JURNAL KAJIAN ILMU PENDIDIKAN
AL-MUADDIB Jurnal
E-ISSN : 2685-9149
P-ISSN : 2723-0805

EXPLORING SENIOR AND NOVICE TEACHERS' PERSPECTIVES ON DEEP LEARNING: A QUALITATIVE STUDY IN ELEMENTARY SCHOOLS

Jumelan[1], Galuh Putrining Aji[2], Erna Yayuk[3]
[1,2]Pedagogik, Universitas Muhammadiyah Malang, Indonesia
[3]Universitas Muhammadiyah Malang, Indonesia
Email : jumelan6@webmail.umm.ac.id[1], galuhputriningaji94@webmail.umm.ac.id[2]

Received: October 2025	Accepted: October 2025	Published: October 2025

Abstract :

This qualitative research explores how senior and novice teachers perceive and implement deep learning in Indonesian elementary schools. Employing a case study approach, the study engaged senior teachers with more than 15 years of teaching experience and novice teachers with less than 10 years of experience from Gugus 02 Bina Ilmu, Pringkuku District, Pacitan Regency. Data were gathered through in-depth interviews, classroom observations, and document analysis, then analyzed using Miles and Huberman's interactive model, consisting of data reduction, data display, and conclusion drawing. The findings reveal both convergences and divergences in teachers' understanding of deep learning. Senior teachers tend to define deep learning as comprehensive mastery of core content through structured, teacher-centered instruction that prioritizes stability and discipline. In contrast, novice teachers interpret deep learning as a process that fosters critical thinking, creativity, collaboration, and technology integration aligned with the Kurikulum Merdeka framework. These differences are primarily influenced by teaching experience, educational background, professional development exposure, and adaptability to pedagogical innovation. Despite their differing approaches, both groups share a common goal of promoting meaningful and student-centered learning. The study highlights the importance of fostering intergenerational collaboration and differentiated professional training to bridge pedagogical gaps, enhance teacher adaptability, and sustain the implementation of deep learning practices responsive to the challenges of 21st-century education.

Keywords : Deep Learning; Senior Teachers; Novice Teachers; Kurikulum Merdeka; Qualitative Study

INTRODUCTION

21st-century education calls for moving away from traditional teacher-directed methods toward learner-centered approaches that not only convey facts but also cultivate essential skills critical thinking, creativity, collaboration, and problem-solving. One promising approach to achieving these objectives is deep learning(Hatima, 2025), which emphasizes meaningful and contextual learning experiences focused on building long-term competencies. Correspondingly, Indonesia's Kurikulum Merdeka (Independent Curriculum) underscores the importance of fostering conceptual understanding, reflection, and holistic character development among students (Amiruddin et al., 2023).

Previous research highlights that the effectiveness of deep learning implementation depends largely on teacher readiness. As learning facilitators,

teachers play a vital role in designing instructional strategies, managing classrooms, and cultivating environments that promote active student participation (Hasanah et al., 2025a). While numerous studies have explored deep learning from pedagogical or technical standpoints, limited attention has been given to examining intergenerational differences among teachers—particularly how these variations shape their comprehension and classroom application of deep learning principles(Hasanah et al., 2025b).

Within the realm of elementary education, differing perspectives between senior and novice teachers are commonly evident. Experienced teachers, relying on their long-standing classroom practice, often maintain traditional and time-tested instructional methods (Nafi'ah & Faruq, 2025). Meanwhile, novice teachers are more inclined toward experimentation, technology integration, and innovative pedagogical models. These distinctions may arise from factors such as differences in teaching tenure, educational background, exposure to professional training, and adaptability to evolving curricula (Relmasira, 2025). Despite this recognition, few qualitative studies have delved deeply into the intergenerational dynamics influencing teachers' perceptions of deep learning (Dirgantoro & Soesanto, 2023).

Preliminary observations conducted in several elementary schools within Gugus 02 Bina Ilmu, Pringkuku District, revealed clear disparities in instructional planning and classroom implementation between senior and novice teachers. Senior teachers predominantly emphasized stability and conventional methods that they believed ensured mastery and discipline. In contrast, novice teachers demonstrated greater openness to experimentation, employing digital tools and collaborative learning strategies to enhance engagement and creativity.

Interviews with teachers in Gugus 02, Pringkuku District, Pacitan Regency, further supported these findings. Senior teachers tended to define deep learning as strengthening students' conceptual understanding through repetition, memorization, and moral reinforcement. Conversely, novice teachers associated deep learning with cultivating critical, reflective, and practical thinking skills, emphasizing the application of knowledge in real-life contexts (Valentine & Wiggins, 2023).

Unlike earlier studies that focused solely on one generational group, the present research explicitly compares how senior and novice teachers conceptualize and operationalize deep learning (Darling-Hammond, 2017). This approach is expected to offer theoretical insights that enrich the literature on

deep learning and provide practical implications for designing more adaptive, generation-sensitive professional development programs(Burstein & LaFlair, 2024).

The importance of this research rests in its role in connecting intergenerational viewpoints within educational contexts, especially regarding the implementation of deep learning (Hatima, 2025). By uncovering both the differences and commonalities between senior and novice teachers, this research seeks to provide an empirical foundation for developing inclusive, collaborative, and quality-oriented teacher training and policy frameworks (Unknown, 2024); Such initiatives are essential to enhance teaching effectiveness and promote deep, meaningful learning experiences for elementary school students (Sari & Niswa, 2022).

RESEARCH METHOD

This research utilized a qualitative approach with a case study design to deeply explore the differing perceptions of senior and novice teachers in implementing deep learning at the elementary school level. The case study method was considered suitable because it allows for an in-depth and contextual understanding of authentic educational environments by integrating diverse data sources and viewpoints.

Participants were elementary school teachers divided into two groups: senior teachers with more than 15 years of experience and novice teachers with under 10 years of experience. Using purposive sampling, respondents were chosen based on criteria aligned with the study's aims specifically their involvement in applying deep learning within the Kurikulum Merdeka. Overall, 10–12 teachers participated, with an equal split between senior and novice cohorts (Rahayu et al., 2022).

The study took place at a public elementary school that had been applying the Kurikulum Merdeka for at least two years (Baity et al., 2023). This site was deliberately chosen due to its diverse teaching staff in terms of age and professional experience, as well as its active engagement in professional development programs aimed at supporting deep learning implementation (Rahayu et al., 2022).

Data were collected through in-depth semi-structured interviews, classroom observations, and review of relevant documents. The semi-structured interview approach allowed for flexibility in uncovering teachers' insights and experiences concerning deep learning. Participant observations were undertaken

to record actual classroom practices of both senior and novice teachers, while document analysis was utilized to review lesson plans, reflective journals, and institutional records (Sari & Niswa, 2022). The researcher functioned as the primary instrument (human instrument) throughout the process, assisted by research tools such as validated interview guides, observation sheets, and document analysis checklists (Burstein & LaFlair, 2024).

The data were analyzed concurrently with the collection process using Miles and Huberman's interactive model (Rezai, 2022), which includes three key stages: data reduction, data display, and conclusion drawing or verification (Arianti et al., 2025). A thematic analysis method was employed to identify recurring themes, similarities, and differences in teachers' perceptions and teaching practices(Wahyuni & Fitrawati, 2024). To ensure the study's credibility and trustworthiness, various validation strategies were applied, including source and methodological triangulation, member checking, peer debriefing, and maintaining an audit trail that thoroughly documented each stage of the research process (Unknown, 2024).

The research procedure began with pre-field preparations, which included research proposal development, obtaining ethical clearance and official permits, as well as validating research instruments. This was followed by the data collection phase through interviews, classroom observations, and document studies. Preliminary data analysis occurred concurrently with data collection to refine emerging insights, which were later verified through triangulation and member checking (Dirgantoro & Soesanto, 2023). In the final stage, the researcher compiled a comprehensive report summarizing key findings, analytical interpretations, and implications for both theory and practice in deep learning within elementary education.

Through this methodological framework, the study aimed to provide a holistic and empirically grounded understanding of the intergenerational dynamics shaping teachers' perceptions of deep learning. It also sought to identify the underlying determinants contributing to perceptual and pedagogical differences between senior and novice teachers, particularly in the context of curriculum reform, professional experience, and adaptive instructional practices (Aolia et al., 2025).

FINDINGS AND DISCUSSION

The findings of this study reveal that while senior and novice teachers

share certain common perspectives on deep learning in elementary education, notable differences also exist between the two groups. Senior teachers generally view deep learning as a process focused on students' mastery of core content through structured and organized teaching (Wahyuni & Fitrawati, 2024). Their practices often reflect traditional pedagogical models emphasizing discipline and accuracy. One senior teacher stated, "I feel more confident when students fully understand the basic concepts before proceeding to more complex material." This reflects a teacher-centered orientation, where knowledge is transmitted from teacher to student, consistent with behaviorist and transmission-based theories of learning rather than constructivist paradigms that emphasize active knowledge construction (Asia, 2024).

In contrast, novice teachers view deep learning as an engaging, student-focused process that incorporates 21st-century skills, including critical thinking, collaboration, creativity, and communication. As one young teacher explained, "Students should be able to find answers on their own, not just wait for the teacher to explain." This aligns with social constructivist perspectives, which argue that understanding is co-constructed through meaningful experiences and interactions(Bruner, 1996). Young teachers therefore tend to adopt inquiry-based and context-driven teaching strategies, often supported by digital tools that encourage exploration, reflection, and student autonomy.

Differences were also evident in classroom practices. Senior teachers typically employed lectures, guided questioning, and structured discussions, ensuring lessons followed a logical, teacher-directed sequence. Young teachers, by contrast, implemented interactive and participatory approaches such as group projects, role-playing, collaborative problem-solving, and experimentation. In one observed activity, fourth-grade students created a miniature ecosystem model to illustrate the concept of interdependence in nature. Such methods fostered engagement, creativity, and sustained curiosity, which are central characteristics of active learning (Bonwell & Eison, 1991).

Despite these pedagogical strengths, both groups encountered distinct challenges. Senior teachers often found it difficult to integrate digital tools and flexible learning models required by the Merdeka Curriculum, although their strong classroom management ensured order and focus. On the other hand, young teachers displayed enthusiasm and innovation but sometimes struggled with maintaining discipline during collaborative activities (Zepeda, 2017). Nonetheless, their classrooms were typically more dynamic and student-driven,

fostering intrinsic motivation and curiosity key indicators of successful deep (Darling-Hammond, 2017).

The study further suggests that these differences stem from interconnected factors such as teaching experience, professional development, technological competence, and school culture. Senior teachers bring stability, practical wisdom, and mastery of classroom dynamics, while young teachers contribute digital fluency and fresh pedagogical ideas. Fullan, (2016) highlights, educational reform thrives on intergenerational collaboration that blends experience with innovation (Opfer & Pedder, 2011).

Evidence of this synergy appeared in Lesson Study programs, where senior and young teachers co-planned, observed, and reflected on teaching practices. In one session, a young teacher utilized Google Slides for student presentations, while a senior teacher contributed insights on formative assessment. The resulting dialogue enhanced teaching quality and deepened student understanding. Such experiences demonstrate how collaborative professional learning promotes reciprocal growth and shared expertise (Guskey, 2002).

The results emphasize the importance of continuous professional development grounded in collaborative practice, reflective dialogue, and mutual learning (Desimone & Garet, 2015). Schools should establish intergenerational professional learning communities that integrate mentoring, co-teaching, and peer coaching. Senior teachers can offer guidance in pedagogy and professional ethics, while young teachers provide leadership in digital and innovative practices (Lieberman & Miller, 2016).

In essence, the contrasting perspectives of senior and young teachers represent complementary strengths rather than divisions. When integrated through reflective collaboration, these perspectives can generate deep, relevant, and transformative learning experiences. These intergenerational collaborations not only strengthen the implementati of the Merdeka Curriculum (Ardhani et al., 2023) but also foster a sustainable and adaptable learning culture that equips students to navigate the complexities of the contemporary world (Baity et al., 2023).

Table 1. Comparison of Senior and Novice Teachers' Perspectives on Deep Learning

Aspect	**Senior Teachers**	**Novice Teachers**
Conceptual	View deep learning as	Interpret deep learning as the

Understanding	mastery of core material.	development of critical, creative, and collaborative thinking skills.
Classroom Implementation	Primarily use lectures and Q&A; reflection is limited.	Use discussions, projects, technology, and collaborative activities.
Student Response	Students tend to be passive and follow teacher directions.	Students are more active and engaged in discussions and activities.
Main Challenges	Difficulty adapting to new curriculum and technology.	Difficulty managing dynamic classrooms.
Strengths	Extensive experience; strong classroom management.	Flexible, innovative, and open to new learning methods.
Influencing Factors	Long experience, conventional methods, limited technological training.	Recent educational background, professional training exposure, technological familiarity.
Collaboration	Seek to share practical experience with younger teachers.	Seek to share innovation and technological skills with senior teachers.

The findings indicate that senior and novice teachers possess distinct yet complementary perspectives on deep learning within elementary education. Senior teachers emphasize instructional stability, content mastery, and classroom discipline, drawing on their long-standing professional experience. In contrast, novice teachers prioritize innovation, technology integration, and student-centered approaches that promote active participation and creativity. These variations are shaped by multiple factors, including teaching experience, educational background, access to professional development, digital proficiency, and adaptability to curriculum reforms (Dirgantoro & Soesanto, 2023). Despite these differences, both groups share a common goal to cultivate meaningful and engaging learning experiences for students.

In light of these findings, it is suggested that schools and educational policymakers facilitate greater collaboration between senior and novice teachers, enabling the fusion of experience with innovation. Professional development initiatives should be continuous, context-sensitive, and designed to meet the varied needs of teachers from different generations, emphasizing the enhancement of technological competence and the adoption of innovative

instructional methods (Yayuk & Husamah, 2020). Furthermore, future studies are encouraged to expand their scope by involving schools from diverse geographical and institutional settings to gain a more comprehensive understanding of intergenerational interactions and their impact on the successful implementation of deep learning in elementary education (Yayuk et al., 2020).

Table 2. Factors Influencing the Perceptual Differences between Senior and Novice Teachers on Deep Learning

No.	Factor	General Description	Impact on Senior Teachers	Impact on Novice Teachers
1	Teaching Experience	Length of teaching experience influences thinking patterns and teaching approaches.	Rely on empirical experience; focus on stability and classroom order.	Oriented toward exploration; tend to try new approaches.
2	Educational Background	Level of education and curriculum during college affects understanding of learning theory.	Follow traditional paradigms emphasizing knowledge transfer.	Exposed to constructivist theories and 21st-century learning concepts.
3	Professional Training Exposure	Access to professional development affects pedagogical updates.	Limited participation in new or technology-based training.	More active in online and innovative professional learning activities.
4	Technological Adaptability	Comfort and skill level in using digital learning tools.	Less confident in using technology; prefer manual methods.	More proficient in using digital tools for interactive learning.
5	Understanding of *Kurikulum Merdeka*	Level of comprehension of its principles, competencies, and approaches.	Still adapting to project-based learning and authentic assessment.	Easily adapt to flexible and collaborative learning models.

6	School Culture and Institutional Support	Collaborative climate and leadership support influence innovation readiness.	Prefer structured and stable environments.	More productive when given freedom to experiment and access resources.
7	Professional Motivation	Drive for continuous learning and self-improvement in teaching.	Motivated by moral responsibility and dedication to students.	Motivated by new challenges, recognition, and innovation opportunities.
8	Openness to Change	Attitude toward innovation, new policies, and alternative teaching ideas.	Selective toward change; require evidence of effectiveness.	Open and quick to accept new ideas with minimal resistance.
9	Intergenerational Collaboration	Interaction between teachers of different ages and experiences in lesson design.	Offer guidance and stability for novice teachers.	Provide fresh ideas and digital support to senior teachers.

The findings of the study reveal that the differing perceptions between senior and novice teachers about deep learning arise from a multifaceted interplay of interrelated factors rather than from isolated or independent variables. Teaching experience emerges as a central factor shaping teachers' instructional choices, pedagogical perspectives, and adaptability. Senior teachers, supported by years of experience, often depend on structured, well-tested strategies and professional intuition. As one senior participant mentioned, "I always make sure students fully grasp the textbook before introducing new material." This perspective reflects a teacher-centered orientation that prioritizes mastery, order, and controlled learning environments.

In contrast, novice teachers are more aligned with constructivist principles, emphasizing that understanding develops through exploration, collaboration, and reflection (Johnson & Johnson, 2009). One young teacher stated, "If students just listen, they forget quickly. But when they try and discuss, they understand better." Their approach focuses on inquiry-based and experiential learning that encourages discovery, contextualization, and

application of knowledge (Saldaña & Omasta, 2018). Observations show that novice teachers frequently implement project-based learning, group discussions, and contextual simulations, enhancing students' critical thinking and engagement(Lieberman & Miller, 2016). These practices reflect active learning theory, which suggests that hands-on participation leads to deeper understanding and long-term retention (Bonwell & Eison, 1991).

Although senior teachers tend to rely on lecture-based instruction, some are gradually shifting toward student-centered practices. One remarked, "I've begun using mind maps, and my students' enthusiasm surprised me." This shift demonstrates a growing openness to change, showing that experience can support innovation rather than resist it (Putra, 2024).

Professional development access also contributes to these generational differences. Younger teachers often participate in digital training and online workshops, building confidence in using tools such as Google Classroom, Quizizz, and Canva for Education (Shamsudin et al., 2024). Conversely, senior teachers may face challenges with time, confidence, or digital literacy. However, with guidance and collaboration, many show strong motivation to learn. As one senior teacher shared, "When someone helps me, I feel confident to try. Sometimes I ask younger teachers to teach me digital tools." This highlights the value of intergenerational mentoring in improving competence and fostering mutual learning (Cahyani & Yudono, 2025).

Understanding of the Merdeka Curriculum further distinguishes the two groups. Novice teachers adapt quickly to its emphasis on flexibility, authentic assessment, and competency-based learning, viewing deep learning as connecting classroom lessons with real-world contexts "Students should learn from life, not just books," one teacher explained. This reflects situated learning theory (Shulman, 1987). Senior teachers, meanwhile, continue transitioning from content-based teaching to project-oriented approaches.

School culture and leadership are also crucial in bridging generational gaps. In collaborative schools, differences are minimized through shared reflection and teamwork. For example, during a Lesson Study session, novice teachers introduced Padlet for reflective discussions, while senior teachers designed formative rubrics. This collaboration improved both engagement and comprehension, illustrating (Hargreaves & Fullan, 2012) concept that professional capital grows through collective expertise and cooperation.

Motivational factors further distinguish the groups: senior teachers are

primarily driven by commitment and professional duty, while younger teachers are motivated by creativity, acknowledgment, and career growth. When nurtured within supportive and inclusive environments, these differing motivations complement each other, creating productive synergy that enhances teaching quality and student learning (Fullan, 2016).

In conclusion, the study emphasizes the need to build intergenerational learning communities within schools spaces where teachers of different generations engage in peer mentoring, co-teaching, and reflective collaboration (Quansah & Aboagye, 2024). Senior teachers can offer pedagogical depth and ethical guidance, while novice teachers contribute technological skills and innovative ideas. The effective realization of deep learning under the Merdeka Curriculum relies on integrating these complementary strengths, turning generational diversity into a unified force that fosters an adaptive, reflective, and forward-looking educational environment.

CONCLUSION

This study concludes that senior and novice teachers have both shared and differing perceptions of deep learning in elementary education. Senior teachers tend to define deep learning as the mastery of core material through structured, conventional methods emphasizing stability and discipline. In contrast, novice teachers prioritize the development of 21st-century skills, including critical thinking, collaboration, and creativity, through the use of constructivist and student-centered learning approaches. These differences are shaped by factors such as teaching experience, educational background, technological exposure, and understanding of the *Kurikulum Merdeka*.

Despite their differences, both groups share the goal of creating meaningful, student-centered learning. Intergenerational differences should be seen as opportunities to combine senior teachers' experience with novice teachers' innovation, forming a strong foundation for effective deep learning practices in the 21st century.

This study highlights key implications for elementary education, emphasizing the need to create collaborative spaces that foster interaction between senior and novice teachers through lesson study, peer coaching, and professional learning communities. Such collaboration allows senior teachers to contribute their pedagogical experience while younger teachers bring creativity and technological skills, fostering mutual learning and intergenerational respect. Continuous and differentiated professional development programs are essential,

focusing not only on technical skills but also on reflective and collaborative capacities through project-based training and co-teaching that bridge theory and practice. Future research should involve more diverse schools to deepen understanding of intergenerational dynamics and examine how school culture, leadership, and policy affect deep learning implementation. Practical evidence, such as at Ngadirejan Elementary School, shows that collaboration between generations combining digital innovation with classroom management expertise creates engaging, student-centered learning aligned with constructivist and active learning principles that emphasize social interaction, reflection, and direct student engagement.

REFERENCES

Amiruddin, A., Baharuddin, F. R., Takbir, T., & Setialaksana, W. (2023). May Student-Centered Principles Affect Active Learning and Its Counterpart? An Empirical Study of Indonesian Curriculum Implementation. *SAGE Open*. https://doi.org/10.1177/21582440231214375

Aolia, S., Dyansa, N., Yuliandini, R., Suciawati, & Martani, M. (2025). Implementasi Pembelajaran Mendalam Berbasis Media Konkret terhadap Kemampuan Berpikir Analisis Peserta Didik Kelas 1 Sekolah Dasar. *Jurnal Pendidikan Tambusai*. https://jptam.org/index.php/jptam/article/view/31072

Ardhani, K., Tisngati, U., & Sugiyono. (2023). Kesiapan dan Hambatan Guru dalam Mengimplementasikan Kurikulum Merdeka di Sekolah Dasar. *Scholarly Journal of Elementary School*, *3*(2), 72–82. https://doi.org/10.21137/sjes.2023.3.2.2

Arianti, E., Sama', A., & Mestika Dewi, I. Y. (2025). Navigating Deep Learning Pedagogy in Rural Classrooms: A Qualitative Study on Teacher Readiness and Innovation in Indonesian Elementary Schools. *Journal of Elementary Education*. https://cahaya-ic.com/index.php/JEE/article/view/1775

Asia, L. T. (2024). Fairness in language classroom assessment practices: what do EFL teachers underscore? *Language Testing Asia*. https://languagetestingasia.springeropen.com/articles/10.1186/s40468-024-00336-7

Baity, N. C., Ghufronudin, G., & Trinugraha, Y. H. (2023). The Implementasi Kurikulum Merdeka dalam Proses Pembelajaran di SMA Negeri 3 Surakarta. *PAKAR Pendidikan*, *21*(2), 191–202. https://doi.org/10.24036/pakar.v21i2.397

Bonwell, C. C., & Eison, J. A. (1991). *Active Learning: Creating Excitement in the Classroom*. George Washington University.

Bruner, J. S. (1996). *The Culture of Education*. Harvard University Press.

Burstein, J., & LaFlair, G. (2024). Where Assessment Validation and Responsible AI Meet. *ArXiv Preprint*. https://arxiv.org/abs/2411.02577

Cahyani, A., & Yudono, P. (2025). Magic School AI in Designing Indonesian Language Learning For Second Grade With A Deep Learning Paradigm.

ELIA: Journal of English Language, Literature, and Teaching. https://journal.shantibhuana.ac.id/index.php/elia/article/view/982

Darling-Hammond, L. (2017). *Teaching for Deeper Learning: Tools to Engage Students in Meaning Making*. Harvard Education Press.

Desimone, L. M., & Garet, M. S. (2015). Best Practices in Teachers' Professional Development. *Educational Researcher*, *44*(2), 111–120.

Dirgantoro, B., & Soesanto, H. (2023). Towards a Paradigm Shift: Analysis of Student Teachers' and Teacher Education Institutions' Readiness on Kurikulum Merdeka. *Jurnal Penelitian Dan Kebijakan Pendidikan*. https://jurnaldikbud.kemdikbud.go.id/index.php/jpnk/article/view/4271

Fullan, M. (2016). *The New Meaning of Educational Change* (5, Ed.). Teachers College Press.

Guskey, T. R. (2002). Professional Development and Teacher Change. *Teachers and Teaching: Theory and Practice*, *8*(3), 381–391.

Hargreaves, A., & Fullan, M. (2012). *Professional Capital: Transforming Teaching in Every School*. Teachers College Press.

Hasanah, U., Prastiwi, R., Arya, A., & Yulian, I. (2025a). Implementation of Deep Learning Approach in Indonesian Education. *International Journal of Education, Teaching and Social Sciences*. https://international.aspirasi.or.id/index.php/IJETS/article/view/358

Hasanah, U., Prastiwi, R., Arya, A., & Yulian, I. (2025b). Implementation of Deep Learning Approach in Indonesian Education. *International Journal of Education, Teaching and Social Sciences*. https://international.aspirasi.or.id/index.php/IJETS/article/view/358

Hatima, Y. (2025). Transformasi Pembelajaran Bahasa Indonesia di Sekolah Dasar melalui Pendekatan Deep Learning. *Jurnal Kajian Pendidikan Dan Aplikasi*. https://jurnal.yayasanmeisyarainsanmadani.com/index.php/JAKAP/article/view/295

Johnson, D. W., & Johnson, R. T. (2009). An Educational Psychology Success Story: Social Interdependence Theory and Cooperative Learning. *Educational Researcher*, *38*(5), 365–379.

Lieberman, A., & Miller, L. (2016). *Teachers in Professional Communities: Improving Teaching and Learning*. Teachers College Press.

Nafi'ah, U., & Faruq, A. (2025). Conceptualizing Deep Learning Approach in Primary Education: Integrating Mindful, Meaningful, and Joyful. *Journal of Educational Research and Practice*. https://cesmid.or.id/index.php/jerp/article/view/384

Opfer, V. D., & Pedder, D. (2011). Conceptualizing Teacher Professional Learning. *Review of Educational Research*, *81*(3), 376–407.

Putra, S. (2024). Validitas & reliabilitas self-assessment pada pemahaman membaca di SMP. *Eduvest: Journal of Universal Studies*. https://eduvest.greenvest.co.id/index.php/edv/article/view/1386

Quansah, F., & Aboagye, I. (2024). Validity of student evaluation of teaching in

higher education: a systematic review. *Frontiers in Education*. https://www.frontiersin.org/articles/10.3389/feduc.2024.1329734/full

Rahayu, R., Rosita, R., Rahayuningsih, Y. S., Hernawan, A. H., & Prihantini, P. (2022). Implementasi Kurikulum Merdeka Belajar di Sekolah Penggerak. *Jurnal Basicedu*, *6*(4), 6313–6319. https://doi.org/10.31004/basicedu.v6i4.3237

Relmasira, S. (2025). Implementasi Pembelajaran Mendalam untuk Meningkatkan Literasi AI Siswa Sekolah Dasar. *Jurnal Pendidikan Dasar*. https://journal.unj.ac.id/unj/index.php/jpd/article/view/53651

Rezai, A. (2022). Fairness in classroom assessment: development and validation of a questionnaire. *Language Testing in Asia*. https://languagetestingasia.springeropen.com/articles/10.1186/s40468-022-00162-9

Saldaña, J., & Omasta, M. (2018). *Qualitative Research: Analyzing Life*. SAGE Publications.

Sari, A. W., & Niswa, K. (2022). Implementation of Deep Learning Approach to English Learning in Elementary School. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*. https://ejournal.iainpalopo.ac.id/index.php/ideas/article/view/6732

Shamsudin, N., Ahmad, S., & Hassim, N. (2024). Exploring the Impact of Online Assessment Tools and Digital Proctoring on Academic Integrity in Higher Education. *Proceedings of ICETECH 2023*. https://www.atlantis-press.com/proceedings/icetech-23/126005441

Shulman, L. S. (1987). Knowledge and Teaching: Foundations of the New Reform. *Harvard Educational Review*, *57*(1), 1–22.

Unknown. (2024). Navigating Deep Learning Pedagogy in Rural Classrooms: A Qualitative Study on Teacher Readiness and Innovation in Indonesian Elementary Schools. *Journal of Elementary Education (JEE)*. https://cahaya-ic.com/index.php/JEE/article/view/1775

Valentine, N., & Wiggins, P. (2023). Fairness in Assessment: Identifying a Complex Adaptive System. *Perspectives on Medical Education*. https://pmejournal.org/articles/993

Wahyuni, R., & Fitrawati, F. (2024). Teachers' Perceptions of Teacher-Centered Learning (TCL) in Learning English at Senior High Schools in Agam Regency. *Journal of English Language Teaching*. https://ejournal.unp.ac.id/index.php/jelt/article/view/126729

Yayuk, E., & Husamah, H. (2020). The Difficulties of Prospective Elementary School Teachers in Item Problem Solving for Mathematics: Polya's Steps. *Journal for the Education of Gifted Young Scientists*, *8*(1), 361–368. https://doi.org/10.17478/jegys.665833

Yayuk, E., Purwanto, As'Ari, A. R., & Subanji. (2020). Primary school students' creative thinking skills in mathematics problem solving. *European Journal of Educational Research*, *9*(3), 1281–1295. https://doi.org/10.12973/eu-jer.9.3.1281

Zepeda, S. J. (2017). *Professional Development: What Works*. Routledge.