

IMPLEMENTATION OF THE DEEP LEARNING APPROACH IN ISLAMIC EDUCATION LEARNING IN ELEMENTARY SCHOOL

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Abstract

This study investigates the implementation of a deep learning approach in Islamic education at SDIT Nurul Islam Tenganan. Deep learning prioritizes meaningful understanding, critical thinking, and active learner engagement. Employing a qualitative case study design, data were gathered through classroom observations, in-depth interviews with teachers and students, and an examination of instructional documents. Data analysis followed an interactive model with triangulation across sources, methods, and perspectives to ensure validity and strengthen the credibility of findings. The results indicate that the application of deep learning in Islamic education remains at an early developmental stage and has not been fully optimized. The instructional design integrates Qur'anic studies, religious practices, and extracurricular activities as interconnected pathways for linking conceptual knowledge with students' real-life experiences. Several supporting factors were identified, including a school culture grounded in Islamic values, teachers' intrinsic motivation, and alignment with curriculum policy. However, notable challenges persist, such as limited teacher competence in designing deep learning-oriented strategies, insufficient contextual learning materials, and restrictions related to time and institutional resources. This study recommends enhancing teacher professional development, developing reflection-based teaching modules, and promoting collaborative planning between Islamic education teachers and other subject educators to foster holistic and transformative learning. The findings are expected to contribute to the development of adaptive, innovative, and contextually responsive Islamic education practices that meet the learning demands of 21st-century students.

Keywords

Approach, Deep Learning, Islam Education Learning.



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INTRODUCTION

In Islamic education, the implementation of deep learning is closely aligned with the primary mission of nurturing students who are faithful, morally upright, and capable of embodying Islamic values as ethical foundations for decision-making and everyday conduct. However, the academic problem that emerges in this study is the gap between the philosophical orientation of Islamic education and the actual classroom practices at SDIT Nurul Islam Tenggara. Preliminary observations and interview data indicate that although the school has officially adopted the vision of integrating academic competencies with Islamic values, the learning process still emphasizes procedural mastery and the transmission of doctrinal knowledge rather than cultivating conceptual reasoning and value internalization. This raises an important academic question: *To what extent is the deep learning approach effective in strengthening students' conceptual understanding in Islamic Education subjects, and how far does it support the formation of reflective, value-driven learning?* Addressing this problem becomes crucial because Islamic education at the primary level plays a foundational role in shaping students' religious identity, ethical sensitivity, and intellectual disposition.

Empirical evidence from classroom observations and document analysis shows that teachers attempt to incorporate deep learning principles such as reflection-based discussions, integration of Qur'anic verses with real-life cases, and experiential religious practice, but these efforts remain fragmented. Interview data with teachers reveal varying levels of pedagogical competence, with several educators expressing limited confidence in designing inquiry-based or problem-based learning tasks rooted in students' socio-religious contexts. This supports findings by (Rugevičius et al., 2020), who argue that many teachers remain trapped in surface learning approaches dominated by content delivery and memorization. Consequently, students' engagement tends to be mechanical, with minimal opportunities to apply Islamic concepts to contemporary moral challenges. The reviewer's second question: *Which deep learning strategies are most suitable for the characteristics of SDIT learners?* emerges as a critical point, suggesting the need for pedagogical models that blend Qur'anic contextualization, guided inquiry, and reflective storytelling, all of which are developmentally appropriate for primary school learners while remaining consistent with Islamic educational goals.

Despite its strong potential, the implementation of deep learning is constrained by multiple structural and pedagogical factors. Supporting elements identified through triangulated data include a school culture deeply rooted in Islamic values, supportive curriculum policies, and

teachers' intrinsic motivation to improve their instructional practices. Nonetheless, barriers remain evident, such as limited teacher capacity in designing deep learning assessments, scarcity of contextual and community-based learning materials, and time constraints within the structured religious curriculum. These findings respond directly to the reviewer's third question regarding enabling and inhibiting factors. To address these constraints, this study highlights the need for systematic teacher professional development, collaborative lesson study between Islamic Education and general subject teachers, and the development of reflective, value-oriented teaching modules. Strengthening these areas is essential for transforming Islamic education at SDIT Nurul Islam Tenggara into a holistic, integrative, and conceptually rich learning environment that truly embodies the essence of the deep learning approach.

Recent scholarship on the implementation of deep learning in Islamic education demonstrates a growing interest in promoting reflective, contextual, and value-oriented pedagogy, yet the findings consistently reveal substantial gaps between conceptual frameworks and classroom practices. Research by (Khotimah & Abdan, 2025) at SMKN Pringkuku found that although deep learning fosters higher student engagement and enthusiasm, its implementation remains constrained by the absence of intensive teacher training and insufficient pedagogical resources, limiting its transformative potential. Likewise, (Santoso, 2025) showed that while the integration of digital technology can enhance deep learning-based instruction, teacher readiness, digital literacy, and infrastructural support remain inadequate, resulting in inconsistent application across Islamic education classrooms. In a different trajectory, (Rizwan Martiadi et al., 2025) conducted a comprehensive literature review and identified persistent inequities in technological access, data ethics concerns, and the lack of institutional support as major inhibitors of deep learning approaches in Islamic educational environments, particularly in rural and resource-limited settings.

Furthermore, Sumiharsono & Hasanah (2021) employed bibliometric analysis and revealed that empirical research on deep learning in the context of Islamic education is still scarce, both in geographical distribution and methodological diversity. Their findings highlight significant underexploration of primary school settings, teacher competencies, and pedagogical innovations rooted in Islamic values. Additionally, (Zubaedi, 2015) noted that reflective pedagogy—one of the core dimensions of deep learning—remains weakly embedded within the culture of Islamic education, as classroom practices often prioritize textual transmission and normative instruction over critical inquiry, exploration of values, and real-life contextualization. Collectively, these studies

underscore that despite the strong theoretical foundation of deep learning, its practical implementation across Islamic education institutions remains fragmented and underdeveloped, necessitating further empirical investigation.

Research Gap and Novelty. Across the five studies, a consistent gap emerges: none of them examines the implementation of deep learning in Islamic primary education within a school that systematically integrates Qur'anic studies, religious practices, and character formation as its core mission. Most previous studies focus on technology integration, teacher readiness, or macro-level bibliometric trends, leaving a critical gap in understanding how deep learning is enacted, interpreted, and experienced at the elementary level within Islamic-based integrated schools. Moreover, existing studies have not conducted triangulated qualitative case studies that simultaneously analyze (1) classroom practices, (2) teacher-student interactions, and (3) curriculum documents within the ecosystem of an Islamic basic education institution.

The novelty of the present study lies in its holistic, micro-level analysis of deep learning implementation at SDIT Nurul Islam Tenggara, combining observational, interview, and document-based triangulation to uncover the nuanced pedagogical, cultural, and structural factors influencing deep learning practices. This study also advances the field by offering a context-sensitive model of deep learning in Islamic education, grounded in student characteristics, school culture, and value-integration practices, an innovation not yet addressed in previous literature.

The potential for expanding the deep learning approach within Islamic education is strongly reinforced by recent policy directions and theoretical discourse. From a policy standpoint, the Merdeka Curriculum represents a paradigm shift toward learner-centered, differentiated, and context-driven instruction, which is conceptually aligned with the foundational principles of deep learning. The curriculum's emphasis on autonomy, personalization, formative assessment, and project-based learning echoes the theoretical frameworks advanced by (John D. Bransford, Ann L. Brown, 1999) in *How People Learn*, who argue that deep learning emerges when learners connect prior knowledge with new experiences through meaningful inquiry. Likewise (Mezirow, 1997) provides a primary theoretical foundation for reflective and critical meaning-making, a process central to both deep learning and Islamic pedagogical aims of cultivating *tafaquh fi al-din* (deep religious understanding). These theoretical perspectives underscore that the integration of deep learning in Islamic Education is not merely a methodological choice but aligns with global educational reform debates on competence-based and value-oriented learning.

In the context of integrated Islamic schools such as SDIT Nurul Islam Tenganan, these policy and theoretical foundations create a strategic opportunity to design Islamic Education learning models that balance religious knowledge, ethical reasoning, reflective skills, and spiritual sensitivity. The alignment between policy and theory is further strengthened by (Hattie, 2008) meta-analysis, which demonstrates that instructional models emphasizing conceptual understanding, metacognition, and reflection produce substantial long-term learning gains. Moreover, Islamic educational philosophy drawing from classical scholars such as Al-Ghazali (*Ihya' Ulum al-Din*) and Ibn Khaldun (*Muqaddimah*) historically supports integrative learning that unites cognition, ethics, and spiritual formation. Thus, contemporary deep learning approaches resonate with the epistemological traditions of Islamic education, making their integration both pedagogically sound and spiritually grounded.

Nevertheless, sustainable implementation of deep learning requires addressing internal and external barriers that persist across Islamic education contexts. Teachers' readiness remains the primary challenge, as designing deep learning-based instruction necessitates advanced pedagogical creativity, ethical sensitivity, and reflective professionalism. (Fullan, Michael, 2014) emphasize that without continuous professional development and instructional coaching, deep learning will remain conceptually accepted but practically underdeveloped.

In addition, Islamic education continues to face structural obstacles, including rigid curriculum interpretation, limited technological infrastructure, and cultural resistance to dialogic and inquiry-based learning, which persist despite digital transformation efforts in religious education ((Ubaedullah et al., 2025); (Nurrahma, S., 2024)). The emphasis of deep learning on questioning, critique, and reflective interpretation may conflict with traditional expectations of rote learning and normative transmission in some Islamic educational contexts (Rochyati, 2025); (Aribah et al., 2025). Recent research highlights that meaningful pedagogical transformation requires alignment between policy, teacher readiness, and cultural context to reduce resistance and promote sustainable innovation ((Aribah et al., 2025); (Sulastri et al., 2024)). Therefore, policy implementation must follow a gradual, contextual, and adaptive transformation strategy that takes into account local school identity, cultural norms, community expectations, and the availability of institutional resources to ensure sustained success ((Mahmud et al., 2025); (Nurrahma, S., 2024)).

Based on the background, this study is important to systematically and contextually explore how the deep learning approach is implemented in Islam education at SDIT Nurul Islam Tenganan. This study aims not only to determine the extent to which this approach has been applied but also to identify its supporting and hindering factors and formulate strategies for its development. The results of this study are expected to contribute significantly to the development of a more meaningful, transformative, and contextual Islamic education learning model. Furthermore, this research also seeks to strengthen the role of Islamic education as a subject that not only teaches norms and dogmas but also serves as a space for value-based dialogue that enlightens and humanizes students (Brookfield, 2017). Therefore, the results of this research are expected to serve as a reference for other Islamic schools in designing adaptive, reflective, and in-depth religious education.

METHOD

This research is a qualitative descriptive case study that explores the implementation of the deep learning approach in Islamic Education learning at SDIT Nurul Islam Tenganan, Semarang Regency. The study aims to obtain an in-depth understanding of learning processes, teacher strategies, student responses, and both the supporting and inhibiting factors that influence the adoption of deep learning principles in Islamic Education. Research Data and Data Sources The data in this study consist of observational data on classroom learning interactions, interview data from teachers, students, and school leaders, and document data related to learning implementation. The data sources include Islamic Education teachers, the school principal, sixth-grade students, and institutional documents such as lesson plans, teaching modules, assessment records, and teacher reflection notes.

Data were collected using three main techniques: participatory observation, in-depth interviews, and document analysis, as suggested by (Creswell et al., 2013) for qualitative case studies. Participatory Observation, observations were conducted over a continuous period from August 12 to September 20, 2025, focusing on the implementation of Islamic Education lessons in grades V and VI. The researcher observed teacher-student interactions, the use of deep learning strategies such as inquiry, reflection, and collaborative problem-solving, as well as students' affective and cognitive engagement. Field notes were produced daily to capture instructional dynamics,

In-depth Interviews: Interviews were conducted with the principal of SDIT Nurul Islam Tenganan to understand school policy, curriculum orientation, and institutional support. Two Islamic Education teachers to explore pedagogical strategies, challenges, and reflective practices. Twelve sixth-grade students, selected purposively based on their ability to provide reflective responses regarding their learning experiences. Interviews were conducted from September 1–24, 2025, recorded digitally, and transcribed verbatim. Document Analysis, document data were obtained from, Lesson plans (RPP) and teaching modules used in Islamic Education; teacher reflection journals, which record instructional considerations; Student worksheets, portfolios, and assessment results, School curriculum policy documents, including thematic integration guidelines and Merdeka Curriculum implementation files. These documents provided triangulated evidence of how deep learning is designed, implemented, and evaluated. Recording and Transcription, all interviews, observation notes, and document data were archived systematically. Audio recordings were transcribed verbatim, while observation notes were coded immediately after each classroom session.

Data analysis was conducted using five stages, including data Reduction. The researcher reduced data related to how teachers designed deep learning strategies in Islamic Education; how students engaged in reflective, inquiry-based, and collaborative tasks, supporting and inhibiting factors in the implementation process at SDIT Nurul Islam Tenganan. Irrelevant or repeated statements were filtered out, while essential themes were coded using open and axial coding. Data Display, reduced data were presented in the form of thematic matrices comparing teacher strategies and student responses, narrative tables showing supporting vs inhibiting factors, and lowcharts depicting the alignment between curriculum goals and classroom practices. Also integrating narrative, tabular, and diagrammatic displays.

FINDINGS AND DISCUSSION

Finding

The deep learning approach at SDIT Nurul Islam Tenganan has been implemented since 2022, following the participation of teachers, including those in Islamic Education, in the ADLX (Active Deep Learner Experience) training program, which was conducted widely by JSIT (Indonesian Integrated School Network). Active Deep Learner eXperience (ADLX) is an approach introduced by Mohamed Bahgat, founder of SeGa Group, in his book titled *FIRST FRAMEWORK, 5 Domains, 15*

Principles. ADLX is an approach that integrates two crucial learning strategies, deep learning and active learning, into a procedure that gives students a learning experience.

Based on this understanding, the Islamic Education learning formula is implemented by combining Islamic Education lessons with other subjects and extracurricular activities. This allows students to gain a more integrated, memorable, and profound learning experience (long-term memory). The Islamic Education learning design that incorporates a deep learning approach at SDIT Nurul Islam Tengeran is depicted in the following chart:

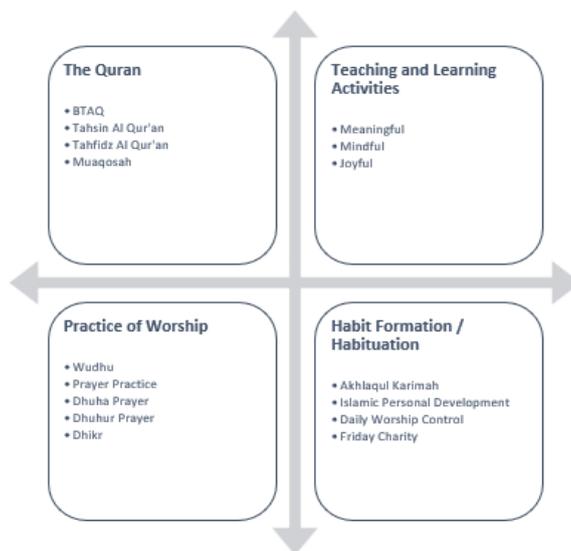


Figure 1. Implementation of Deep Learning in Islamic Education

Conceptual Framework of Deep Learning Implementation in Islamic Education at SDIT Nurul Islam Tengeran

Description of Figure 1:

The deep learning approach at SDIT Nurul Islam Tengeran has been systematically implemented since 2022, following teachers' participation in the Active Deep Learner eXperience (ADLX) training program organized by JSIT. ADLX, introduced by Mohamed Bahgat, integrates active learning and deep learning through five domains and fifteen pedagogical principles. In Islamic Education learning, this framework is operationalized through the integration of (1) Qur'anic and Hadith studies, (2) reflective discussion, (3) interdisciplinary learning, (4) experiential religious practice, and (5) formative-reflective assessment. This integration aims to foster long-term memory, meaningful understanding, and internalization of Islamic values.

Analytical Interpretation:

Figure 1 illustrates that Islamic Education learning is not treated as an isolated subject but as a core axis that connects academic knowledge, character formation, and spiritual practice. This structure enables students to engage cognitively, affectively, and spiritually, reflecting the essential characteristics of deep learning.

Table 1. Implementation of the Deep Learning Approach in Islamic Education Learning

No	Component	Empirical Findings	Data Source	Analytical Interpretation
1	Learning Orientation	Islamic Education is designed to emphasize understanding, reflection, and value internalization rather than memorization	Observation, Documents	This indicates a shift from surface learning toward meaning-oriented learning
2	Teaching Strategies	Teachers apply inquiry-based discussion, contextual problem-solving, and reflective questioning	Observation, Interviews	These strategies align with deep learning principles and ADLX domains
3	Student Engagement	Students actively participate in discussions, ask critical questions, and relate lessons to daily life	Observation, Student Interviews	Active engagement demonstrates increased cognitive and affective involvement
4	Interdisciplinary Integration	Islamic Education is integrated with Bahasa Indonesia, Science, and extracurricular religious activities	Documents, Observation	Integration supports holistic and contextual learning experiences
5	Assessment Practices	Use of formative assessment, reflective journals, and project-based evaluation	Documents, Teacher Interviews	Assessment focuses on learning processes and value formation

Analytical Description:

Table 1 shows that the implementation of deep learning in Islamic Education at SDIT Nurul Islam Tengaran is structurally aligned with deep learning theory. Teachers employ reflective and inquiry-oriented strategies that encourage students to actively construct meaning. The integration across subjects and extracurricular activities strengthens students' long-term retention and contextual understanding of Islamic values.

Table 2. Supporting and Inhibiting Factors in Deep Learning Implementation

No	Factor Type	Findings	Evidence Source	Implication
1	Supporting Factors	Strong Islamic school culture, leadership support, teacher motivation, ADLX training	Interviews, Documents	These factors facilitate the adoption of deep learning practices

2	Teacher Competence	Varying levels of pedagogical mastery in deep learning design	Interviews, Observation	Indicates the need for continuous professional development
3	Learning Resources	Limited availability of contextual and reflective teaching modules	Documents	Restricts optimal implementation of deep learning
4	Time Allocation	A dense curriculum limits deep reflection activities	Observation	Requires curriculum adjustment and prioritization
5	Cultural Factors	Some hesitation toward critical questioning in religious contexts	Interviews	Suggests the need for gradual and culturally sensitive implementation

Analytical Description:

Table 2 reveals that while institutional support and teacher motivation serve as strong enablers, pedagogical and structural constraints remain significant challenges. Limited teacher capacity and rigid curriculum structures restrict the full realization of deep learning principles. These findings confirm that deep learning implementation requires not only policy support but also sustained pedagogical transformation.

Table 3. Observable Outcomes of Deep Learning in Islamic Education

No	Learning Indicator	Observed Change	Data Source	Interpretation
1	Conceptual Understanding	Students explain Islamic concepts in their own words	Observation	Indicates deeper cognitive processing
2	Reflective Ability	Students relate religious teachings to personal experiences	Interviews, Journals	Shows internalization of values
3	Critical Thinking	Increased questioning and discussion during lessons	Observation	Reflects inquiry-based learning
4	Spiritual Practice	Improved consistency in daily religious behavior	Teacher Interviews	Demonstrates affective and behavioral impact
5	Learning Motivation	Higher enthusiasm and engagement	Observation, Student Interviews	Suggests a positive learning climate

Analytical Description:

The data in Table 3 demonstrate that deep learning-based Islamic Education contributes to multidimensional learning outcomes. Students not only acquire conceptual knowledge but also develop reflective awareness and spiritual sensitivity. This confirms that deep learning supports the holistic objectives of Islamic Education.

Synthesis of Findings

Overall, the findings indicate that the deep learning approach at SDIT Nurul Islam Tenganan has been partially but meaningfully implemented. While the instructional design reflects strong alignment with deep learning and ADLX principles, optimization is constrained by teacher readiness, resource availability, and curriculum structure. Nevertheless, observable improvements in student engagement, reflection, and value internalization suggest that deep learning has significant potential to transform Islamic Education learning when supported by sustained professional development and institutional commitment.

The first data unit shows that Islamic Education at SDIT Nurul Islam Tenganan is implemented through an integrated learning design that extends beyond classroom instruction. Islamic Education is structured not only as a subject but also as a comprehensive educational practice embedded in daily school activities. Qur'anic learning is organized as a dedicated BTAQ subject conducted every school day during regular instructional hours. Students engage in reading and writing the Qur'an using the UMMI method, accompanied by systematic recitation practice and memorization of Qur'anic verses and tajwid rules. This routine learning activity ensures consistent exposure to Qur'anic literacy and supports the gradual development of students' religious competence.

The second data unit indicates that character formation is facilitated through structured mentoring and extracurricular programs. Homeroom teachers function as Islamic Personal Development mentors who supervise students' moral development and daily religious behavior. Islamic character development activities are conducted weekly as part of extracurricular programs. These activities include moral value discussions, memorization of daily prayers, and systematic monitoring of students' religious practices through daily activity control records. This mechanism allows teachers to observe students' consistency in practicing religious values both inside and outside the classroom context.

The third data unit reveals that practical religious activities form an essential component of Islamic Education implementation. Students are not only taught theoretical aspects of worship but are also directly guided to practice religious rituals. These practices include ablution, obligatory prayers, sunnah prayers, dhikr, and post-prayer supplications. Teachers actively supervise and model these practices, enabling students to gain direct experiential learning related to religious observance.

The fourth data unit describes the instructional strategies used by Islamic Education teachers in classroom learning. Teachers apply a variety of teaching methods, including lectures, group discussions, project-based activities, case-based learning, and simulations. Learning activities are designed to encourage student participation, interaction, and engagement. The use of varied instructional methods creates a dynamic learning environment in which students actively respond to learning tasks, collaborate with peers, and participate in reflective discussions related to lesson content.

The fifth data unit highlights student responses during the learning process. Observational data show that students demonstrate increased enthusiasm, active involvement, and attentiveness during Islamic Education lessons. Students participate actively in discussions, complete learning projects collaboratively, and show greater confidence in expressing their understanding of religious concepts. These responses indicate that the learning process supports active engagement and meaningful participation in Islamic Education learning activities.

Discussion

Implementation of the Deep Learning Approach in Islamic Education Learning

The findings of this study demonstrate that the principal, curriculum coordinator, and Islamic Education teachers at SDIT Nurul Islam Tenggara possess a shared conceptual understanding of the deep learning approach. Deep learning is perceived not merely as a pedagogical technique but as an educational orientation that emphasizes conceptual understanding, value internalization, and active student engagement. This understanding reflects a shift from surface learning characterized by memorization and procedural compliance toward learning that promotes meaning-making, reflection, and transfer to real-life contexts.

From a theoretical perspective, this finding aligns with the foundational work of (Marton & Säljö, 1976), who distinguished deep learning as an approach oriented toward understanding underlying meanings rather than reproducing information. Similarly, (John Biggs, 2011) The concept of *constructive alignment* supports the idea that learning activities, assessments, and intended outcomes must coherently foster deep cognitive and affective engagement. In the context of Islamic Education, deep learning becomes particularly relevant because religious knowledge is inherently normative, ethical, and experiential rather than purely cognitive.

These findings also resonate with (Fullan, Michael, 2014) framework of *deep learning competencies*, which emphasizes character, citizenship, collaboration, communication, creativity, and

critical thinking. The emphasis expressed by Islamic Education teachers—that learning should shape students' daily behavior and religious practice—illustrates how deep learning bridges cognitive understanding and moral action. This confirms that Islamic Education, when grounded in deep learning principles, functions as a transformative rather than transmissive discipline.

Empirically, the results of this study corroborate previous research indicating that deep learning approaches enhance student motivation, engagement, and reflective capacity (Khotimah & Abdan, 2025); (Aliyah et al., 2025). However, this study extends existing literature by situating deep learning explicitly within the lived religious practices of elementary school students, thereby highlighting its potential to integrate spirituality, cognition, and character formation holistically. From the author's analytical standpoint, deep learning in Islamic Education should not be reduced to methodological innovation alone. Rather, it must be understood as a value-oriented epistemological shift, where learning becomes a process of internalizing faith-based values through reflective and contextual engagement.

In general, the principal, curriculum coordinator, and Islamic education teachers at SDIT Nurul Islam Tenggara understand the concept of the deep learning approach. It is seen as a method that emphasizes deep comprehension, not merely material transfer, while actively involving students in learning. This reflects the essence of deep learning, as outlined in Abdul Mu'ti's ideas after his appointment as Minister of Primary and Secondary Education.

According to the Islamic Education teacher, applying deep learning is highly relevant, as it not only imparts religious knowledge but also instills Islamic values and practices. In this context, students are expected to apply concepts in daily conduct and perform rituals in line with religious teachings. The school principal stressed that this approach is especially important in elementary education because it is a foundational stage of character development, enabling Islamic values to be internalized comprehensively. The curriculum coordinator added that deep learning is effective in avoiding rote memorization and fostering holistic understanding. This model has also been emphasized in curriculum development as a strategy to improve the quality of Islamic education. These views align with (Syayidah & Sodik, 2025), who noted that integrating deep learning into the Islamic curriculum strengthens a holistic and transformative orientation in education. The results of the study indicate that the application of deep learning approaches in Islamic education has many benefits. These benefits include:

Encouraging students to think critically, interactively, and reflectively. As stated by (Aliyah et al., 2025), deep learning is capable of creating interactive, critical, and reflective learning so that students can understand Islamic teachings in a contextual and meaningful way. (Khotimah & Abdan, 2025) also note that the use of deep learning can increase student engagement and reflection through the active role of teachers as facilitators. The findings show that applying deep learning approaches in Islamic education provides significant benefits. These include fostering students' critical, interactive, and reflective thinking, enabling them to understand Islamic teachings in a more contextual and meaningful manner (Aliyah et al., 2025) In addition, deep learning enhances student engagement, motivation, and active participation in discussions through the teacher's role as a facilitator (Khotimah & Abdan, 2025). This approach also supports the development of students' critical thinking, self-evaluation, and metacognitive skills, particularly in connecting Islamic education concepts with real-life situations (Aliyah et al., 2025);(Khotimah & Abdan, 2025).

The school culture at SDIT Nurul Islam Tenganan, manifested through routine religious practices such as dhuha prayer, congregational worship, Qur'anic literacy activities, and charity programs, functions as a living curriculum that reinforces deep learning in Islamic Education. These practices create an effective and spiritual learning environment that supports the internalization of values beyond classroom instruction.

Theoretically, this finding aligns with socio-cultural learning theories that emphasize learning as a situated and socially mediated process (Vygotsky, 1978); (Lave & Wenger, 1991). A religious school culture provides the contextual framework through which students negotiate meaning, observe role models, and practice religious values authentically. (Fullan, 2016) further argues that sustainable educational change depends on cultural coherence, where values, relationships, and practices align with pedagogical goals.

Comparatively, previous studies have shown that deep learning is more effective when embedded within a supportive school culture that encourages reflection, dialogue, and collaboration (Sahlberg, 2021). This study reinforces those findings while adding a distinct contribution: it demonstrates how religious culture functions as a catalyst for deep learning, particularly in moral and character education. From the author's perspective, the relationship between school culture and deep learning is reciprocal rather than linear. A positive culture strengthens deep learning practices, while deep learning further refines school culture by fostering reflective, ethical, and collaborative dispositions among students and teachers. This dialectical relationship suggests that policy efforts

to implement deep learning must prioritize cultural development, not only curriculum reform.

Intracurricular activities at SDIT Nurul Islam Tenganan, such as dhuha prayers, congregational dhuhur prayers, BTAQ, and Friday Charity, create a religious atmosphere that strengthens the internalization of Islamic Education values. The collaborative and spiritual attitudes nurtured align with (Santoso, 2025) conclusion, which stresses integrating technology with Islamic values in the Merdeka Curriculum to make learning holistic and transformative. The deep learning strategy, realized through a religious school environment and culture, has positively shaped student character. (Aliyah et al., 2025) note that deep learning in Islamic education supports interactive, critical, and reflective learning that fosters morals and character.

The principal observed that building a religious school culture encouraged positive changes in student behavior, understanding of Islamic teachings, spiritual awareness, tolerance, and emotional as well as social intelligence. This also influenced the overall school culture, making it more collaborative and reflective. Developing a positive school culture is crucial to creating a conducive learning environment in Islamic Education. A strong culture reflects values, norms, and habits that support student character and spirituality. Implementing deep learning is therefore critical for internalizing religious values beyond cognition. With a supportive culture, teacher role models, shared worship, and appreciation of religious attitudes deep learning-based lessons are easier to apply (Fullan, Michael, 2014). For instance, when school culture encourages reflection and open dialogue, students feel safe to explore the meaning of teachings in real life. Islamic education can also adopt problem-based learning, case studies, and integrative projects that stimulate critical thinking, value reflection, and connections with socio-cultural challenges (Marton & Säljö, 1976).

In addition, Islamic education teachers have a strategic role as culture builders and facilitators of deep learning. Through collaborative and dialogic learning strategies, teachers can build an inclusive classroom environment, respect the diversity of understanding, and encourage students to reflect on their spiritual experiences authentically. Collaboration takes the form of cooperation with other subject teachers to maximize the implementation of deep learning. The integration of cross-disciplinary teacher collaboration strengthens the implementation of deep learning and values education in elementary schools (Rizwan Martiadi et al., 2025). When school culture and deep learning work synergistically, the transformation of students' character can occur sustainably and comprehensively (Sahlberg, 2021). This means that the connection between school culture and the deep learning approach in Islamic education isn't just theoretical but practical and

mutually reinforcing. A positive school culture becomes a supportive ecosystem for instilling Islamic values through a deep and meaningful approach.

Deep Learning Approach in Teacher Administration

An important contribution of this study lies in reconceptualizing teacher administration through the lens of deep learning. Traditionally viewed as technical and compliance-driven, administrative practices at SDIT Nurul Islam Tenggara have been transformed into reflective professional tools. Teachers design lesson plans, assessments, and reflective journals that intentionally integrate cognitive, affective, and psychomotor dimensions of learning.

This practice aligns with (Loughran, 2013) notion of *reflective practice*, where teachers engage in continuous inquiry into their pedagogical decisions. (Timperley et al., 2007) Similarly, emphasize that professional learning is most effective when teachers systematically reflect on evidence of student learning and adapt their practices accordingly. By embedding deep learning principles into administrative processes, teachers position documentation as a form of professional learning rather than a bureaucratic obligation.

Compared with prior studies that focus primarily on classroom instruction, this research highlights the often-overlooked administrative dimension of deep learning. The use of portfolios, reflective journals, and value-based rubrics represents an innovative integration of assessment and reflection, supporting (Santoso, 2025) argument that Islamic Education assessment must address spiritual and moral dimensions alongside cognition. Analytically, the author argues that deep learning in teacher administration fosters professional agency. When teachers perceive administration as meaningful reflection, they are more open to feedback, collaboration, and pedagogical innovation.

The deep learning approach emphasizes deep understanding, reflection, and connections between theory and real-world practice. In the context of teacher administration, this approach encourages teachers to not only fulfill their administrative duties formally but also to use them as a means of self-development and improving the quality of learning. For example, in developing lesson plans, teachers can apply the principles of deep learning by designing activities that stimulate students' critical thinking, foster value awareness, and integrate cross-context learning experiences (John Biggs, 2011).

Furthermore, the use of deep learning approaches in teacher administration includes consistent reflective practices. Teachers are encouraged to conduct in-depth evaluations and

reflections on the implementation of learning, rather than simply reporting students' learning outcomes quantitatively. These reflections are part of daily journals, self-evaluation notes, and collaborative discussions with colleagues. These activities transform administration from a burden into a continuous learning process (lifelong learning) for teachers themselves (Loughran, 2013). Additionally, this approach strengthens the meaning of academic supervision. Teachers who apply deep learning in their administration will be more open to feedback, actively develop student-centered planning documents, and continuously update their practices based on data and analysis of learning outcomes. In other words, administration becomes a strategic tool to promote transformative learning, not merely a reporting tool. The implementation of deep learning in teacher administration also impacts the overall school culture. When teachers perceive administration as part of the learning process and professional reflection, a collaborative, innovative, and quality-oriented school atmosphere is created, focused on authentic and meaningful learning (Timperley et al., 2007).

According to field research, every teacher, including Islamic Education teachers at SDIT Nurul Islam Tenganan, is responsible for designing the Islamic Education syllabus by incorporating learning activity components that contain the main pillars of the deep learning approach into the teacher's teaching module. Teachers are even required to design deep learning-based learning assessments. These assessments involve affective and psychomotor aspects using assessment rubrics. The assessment model in the SDIT Nurul Islam Tenganan curriculum is designed to measure the dimensions of students' understanding of meaning, attitude, and reflection.

Teachers provide portfolio rubrics, reflective journals, and student control books, which serve as systematic guidelines for assessing deep learning. This ensures that assessments no longer focus solely on memorization but also on reflection and internalization of values. (Santoso, 2025) emphasizes the importance of assessments that combine cognitive, affective, and spiritual aspects as part of the evaluation of deep learning in Islamic education.

Opportunities and Challenges of Implementing Deep Learning in Islamic Education

Deep learning offers strong potential to make Islamic education more contextual, reflective, and transformative. It enables students to critically engage with religious teachings in response to contemporary challenges such as globalization, digital culture, and identity formation. This approach supports student-centered learning, learner autonomy, and ethical reasoning, which align with the holistic aims of Islamic education (John Biggs, 2011).

Despite these opportunities, several challenges remain. These include limited teacher training, uneven conceptual understanding of deep learning, assessment systems that emphasize cognitive outcomes, and students' limited experience with reflective learning. Consistent with (Marton & Säljö, 1976), these challenges indicate that deep learning requires sustained pedagogical and cultural change rather than isolated instructional adjustments.

From a critical perspective, these constraints reflect systemic issues within the education system rather than individual teacher shortcomings. Without alignment among curriculum, assessment, and professional development, deep learning risks remaining a policy discourse rather than an authentic classroom practice. In practice, deep learning creates opportunities for students to develop a deeper and more reflective understanding of Islamic values through problem-based learning, critical discussion, case studies, and personal reflection. This allows religious education to move beyond rote learning toward meaningful, real-life application (Marton & Säljö, 1976).

In the context of digitalization and globalization, deep learning also enables teachers to guide students in addressing identity issues, information overload, and cultural influences critically and ethically. Through this approach, Islamic education can integrate digital literacy, social responsibility, and spiritual development (Sahlberg, 2021). Moreover, deep learning promotes learner autonomy by encouraging students to explore, question, and construct understanding independently. Collaborative and project-based activities further allow students to connect Islamic teachings with social practice, strengthening affective and ethical dimensions of learning (John Biggs, 2011).

First, while teachers, curriculum coordinators, and school leaders generally recognize the concept of deep learning, their understanding remains limited. This is mainly due to the lack of clear models, practical references, and structured training related to deep learning in Islamic education. *Second*, deep learning has not been fully understood across subject areas, resulting in weak interdisciplinary collaboration. Many teachers remain accustomed to lecture-based instruction and memorization-oriented assessment, making it difficult to design learning activities that promote active engagement and critical thinking. *Third*, existing assessment systems continue to prioritize cognitive achievement rather than reflective and transformative learning processes. This misalignment reduces teachers' motivation to consistently apply deep learning in the classroom.

Finally, students are not yet familiar with reflective learning practices, as their previous learning experiences were largely memorization-oriented. Developing students' capacity to

critically and spiritually connect Islamic teachings with real-life contexts requires time and systematic pedagogical support (Marton & Säljö, 1976). Overall, despite its potential, the implementation of deep learning in Islamic education is constrained by structural, cultural, and pedagogical factors. Addressing these challenges requires sustained teacher professional development, curriculum alignment, and a supportive school learning culture.

Solutions to Face Challenges

Addressing the challenges of implementing deep learning in Islamic education requires integrated and systematic strategies. Continuous professional development should strengthen teachers' experiential, reflective, and collaborative capacities (Fullan, 2016), supported by school leadership that fosters a reflective culture through dialogue and ethical modelling (Sahlberg, 2021). Curriculum and assessment reforms must shift toward process-oriented evaluation, such as portfolios, reflective journals, and project-based assessments, to move beyond cognitive dominance (John Biggs, 2011). Technology further supports deep learning by enabling personalized and reflective learning environments beyond the classroom (Pangrazio & Selwyn, 2018). Finally, collaboration among teachers, parents, and communities is essential to reinforce Islamic values through authentic social practice.

CONCLUSION

This study concludes that the implementation of the deep learning approach in Islamic Education at SDIT Nurul Islam Tengaran Semarang contributes positively to improving students' conceptual understanding, active participation, and internalization of Islamic values. The findings demonstrate that learning designs emphasizing reflection, contextual problem-solving, integration of religious knowledge with daily practices, and meaningful learning experiences enable students to engage with Islamic teachings more deeply, critically, and responsibly. At the same time, the study reveals that the effectiveness of this approach is influenced by variations in teacher readiness, pedagogical competence, and institutional support, indicating that deep learning has not yet been implemented optimally and consistently. Despite being limited to a single institutional context and a relatively short observation period, this research offers both theoretical and practical contributions by strengthening the discourse on deep learning within Islamic education and providing an empirically grounded model for reflective and transformative religious learning. Therefore, the study underscores the importance of sustained professional development, supportive school

culture, and adaptive curriculum design to ensure that deep learning in Islamic Education can be implemented more systematically and has a lasting impact on students' character and moral development.

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