

English Teachers' Challenges in Implementing Deep Learning Approach within the Merdeka Curriculum

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Abstract

Deep Learning has been promoted as a student-centered approach to foster meaningful, mindful, and joyful learning within the Merdeka Curriculum. However, its implementation in English language teaching remains underexplored, particularly regarding teachers' understanding, perceptions, and the practical challenges encountered in classroom practice. This study aimed to examine English teachers' understanding of Deep Learning, investigate their perceptions of its implementation, and explore the challenges they faced in applying the approach. This study employed a descriptive qualitative research design involving a school principal, a vice principal for curriculum affairs, and three English teachers at Junior high school. Data were collected using interviews, observations, questionnaires, and documentation, and analyzed using data reduction, data display, and conclusion drawing. The findings showed that the teachers demonstrated a good understanding of Deep Learning as an approach emphasizing meaningful, mindful, and joyful learning. They also expressed highly positive perceptions, with all three teachers obtaining an average questionnaire score of 89.33%. Nevertheless, the implementation was constrained by challenges related to designing meaningful learning activities, preparing Deep Learning-based lesson plans, adapting English materials, managing student-centered classrooms, limited instructional time, diverse student characteristics, limited facilities, assessing deep understanding, and administrative workload. The study concludes that although English teachers possess positive understanding and perceptions of Deep Learning, addressing these implementation challenges is essential to optimize its effectiveness in English language teaching.



Keywords: *Deep Learning; understanding; perception; challenge; English teacher*

1. Introduction

Educational transformation in Indonesia has shifted learning from conventional instruction toward approaches that emphasize competency development, meaningful understanding, and active student participation. One of the key reforms is the implementation of Merdeka Curriculum, which offers teachers greater flexibility to design learning based on students' needs, characteristics, and progress. The curriculum emphasizes critical thinking, creativity, collaboration, communication, and independent learning rather than content completion (Rani, Asbari, Ananta, & Alim, 2023). It also promotes creative and enjoyable learning by developing students' potential according to their interests and talents (Ningrum, as cited in Siregar & Putri, 2024). Consequently, teachers play a crucial role in implementing curriculum policies through meaningful classroom practices. However, the success of this reform depends on teachers' readiness, conceptual understanding, and ability to adapt instructional practices to new learning demands (Suryana, Suastra, & Suma, 2023).

As part of the implementation of the Merdeka Curriculum, the Ministry of Primary and Secondary Education introduced the Deep Learning approach as a framework for developing more meaningful, mindful, and joyful learning experiences. Rather than focusing primarily on knowledge transmission and memorization, Deep Learning emphasizes students' active engagement in constructing knowledge through exploration, reflection, problem solving, and authentic learning experiences connected to real-life contexts. This approach integrates cognitive, emotional, social, and physical aspects of learning while encouraging students to understand, apply, and reflect on their knowledge throughout the learning process (Ministry of Primary and Secondary Education, 2025). Therefore, Deep Learning aligns with the objectives of the Merdeka Curriculum by positioning students as active participants in the learning process.

Despite its potential to improve learning quality, the implementation of Deep Learning remains challenging, particularly in English language teaching. English learning requires students not only to acquire vocabulary and grammatical knowledge but also to use language meaningfully through communication and interaction in authentic contexts. Consequently, implementing Deep Learning in English classrooms requires teachers to design instructional practices that promote inquiry, collaboration, contextual learning, and reflection rather than relying solely on conventional teacher-centered approaches. However, applying these principles into actual classroom practices remains complex because Indonesia still faces several implementation barriers, including limited teacher understanding, inadequate supporting resources, and evaluation systems that are not fully aligned with Deep Learning implementation (Amri & Adifa, 2025). Therefore, teachers are required to simultaneously modify learning activities, classroom interactions, instructional materials, and assessment practices, making the transition toward Deep Learning a demanding process.

Several studies have identified various obstacles encountered by teachers during the implementation of Deep Learning in Indonesian educational settings. Paramita, Ariani, Mahadewi, and Werang (2025) reported that limited infrastructure, insufficient teacher readiness, lack of continuous professional development, and difficulties in implementing authentic assessment represent significant barriers to successful implementation. Similarly, Hariyono, Muchson, Anas, and Forijati (2025) found that differences in teacher competence, limited educational facilities, and the challenge of shifting from teacher-centered to student-centered learning continue to affect Deep Learning implementation. Furthermore, Mukhoiyaroh, Sodikin, and Waluyo (2025) highlighted challenges related to lesson planning, availability of instructional resources, and the difficulty of developing learning activities that accommodate students' diverse abilities and characteristics. These findings indicate that successful implementation of deep learning requires not only changes in instructional approaches but also adequate institutional support, learning resources, and teacher development programs.

Although previous studies discussed above have provided valuable insights into the challenges of Deep Learning implementation, limited attention has been given to its application within specific subject areas, particularly English language education. Previous studies have generally discussed teachers' challenges in implementing Deep Learning from a broader educational perspective. However, the implementation of Deep Learning in English language teaching may involve specific challenges because English learning requires students to engage in meaningful communication, apply language knowledge in real-life contexts, and develop multiple language skills. Therefore, examining how English teachers understand and perceive Deep Learning and the challenges they encounter in applying it is important for understanding how the approach can be effectively implemented in English classrooms. Based on this research gap, this study aims to examine English teachers' understanding of the Deep Learning approach, describe their perceptions of Deep Learning implementation, and explore the challenges they encounter in applying Deep Learning within the Merdeka Curriculum. By investigating these three aspects, this study is expected to contribute empirical evidence regarding curriculum implementation in English language education and provide practical implications for teachers, schools, and educational stakeholders in developing more effective support systems for sustainable Deep Learning implementation.

Deep Learning

Deep Learning is an educational approach that focuses on developing students' deep and comprehensive understanding rather than only achieving surface-level mastery of learning materials. The Ministry of Primary and Secondary Education (2025) explains that Deep Learning is a student-centered approach that promotes meaningful, mindful, and joyful learning experiences by integrating thinking skills, values, emotional awareness, and physical engagement in a holistic manner. The implementation of Deep Learning is supported by several components, including graduate profile dimensions, learning principles, learning experiences, and learning frameworks. The learning principles emphasize mindful, meaningful, and joyful learning, while the learning experiences involve three stages: understanding, applying, and reflecting (Ministry of Primary and Secondary Education, 2025). In English language teaching, this approach encourages students to use language meaningfully by connecting learning materials with real-life contexts, applying knowledge in communication activities, and reflecting on their learning processes.

Understanding

Understanding refers to an individual's ability to process, interpret, and explain information rather than simply memorize knowledge. Ahmad (2014) explains that understanding encompasses broad knowledge, perspectives, ways of thinking, and the ability to comprehend something accurately and appropriately. Similarly, Bloom (as cited in Zelia, 2023) argues that understanding involves the ability to comprehend the meaning of information and express it using one's own words and perspectives. Thus, understanding represents a deeper level of knowledge mastery because individuals are able to interpret concepts and apply them appropriately. In the context of Deep Learning implementation, teachers' understanding reflects their ability to comprehend the principles and objectives of Deep Learning and translate them into classroom practices. Teachers who have a strong understanding of Deep Learning are expected to design learning activities that support meaningful, mindful, and joyful learning experiences.

Perception

Perception is the process by which individuals acquire, organize, and interpret information from their surrounding environment. Suranto (2010) defines perception as the process of interpreting sensory information into meaningful understanding. Likewise, Shaleh (2009) explains that perception involves recognizing and understanding information derived from environmental stimuli. Nisa, Hasna, and Yarni (2023) and Saifudin (2022) further state that perception is formed through responses to stimuli received by the senses and processed based on individuals' memory, experience, and knowledge, enabling them to assign meaning to what they perceive. Furthermore, Robbins (2002) argues that perception is influenced by the perceiver, the object being perceived, and the surrounding context. In educational settings, teachers' perceptions shape how they interpret and respond to curriculum changes and instructional innovations.

Challenge

Challenges refer to obstacles or difficulties encountered in achieving specific goals, requiring individuals to adapt, solve problems, and improve their abilities. Salshabila, Nadhifa, and Hendra (2020) state that challenges encourage individuals to make greater efforts to achieve desired outcomes, while Rollings and Adams (2003) define them as obstacles that motivate individuals to develop strategies and enhance their performance. However, the level of challenge should be balanced, as excessive challenges may lead to frustration, whereas insufficient challenges can result in boredom (Chanel, Rebetez, Bétrancourt, & Pun, 2008). In educational settings, challenges arise from social, cultural, technological, and institutional changes, requiring continuous adaptation. Rusniati (2015) further highlights those educational challenges include globalization, increasing competency demands, improving educational quality, and strengthening character development. Therefore, understanding these challenges is essential for improving the effectiveness of educational implementation and achieving learning objectives.

2.Method

This study adopted a descriptive qualitative research approach to explore English teachers' understanding, perceptions, and challenges in implementing the Deep Learning approach within the Merdeka Curriculum. A qualitative approach was selected because this study aimed to explore teachers' experiences, interpretations, and practices related to Deep Learning implementation in a natural classroom context. The research was conducted at Junior high school. The participants of this study consisted of all three English teachers, who served as the primary participants, as well as the school principal and the vice principal for curriculum affairs as supporting informants. The three English teachers were purposively selected because they were directly involved in implementing the Merdeka Curriculum and the Deep Learning approach in English language classrooms. Their selection was not based on their level of understanding or expertise in Deep Learning, but on their direct experience and involvement in its implementation. The school principal and vice principal for curriculum affairs were included to provide additional information regarding the implementation of Deep Learning at the school level and to support data triangulation. The study focused on one school to allow an in-depth examination of English teachers' understanding, perceptions, and challenges in implementing Deep Learning within the Merdeka Curriculum. The object of this study was the implementation of Deep Learning in English language teaching, focusing on teachers' understanding of the approach, their perceptions of its implementation, and the challenges encountered during classroom practices.

Data were collected using interviews, questionnaires, classroom observations, and documentation. Semi-structured interviews were conducted with the school principal, vice principal, and English teachers to obtain in-depth information regarding teachers' understanding of Deep Learning and the challenges they experienced during its implementation. Questionnaires using a Likert scale were administered to the three English teachers to examine their perceptions toward Deep Learning implementation. The questionnaire was developed by the researcher based on relevant theoretical concepts and indicators of Deep Learning within the Merdeka Curriculum. To establish content validity, the questionnaire was reviewed by an English Education lecturer with expertise in curriculum studies. The validation focused on the relevance of the items to the research objectives, clarity of the statements, and appropriateness of the indicators. Revisions were made based on the expert's suggestions before the questionnaire was administered to the participants. Classroom observations were conducted twice for each of the three English teachers, resulting in six observations in total. The observations were conducted to obtain direct evidence how Deep Learning principles were applied in actual English learning activities and to observe the challenges faced by teachers during classroom practice. Meanwhile, documentation was used as supporting evidence to complement and validate the findings obtained from interviews, questionnaires, and observations. The combination of these data collection techniques enabled data triangulation to enhance the credibility and reliability of the findings.

The data analysis process followed the interactive model of qualitative data analysis introduced by Miles, Huberman, and Saldaña (2014), which includes three main stages: data reduction, data display, and conclusion drawing or verification. The questionnaire responses were presented and analyzed numerically by calculating the percentage of responses for each Likert-scale item. The results were then interpreted to describe the teachers' perceptions of Deep Learning implementation. The questionnaire findings were subsequently included in the data reduction and data display processes alongside data obtained from interviews, observations, and documentation. The data reduction stage involved the process of identifying, selecting, and organizing significant information obtained from multiple sources, particularly interview transcripts, observation results, questionnaire responses, and documentation. The condensed data were then presented descriptively to identify patterns related to teachers' understanding, perceptions, and challenges in implementing Deep Learning. Finally, conclusions were drawn and verified by comparing findings from different data sources to ensure consistency and validity.

3. Findings and Discussion

English Teachers' Understanding of Deep Learning

The interview findings revealed that the three English teachers demonstrated a good conceptual understanding of the Deep Learning approach, although they explained the concept from different perspectives. All teachers consistently viewed Deep Learning as a student-centered approach that emphasizes meaningful learning experiences rather than knowledge transmission. The first English teacher (ET1) associated Deep Learning with its three fundamental principles—mindful, meaningful, and joyful learning—whereas the second English teacher (ET2) emphasized students' ability to understand, connect, and apply knowledge in real-life situations. Similarly, the third English teacher (ET3) described Deep Learning as meaningful learning that encourages students to apply knowledge contextually and solve problems critically. These findings indicate that the teachers shared a common understanding of the essential characteristics of Deep Learning despite using different explanations. This finding was evident from the interview data, as all three teachers emphasized meaningful learning, active student engagement, and the application of knowledge in relevant contexts. Although they expressed their understanding differently, their explanations reflected the core principles of Deep Learning, particularly mindful, meaningful, and joyful learning.

The interview data were further supported by information obtained from the school principal and the vice principal for curriculum affairs. Both participants described Deep Learning as a student-centered approach that encourages students to construct understanding, apply knowledge, and develop critical, creative, and collaborative thinking through meaningful learning experiences. They also explained that the school had supported the implementation of Deep Learning through teacher training, academic supervision, project-based learning, and continuous monitoring. These findings indicate that teachers' understanding was reinforced not only by individual learning experiences but also by institutional support that facilitated the implementation of curriculum innovation. Previous studies have mainly highlighted the challenges of implementation, such as limited infrastructure, teacher readiness, and the need for professional development. However, the present study shows that institutional support does not only function as a solution to implementation barriers but also contributes to strengthening teachers' conceptual understanding of Deep Learning. The present study extends previous research by emphasizing the complementary role of school-level support in facilitating teachers' understanding and the sustainable implementation of curriculum innovation within the Merdeka Curriculum.

Classroom observations confirmed that the teachers' conceptual understanding was generally reflected in their instructional practices. The principle of mindful learning was demonstrated when teachers encouraged students to ask questions, analyze learning materials, discuss ideas, and explain their reasoning instead of merely memorizing information. Meaningful learning was observed through activities that connected English materials with students' daily experiences, such as discussing family, school life, and hobbies, followed by pair work, group discussions, and

presentations that enabled students to apply English in authentic contexts. Meanwhile, joyful learning was reflected in the use of collaborative learning, educational games, classroom discussions, and interactive presentations that actively engaged students throughout the lesson. During these activities, teachers consistently assumed the role of facilitators rather than the primary source of knowledge, reflecting the student-centered orientation promoted by Deep Learning.

Despite these findings, the observations also identified minor inconsistencies between teachers' conceptual understanding and classroom implementation. While ET1 and ET2 implemented the observed Deep Learning indicators consistently, ET3 did not fully demonstrate several instructional practices, including providing learning motivation at the beginning of the lesson, encouraging students to ask exploratory questions, giving individualized feedback, and conducting formative assessment and reflection at the end of the lesson. These findings suggest that understanding the principles of Deep Learning does not necessarily guarantee their complete implementation in classroom practice. Although teachers possessed adequate conceptual knowledge, translating that understanding into consistent pedagogical practice remained dependent on teachers' instructional competence and classroom implementation. Overall, the findings indicate that English teachers at Junior high school had a good understanding of Deep Learning, which was reflected in both their conceptual explanations and, to a large extent, their classroom practices. Previous studies have mainly focused on the challenges and supporting factors of Deep Learning implementation, such as lesson planning, learning resources, teacher training, infrastructure, and assessment. However, these studies have not specifically examined the relationship between teachers' conceptual understanding of Deep Learning and its actual implementation in English language classrooms. The present study provides an additional insight by showing that teachers may demonstrate good conceptual understanding while the implementation of some Deep Learning principles may still vary in classroom practice and highlights the importance of not only developing teachers' conceptual understanding but also strengthening their instructional competence to translate Deep Learning principles into consistent classroom practices.

English Teachers' Perceptions of Deep Learning

The teachers' perceptions of Deep Learning were explored through a questionnaire distributed to the three English teachers. The questionnaire consisted of 15 statements developed by the researcher based on the indicators of Deep Learning implementation. The statements were divided equally into three aspects: five items addressing planning, five items addressing implementation, and five items addressing evaluation. The planning items focused on teachers' preparation of Deep Learning-based learning activities, the implementation items addressed the application of mindful, meaningful, and joyful learning principles in classroom practices, and the evaluation items focused on teachers' assessment of students' learning processes and outcomes. The 15 items were designed to represent the three main aspects of Deep Learning implementation relevant to the research objectives and were validated by an expert in curriculum studies to ensure their relevance and clarity. The responses were analysed using a Likert scale, and the percentage score for each teacher was calculated based on the total score obtained compared to the maximum possible score.

Table 1. Questionnaire score

No	Informant	Percentage	Interim Conclusion
1.	ET1	89,33%	Very Positive
2.	ET2	89,33%	Very Positive
3.	ET3	89,33%	Very Positive

The questionnaire results revealed that all three English teachers demonstrated highly positive perceptions toward the implementation of Deep Learning. Each teacher obtained an identical percentage score of 89.33%, calculated based on their individual responses across all questionnaire items. Thus, the 89.33% score represents the perception score of each teacher individually, rather than a combined score across the three teachers. This score placed each teacher's perception in the very positive category. Furthermore, the three teachers provided consistent responses across the questionnaire items, resulting in the same percentage score of 89.33% for each teacher. The identical scores indicate consistency in the teachers' responses and suggest a shared understanding and acceptance of Deep Learning as an appropriate instructional approach for English language teaching.

Regarding the planning aspect, the teachers perceived that the Deep Learning Lesson Planning Design (*Perencanaan Rancangan Pembelajaran Mendalam* [PRPM]) supports the development of learning objectives that emphasize students' thinking processes and facilitates the design of contextual learning activities. However, they acknowledged that preparing PRPM is more time-consuming than conventional lesson planning and that limited teaching materials and supporting resources remain challenges. These findings suggest that while teachers recognize the pedagogical value of PRPM, its implementation requires greater preparation and adequate instructional support.

In terms of implementation, the teachers believed that Deep Learning promotes active participation, meaningful learning, critical thinking, and authentic language use. They also perceived that contextual learning activities enhance students' motivation and engagement. Nevertheless, they identified limited instructional media, internet access, and technological facilities as factors that may hinder effective implementation, indicating that the success of Deep Learning depends on both teachers' competence and institutional support.

Regarding evaluation, the teachers agreed that assessment should be integrated throughout the learning process and accompanied by meaningful feedback to monitor students' progress and improve instruction. They also perceived that Deep Learning-based assessment aligns with the principles of Merdeka Curriculum by supporting student-centered learning and the holistic development of learners' competencies.

Overall, the findings indicate that English teachers hold highly positive perceptions of Deep Learning across the aspects of planning, implementation, and evaluation. Although they recognize several practical constraints, particularly in lesson preparation and learning resources, they believe that Deep Learning has the potential to improve students' understanding, critical thinking, participation, and meaningful learning experiences.

Challenges Faced by English Teachers in Implementing Deep Learning

The interview findings revealed that although the English teachers demonstrated good understanding and highly positive perceptions of Deep Learning, its implementation was accompanied by several pedagogical, contextual, and institutional challenges. Nine major challenges were identified, namely designing learning activities that promote students' deep understanding, limited instructional time, diverse student characteristics, classroom management in student-centered learning environments, limited facilities and infrastructure, assessment of students' deep understanding, administrative workload, adapting English learning materials to the Deep Learning approach, and preparing Deep Learning-based instructional design.

Table 2. Challenges faced by English teachers on Deep Learning

No	Challenges	ET1	ET2	ET3
1.	Designing learning activities that encourage students' understanding	✓	✓	✓
2.	Limited instructional time	✓	✓	✓
3.	Variations in students' abilities, learning styles, and readiness	✓	✓	✓
4.	Classroom management in student-centered learning environment	✓	✓	✓
5.	Limited facilities and infrastructure	✓	✓	✓
6.	Assessment of students' deep understanding	✓	✓	✓
7.	Administrative workload	✓	✓	✓
8.	Adapting English learning materials to Deep Learning approach	-	✓	-
9.	Preparation of Deep Learning based instructional design	-	✓	-

Table 2 presents the challenges experienced by the three English teachers in implementing Deep Learning. The findings indicate that several challenges were shared by all participants, whereas others were experienced by individual teachers. These challenges concerned instructional design, time allocation, learner diversity, classroom management, educational resources, assessment, administrative workload, adaptation of learning materials, and the preparation of Deep Learning-based instructional devices.

The first challenge involved designing learning activities that facilitate students' deep understanding, which was reported by all three participants. ET1 highlighted the need to select essential learning materials carefully, manage instructional time, and prepare learning media and internet access before lessons. ET2 emphasized the difficulty of designing learning experiences that move beyond content mastery by enabling students to understand concepts, connect new knowledge with prior learning, and apply it in authentic contexts. Similarly, ET3 indicated that learning activities need to be adapted to students' characteristics and learning needs, requiring teachers to employ flexible instructional strategies.

Limited instructional time was another challenge commonly reported by all three participants. The teachers indicated that Deep Learning requires additional time for lesson preparation and the implementation of learning activities. ET1 associated the time constraint with the need to organize activities and prepare supporting facilities, whereas ET2 noted that the available instructional time was insufficient to accommodate the exploration, discussion, application, and reflection stages effectively. ET3 similarly observed that meaningful learning often cannot be completed within a single classroom session and may require several meetings.

Students' diversity also emerged as a common challenge. Differences in students' English proficiency, learning styles, and readiness affected classroom participation and the pace at which students understood learning materials. ET2 reported difficulties in ensuring equal participation because of differences in students' proficiency and readiness, while ET3 emphasized the need to provide differentiated support for students who required more time to understand the material. ET1 considered heterogeneous grouping a strategy for addressing these differences but acknowledged that variations in learning styles continued to affect classroom implementation.

Classroom management in student-centred learning environments was likewise identified as a challenge by all participants. The transition from teacher-centred to student-centred learning required teachers to provide greater facilitation while accommodating students with different learning characteristics. ET1 noted the additional time required to facilitate students with different learning styles. ET2 reported that discussion-based activities could result in increased classroom noise, unequal participation, and extended instructional time. Meanwhile, ET3 emphasized the need to continuously adjust instructional strategies to accommodate students' diverse learning styles.

Limited facilities and infrastructure constituted another common challenge. ET1 reported inadequate Wi-Fi access and limited instructional media, while ET2 identified insufficient learning resources and supporting facilities. ET3 similarly indicated that the available school facilities did not fully support Deep Learning implementation.

Assessment of students' critical thinking and deep understanding was also perceived as challenging by all three participants. The teachers considered this type of assessment more complex than assessing factual knowledge. ET1 pointed to the subjective nature of assessment, the need for multiple assessment instruments, and the time required to conduct the assessment. ET2 reported difficulties in determining appropriate indicators for measuring higher-order thinking skills, particularly in light of students' varying abilities and limited preparation time. ET3 similarly identified subjectivity as an inherent concern when assessing students' deep understanding.

Administrative workload was also reported as a common challenge. Although all three English teachers recognized the importance of preparing comprehensive instructional documents, they indicated that administrative responsibilities reduced the time available for lesson planning, instructional innovation, and assessment. Nevertheless, the participants acknowledged that school leadership support, particularly through professional development and training related to Deep Learning, contributed positively to their understanding of the approach.

In contrast to the challenges shared by all participants, adapting English learning materials to the Deep Learning approach was reported specifically by ET2. ET2 indicated that Deep Learning requires a shift from conventional English instruction, which tends to emphasize vocabulary and grammar mastery, toward learning that encourages students to use English meaningfully in real-life contexts. The selection of materials relevant to students' everyday experiences was also considered challenging because of differences in English proficiency. In contrast, ET1 and ET3 did not report significant difficulties in adapting learning materials. This difference may indicate variation in teachers' instructional practices and their readiness to contextualize English learning materials within the Deep Learning framework.

The preparation of Deep Learning-based instructional devices was another challenge reported specifically by ET2. ET2 indicated that developing lesson plans and learning activities aligned with Deep Learning principles required substantial pedagogical understanding and careful planning. In contrast, ET1 and ET3 did not report significant difficulties in preparing instructional documents. This finding suggests that teachers' readiness to develop Deep Learning-based instructional devices may vary according to their understanding and experience with the approach.

Overall, the findings demonstrate that the implementation of Deep Learning is shaped by interconnected pedagogical, institutional, and contextual factors. Seven challenges were commonly experienced by all three participants, while adapting English learning materials and preparing Deep Learning-based instructional devices were reported specifically by ET2. Among the participants, ET2 reported the widest range of challenges, particularly across the planning, implementation, and assessment stages. In comparison, ET1 and ET3 primarily encountered challenges related to classroom implementation and assessment. These findings suggest that successful implementation of Deep Learning requires continuous professional development, adequate instructional resources, appropriate assessment guidelines, sufficient instructional time, and sustained institutional support. The interview findings were further reinforced by information obtained from the school principal and the vice principal for curriculum affairs. Both participants emphasized that the main challenges involve teachers' readiness to adopt student-centred learning, limited instructional time, students' diverse learning characteristics, and the need to prepare instructional materials and assessment instruments aligned with Deep Learning principles. Although the school has provided training, academic supervision, and professional development programs, both school leaders acknowledged that continuous support remains necessary to strengthen teachers' capacity in implementing the approach effectively.

Documentation findings also supported the interview results by revealing the absence of several supporting documents, including teaching modules, assessment documents, learning resources, training materials, training meeting

minutes, and training activity records. This finding does not indicate that Deep Learning was not implemented; rather, it reflects the practical constraints experienced by teachers, particularly limited preparation time, administrative workload, and the complexity of developing instructional documents aligned with Deep Learning principles. Consequently, teachers tended to prioritize classroom implementation over systematic documentation of instructional activities.

The findings indicate that English teachers at Junior high school have a good understanding of Deep Learning within the Merdeka Curriculum. Although they described the concept differently, all teachers viewed Deep Learning as a student-centered approach that encourage meaningful, mindful, and joyful learning. This understanding aligns with the framework of the Ministry of Primary and Secondary Education (2025), which emphasizes learning through understanding, applying, and reflecting. The perspectives of the school principal and vice principal further reinforced these findings, indicating that teachers' understanding has been strengthened through institutional support, including training and academic supervision. This supports Suryana et al. (2023), who argue that successful curriculum transformation depends on teachers' conceptual understanding and pedagogical competence.

Classroom observations also confirmed that teachers generally implemented the principles of Deep Learning through contextual learning, collaborative activities, discussions, and interactive instruction. These findings are consistent with Bloom's revised taxonomy, which defines understanding as the ability to interpret and apply knowledge rather than merely remember it (Zelia, 2023). However, one teacher did not consistently implement several indicators, such as reflection, formative assessment, and individualized feedback, suggesting that conceptual understanding does not always translate into consistent classroom practice.

The questionnaire findings showed that all teachers had highly positive perceptions of Deep Learning, with an average score of 89.33% (very positive). They believed that the approach improves students' understanding, critical thinking, participation, and meaningful learning experiences. These findings support Suranto (2010), Walgito (2010), and Robbins (2002), who explain that perception is shaped by individual interpretation, experience, and contextual factors. Teachers' positive perceptions were influenced by their professional experiences, school support, and the perceived benefits of Deep Learning for students.

Despite these positive perceptions, teachers encountered several implementation challenges, including designing meaningful learning activities, preparing Deep Learning-based lesson plans, adapting English learning materials, limited instructional time, diverse student characteristics, classroom management, limited facilities, assessment of deep understanding, and administrative workload. Designing meaningful learning activities emerged as the most significant challenge because teachers were required to facilitate exploration, problem-solving, and reflection rather than simply deliver content. This finding is consistent with Hariyono et al., (2025).

Limited instructional time, learner diversity, and classroom management also constrained the implementation of Deep Learning, as teachers had to accommodate different learning needs while ensuring active participation. These findings support Mukhoiyaroh et al., (2025), who highlighted similar challenges in designing student-centered learning. In addition, inadequate facilities and learning resources reduced opportunities to implement interactive learning, supporting the findings of Paramita et al., (2025). Assessment and administrative workload further complicated implementation because teachers were required to evaluate higher-order thinking skills while simultaneously managing extensive instructional documentation (Paramita et al., 2025).

Overall, the findings demonstrate that English teachers possess good understanding and positive perceptions of Deep Learning; however, its implementation remains influenced by pedagogical, institutional, and contextual challenges. Compared with previous studies, this research provides a more comprehensive understanding by examining teachers' understanding, perceptions, and challenges simultaneously through interviews, questionnaires, classroom observations, and documentation. These findings highlight the need for continuous professional development, adequate learning resources, practical assessment guidelines, and sustained institutional support to strengthen the implementation of Deep Learning in English language teaching.

4. Conclusion

This study examined English teachers' understanding, perceptions, and challenges in implementing Deep Learning within the Merdeka Curriculum. The findings show that the teachers possessed a good understanding of Deep Learning as a student-centered approach that encourage meaningful, mindful, and joyful learning through the processes of understanding, applying, and reflecting. They also demonstrated highly positive perceptions of its implementation, believing that Deep Learning enhances students' understanding, critical thinking, participation, collaboration, and meaningful learning experiences. Nevertheless, teachers encountered several challenges related to designing meaningful learning activities, preparing Deep Learning-based instructional design, adapting English learning materials, limited instructional time, diverse student characteristics, classroom management, limited facilities, assessment of deep understanding, and administrative workload. These findings indicate that while the research objectives were achieved, the successful implementation of Deep Learning requires continuous professional development, adequate learning resources, institutional support, and effective instructional strategies to address practical classroom challenges.

This study was limited to three English teachers in a single junior high school; therefore, the findings cannot be generalized to broader educational contexts. Future studies are recommended to involve more diverse participants, educational levels, and subject areas, as well as to examine Deep Learning from the perspectives of students, school leaders, or other stakeholders. Employing different research designs may also provide broader insights into the effectiveness and implementation of Deep Learning in educational practice.

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