are relevant to the demands of the times. Differentiated learning, with its ability to accommodate the diversity of learners, is very relevant in preparing them to face global challenges, both in terms of abilities, interests, and learning styles (Tomlinson, 2001).

Differentiated learning supports the development of students' social-emotional skills, which are essential for interaction in a global society. By tailoring approaches to individual strengths and needs, teachers can help students develop empathy, effective communication, and collaborative skills, all of which are crucial in an increasingly connected and diverse world (Tomlinson, 2001). Therefore, differentiated learning focuses not only on academic achievement but also on the development of skills that prepare students for success in facing the challenges of globalization and technology. Relevant, adaptive, and diverse-needs-based learning will produce individuals who are innovative, adaptable, and able to contribute positively to a changing world (Sousa & Tomlinson, 2018).

One effective method in this context is *project-based learning* (PjBL). PjBL allows learners to engage in real-life learning experiences that are relevant to their lives, and develop critical thinking, collaboration, and creativity skills. This approach is compatible with differentiated learning because it gives teachers room to adapt projects to learners' learning styles, interests, and needs (Thomas, 2000). The advantage of PjBL is its ability to adapt tasks to students' ability levels, allowing them to work in groups with different abilities and develop their

potential through different contributions. For example, learners with higher analytical skills can focus on research, while creative ones can be involved in project design and presentation (Bell, 2010).

PjBL also provides opportunities for students to learn independently, explore various strategies for solving problems, and develop critical and creative thinking skills. In addition, PjBL can integrate various disciplines, giving students the opportunity to see the relationship between various fields of knowledge and their applications in real life (Helle, Tynjälä, & Olkinuora, 2006). In this process, the teacher acts as a facilitator who supports students, provides direction, and helps them overcome challenges that arise. This is in line with the principle of differentiated learning, where teachers adjust learning methods to meet the diverse needs and interests of students (Tomlinson, 2001). Thus, PjBL not only enriches the learning experience, but also supports the development of 21st century skills and prepares students to face global challenges.

The application of differentiated learning in the classroom can be an effective solution to overcome the social challenges faced by students in the learning process. For example, at SMAN 106 Jakarta, the virus material teaching module used in the PPL PPG guided teaching practice has successfully demonstrated the application of differentiation strategies. In the teaching module, diagnostic assessments are applied to identify students' basic abilities and the most effective learning styles for them, which are then used to form learning groups tailored to students' needs (Antika *et al.*, 2023). This approach is in line with Vygotsky's concept of the zone of proximal development, which emphasizes the importance of *scaffolding* or peer assistance in maximizing students' potential.

Formative assessment also plays an important role in differentiated learning, by providing continuous feedback that allows teachers to evaluate student development throughout the learning process (Ramadhani *et al.*, 2021; Sucipta *et al.*, 2023). Formative assessment techniques carried out online in the virus material teaching module allow students to work on evaluations according to their needs, providing space for reflection without pressure. This learning not only deepens the material but also encourages the development of social skills, such as collaboration and communication, because students work in supportive learning groups. Integration of differentiated learning with models such as *Blended Learning's Station Rotation* and PjBL has also been shown to improve student learning outcomes (Wahyuni, 2022). Therefore, the application of a differentiated approach that combines learner-centered learning models can improve learning outcomes and help students overcome social challenges in the classroom.

In Indonesia, differentiated learning has great potential to improve the quality of education by providing space for the diversity of student potential. As explained in the academic manuscript of the independent curriculum, the purpose of differentiated learning is to eliminate the practice of moving up a class that is not based on the needs and abilities of students, and to give them the opportunity to develop according to their respective potentials (Wahyudin *et al.*, 2024). In this case, teachers do not need to force students to achieve uniform academic standards, but simply facilitate them to develop according to their uniqueness. The application of differentiated learning has the potential to widen the gap in abilities between students, which can burden teachers in managing the differences in abilities that exist in the classroom.

Therefore, effective management of differentiated classes requires solid collaboration between teachers, learners, and school management. This collaboration is very important to ensure that each learner gets the right support according to their learning needs. Tomlinson (2001) emphasized that differentiated learning will only be successful if teachers understand the needs of learners and can create a learning environment that supports this diversity.

The implementation of differentiated learning requires a strong commitment from various parties. Teachers must have the competence to implement learning that is appropriate to the needs of students, and be able to manage differences in abilities in the classroom wisely. In addition, support from school management is also very important so that differentiated learning can run optimally. Kulik (2003) emphasized that the success of differentiated learning is highly dependent on the readiness and support provided by all parties involved, including teachers, students, and school management. School management needs to provide adequate resources, such as appropriate teaching materials and technology that supports learning, as well as create an environment that supports diversity in the learning process.

With good collaboration between teachers, students, and school management, it is expected that differentiated learning can be implemented more effectively, provide equitable education, and remain quality for all students in Indonesia. This is in line with Hattie's opinion (2009), which states that effective collaboration between various parties in the educational environment can accelerate the achievement of learning goals and improve the overall quality of education.

The implementation of differentiated learning faces various challenges that can hinder its effectiveness, one of which is resistance from students who are accustomed to traditional learning methods. Learning that is more flexible and focused on individual needs often causes anxiety and discomfort, especially for students who

are accustomed to a more rigid learning structure and clear evaluation. Tomlinson (2001) explains that the change towards more personalized learning takes time for students to adapt. Another challenge arises from parents and communities who are more comfortable with the established education system, worrying that differentiated learning will not produce uniform and measurable results, which they consider important to objectively assess their child's progress (Kelly & Ross, 2017).

In addition, another major challenge is how teachers manage differences in student abilities in the classroom. Differentiated learning requires teachers to be more creative and flexible in designing learning experiences that meet the needs of each student. Guskey (2007) stated that although differentiated learning can improve student achievement, its success is highly dependent on the teacher's ability to manage a highly diverse class. Managerial constraints such as limited resources also affect the effectiveness of the implementation of differentiated learning. Several schools with adequate educational facilities and technology are starting to show progress, including providing technology-based materials that can be personalized through platforms such as *the Learning Management System (LMS)* (Almujab, 2023). However, many schools in Indonesia are still limited in terms of access to technology and additional learning materials other than textbooks, which makes the implementation of differentiated learning difficult (de Jager, 2011).

Limited time management is also a significant obstacle. Differentiated learning requires teachers to design materials and strategies that are appropriate to students' learning needs, but time constraints often make it difficult for teachers to do this optimally (Putra, 2023). In classes with a large number of students, the teacher's role in adjusting the pace of learning and providing verbal feedback becomes very difficult. Other obstacles are related to policy support and teacher competence. Not all teachers have a deep enough understanding of differentiated learning, resulting in varying perceptions of this concept. Some teachers see it as a way to improve the quality of learning, while others feel that its implementation is too complex and burdensome (Ginja & Chen, 2020). Limited training that only covers a small number of teachers hinders the dissemination of a wider understanding of this approach, resulting in teachers' inability to identify students' needs accurately.

Problems in assessment are also a concern, because teachers need to design assessments that are in accordance with students' preferences and abilities, but remain fair and objective. Adjusting assessments to accommodate differences in student needs can pose a risk of bias in assessment, considering that not all students get the same opportunity to demonstrate their abilities (Merawi, 2018). Conditions in several schools that have experienced a reduction in the duration of learning time also add to the challenge, because teachers must design flexible assessments while maintaining the principle of objectivity, which often creates contradictions.

Overall, managerial constraints such as limited resources, time, and policy support greatly affect the implementation of effective differentiated learning. Therefore, greater support is needed from various parties, including supportive education policies and improving teacher competency through ongoing training. One strategy to overcome these obstacles is to provide structured training and mentoring for teachers. Pane *et al.* (2024) stated that intensive training and ongoing mentoring can improve teachers' skills in designing and implementing differentiated learning, enabling them to better understand and manage differences in learner needs effectively.

Well-trained teachers can more easily identify students' learning needs and design appropriate strategies. Adequate training and ongoing professional development are essential for teachers to be able to manage classes with diverse learning needs. Darling-Hammond *et al.* (2017) emphasized that effective teacher training is key to helping them develop skills in managing differentiated learning, creating inclusive and learner-centered learning environments. In addition, the *Culturally Responsive Teaching (CRT)* approach can also be applied to increase the relevance of learning. This approach emphasizes the importance of cultural integration in the learning process, which supports learner engagement according to their cultural context and background.

The application of CRT in differentiated learning has been proven effective in increasing learning interest (Azis *et al.*, 2024), active participation (Istika *et al.*, 2024), as well as students' understanding and learning outcomes of the material taught (Molita *et al.*, 2024). By understanding and appreciating cultural diversity, learning becomes more relevant and interesting for students, which supports the achievement of better learning outcomes. Therefore, appropriate training and a responsive approach to cultural differences are important steps in overcoming barriers to the implementation of differentiated learning. Through adequate support, teachers can design inclusive and equitable learning, providing equal opportunities for each student to achieve their maximum potential.

IV. CONCLUSION

Differentiated learning is a strategic approach that can accommodate the diversity of needs, interests, and abilities of students. As a social approach, this learning creates an inclusive learning environment, encouraging the development of empathy, collaboration, and social skills of students. Based on a managerial

perspective, this approach helps teachers design more effective learning through differentiation of content, processes, products, and learning environments, thereby supporting the fulfillment of students' academic and personal potential optimally and reducing the impact of socio-economic inequality in education. To support its implementation, education stakeholders need to provide ongoing training and mentoring for teachers so that they can understand and manage the diversity of students' needs effectively. In addition, the provision of adequate resources, including varied teaching materials and educational technology, is an important step that must be taken. Policies that support learning flexibility, such as those proposed in the Merdeka Curriculum, are also needed so that teachers have room to adjust teaching methods.

Synergy between teachers, students, parents, and education managers is essential to realize quality education in the 21st century. Teachers need to collaborate with parents to understand the individual needs of students, while education managers must create an environment that supports diversity. This shared commitment will ensure that every student feels valued and gets an equal opportunity to develop according to their potential. Thus, differentiated learning can be the foundation for creating an adaptive, innovative, and inclusive generation amidst the ever-growing global challenges.

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