

Article

The implementation of differentiated learning in ELT: Indonesian teachers' readiness

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CITATION

Sofiana N, Andriyani S, Shofiyuddin M, et al. (2024). The implementation of differentiated learning in ELT: Indonesian teachers' readiness. Forum for Linguistic Studies. 6(2): 1178.

https://doi.org/10.59400/fls.v6i2.1178

ARTICLE INFO

Received: 22 January 2024 Accepted: 18 February 2024 Available online: 12 March 2024

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Abstract: In responding to the curriculum change in Indonesia to the Merdeka (Freedom) curriculum, the teaching and learning process should emphasize differentiated learning, including English Language Teaching (ELT). Despite the fact the teachers must implement it in their class, little research has examined the teachers' readiness and its affecting factors in implementing differentiated learning. This study aims to address this gap by exploring teachers' readiness in applying it and the factors affecting their readiness, by administering questionnaires and interviewing sixty public-school teachers of senior high schools who enrolled in the Subject Teacher Deliberation (STD) of English, in Central Java, Indonesia. The findings indicated that teachers were not ready in implementing content and process differentiation in ELT, but they just needed some improvements. Additionally, teachers had been ready in applying product and learning environment differentiation, but they still need a little enhancement. The factors affecting their readiness included insufficient training opportunities, limited time for planning and designing learning activities, difference of students' readiness in learning English, and the large number of students in each class. Furthermore, the study recommends that the Indonesian government should provide additional training and workshops for teachers, establish a clear and consistent guideline for differentiated learning, and facilitating collaboration and communication among teachers to share their best practice.

Keywords: differentiated instruction; English language teaching (ELT); English as a foreign language (EFL); Indonesia; teachers' readiness

1. Introduction

In 2022, the Indonesian government, specifically the Ministry of Education, Culture, Research, and Technology, implemented a new curriculum, dubbed the Merdeka (Freedom) curriculum. This curriculum aimed to update and improve Indonesia's education system and would be implemented in all educational institutions from early childhood education to senior high schools. The Merdeka Curriculum is a program created to enhance education in Indonesia by implementing a student-centered and contextual approach, with the goal of improving its quality (Dian et al., 2023). This program presents a fresh method for freshening educational curricula in Indonesia, prioritizing the cultivation of students' abilities through a more comprehensive and imaginative approach. Moreover, this program prioritizes student needs in the creation of the curriculum (Mariati, 2021), addresses the current challenges (Haryati et al., 2022), highlights the involvement of students in the teaching and learning process (Pertiwi et al., 2022), and promotes competency-based learning (Wiguna and Tristaningrat, 2022). It is expected that the Merdeka Curriculum will be able to establish a captivating and valuable learning atmosphere that meets the

requirements of students (Inayati, 2022). To achieve this goal, differentiated learning plays a crucial role in the teaching and learning process.

The Merdeka Curriculum holds the belief that the differentiated learning model is an effective approach to teaching and learning. It is a learning model introduced by Caroll An Tomlinson in 1999 that focuses on adapting, supporting, and catering to the different needs, preferences, and abilities of students during their learning process (Astuti and Afendi, 2022). In other words, teachers should customize their teaching methods and approaches to fit the preferences, individualities, and capabilities of their students. It is important for them to be aware of the unique characteristics and preferences of each student, and to provide educational opportunities that cater to their specific needs and interests. Furthermore, when incorporating differentiated learning, teachers should consider appropriate measures to be taken, as it does not involve treating each student differently or categorizing them based on intelligence (Ciaramella and Dall'orso, 2021), but rather provides them with different avenues for acquiring and processing content (Crim et al., 2013). Thus, many teachers still have lack of understanding on how to implement it.

Differentiated learning can be employed in Indonesia's senior high school classrooms through a range of strategies to cater to the varying requirements of students. They include: 1) setting personalized learning goals for each student based on their individual strengths, weaknesses, and interests; 2) utilizing a variety of instructional methods, including direct instruction, group work, problem-based learning, and inquiry-based learning, to address various learning styles; 3) providing adaptive materials that match the complexity and difficulty level of students' abilities; 4) creating flexible groups based on students' specific needs, such as ability level, interest, or learning style, to ensure targeted instruction; 5) employing different types of assessments, such as quizzes, projects, and presentations, to assess students' progress and offer feedback; 6) offering additional support, such as extra practice, oneon-one tutoring, or peer collaboration, to students who require it; 7) encouraging student-centered learning by enabling students to choose topics, set their own goals, and reflect on their own progress; 8) encouraging collaborative learning by creating an environment where students can learn from and help each other; 9) giving individualized feedback that is specific, constructive, and based on each student's needs, and giving students the freedom to work at their own pace, and offer extra support or enrichment activities when necessary. These strategies can assist teachers in developing a learning atmosphere that is more inclusive and captivating, tailored to the diverse requirements of senior high school students in Indonesia (Fatmawati et al., 2023; Jufrianto et al., 2023; Lisdiana et al., 2018; Primadani, 2020; Wahyudi et al., 2023).

There are four key elements of differentiated learning that can be adjusted to meet the students' needs including content, process, projects, and the learning environment (Campbell et al., 2016; Tomlinson, 2001). The content pertains to the knowledge that the student must acquire and the resources that can aid in their learning. The process refers to the actions carried out in order to assist students in comprehending and grasping the concepts of their learning. The projects provide an opportunity for students to demonstrate their comprehension or knowledge. The learning environment

refers to the overall ambience of the classroom and the cooperation and interaction among the students in the class.

In the context of differentiated learning, students achieve optimal learning outcomes when their teachers adapt their teaching methods to account for variations in their levels of preparedness, areas of interest, and individual learning characteristics (Tomlinson, 2005). Students are offered a range of options in terms of learning materials, teaching techniques, and assessments. Therefore, it is crucial for teachers to employ diverse teaching techniques that cater to the individual learning styles of students because each student has unique needs. Teachers need to incorporate authentic teaching methods, which involves bringing relevant and meaningful information into the classroom (Lawrencee-Brown, 2004). Furthermore, teachers can evaluate the progress and needs of students in differentiated learning by collecting data from various sources before, during, and after learning (Chapman and King, 2005). Thus, students are hoped to be more motivated, engaged, and valued in their learning, which will lead to a more effective learning process and the ability to reach their full potential. Additionally, their learning outcomes will be more accurately represented. The question that arises is whether teachers truly understand how to effectively apply it in the classroom.

The implementation of differentiated learning is hindered by a variety of challenges and obstacles, including in English Language teaching (ELT) (Suwastini et al., 2021). Wahyudi et al. (2023) even state that most teachers worldwide, regardless of their teaching level, struggle with incorporating differentiated learning in their classrooms. The interview conducted in the initial research revealed that English teachers of Senior High Schools in Jepara, Central Java, Indonesia are facing difficulties in implementing differentiated learning, which involves tailoring instruction to meet the unique needs of each student and providing personalized teaching to support their learning. They claim that it can be challenging to recognize and comprehend the distinct learning requirements of students in every class. In addition, teachers face difficulties in implementing differentiated learning due to scarce resources such as time, space, teaching materials, and costs for each class (Campbell et al., 2016). Teachers also encounter challenges when it comes to evaluating the advancement of students with varying learning requirements. Furthermore, teachers usually struggle to establish a nurturing and helpful atmosphere that fosters student growth, while simultaneously dedicating additional focus to students with limited abilities. Therefore, teachers need a high level of readiness in implementing differentiated instruction in the classroom because it presents difficulties for teachers because of limited time, a heavier workload, and potential confusion caused by students receiving different approaches (Suwastini et al., 2021).

Previous researches have examined the idea, principles, and implementation of differentiated instruction across different levels and subjects, as well as its influence on students' activities and academic achievements in the Indonesian context. Nevertheless, there are still certain constraints in these studies. For example, the studies conducted by Barlian et al. (2023) and Tricahyati and Zaim (2023) which focused solely on the application of differentiated learning in the Merdeka curriculum for English classes in junior high schools. The results acknowledged that the circumstances could vary when it comes to senior high schools. In addition, Maruf

(2023) offered important understandings about how teachers' beliefs and attitudes regarding differentiation impact its implementation in EFL classrooms in Indonesia. However, it did not investigate additional factors that could impact teachers' beliefs and attitudes towards differentiation. The research conducted by Kamal (2021) only focused on the application of differentiated learning in mathematics classes at high school level, which might not accurately address the unique characteristics and requirements of students in English classes. Wote and Sabarua (2020) research primarily investigated the overall readiness of teachers for classroom instruction, but did not specifically concentrate on differentiated learning.

Thus, the researchers aim to address a gap in research by proposing a novel study. This research investigated the readiness of English teachers in senior high schools in implementing differentiated learning, and identified the factors that affect their level of readiness. This is significant because these schools may present unique challenges and obstacles compared to other grade levels and subjects. The result of the study, hopefully, can assist in recognizing the positive aspects and drawbacks of the existing methods used for teaching English, such as grammar translation method, communicative approach, audio-lingual method, role play method, demonstration method, and lecturing method (Anabokay and Suryasa, 2019; Zein et al., 2020) and offer recommendations for enhancing and introducing new approaches. Thus, the study investigates the following research questions:

- 1) How is teachers' readiness in implementing differentiated learning in ELT class?
- 2) What are factors affecting English teachers' readiness in implementing differentiated learning in their classroom?

2. Materials and methods

In order to assess the readiness of teachers in implementing differentiated learning in English Language Teaching and the factors that affect their level of readiness, a convergent parallel mixed-methods design was employed in the design of the study. It meant that the researchers collected and analyzed both quantitative and qualitative data separately, and then merged them to compare and contrast the results.

The study involved the voluntary participation of 60 English teachers in Senior High School enrolled in the Subject Teacher Deliberation (STD) of English in Central Java, Indonesia. Subject Teacher Deliberation is a technique of group supervision aimed at enhancing the effectiveness of teaching and learning activities to achieve educational objectives (Wardani et al., 2020). It is a forum where English teachers of Senior High School come together every Tuesday every two weeks to address issues and enhance the teaching and learning experience. They were selected through a snowball sampling method. Thirty-six out of the total number were females, and twenty-four teachers were men. The participants had varying levels of English language teaching experience, ranging from a year to 30 years, and the average age of the participants was 38.

There were two instruments to collect the data in this research: a questionnaire and an interview. The questionnaire consisted of Likert-scale items consisting of five choices ranging from "never" to "always" that measure the teachers' readiness in implementing differentiated learning, based on the indicators proposed by Tomlinson,

(2001) and developed by Kristiani et al. (2021). It included 17 items that addressed four aspects of differentiated learning, which were content, process, product, and learning environment. In addition, the semi-structured interview consisted of openended questions that explored the teachers' perceptions, experiences, and challenges in implementing differentiated instruction, and their feedback and suggestions for improvement in implementing differentiated learning. The participants who were part of the research project were given the opportunity to read and sign consent forms before they were interviewed. They were interviewed using Bahasa in order to encourage open and confident communication. Afterwards, the interviews were converted into English for further analysis. Every interview had a duration of 30-60 minutes and was recorded in audio form. These recordings were then transcribed word-for-word and translated into English.

In collecting data, the questionnaire was administered online using Google Forms, and the interviews were conducted via Zoom or phone call. The quantitative data, then, were analyzed using descriptive analysis and conducted using software program of SPSS Statistics 25, such as mean, frequency, and percentage, while the qualitative data were analyzed using thematic analysis, which involves coding, categorizing, and interpreting the data to identify the main themes and patterns. **Table 1** shows category level of readiness through the interval score based on model modified from Tricahyati and Zaim (2023).

Level	Percentage (%)	Category
4	86–100	Ready, could be continued
3	76–85	Ready, but needs a few improvements
2	60–75	Not ready, needs some improvements
1	≤59	Not ready, needs a lot of improvements

Table 1. Level of readiness.

3. Results and discussion

3.1. Teachers' readiness in implementing differentiated learning in ELT

There were four indicators to measure the teachers' readiness in implementing differentiated learning: content, process, product, and learning environment. With a total of 60 respondents, the level of readiness was determined by comparing their real score to the ideal score and determining the percentage. The real score was calculated by adding up the scores given by each participant in response to the questionnaire statements. The ideal score was the highest possible score on the 5-point scale, which was 300 (5 multiplied by 60).

3.1.1. Content differentiation

In this study, five closed-statement items were used to assess the level of teachers' readiness in differentiating content. The discussion was focused on whether their implementation had prioritized the students' learning needs and the student's access to the information.

According to the findings of the descriptive statistical analysis in **Table 2**, it indicated that teachers' readiness in implementing differentiated learning fell into the

level 2. It meant that the teachers were not prepared and needed some improvements to incorporate it into their teaching and learning process This conclusion was drawn from the examination of the 5 specific closed statement items utilized in this study. Teachers were not ready in utilizing learning contracts, using multiple teaching methods when delivering information, and offering different types of support systems. However, teachers had been ready but needs a few improvements in employing a diverse range of materials and in utilizing materials that aligned with the unique learning profiles of their students.

Table 2. Content differentiation.

No.	Item	Real score	Ideal score	Item score percentage	Category
1.	Teachers use a variety of materials	234	300	78%	Level 3
2.	Teachers use learning contracts	212	300	71%	Level 2
3.	The teacher presents material with various learning models	224	300	75%	Level 2
4.	Teachers provide various supporting systems	220	300	73%	Level 2
5.	Teachers use materials according to students' learning profiles	234	300	78%	Level 3
	Total	1124	1500	-	-
	Average	-	-	75%	Level 2

3.1.2. Process differentiation

There were 5 closed-statement items utilized in the component of process differentiation. The main emphasis was on the activities carried out by the teachers to make the students understand or become proficient in English learning.

Table 3. Process differentiation.

No.	Item	Real score	Ideal score	Item score percentage	Category
1.	The teacher carries out activities that use the students' information skills.	233	300	78%	Level 3
2.	Teachers carry out activities that are meaningful for students as a learning experience in class.	242	300	81%	Level 3
3.	Teachers prepare students' personal and social abilities through online learning sessions by bringing in guest teachers as resource persons so that students have self-awareness, self-management, social awareness and social management.	168	300	56%	Level 1
4.	Teachers prepare information and communication technology through online learning by bringing in guest teachers so that students have the ability to manage ICT.	165	300	55%	Level 1
5.	Teachers prepare theme-based learning and collaborative subject projects.	193	300	64%	Level 2
	Total	1001	1500	-	-
	Average	-	-	67%	Level 2

During the measurement of the process differentiation indicator as displayed in **Table 3**, it was found that teachers have been ready and just need a few improvements in engaging in tasks that involve students' information skills and in activities in the classroom that are valuable and significant for students' learning. However, they were not prepared and need some improvement in engaging in the preparation of themebased learning activities and collaborative projects in their subjects. They even needed a lot of improvement in facilitating the teaching of information and communication

technology (ICT) through online learning and in engaging in the preparation of themebased learning activities and collaborative projects in their subjects. Therefore, considering all perspectives, the teachers were not prepared to incorporate process differentiation.

3.1.3. Product differentiation

Four items were used to measure the readiness of teachers in implementing product differentiation. The primary focus lied in how teachers concluded projects that required students to practice, implement, and expand upon what they had learned in a specific unit.

In terms of the implementation of product differentiation in **Table 4**, teachers had been prepared but needed a few improvements in determining the types of products that students would engage with based on the level of knowledge, comprehension, and abilities that they needed to showcase. They also were ready in establishing assessment criteria in the rubric, ensuring that students have a clear understanding of what would be evaluated and in clarifying to students how they could showcase their creations in a way that their peers could easily observe them. However, teachers are not ready in preparing the tasks that are tailored to students' level of preparedness, preferences, and profile of learning. So, after examining the four specific statements regarding the application of product differentiation, it could be determined that the level of preparedness among teachers was high. Teachers were prepared and just need a little improvement to incorporate product differentiation into their English Language Teaching.

Real Ideal Item score No. Item Category score score percentage Teachers design products that will be worked on by students according to the knowledge, 228 Level 3 1. 300 76% understanding and skills that they must demonstrate. The teacher determines the assessment criteria in the rubric so that students know what 2. 237 300 79% Level 3 will be assessed. 300 77% Level 3 3. The teacher explains how students can present their products. 230 The products that students will work on must be differentiated according to the students' 217 300 72% 4. Level 2 readiness, interests and learning profile. Total 912 1200 76% Level 3 Average

Table 4. Product differentiation.

3.1.4. Learning environment differentiation

In relation to differentiation in the learning environment, there were three closed-statements utilized to measure the readiness of teachers. They pertain to the functioning and atmosphere of the classroom.

Based on **Table 5**, when it comes to applying learning environments differentiation, the teachers were not ready in organizing various seating arrangements for students based on their readiness, interests, and learning styles. However, the teachers were well prepared in creating a positive learning environment where students feel secure, at ease, and relaxed, ensuring that their educational needs are fulfilled. They were also ready in establishing a conducive and morally sound atmosphere for

learning. They did this by setting up designated areas in the classroom, such as the presence zone, emotion zone, personal gallery, reading corner, and class agreement. Thus, the level readiness of teachers to implement differentiated learning environments was in the level 3.

Table 5. Learning environment differentiation.

No.	Item	Real score	Ideal score	Item score percentage	Category
1.	The teacher prepares several student seating arrangements which are posted on the class notice board according to their learning readiness, interests and learning styles.	209	300	70%	Level 2
2.	Teachers create a pleasant learning atmosphere and environment for students.	256	300	85%	Level 3
3.	Teachers create a positive and ethical learning environment, by creating zones in the classroom, for example attendance zones, emoticon zones, personal galleries, reading corners and class agreements.	227	300	76%	Level 3
	Total	692	900	-	-
	Average	-	-	77%	Level 3

3.2. Factors affecting English teachers' readiness in implementing differentiated learning in their classroom

3.2.1. Insufficient training

During the interview, the results highlighted that one factor was that 75% of teachers had lack sufficient training or professional development opportunities to successfully implement differentiated learning in their ELT classes. The teachers identified a lack of ongoing support and professional development as a major issue that could potentially diminish the quality of their teaching and learning process. Providing teachers with sufficient professional development is crucial when introducing new policies and teaching methods, as it helps them enhance their essential knowledge and teaching skills for the benefit of their students (Njenga, 2023; Sancar et al., 2021). However, teachers expressed that they did not receive enough opportunities or support for professional development in order to improve their skills as English teachers. It is worth mentioning that teachers acknowledged the urgent requirement for professional growth in order to enhance their abilities in teaching. The following is the comment regarding to this matter:

"STDP activities are held once every 2 weeks every Tuesday. At each meeting we take turns being resource persons to discuss issues related to learning. Regarding the implementation of differentiated learning, all teachers who are part of this program do not know how to implement it correctly. Even though there has been training related to the implementation of Merdeka curriculum, there has never been a specific activity discussing differentiated learning, especially in ELT. Hence, it is necessary for the government to take measures in enhancing the English teaching abilities of teachers in order to effectively carry out this strategy and enhance students' proficiency in English."

"Curriculum changes that often occur in Indonesia require teachers to always adapt to new learning methods as well. In the independent curriculum, we are required to implement differentiated learning. However, we have not been equipped with how to implement it in the classroom either by our schools or by

policy makers. At least there should be a guide for us regarding its implementation in English learning."

From the teachers' comments, as the changes of curriculum required teachers to implement differentiated learning strategy in ELT, teachers highlighted the importance of getting proper professional training opportunities. Therefore, they proposed that policymakers should create an intensive development program for teachers in order to enhance their pedagogical abilities that are necessary for implementing differentiated learning in classrooms, and provided them with a guide for doing so.

3.2.2. Limited time for planning and designing learning activities

Based on the interview results, 78% of English teachers identified their lack of time for planning and group activities as a significant obstacle they faced while implementing differentiated learning in the classroom. Teachers need to spend time and put in effort to prepare and design the learning process when implementing differentiated learning (Joseph et al., 2013; Wahyudi et al., 2023). This includes organizing lesson materials, activities, tasks completed in class and at home, and assessments based on students' readiness, interests, and learning profile (Wahyuningsari et al., 2022).

"I truly require sufficient time to get ready for learning. In the process of learning, there are numerous tasks that must be accomplished, including planning, implementation activities, and assessment. Creating learning materials, activities, and tasks that meet the various requirements of students can be a time-consuming task. In addition to our responsibilities of preparing for and teaching classes, there are additional tasks like being a homeroom teacher that also demand our time".

"Making lesson plans really takes a lot of time. I feel that there is still not enough time to create learning scenarios that suit students' needs."

Thus, teachers expressed that a major issue they faced was their lack of adequate time to plan and create learning activities. They were obligated to create learning materials and also considered how to adapt the learning process to align with the principles of differentiated learning. Therefore, it is important to conduct a workshop in order to create learning materials that meet the specific requirements of students.

3.2.3. Difference of students' readiness in learning English

The majority of teachers, around 83%, during the interview stated that the readiness in implementing differentiated learning was influenced by the difference of students' readiness in learning English. Students' readiness pertains to their previous knowledge, skills, and comprehension of the subject (Granas, 2019). The statement suggests that the condition being referred to is not permanent and should undergo regular changes due to effective teaching (Joseph et al., 2013).

"The students' ability to absorb different English language lessons makes it difficult for me to develop differentiated learning plans".

"Students have different English abilities. Their learning style and motivation for learning English are also different. These are the things I need to consider when teaching, which of course influences my readiness to implement differentiated learning."

The comments suggested that the readiness of students to learn English was an important factor that could impact teachers' readiness to use differentiated learning effectively in their classroom. Therefore, preliminary investigation needed to conduct to explore how students differed in their readiness to provide differentiated learning based on students' needs. Certainly, there is a need for guidance in developing assessment tools that accurately assess students' readiness for learning English in order to obtain reliable data.

3.2.4. Large number of students in each class

The majority of teachers, around 87%, believed that having a high number of students in their class can impact their ability to effectively implement differentiated learning. They noted that in a large class, giving personal attention to every student can be challenging or even impossible, resulting in some students falling behind or not getting the necessary assistance.

"The class size typically consists of around 34 to 36 students. This definitely had a strong impact on me when it came to implementing differentiated learning because I recognize that every student has unique requirements. Therefore, I am unable to give each of them my attention."

"Having a high number of students in a class prevents all students from actively participating in the learning process. This poses a challenge for me in assessing the extent of their comprehension of learning."

In conclusion, having a significant number of students in a class could create difficulties for teachers in implementing differentiated learning in English language teaching environments. In order to address these problems, teachers can employ various approaches like establishing a positive classroom atmosphere, offering chances for students to practice their English skills, and designing well-structured lesson plans.

4. Discussion

Differentiated learning is a method of teaching that strives to address the varying needs of students by offering them a range of learning opportunities tailored to their individual levels of readiness, interests, and learning profile. In this study, there were four elements that could be used to implement differentiated instruction: content, process, product, and learning environment. Content signifies the knowledge and skills that students are anticipated to acquire. The term "process" describes the activities and strategies that students employ in order to obtain and utilize the content. Product is what students create or produce to show what they have learned or achieved. Learning environment refers to the overall atmosphere, both in terms of physical and emotional aspects, in a classroom.

Based on the finding, English language teachers were not quite ready in implementing differentiated learning in their classroom. It was evident that the teachers' level of readiness in implementing differentiated learning was at a level 2, indicating they are not fully prepared. Therefore, slight enhancements are necessary in order to enhance the potential of students based on their readiness to learn, students' interests, and learning style. The results were summarized in **Table 6**.

Table 6. Teachers' readiness in implementing differentiated learning.

No.	Item	Real score	Ideal score	Item score percentage	Category
1.	Content differentiation	1124	1500	75%	Level 2
2.	Process differentiation	1001	1500	67%	Level 2
3.	Product differentiation	912	1200	76%	Level 3
4.	Learning environment differentiation	692	900	77%	Level 3
	Total	3729	5100	-	-
	Average	-	-	73%	Level 2

The English teachers' readiness to implement content differentiation was at a level 2, indicating that they were not fully prepared and required some enhancements. The teachers' responses were derived from their experience in applying content differentiation in the classroom. The researchers identified five significant indicators of readiness of the teacher related to the content differentiation. They are the teacher's readiness in utilizing variety of materials, implementing customized learning agreements (contracts), presenting materials using different learning models, providing diverse support systems, and adapting materials to align with students' individual learning styles. Regarding to this issue, studies also indicate that implementing content differentiation poses a challenge for teachers (Smale-Jacobse et al., 2019). Differentiation aims to cater to the diverse range of learners in the classroom by employing various methods to meet the individual needs of students with varying levels of academic performance (Reis, 2018). The wide array of abilities, talents, and passions that students possess necessitates teachers to have a significant variety of skills, as well as a substantial amount of time and resources. According to the interview results, the lack of preparedness among teachers was attributed to their lack of knowledge on effectively implementing it. Despite the presence of training in all schools, there is a lack of specialized training for English teachers. Therefore, English teachers require more professional development in order to effectively implement differentiated learning (Azer, 2005; Dixon et al., 2014; Meutstege et al., 2023).

Furthermore, the English teachers also were not adequately prepared to implement process differentiation into their teaching practice. They even required significant enhancements in developing students' personal and social skills as well as facilitating their proficiency in information and communication technology. It actually could be done by inviting guest teachers online as resource person to make students have self-awareness, self-management, social awareness, social management, and the ability to manage ICT. Moreover, they lacked the readiness to prepare theme-based learning and engaged in collaborative projects. However, they just needed small enhancements. Thus, it suggested that teachers found it difficult to implement process differentiation into their English classrooms. Based on the interview findings, the limited time available for planning and designing learning activities, as well as the large number of students in each class, had an impact on their readiness. This aligns with the research conducted by Adare et al. (2023) that stated the major challenges of differentiation included limited preparation time and large class size. In another research conducted by Gibbs, (2023) similar factors were discovered, such as lack of

time for planning and instruction. This finding aligned with the challenges that English teachers face when implementing differentiated learning. Furthermore, it was suggested that teachers required further professional development and training in order to gain a deeper understanding of differentiated instruction and effectively implement it (Estaiteyeh and DeCoito, 2023) since many teachers feel they do not have enough opportunities for relevant training, especially considering the varying levels of readiness among students in learning English. Therefore, it is important to provide teachers with the necessary resources, training, and support to overcome these challenges and implement process differentiation effectively in their classrooms.

Different from content and process differentiation, teachers were prepared to implement product differentiation although they still needed a little enhancement. They were able to design products that would be worked on by students according to the knowledge, understanding and skills that they must demonstrate. They could outline how students can showcase their product and establish the evaluation criteria in the rubric. This was significant because it ensured that the students had knowledge of what criteria would be used for evaluation by their teachers. English teachers might be more inclined to implement product differentiation in their classrooms due to its comfort and familiarity. It allowed them to adapt their instruction to meet the diverse needs of their students without having to change the core content or process (Estaiteyeh and DeCoito, 2023). This approach could be seen as an extension of traditional teaching practices, rather than a radical shift in pedagogical approach. In addition, product differentiation could be more easily implemented in the classroom, as it did not require teachers to create entirely new content or processes. Instead, teachers could adapt existing materials and activities to meet the diverse needs of their students, making it a more manageable and accessible approach for educators (Joseph et al., 2013).

In the end, although teachers still needed some improvements, they had been ready to put learning environment differentiation into practice. They demonstrated their ability to use their creativity in order to establish a favorable atmosphere for students to learn in and promote a positive and ethical learning environment. This was accomplished by establishing different areas in the classroom, such as designated spots for taking attendance, expressing emotions through emojis, displaying personal artwork, having cozy reading areas, and setting class rules. Thus, English teachers were more likely to implement environment differentiation in their classrooms rather than content and process differentiation due to supportive learning environments. Differentiation generally involved creating a learning atmosphere that was approachable to all learners, and it was common for teachers to make adaptations and arrangements to cater to their students' needs (Saban and Atay, 2023).

In summary, the research results suggested that English teachers are more ready to implement product and learning environment differentiation than content and process differentiation. Product differentiation refers to the ways that students demonstrate their learning, such as through projects, portfolios, presentations, etc. Learning environment differentiation refers to the physical and emotional aspects of the classroom that affect learning, such as seating arrangements, noise level, lighting, temperature, etc. Content differentiation refers to the topics, concepts, skills, and information that students need to learn, such as through varied texts, materials,

resources, etc. Process differentiation refers to the activities, strategies, and methods that students use to learn, such as through cooperative learning, problem-solving, inquiry, etc.

There are several potential reasons why teachers may have different levels of readiness for different aspects of differentiation. One reason could be that implementing differentiation in terms of products and the learning environment may be easier compared to differentiating content and processes. This is because the former requires less planning, preparation, and adjustment of the curriculum. Additionally, differentiating products and the learning environment may be more noticeable and concrete compared to differentiating content and processes, as they result in observable outcomes and changes in the classroom. On the other hand, differentiating content and processes might be more challenging for teachers because it requires more knowledge, skills, and resources. Moreover, external factors such as curriculum standards, assessment systems, and school policies may have a stronger influence on content and process differentiation compared to product and learning environment differentiation.

In addition, the findings from the research also indicate that teachers are not adequately prepared to utilize content and process differentiation. This is primarily due to a lack of sufficient training opportunities, limited time for planning and developing learning tasks, discrepancies in students' readiness to learn English, and a sizable number of students in each classroom. These difficulties align with previous researches that have examined the obstacles and limitations to implementing differentiated instruction in different situations. For instance, a qualitative investigation conducted by Yuen et al. (2023) highlighted some of the common issues with differentiated learning, such as the number of students in a class, qualified staff, available resources, support from administration, and support from parents. Differentiated instruction requires more work during lesson planning, and many teachers find it hard to find the extra time in their schedule. The learning curve can be steep and some schools lack professional development resources. Differentiated instruction also requires that a variety of materials and resources be available for students with differing learning styles, which can be challenging for teachers to access or create (Gibbs, 2023). Therefore, to enhance their readiness for differentiation, English teachers may need more training opportunities, more time for planning and creating learning activities, more awareness of the students' readiness for learning English, and more strategies for managing the large number of students in each class.

5. Conclusion

Implementing differentiated learning in English Language Teaching (ELT) is extremely important in order to cater to the varying requirements of English language learners, delivering excellent instruction, and creating a supportive and captivating learning atmosphere. The results of this study suggest that teachers have a high level of readiness to apply differentiation in their English Language Teaching, both in terms of product and learning environment. However, there are some areas that need further improvement, such as designing tasks that match students' readiness, interests, and learning profiles, and arranging flexible seating options that suit students' learning

styles. Therefore, it is recommended that teachers seek more professional development opportunities and resources on how to effectively differentiate instruction in the language classroom.

In contrast, the research revealed that teachers lacked readiness and required further enhancement to apply content and process differentiation in their teaching and learning process. The analysis of the five closed statement items showed that teachers struggled with using learning contracts, multiple teaching methods, and various support systems. They also faced difficulties in preparing and facilitating theme-based and collaborative activities, as well as integrating ICT and online learning. Although teachers demonstrated some readiness in using diverse and appropriate materials, and engaging students in meaningful and informative tasks, these aspects also needed some improvement. Therefore, the research suggested that teachers should receive more training and guidance on how to differentiate their instruction effectively and efficiently.

Lastly, the research revealed that English teachers in Indonesia face four major challenges in implementing differentiated learning in their classrooms: insufficient training, limited time, difference on students' readiness, and large class size. These challenges hinder the teachers' ability to design and deliver learning activities that cater to the diverse needs and preferences of their students. The participants expressed their need for more guidance and support from the government and the school in terms of curriculum implementation and professional development.

To overcome these challenges, the research suggests some recommendations for the stakeholders involved in English education. First, the government should provide more specific and comprehensive training for the teachers on how to apply differentiated learning in ELT, as well as monitor and evaluate its effectiveness. Second, the school should allocate more time and resources for the teachers to plan and prepare their lessons, as well as reduce the class size or implement a co-teaching model to facilitate more individualized instruction. Third, the teachers should assess their students' English proficiency, learning styles, and motivation regularly and use various strategies and tools to differentiate their instruction according to the students' needs and interests. By doing so, the teachers can enhance their readiness and confidence in implementing differentiated learning and improve their students' learning outcomes.

The limitations of this research are mainly related to the generalizability and validity of the findings. The small sample size of 60 English teachers from one province in Indonesia may not represent the population of Indonesian English teachers who face different contexts and challenges in implementing differentiated learning in English language teaching. Moreover, the use of self-reported data from questionnaire and interview may introduce bias and inconsistency in the responses, as the teachers may not accurately or honestly report their readiness, perceptions, and practices of differentiated learning. Additionally, the focus on public schools' English teachers of senior high school may exclude the perspectives and experiences of other types of schools and levels of education, such as private schools, vocational schools, junior high schools, or elementary schools.

To address these limitations, future research could expand the sample size and diversify the sampling methods to include more teachers from different regions,

backgrounds, and types of schools. This would increase the generalizability and reliability of the results, as well as capture the diversity and complexity of the Indonesian English language teaching context. Furthermore, future research could triangulate the data collection methods by using not only questionnaire and interview, but also other sources of evidence, such as classroom observation, document analysis, or student feedback. This would enhance the validity and credibility of the findings, as well as provide a more comprehensive and holistic picture of the teachers' readiness, perceptions, and practices of differentiated learning. Despite these limitations, this research is still important, as it contributes to the literature on differentiated learning in English language teaching, especially in the Indonesian context. It also provides insights and implications for teachers, teacher educators, and policy makers on how to improve the quality and effectiveness of English language teaching and learning in Indonesia.

Author contributions: Conceptualization, NS and SA; methodology, NS; software, MS; validation, HM, ORC and MS; formal analysis, NS; investigation, NS; resources, ORC; data curation, SA; writing—original draft preparation, NS; writing—review and editing, SA; visualization, MS; supervision, HM; project administration, XX; funding acquisition, HM. All authors have read and agreed to the published version of the manuscript.

Acknowledgments: This work was supported by the Institute for Research and Community Services of Universitas Islam Nahdlatul Ulama Jepara.

Conflict of interest: The authors declare no conflict of interest.

References

- Adare, A. A., Li, Y., & Gebresilase, B. M. (2023). Assessing Practices and Challenges in Implementing Differentiated Instruction in Mingde Primary School. Open Journal of Social Sciences, 11(02), 79–100. https://doi.org/10.4236/jss.2023.112007
- Anabokay, Y. M., & Suryasa, I. W. (2019). TEFL Methods in Indonesia. International Journal of Linguistics, Literature and Culture, 5(2), 13–24. https://doi.org/10.21744/ijllc.v5n2.612
- Astuti, I., & Afendi, A. R. (2022). Implementation of Differentiated Learning Through Play Activities in Early Childhood. EduLine: Journal of Education and Learning Innovation, 2(3), 358–365. https://doi.org/10.35877/454ri.eduline1264
- Azer, S. A. (2005). The Qualities of a Good Teacher: How can they be Acquired and Sustained? Journal of the Royal Society of Medicine, 98(2), 67–69. https://doi.org/10.1177/014107680509800211
- Barlian, U. C., Yuni, A. S., Ramadhanty, R. R., & Suhaeni, Y. (2023). Implementation of Differentiated Learning in the Merdeka Curriculum in English Subjects (Indonesian). ARMADA: Jurnal Penelitian Multidisiplin, 1(8), 815–822. https://doi.org/10.55681/armada.v1i8.742
- Campbell, K., Whitten, T., & Hester, K. (2016). Differentiated Instruction. Instructional Modules for Professional Learning Responding to Opportunities and Valuing Educators (IMPROVE).
- Chapman, C., & King, R. (2005). Differentiated Assessment Strategies: One Tool Doesn't Fit All. Corwin Press.
- Ciaramella, A., & Dall'Orso, M. (2021). Urban Regeneration and Real Estate Development. In SpringerBriefs in Applied Sciences and Technology. Springer International Publishing. https://doi.org/10.1007/978-3-030-67623-0
- Crim, C. L., Kennedy, K. D., & Thornton, J. S. (2013). Differentiating for Multiple Intelligences: A Study of Students' Understandings through the Use of Aesthetic Representations. Issues in Teacher Education, 22(2), 69–91.
- Dian, D., Ahmad, C. F., Arsal, F. R., et al. (2023). Implication And Application MBKM's Curriculum in Education (Madrasah and Universities). At-Ta'dib, 18(1), 106–122. https://doi.org/10.21111/attadib.v18i1.9910
- Dixon, F. A., Yssel, N., McConnell, J. M., et al. (2014). Differentiated Instruction, Professional Development, and Teacher Efficacy. Journal for the Education of the Gifted, 37(2), 111–127. https://doi.org/10.1177/0162353214529042

- Estaiteyeh, M., & DeCoito, I. (2023). Planning for Differentiated Instruction: Empowering Teacher Candidates in STEM Education. Canadian Journal of Science, Mathematics and Technology Education, 23(1), 5–26. https://doi.org/10.1007/s42330-023-00270-5
- Fatmawati, Hardiyanti, & Muktamar, A. (2023). Implementation of Differentiated Learning in Indonesian Language Courses: Realizing Freedom of Learning. Indonesian Journal of Research and Educational Review, 2(4), 44–54. https://doi.org/10.51574/ijrer.v2i4.935
- Gibbs, K. (2022). Voices in practice: challenges to implementing differentiated instruction by teachers and school leaders in an Australian mainstream secondary school. The Australian Educational Researcher, 50(4), 1217–1232. https://doi.org/10.1007/s13384-022-00551-2
- Granas, K. (2019). Differentiated Instruction in the English Subject [Master's thesis]. The Arctic University of Norway.
- Haryati, L. F., Anar, A. P., & Ghufron, A. (2022). Responding to the Challenges of the Era Society 5.0 through Independent Curriculum Innovation in Elementary Schools (Indonesian).
- Inayati, U. (2022). Concepts and Implementation of Merdeka Curriculum in 21st Century Learning at SD/Mi (Indonesian). In: Proceedings of the 2st ICIE: International Conference on Islamic Education, 293304. http://proceeding.iainkudus.ac.id/index.php/ICIE
- Joseph, S., Thomas, M., Simonette, G., et al. (2013). The Impact of Differentiated Instruction in a Teacher Education Setting: Successes and Challenges. International Journal of Higher Education, 2(3). https://doi.org/10.5430/ijhe.v2n3p28
- Jufrianto, M., Rahyuni, Gaffar, S., Akbal, F. A., et al. (2023). Differentiated Instruction in Improving Senior High School Students' Reading Comprehension Level. Journal of Learning and Development Studies. https://doi.org/10.32996/jlds
- Kamal, S. (2021). Implementation of differentiated learning in an effort to improve the activity and learning outcomes of mathematics students in class xi MIPA SMA negeri 8 Barabai (Indonesian). JULAK: Jurnal Pembelajaran Dan Pendidik, 1(1), 89–100.
- Kristiani, H., Susanti, E. I., Purnamasari, N., et al. (2021). Development model of differentiated instruction in flexible curriculum as a form of independent learning at SMPN 20 South Tangerang (Indonesian), 1st ed. Pusat Kurikulum dan pembelajaran, Badan Standar, Kurikulum, dan Asesmen Pendidikan, Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, Republik Indonesia.
- Lawrencee-Brown, D. (2004). Differentiated Instruction: Inclusive Strategies for Standards-Based Learning That Benefit the Whole Class. American Secondary Education, 32(3), 34–62. https://doi.org/doi:10.2307/41064522
- Lisdiana, A., Hufad, A., Tarsidi, D., & Aprilia, I. D. (2018). Differentiated Instruction: An alternative learning approach for all learners in inclusive setting. Advances in Social Science, Education and Humanities Research, 214, 19–21.
- Mariati. (2021). Challenges in Developing an Independent Curriculum for Independent Campus Learning in Higher Education (Indonesian). Seminar Nasional Teknologi Edukasi Dan Humaniora 2021, 2021, 747–758.
- Maruf, N. (2023). The interplay of teachers' beliefs, attitudes, and the implementation of differentiated instruction in indonesian EFL contexts. English Review: Journal of English Education, 11(2), 357–364. https://doi.org/10.25134/erjee.v11i2.7251
- Meutstege, K., Van Geel, M., & Visscher, A. (2023). Evidence-Based Design of a Teacher Professional Development Program for Differentiated Instruction: A Whole-Task Approach. Education Sciences, 13(10), 985. https://doi.org/10.3390/educsci13100985
- Njenga, M. (2023). Teacher Participation in Continuing Professional Development: A Theoretical Framework. Journal of Adult and Continuing Education, 29(1), 69–85. https://doi.org/10.1177/14779714221123603
- Pertiwi, A. D., Nurfatimah, S. A., & Hasna, S. (2022). Implementing Student Centered Learning Methods Towards the Independent Curriculum Transition Period (Indonesian). Jurnal Pendidikan Tambusai, 6(2), 8839–8848.
- Primadani, L. (2020). Differentiated Instruction (DI) Teaching Practice in Heterogeneous Class as the Impact of School Zoning System Policy. Proceedings of the Brawijaya International Conference on Multidisciplinary Sciences and Technology (BICMST 2020). https://doi.org/10.2991/assehr.k.201021.045
- Saban, C., & Atay, D. (2023). Differentiated Instruction in Higher Education EFL Classrooms: Instructors' Perceived Practices in a Turkish Context. MEXTESOL Journal, 47(2), 1–11.
- Sancar, R., Atal, D., & Deryakulu, D. (2021). A new framework for teachers' professional development. Teaching and Teacher Education, 101, 103305. https://doi.org/10.1016/j.tate.2021.103305
- Smale-Jacobse, A. E., Meijer, A., Helms-Lorenz, M., et al. (2019). Differentiated Instruction in Secondary Education: A Systematic Review of Research Evidence. Frontiers in Psychology, 10. https://doi.org/10.3389/fpsyg.2019.02366

- Suwastini, N. K. A., Rinawati, N. K. A., Jayantini, I. G. A. S. R., & Dantes, G. R. (2021). Differentiated Instruction Across EFL Classrooms: A Conceptual Review. TELL-US Journal, 7(1), 14–41. https://doi.org/10.22202/tus.2021.v7i1.4719
- Tomlinson, C. A. (2001). How to differentiate instruction in mixed-ability classrooms. Association for Supervision and Curriculum Development.
- Tomlinson, C. A. (2005). Grading and differentiation: Paradox or good practice? Theory into Practice, 44(3): 262–269. https://doi.org/10.1207/s15430421tip4403_11
- Tricahyati, S., & Zaim, M. (2023). English Teachers' Readiness in Implementing of "Merdeka Belajar" Curriculum in Teaching English at Junior High School in Padang. Journal of English Language Teaching, 12(1), 97–105. https://doi.org/10.24036/jelt.v12i1.121783
- Wahyudi, S., Hapsari, M. M., & Sugiono. (2023). The Implementation of Differentiated Instruction Methods: An Identification of Inhibiting Factors and Their Solutions Toward Qualitative Surveys. In: Proceedings of the 1st UPY International Conference on Education and Social Science (UPINCESS 2022) (pp. 242–252). Atlantis Press SARL. https://doi.org/10.2991/978-2-494069-39-8
- Wahyuningsari, D., Mujiwati, Y., Hilmiyah, L., et al. (2022). Differentiated learning in order to realize independent learning (Indonesian). Jurnal Jendela Pendidikan, 2(4), 529–535. https://doi.org/10.57008/jjp.v2i04.301
- Wardani, A. D., Gunawan, I., Kusumaningrum, D. E., et al. (2020). Subject Teacher Deliberation: Role and Functions in School Management. Advances in Social Science, Education and Humanities Research.
- Wiguna, I. K. W., & Tristaningrat, M. A. N. (2022). Steps to Accelerate the Development of Merdeka Belajar Curriculum (Indonesian). Edukasi: Jurnal Pendidikan Dasar, 3(1), 17. https://doi.org/10.55115/edukasi.v3i1.2296
- Wote, A. Y. V., & Sabarua, J. O. (2020). Analysis of Teacher Readiness in Implementing the Teaching and Learning Process in the Classroom (Indonesian). KAMBOTI: Jurnal Sosial Dan Humaniora, 1(1), 1–12. https://doi.org/10.51135/kambotivol1iss1pp1-12
- Zein, S., Sukyadi, D., Hamied, F. A., et al. (2020). English language education in Indonesia: A review of research (2011–2019). Language Teaching, 53(4), 491–523. https://doi.org/10.1017/s0261444820000208