



IMPLEMENTATION OF DEEP LEARNING APPROACH IN INDONESIAN LANGUAGE LEARNING TO DEVELOP CRITICAL AND REFLECTIVE THINKING SKILLS OF HIGH SCHOOL STUDENTS

IMPLEMENTASI PENDEKATAN DEEP LEARNING DALAM PEMBELAJARAN BAHASA INDONESIA UNTUK MENGEMBANGKAN KEMAMPUAN BERPIKIR KRITIS DAN REFLEKTIF SISWA SMA

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Abstract

This study aims to describe the implementation of the deep learning approach in Indonesian language learning and its impact on the development of critical and reflective thinking skills of high school students in several schools in Makassar City. The deep learning approach is seen as an innovative learning strategy that emphasizes high-level thinking processes, active engagement, and deep reflection on teaching materials. The research method used is descriptive qualitative with data collection techniques through observation of learning activities, interviews with teachers and students, and analysis of learning outcome documents. The results of the study show that the application of the deep learning approach contributes positively to improving the quality of learning interactions and students' metacognitive awareness. Students show high ability to identify problems, analyze arguments, draw logical conclusions, and reflect on the learning process. Deep learning-based learning also strengthens collaborative interaction patterns in the classroom and encourages students' intellectual independence. Thus, the deep learning approach is relevant to be applied in Indonesian language learning in high school to foster critical, reflective, and literacy skills in accordance with the demands of 21st century education.

Keywords : Indonesian learning, deep learning, critical thinking, reflective, high school.

Abstrak

Penelitian ini bertujuan untuk mendeskripsikan implementasi pendekatan deep learning dalam pembelajaran Bahasa Indonesia serta dampaknya terhadap pengembangan kemampuan berpikir kritis dan reflektif siswa SMA di beberapa sekolah di Kota Makassar. Pendekatan deep learning dipandang sebagai strategi pembelajaran inovatif yang menekankan pada proses berpikir tingkat tinggi, keterlibatan aktif, dan refleksi mendalam terhadap materi ajar. Metode penelitian yang digunakan adalah kualitatif deskriptif dengan teknik pengumpulan data melalui observasi kegiatan pembelajaran, wawancara dengan guru dan siswa, serta analisis dokumen hasil belajar. Hasil penelitian menunjukkan bahwa penerapan pendekatan deep learning berkontribusi positif terhadap peningkatan kualitas



interaksi belajar dan kesadaran metakognitif siswa. Siswa menunjukkan kemampuan tinggi dalam mengidentifikasi masalah, menganalisis argumen, menyusun kesimpulan logis, serta merefleksikan proses belajarnya. Pembelajaran berbasis deep learning juga memperkuat pola interaksi kolaboratif di kelas dan mendorong kemandirian intelektual siswa. Dengan demikian, pendekatan deep learning relevan untuk diterapkan dalam pembelajaran Bahasa Indonesia di SMA guna menumbuhkan kemampuan berpikir kritis, reflektif, dan literasi yang sesuai dengan tuntutan pendidikan abad ke-21.

Kata Kunci : Pembelajaran Bahasa Indonesia, deep learning, berpikir kritis, reflektif, SMA.

1. INTRODUCTION

The development of education in the 21st century requires a paradigm shift in learning from teacher-centered to student-centered learning (Wirati et al., 2024). Learning is no longer only oriented to mastery of the material, but also to the development of high-level thinking skills such as critical, creative, communicative, and collaborative thinking (Trilling & Fadel, 2019). In the context of Indonesian learning in high school, this paradigm shift is important to encourage students not only to understand the text literally, but also to be able to interpret, evaluate, and reflect on the meaning behind the text. Therefore, a learning approach is needed that is able to encourage students' deep cognitive involvement, one of which is through a deep learning approach.

The deep learning approach in the context of education does not refer to artificial intelligence technology, but rather to a deep learning process that emphasizes conceptual understanding, connections between knowledge, and students' self-reflection (Biggs & Tang, 2011). Learning with this approach allows students to not only memorize, but to understand, relate and apply concepts in a variety of contexts. According to Entwistle and McCune (2019), the deep learning approach fosters an intrinsic desire to learn meaningfully with a focus on understanding, not just the achievement of values. In learning Indonesian, this approach can be an effective way to improve students' linguistic awareness and reflective thinking skills towards language and its social context.

Critical thinking skills are one of the competencies that must be developed in Indonesian language learning. According to Facione (2020), critical thinking involves the ability to analyze, evaluate, and synthesize information in a logical and reflective way. Meanwhile, reflective thinking is concerned with the ability of learners to assess their own learning experiences and identify the meaning gained from the process (Brookfield, 2017). These two abilities are an important basis in building students' critical literacy, especially in understanding texts that are loaded with values, culture, and ideology.

However, the reality of Indonesian learning in secondary school is still dominated by the surface learning approach, which is learning that emphasizes memorization and reproduction of information (Wang & Liu, 2021). As a result, students tend to lack in-depth analysis of the content of the text and are not used to relating the content of the text to personal experiences and the surrounding socio-cultural context. This condition has an impact on the low ability of



students' critical and reflective thinking skills in understanding and interpreting the meaning of the text comprehensively.

In the context of education in Indonesia, the Merdeka Curriculum provides a great opportunity to implement a more meaningful and in-depth learning approach. This curriculum emphasizes student agency and character strengthening through reflective processes and project-based learning (Ministry of Education and Culture, 2022). The implementation of the deep learning approach is in line with the spirit of the Independent Curriculum because it encourages active involvement of students in building knowledge through exploration, reflection, and collaboration. Thus, the application of this approach in Indonesian learning is expected to strengthen students' literacy and high-level thinking skills.

In addition, Indonesian learning that applies deep learning can help students understand the socio-cultural values contained in the text. According to Widiatmoko and Lestari (2023), learning that integrates reflection and meaning into texts has the potential to build students' cultural awareness and character. Thus, deep learning not only plays a role in improving cognition, but also affective and moral improvement of learners. Learning Indonesian through this approach will be more contextual and meaningful because it connects language with the reality of life.

Several recent studies have shown the effectiveness of applying deep learning approaches in improving the quality of learning. For example, research by Nguyen et al. (2021) found that the application of deep learning approaches improves students' critical thinking skills and conceptual understanding in various fields of study. Meanwhile, in the context of language learning, Lee and Chai (2020) prove that this approach is able to foster students' metacognitive awareness in reflective writing. This shows that deep learning has great potential to be applied in Indonesian language learning, especially to develop students' critical and reflective thinking skills.

Therefore, this research is important to examine how the implementation of the deep learning approach can be applied effectively in Indonesian learning at the high school level. The focus of the research is directed at the process and results of the application of this approach in developing students' critical and reflective thinking skills. The results of this research are expected to contribute to the development of innovative Indonesian learning models that are relevant to the demands of 21st century education.

Overall, the application of the deep learning approach in Indonesian learning is expected to not only be a methodological innovation, but also a transformation of the learning paradigm. With this approach, teachers act as facilitators who guide students to build knowledge meaningfully through deep and reflective thinking processes. This research will provide an empirical overview of the effectiveness of the approach as well as practical recommendations for Indonesian teachers in developing learning that is student-centered and relevant to global challenges.



2. RESEARCH METHOD

This study uses a qualitative approach with a case study design to describe the implementation of the deep learning approach in Indonesian learning in several Makassar City high schools (Nugraha, 2025). This approach was chosen because it allows researchers to deeply understand the learning process and meaning experienced by teachers and students. According to Creswell (2020), qualitative research aims to explore a contextual understanding of social phenomena in depth. Meanwhile, Yin (2021) explained that case studies are suitable for researching complex educational practices in real-world situations.

The research was carried out in several high schools in Makassar City that implemented the Independent Curriculum. The selection of schools and participants was carried out by purposive sampling, which is based on the consideration of teachers' ability to integrate innovative learning. The research participants consisted of three Indonesian teachers and 96 grade XI students from three different schools. Data were obtained through participatory observation, in-depth interviews, and analysis of learning documents. These three techniques were chosen to obtain a comprehensive overview of the application of deep learning in the classroom.

The research instruments include learning observation sheets, semi-structured interview guides, and critical and reflective thinking skills assessment rubrics. The observation sheet was used to assess the application of deep learning principles in learning activities, such as active engagement, problem-solving, and reflection. Interview guides are used to explore teacher and student views on the benefits and challenges of learning. The assessment rubric is compiled based on indicators of critical and reflective thinking skills according to Facione (2020) and Brookfield (2021).

The data was analyzed using the interactive analysis model of Miles, Huberman, and Saldaña (2020) which included three stages, namely data reduction, data presentation, and conclusion drawn. Data reduction is carried out to select relevant information, data presentation is carried out in the form of narrative descriptions, while conclusions are drawn through thematic interpretation. The validity of the data is maintained through triangulation of sources and methods as well as member checking of research participants. With this approach, the results of the research are expected to provide an empirical picture of the effectiveness of the application of deep learning in developing critical and reflective thinking skills of high school students in Makassar City.

3. RESULT AND DISCUSSION

The results of the study show that the application of *the deep learning approach* in Indonesian learning in several Makassar City high schools produces a positive tendency towards the development of students' critical and reflective thinking skills. Data was obtained through observation of learning activities, interviews with teachers and students, and analysis of learning outcome documents. In general, students show more meaningful involvement in



the learning process, especially when faced with activities that demand analysis, interpretation, and reflection on the text.

Table 1. Profile of Critical and Reflective Thinking Skills of High School Students in Indonesian Learning Based on Deep Learning

Ability Aspect	Category Dominance	Percentage (%)	Description of Key Findings
Identify issues	Tall	82	Students are able to find key issues in the text and relate them to the social context.
Analyze arguments	Tall	79	Students demonstrate the ability to assess the validity of arguments and evidence in the reading text.
Draw logical conclusions	Quite High	77	Students are able to formulate conclusions supported by reason and relevant data.
Reflection on the learning process	Tall	84	Students show awareness of their thinking process and learning strategies.
Involvement in discussions	Tall	86	Students actively participate in discussions and provide feedback on friends' ideas.

Based on Table 1, it appears that students' critical and reflective thinking skills are in the high category in almost all aspects observed. The engagement aspect in discussions obtained the highest percentage, at 86%, indicating that students were actively engaged in learning interactions that emphasized collaboration and open argumentation. This shows that *deep learning* encourages meaningful and dialogical participation in the classroom, as stated by Hattie (2020) that the deep learning process is always rooted in reflective interactions between students and the learning context.

The aspect of reflection on the learning process also showed high results (84%), which indicates that students are able to self-evaluate their understanding and learning strategies. In the context of Indonesian learning, reflective activities such as writing learning journals and reflective discussions help students relate the content of the text to personal experiences. This is in line with the opinion of Brookfield (2021) who emphasizes that reflection is a key element in deep learning that is oriented towards the development of self-awareness.

Meanwhile, the aspect of identifying problems and analyzing arguments shows a strong tendency to have a high level of critical thinking ability. Students can assess the relevance and validity of the arguments in the text and relate them to the surrounding socio-cultural issues. These findings are in line with the results of Facione's (2020) research which states that *deep learning* develops high-level thinking skills through exploration and reflective dialogue.

Overall, the results of the study illustrate that the application of *the deep learning* approach in Indonesian learning is able to create a student-centered learning environment,



foster intellectual independence, and strengthen critical and reflective thinking skills. Thus, this approach has the potential to be a relevant learning model in the context of 21st century education, especially in an effort to form a literate and reflective generation.

Discussion

The findings of this study show that the application of *the deep learning* approach in Indonesian learning in several Makassar City high schools contributes to the development of students' critical and reflective thinking skills. Students demonstrate high ability to identify problems, analyze arguments, and participate in discussions that are dialogical in nature. These results reinforce the view of Hattie (2020) that deep learning is able to activate the process of high-level thinking because students do not only passively receive information, but also construct meaning through reflective interaction with the material and their peers.

The active involvement of students in discussions reached the highest percentage (86%) indicating that *the deep learning approach* encourages collaborative participation in learning activities. According to Fullan and Langworthy (2021), meaningful learning is created when students engage in the process of sharing ideas, asking questions, and building knowledge socially. In the context of Indonesian language learning, these activities are seen in text analysis activities and argumentative discussions, which require students to think critically while being open to the views of others.

The reflective aspect, which is also in the high category (84%), shows that students not only understand the content of the text, but are also able to reflect on their own learning strategies. This shows the emergence of metacognitive awareness, which is the ability of students to monitor, evaluate, and adjust their way of thinking to be more effective. These findings are consistent with Brookfield (2021), who asserts that reflection is at the core of deep learning because it allows learners to understand the relationship between learning experiences and their cognitive development.

Results in the aspect of identifying problems and analyzing arguments indicate that students have mastered advanced critical thinking skills. They can assess the validity of the evidence and relate it to the local socio-cultural context. This is in line with the opinion of Facione (2020) that *deep learning* provides space for students to hone their complex reasoning skills through exploratory and reflective activities. In this context, teachers act as facilitators who challenge students to think deeper through open-ended questions and reflective guidance.

In addition, the results of this study show the relevance between *deep learning* and culture-based contextual learning. The integration of local values in texts and discussions allows students to relate the learning experience to their social environment. These findings corroborate the statement of Tan and Koh (2022) that the effectiveness of *deep learning* increases when the learning process relates academic material to the cultural reality of students. Thus, the application of this approach not only develops cognitive competence, but also forms students' reflective character and cultural identity awareness.

In general, the results of this study support the view that Indonesian learning through *a deep learning* approach can be a strategic alternative to develop 21st century skills, especially



critical, reflective, and collaborative thinking skills. These findings also emphasize the importance of changing the learning paradigm from *surface learning* to *deep learning*, where students not only memorize concepts, but understand and apply them in a real context. Thus, *deep learning* has the potential to become a pedagogical foundation for Indonesian learning that is more humanistic, contextual, and oriented towards student self-development.

4. CONCLUSION

Based on the results of research conducted in several high schools in Makassar City, it can be concluded that the application of the deep learning approach in Indonesian learning has a positive impact on the development of students' critical and reflective thinking skills. This approach encourages students' active involvement in the learning process, strengthens collaborative interactions, and fosters metacognitive awareness of their own ways of thinking and learning.

Students demonstrate a high ability to identify problems, analyze arguments, and reflect on the learning process. This shows that deep learning-based learning is able to facilitate deeper conceptual understanding, not just memorization. Learning that demands exploration, reasoning, and reflection makes students better able to relate texts to social contexts and personal experiences.

In addition, this approach has been shown to reinforce the principle of student-centered learning, where students become active subjects in building knowledge and meaning. The results of this study indicate that the integration of deep learning in Indonesian learning not only improves the quality of the learning process, but is also relevant to the needs of 21st century education which demands high critical thinking, reflective, and literacy skills.

Thus, it is recommended that Indonesian teachers at the high school level integrate deep learning principles more systematically through collaborative, reflective, and project-based learning strategies. Further research can also be focused on developing a deep learning implementation model that is scalable and adaptive to the characteristics of learners in various educational contexts..

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