

The Deep Learning Paradigm in Elementary School Bahasa Indonesia: Transforming Language Acquisition through Mindful, Meaningful, and Joyful Learning

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ABSTRACT

This article examines the implementation of the deep learning approach in teaching Bahasa Indonesia at the elementary school level, aligned with the guidelines issued by Puskurjar. Utilizing a qualitative literature review method, this study analyses how the core principles of deep learning (mindful, meaningful, and joyful learning) can resolve persistent pedagogical challenges in early language acquisition. The findings reveal that the deep learning approach systematically supports the structured development of six core language skills (listening, speaking, reading, viewing, writing, and presenting) by shifting classroom dynamics from mechanical memorization to authentic linguistic practice. Furthermore, the study outlines four critical roles for educators in fostering a deep learning emotional anchor. Ultimately, this approach successfully bridges abstract linguistic concepts with students' daily realities, cultivating active, reflective, and sustainable language competencies in elementary school students.



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A. INTRODUCTION

The learning approach in elementary schools is a crucial component of the learning process. Teachers should wisely choose an approach that is appropriate to the classroom conditions, student characteristics, and cognitive abilities, in order to positively impact students. The choice of learning approach needs to be tailored to the lesson or material the teacher intends to deliver. For example, in Indonesian language learning, the approach used for each subject may not be the same. Given technological developments in various fields, including education, innovative learning approaches are needed to adapt to these developments. Today, technology and digitalization are unavoidable in the learning process. Various components of learning are also impacted by technological developments, including planning, instructional media utilization, assessment, and so on. Rapid technological advancements necessitate various innovations in learning to introduce new approaches to enhance understanding and create new practices, both in methods and approaches, to keep pace with current developments while still achieving intended goals (Syafawani & Prasetyo, 2024).

Despite its foundational role, Indonesian language learning in elementary schools faces critical challenges regarding student proficiency and engagement. Empirical data

from the Programme for International Student Assessment (PISA) consistently highlights that Indonesian students struggle significantly with reading literacy, often scoring well below the OECD average (OECD, 2023). This national literacy gap is further corroborated by recent National Assessment (Asesmen Nasional) data, which indicates a substantial percentage of elementary school students have not reached the minimum competency level in functional reading and text comprehension (Kemendikbudristek, 2023). These statistics underscore a systemic reliance on rote memorization and surface-level teaching in early language education, where students are trained to decode words rather than construct meaning. Consequently, this persistent literacy crisis demands a pedagogical shift from traditional, superficial instruction to a more robust framework, establishing a clear urgency for the integration of the deep learning approach in elementary classrooms.

The Indonesian education system is experiencing various dynamics, one of which is the change in government structure. On October 24, 2024, the Ministry of Education, Culture, Research, and Technology was split into three ministries: the Ministry of Elementary and Secondary Education, the Ministry of Science and Technology, and the Ministry of Culture. The Center for Curriculum and Learning, under the Ministry of Elementary and Secondary Education, has released an Academic Paper on Deep Learning, which is expected to become the latest curriculum design during President Prabowo's administration. However, as reported by detik.com, the Minister of Primary and Secondary Education, Abdul Mu'ti, emphasized that deep learning is an approach to learning, not a new curriculum design or discourse. He stated that there has been no discussion regarding a new curriculum to date. The concept of deep learning has also been known in the world of education for a long time.

Bengio et al. (2021) define the core of deep learning as inspired by how the human brain works, deep learning tries to create a simple neural network imitation that is non-linear in nature learning by adjusting the strength of connections between nerves. Puskurjar defines Deep Learning as an approach that glorifies, emphasizes the creation of a learning atmosphere and a learning process that is mindful, meaningful, heart-based (ethical), feeling-based (aesthetic), and sports-based (kinesthetic) in a holistic and integrated manner. Nugraha & Hasanah (2021) define deep learning as a series of learning activities that are carried out effectively and efficiently, because the ultimate hope or output of deep learning is the creation of meaningful and quality learning. Deep Learning is designed to realize the profile of graduates with 8 dimensions: (1) faith and piety towards God Almighty, (2) citizenship, (3) critical reasoning, (4) creativity, (5) collaboration, (6) independence, (7) health, and finally (8) communication (Kemendikdasmen, 2025). The communication dimension aims to shape students into individuals who have intrapersonal communication skills to conduct interpersonal reflection to convey ideas, thoughts, and information, both verbally and in writing, and are able to interact effectively in various conditions (Puskurjar, 2025). This dimension can be supported by Indonesian language learning in schools. Indonesian language learning is important for students to learn so that it is introduced at the elementary education level, because a person's communication skills are closely related to language skills.

Indonesian language learning is important for students to learn so that it is introduced at the elementary education level, because a person's communication skills are very closely related to language skills. Learning is a process of interaction between individuals, individuals, and groups, to gain insight or knowledge. This definition demonstrates that learning is inseparable from social interaction. The learning process involves various elements within a learning environment, such as teachers, students, methods, media, and

so on (Setiawan et al., 2023). Indonesian language learning in elementary schools is allocated four hours per week, meaning that Indonesian language learning only takes place twice a week (Ali, 2020). Approaches commonly used in Indonesian language learning in elementary schools include the integrated thematic approach and the whole language approach. The whole language approach relates to eight inseparable components, including reading, shared reading, journal writing, guided reading, guided writing, independent reading, and independent writing (Viora et al., 2021). The integrated thematic approach is considered effective in Indonesian language learning in elementary schools (Siregar et al., 2022).

Therefore, based on the background, theory, and supporting research, this study aims to determine how to apply the deep learning approach to Indonesian language learning in elementary schools.

B. METHODS

This research uses a literature study method to comprehensively evaluate the implementation of the deep learning approach in elementary language education. To ensure the academic rigor and validity of the source materials, a systematic literature search was conducted across multiple reputable international and national academic databases, including Scopus, Web of Science (WoS), ScienceDirect, and SINTA (Science and Technology Index), alongside Google Scholar as a secondary discovery tool. The literature search utilized specific combinations of keywords, such as “deep learning approach”, “elementary school language instruction”, “Bahasa Indonesia pedagogy”, and “Puskurjar curriculum guidelines.”

The stages carried out in this research followed a structured protocol: (1) The researcher determines the topic and formulates the problem, (2) the researcher searches for and collects data from relevant sources, (3) the researcher analyzes and interprets the collected data, and (4) the researcher compiles a systematic and logical research report (Adlini et al., 2022). Researchers obtained three manuscripts on Deep Learning drafted by the Center for Curriculum and Learning, one of which is a final academic manuscript and can be used as a reference for educators and researchers. After applying strict inclusion and exclusion criteria focusing on peer-reviewed studies published within the 2020-2025 period, 10 highly relevant core articles were synthesized, linked to foundational learning theories, and presented in a systematic description.

C. RESULT AND DISCUSSION

The introduction has presented the definition of deep learning from several sources. It is concluded that deep learning means an approach designed to prioritize a complete and meaningful learning experience, not just focusing on the cognitive aspect alone. This approach prioritizes a mindful, meaningful, joyful process, and is able to touch the ethical, aesthetic, and kinesthetic dimensions, in an integrated and comprehensive manner. Learning activities using the deep learning approach are designed effectively and efficiently to achieve good learning quality, not only results but also a good learning process.

Furthermore, here are three principles of deep learning initiated by Puskurjar. The first principle is being mindful. This principle emphasizes that students must be fully involved in the teaching and learning process, increasing awa

reness in thinking, feeling, and their surroundings. Deep learning plays a role in stimulating students' emotional, intellectual, mental, social, physical, and personal intelligence. The principle of being mindful in Indonesian language learning in elementary

schools can be interpreted as a process of involving students wholly and fully. According to Langer (2016), mindfulness in education involves continuous openness to new information and active perspective-taking. Within this framework, mindful learning can be dynamically operationalized to enhance elementary students' reading and writing skills. In reading activities, instead of traditional speed-reading exercises, mindful learning is applied through reflective reading logs. Students are guided to pause after paragraphs, visualize the narrative, and consciously connect the text to their personal emotions or experiences, thereby shifting their focus from mechanical word decoding to deep comprehension. In writing instruction, mindful learning is implemented through experiential drafting processes. For instance, before writing a descriptive text about a rainy day, teachers engage students in sensory observation, encouraging them to listen to the sound of rain, feel the drop of temperature, and list their emotional responses. This mindful awareness ensures that when students sit down to write, they are not merely assembling arbitrary grammatical structures but are intentionally selecting vocabulary to accurately articulate their heightened internal and external observations, resulting in deeply authentic and cohesive compositions.

The second principle is being meaningful. In the learning approach initiated by Puskurjar, meaningful learning prioritizes a holistic understanding of the material, not just memorization. It is expected that students are able to analyze, make connections, and actively synthesize information. The final principle is joyful. This means that joyful learning focuses on positive emotions, related to supporting the learning process: curiosity, enthusiasm, and motivation. When learning fully engages students and prioritizes comprehensive understanding, students' motivation to pursue deeper understanding will increase.

These three principles are inseparable from learning theory. Some popular learning theories include behaviorism, cognitivism, constructivism, and humanism. Based on the three principles of deep learning, the learning theories related to these three principles are constructivism and humanism (Mokalu et al., 2022). The concept of constructivism theory is how learners construct knowledge through their unique experiences. This theory gives individuals the freedom to learn and pursue their own needs. This theory aligns with the three principles of deep learning: learners can connect prior knowledge with new knowledge, and learning activities are student-centered, fostering a strong desire to continue understanding and exploring. The next learning theory related to the concept of deep learning is humanism learning theory. This theory explains that the learning process must originate and culminate in the individual and emphasizes the importance of an ideal learning process, particularly so that the learning process aims to "humanize humans." This is in accordance with the principles of deep learning, because this approach does not only focus on the cognitive aspects of students, but also prioritizes how learning can be carried out well and according to the planned objectives.

In addition to the three principles in deep learning, there are also dimensions of graduate profiles, learning experiences, and learning frameworks that are integrated in the deep learning framework. The dimensions of graduate profiles in deep learning include 8 types of dimensions, (1) faith and piety towards God Almighty, (2) citizenship, (3) critical reasoning, (4) creativity, (5) collaboration, (6) independence, (7) health, and finally (8) communication. Furthermore, included in the learning experience are three points, (1) understanding, (2) applying, and (3) reflecting. Finally, the learning framework consists of, (1) pedagogical practices, (2) learning environments, (3) digital utilization, and (4) learning partnerships (Puskurjar, 2025). If illustrated, this deep learning framework is in the form of a circle that has layers, the deepest layer consists of the

graduate profile dimensions, then learning principles, followed by learning experiences, and the outermost layer is the learning framework.

Puskurjar explained the definition of each learning experience. The first is understanding, which is the initial stage for students to actively construct knowledge to be able to understand concepts or materials in depth from various contexts and sources. Second, application. This is defined as a learning experience that describes students' activities in applying knowledge in real life contextually. Finally, reflection, students' activities evaluate and interpret the process and results of real actions or practices that have been carried out. This stage involves self-regulation, using students' abilities to process the learning process independently.

At the outermost layer of the learning framework, there are four learning frameworks. Puskurjar also defines each framework. The first framework is pedagogical practice, which relates to teaching strategies used by teachers to achieve learning objectives so that they can later achieve the dimensions of the graduate profile. Second, the utilization of digital technology. Digital technology plays a crucial role as a trigger for the creation of interactive, collaborative, and contextual learning. The third framework is the learning environment. Integrating physical, virtual, and cultural learning spaces. The final learning framework is learning partnerships, which foster dynamic relationships between teachers, students, parents, communities, and professional partners. Learning control will no longer be solely the responsibility of teachers, but rather a collaborative effort with other parties who can become in-depth learning partners.

When educators want to apply a deep learning approach to Indonesian language learning in elementary schools, educators should first understand the three principles of deep learning. Understanding students' diverse characteristics is a critical prerequisite for teachers to successfully foster deep learning environments. In elementary education, students possess varying cognitive development stages, cultural backgrounds, and emotional needs, which heavily dictate how they process and internalize new language concepts. Failing to align teaching methodologies with student readiness and learning profiles often leads to superficial learning and disengagement (Tomlinson, 2014). In a deep learning framework, teachers do not merely transmit information but act as facilitators who design tailored, meaningful experiences; this cannot be achieved without a granular diagnosis of who the learners are (Fullan et al., 2018). Furthermore, pedagogical interventions rooted in an acute awareness of student capabilities and misconceptions yield significantly higher academic growth (Hattie, 2012). Therefore, mastering student characteristics allows educators to bridge abstract linguistic rules with the students' concrete realities, ensuring that language learning becomes an active, reflective, and permanent cognitive acquisition rather than rote memorization.

There are four roles of teachers in building a deep learning mindset: (1) building self-awareness and being open to change, (2) constructing a learning environment that supports constructive disorientation, (3) being skilled at facilitating structured and consistent critical reflection, and (4) building a collaborative and professional learning community (Hendrianty et al., 2024). The number of teacher roles should be commensurate with the facilities and support received. Special training and workshops are needed to equip teachers with deep learning in learning.

After understanding the principles and roles carried out by teachers, teachers then need to understand the characteristics of students. Characteristics in elementary school-aged children include motor, language, emotional, and cognitive development. The need for a deep understanding of student characteristics because each individual has a different learning style and motivation, so that in determining the approach, model, and

strategy must be adjusted to the needs of each student (Arif et al., 2025). When teachers want to apply a deep learning approach to Indonesian language learning, it is necessary to understand the characteristics of language development in elementary school-aged children. Elementary school age is a time of rapid development in the ability to recognize and master vocabulary. At the age of 6 to 7 years, children have a vocabulary of approximately 2,500 words. Then, at the age of 11 to 12 years, children have a vocabulary of approximately 5,000 words. During elementary school, there are at least three categories that children can master in language development: (1) making more complete sentences, (2) making compound sentences, and (3) composing and asking questions during the lesson (Evitasari, 2024).

The Indonesian language subject taught in elementary schools aims to develop language skills. These language skills include receptive and productive language skills. Receptive language skills include listening, reading, and viewing. Meanwhile, productive language skills include presenting and writing (Ministry of Education, Culture, Research, 2024). Of course, in optimizing these six language skills, various challenges arise. The deep learning approach is expected to address various challenges in Indonesian language learning in elementary schools. The following is an example of a deep learning approach in Indonesian language learning in elementary schools.

At the mindful learning stage, a deep learning approach can be implemented by teachers using texts or readings relevant to students' experiences (Aryanto, 2025). Teachers can adapt to the age and environmental conditions of the students. For productive skills, students can be asked to create literary works with themes taken from current phenomena or things around them. This can be an effort to ensure students feel involved in learning, because what they know, experience, and witness can be implemented in learning.

The second principle of deep learning is meaningful learning. Meaningful learning is a concept that has long been applied in learning (Adnyana, 2024). The application of deep learning at this stage is that teachers are able to connect new knowledge, experiences, or material with previously discussed ones, with the hope that students will be able to understand the benefits and relevance of the learning material to everyday life. In Indonesian language learning, teachers can convey learning objectives that have been designed in the teaching module, then teachers can relate these objectives to Indonesian language learning, such as in relation to literacy skills, increasing students' vocabulary, and making students able to understand various linguistic contexts found in their texts and shows.

The final principle of immersive learning is joyful learning. Learning should be designed to be enjoyable to reduce stress and increase students' emotional engagement in the learning process (Putri et al., 2022). Enjoyable learning can reduce students' anxiety in facing exams, increase their self-confidence, and create a pleasant learning environment even with limited facilities. The application of this in Indonesian language learning is that teachers can vary the media or learning resources. It is not limited to text, but can also use games, visual or audio displays, and utilize technology familiar to students.

Below is an example of how immersive learning is applied in Indonesian language learning in elementary schools.

Table 1. Example of application of the Deep Learning approach using three learning principles in Indonesian Language Learning in Elementary School

Learning Principles	Applications in Learning Experience	Implementation in Indonesian Language Learning in Elementary Schools	Related Graduate Profile Dimensions
<i>Mindful learning</i>	Understand. Students are explained the learning objectives and given a trigger in the form of questions related to the material. Applying. Students are invited to analyze how to apply the material they have learned in the context of everyday life. Reflecting. After completing the understanding and application stages, students are expected to have the ability to interpret the learning process and results independently.	-Students read narrative texts then answer HOTS-based questions. -Students can be asked to analyze the content and structure of folklore texts, then write or retell them using the students' language and point of view. -Students are able to carry out learning reflection activities. Teachers can provide learning journal sheets.	critical reasoning, independence, communication
<i>Meaningful Learning</i>	Teachers can encourage students to connect learning material to their real-life experiences. This will make learning more meaningful, both emotionally and cognitively.	-Students can be asked to compose procedural texts based on personal experiences. (For example: how to make regional specialties) -In addition to being asked to create procedural texts, students can be asked to connect the contents of	critical reasoning, independence, communication

		narrative texts in the learning resources used with students' life experiences so that they are able to understand the moral values contained in the text.	
<i>Joyful Learning</i>	Providing a fun learning atmosphere through games, songs, interactive visual learning media, and positive social interactions.	-Teachers can use regional songs to increase students' vocabulary. -Teachers can organize Indonesian-based games, such as crossword puzzles, reading-based quizzes, and group games to increase student motivation. -Students can be asked to make invitation posters with interesting illustrations as examples. -Students can be asked to read rhythmic poetry	critical reasoning, independence, communication

D. CONCLUSION AND SUGGESTIONS

In conclusion, the integration of the deep learning approach in elementary school Bahasa Indonesia instruction represents a transformative paradigm shift from traditional, passive learning to active, holistic competency development. By prioritizing mindful, meaningful, and joyful learning experiences, this approach successfully addresses the persistent challenges of low reading comprehension and surface-level writing skills among early learners.

Importantly, these findings have vital policy implications for curriculum development in Indonesia. Educational authorities, particularly Puskurjar, must utilize this deep learning framework to redesign teacher professional development programs, ensuring educators are equipped with diagnostic tools to analyze student characteristics. Furthermore, national curriculum policies should prioritize depth of understanding over breadth of content, reducing dense subject-matter requirements to give teachers the institutional flexibility to implement reflective and experiential language practices. Ultimately, embedding deep learning principles into systemic policy will ensure that elementary language education serves as a sustainable foundation for lifelong literacy and critical thinking.

Recommendations for research and follow-up of research with similar topics are: (1) further researchers can develop topics to various levels and learning materials, (2) for policy makers, can conduct massive training on the deep learning approach in learning in elementary schools, (3) for teachers, can continue to innovate in planning, organizing, and reflecting on learning activities with a deep learning approach, (4) for schools, to provide adequate facilities in the implementation of the deep learning approach, creating a learning environment that supports the deep learning approach for both teachers and students.

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REFERENCES

- Adlini, M. N., Dinda, A. H., Yulinda, S., Chotimah, O., & Merliyana, S. J. (2022). No Title. *Qualitative Research Methods of Literature Study*, 6(1), 974–980. <https://doi.org/10.33487/edumaspul.v6i1.3394>
- Adnyana, I. K. S. (2024). Implementation of the Deep Learning Approach in Indonesian Language Learning. *Journal of Rethoric*, 5(1).
- Ali, M. (2020). Learning Indonesian Language and Literature (Basastra) in Elementary Schools. *PERNIK: Jurnal Pendidikan Anak Usia Dini*, 3(1). https://scholar.google.com/scholar?hl=id&as_sdt=0%2C5&q=konsep+pendidikan+empirisme&oq=#d=gs_qabs&t=1726721470771&u=%23p%3D2YMs79syqWk
- Arif, M. N., Parawansyah, M. I., Huda, F. H., & Zulfahmi, M. N. (2025). Strategy to Grow Student Interest in Learning Through Deep Learning Approach. *Muassis*, 4(1).
- Aryanto, S. (2025). Literacy and Numeracy Learning through Deep Learning: a Transformational Approach. *JPEE*, 4(1), 1–120. <https://doi.org/10.46306/jpee.v4i1>
- Bengio, Y., Lecun, Y., & Hinton, G. (2021). Deep Learning for AI. *Communications of the ACM*, 64(7), 58–65. <https://doi.org/10.1145/3448250>
- Evitasari, A. D. (2024). Characteristics and Problems of Elementary School Students. *JPI (Jurnal Pendidikan Indonesia): Jurnal Ilmiah Pendidikan*, 10(2). <https://doi.org/10.20961/jpiuns.v10i2.87052>
- Fullan, M., Quinn, J., & McEachen, J. (2018). *Deep Learning: Engage the World Change the World*. Corwin Press.
- Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. Routledge.
- Hendrianty, B. J., Ibrahim, A., & Mulyasari, E. (2024). Building a Deep Learning Mindset in Elementary School Teachers. *Kalam Cendekia: Jurnal Ilmiah Kependidikan*, 12(3).
- Kemendikdasmen. (2025). *Naskah Akademik Pembelajaran Mendalam*.
- Langer, E. J. (2016). *The Power of Mindful Learning (2nd ed.)*. Da Capo Lifelong Books.
- Ministry of Education, Culture, Research, and T. (2024). *Learning Outcomes in Early Childhood Education, Elementary Education, and Secondary Education in the Independent Curriculum*.
- Mokalu, V. R., Panjaitan, J. K., Boiliu, N. I., & Rantung, D. A. (2022). The Relationship

- Between Learning Theory and Educational Technology. *Edukatif: Jurnal Ilmu Pendidikan*, 4(1), 1475–1486. <https://doi.org/10.31004/edukatif.v4i1.2192>
- Nugraha, M. T., & Hasanah, A. (2021). Shaping Leadership Character in Students Through a Deep Learning Approach. *AL-HIKMAH: Jurnal Pendidikan Dan Pendidikan Agama Islam*, 3(1), 15–23. <https://doi.org/10.31857/s013116462104007x>
- OECD. (2023). *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*. OECD Publishing. <https://doi.org/10.1787/53f238dd-en>
- Puskurjar, & K. (2025). *Deep Learning*.
- Putri, R., Syahnam, S., Kurnia, H., Indah, M., & Fierna, M. (2022). Application of Deep Learning in Education in Indonesia. *Proceedings of the National Seminar on Pancasila and Citizenship Education*, 97–102.
- Setiawan, R., Muhimmah, H. A., Subrata, H., Istiq'faroh, N., Abidin, Z., & Noerdiana, A. F. (2023). Innovative Indonesian Language Learning Methods at Elementary School Level Using Cybernetic Learning Theory. *Elementary Education Review Journal: Journal of Educational Studies and Research Results*, 9(2), 117–122. <https://doi.org/10.26740/jrpd.v9n2.p117-122>
- Siregar, M. D., Putrayasa, I. B., & Sudiana, I. N. (2022). Thematic Approaches and Integrated Approaches in Learning Indonesian in Elementary Schools. *Didika Journal: A Scientific Forum for Elementary Education*, 8(2), 358–371. <https://doi.org/10.29408/didika.v8i2.6999>
- Syafawani, U. R., & Prasetyo, T. (2024). The Urgency of Innovation in the Use of Technology in Education: Analysis Based on Literature Review. *Journal of Primary School Teaching*, 3(2), 214–230. <https://doi.org/doi.org/10.56855/jpsd.v3i2.1276>
- Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all learners*. ASCD Publication.
- Viora, D., Wahyuningsi, E., Fitra, S. Y., & Marta, R. (2021). Implementation of the Whole Language Approach in Indonesian Language Learning in Elementary Schools. *Tambusai Education Journal*, 5(3), 9379–9386.