

# Teachers' Readiness in Implementing Deep Learning: Managerial Studies in Islamic Education

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## Info Artikel

## Abstract

### Keywords:

Teacher Readiness; Deep Learning; Managerial; Islamic Education; Case Study

The Ministry of Primary and Secondary Education of the Republic of Indonesia, through the Center for Curriculum and Learning (Puskurjar), emphasizes the importance of deep learning learning as part of educational transformation to improve the quality of learning. However, until now, the mapping of teacher readiness to implement it and the role of school managerialism, especially in Muhammadiyah schools, which are Islamic-based, remains unknown. This study aims to explore teacher readiness in implementing the deep learning learning approach of managerial studies in Islamic education, examining several key aspects, understanding the role of school management in preparing teachers to implement deep learning learning from knowledge of deep learning learning concepts, skills in designing and implementing lesson plans, attitudes towards policy changes, and the readiness of supporting facilities and infrastructure that are effective and in accordance with Islamic values. The method employed is a qualitative case study approach. Data were collected through interviews with Muhammadiyah school supervisors, principals, teachers, and observations of classroom learning implementation, as well as analysis of teaching module documents to obtain a comprehensive picture of teacher readiness and managerial roles. The collected data will be analyzed using the thematic analysis method, with the help of the atlas.TI application.<sup>9</sup> The results of the study show that the principal and foundation's management facilitate teachers in preparing the implementation of deep learning learning such as holding training, workshops and the existence of learning communities so that this can influence teachers' understanding of the concept of knowledge about deep learning learning that emphasizes awareness, meaningful and joyful, the accuracy of teachers in choosing strategies in designing teaching modules with learning methods that integrate Islamic and contextual values such as problem-based learning, as well as facilities and infrastructure that support the learning process that honors students by implementing the principle of honoring and activating students in the classroom.

**Kata Kunci:** Kesiapan Guru; Pembelajaran Mendalam; Sekolah Dasar; Muhammadiyah; Studi kasus

### Abstrak.

Kementerian Pendidikan Dasar dan Menengah Republik Indonesia melalui Pusat Kurikulum dan Pembelajaran (Puskurjar) menekankan pentingnya pembelajaran mendalam sebagai bagian dari transformasi pendidikan untuk meningkatkan kualitas pembelajaran. Namun sampai saat ini belum diketahui pemetaan kesiapan guru untuk mengimplementasikannya serta peran manajerial sekolah terutama di sekolah Muhammadiyah sebagai sekolah berbasis Islam. Penelitian ini bertujuan mengeksplorasi kesiapan guru dalam mengimplementasikan pendekatan pembelajaran mendalam telaah manajerial dalam pendidikan Islam, mengkaji beberapa aspek utama, pemahaman peran manajemen sekolah dalam mempersiapkan guru mengimplementasikan pembelajaran mendalam dari pengetahuan konsep pembelajaran mendalam, keterampilan dalam merancang dan menerapkan rencana pembelajaran, sikap terhadap perubahan kebijakan, serta kesiapan sarana dan prasarana

pendukung yang efektif dan sesuai dengan nilai-nilai Islam. Metode yang digunakan adalah metode kualitatif dengan studi kasus. Data dikumpulkan melalui wawancara pengawas sekolah Muhammadiyah, kepala sekolah, guru dan observasi pelaksanaan pembelajaran di kelas serta analisis dokumen modul ajar guna memperoleh gambaran menyeluruh tentang kesiapan guru dan peran manajerial. Data yang dikumpulkan akan dianalisis menggunakan metode analisis tematik, dengan menggunakan bantuan aplikasi atlas.TI 9 Hasil penelitian bahwa manajerial kepala sekolah dan yayasan memfasilitasi guru-guru dalam menyiapkan pengimplementasian pembelajaran mendalam dalam bentuk pelatihan, workshop serta adanya komunitas belajar sehingga hal tersebut dapat mempengaruhi pemahaman guru tentang konsep pengetahuan tentang pembelajaran mendalam yang menekankan pada kesadaran, bermakna dan menggembarakan, ketepatan guru memilih strategi dalam merancang modul ajar dengan metode pembelajaran yang mengintegrasikan nilai-nilai Islam dan kontekstual seperti problem based learning, serta fasilitas dan infrastruktur yang mendukung proses pembelajaran yang memuliakan murid dengan menjalankan prinsip memuliakan dan mengaktifkan murid di kelas.

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## **INTRODUCTION**

The Ministry of Primary and Secondary Education of the Republic of Indonesia emphasizes the importance of deep learning as part of educational transformation. (Kartiko et al., 2025; Nofamataro Zebua, 2025) To improve the quality of learning and the application of Islamic values, because future changes are difficult to predict. Deep learning does not only focus on memorization or practice questions, but instead emphasizes the contextual learning process that provides a meaningful and enjoyable experience for students. (Feriyanto & Anjariyah, 2024). Deep learning is defined as a type of learning that prioritizes comfortable conditions for learning. (Raissi et al., 2019; Zhang et al., 2019) This approach is based on three main pillars: mindful, meaningful, and joyful, which integrate aspects of understanding, application, and reflection. (Basyir et al., 2022).

Teachers' readiness to implement deep learning is highly dependent on effective school management. (Rogante & Santelli, 2023a), Especially the role of the principal and management team in supporting teachers to collaborate and innovate (Hutagaol et al., 2025). In addition, a superior school manager can facilitate (Firdaus, 2024) Build a positive culture and ensure the involvement of all parties in decision-making to improve the quality of learning and overall student development. Support from foundations and educational offices is also crucial for facilitating teacher training and providing the necessary facilities. (Raihan & Pramono, 2025). Islamic schools require preparation in implementing deep learning to ensure the success of the learning process and its outcomes. (Ben Gurion & Limbong, 2025). In the learning process, teachers often focus solely on textbooks and fail to provide meaningful learning experiences, although deep learning requires active student involvement (Zheng, 2022) Students' awareness of the importance of learning requires the school to seek support and cooperation from the foundation in terms of facilitating infrastructure, learning spaces, teachers, and learning media (Sri Kadarsih et al., 2025).

Several studies have conducted studies on school management in improving school culture (Anik Indra Mustika et al., 2025), Implementation of several components of school management (Hutagaol et al., 2025), Fun learning such as, joyfull learning application of fun learning model (Abrori et al., 2025), Learning Meaningful Lessons (Sadikin et al., 2020), Perception of learning is fun (Mulyawati, 2021), Ausubel Meaningful Learning (Tarmidzi, 2018), Mindfulness (Seneru & Andriyaningsih, 2023) and research on awareness (mindfulness) (Setyawan, 2023). However, these studies still focus on one specific aspect, such as school-based management, school quality improvement programs, joyful strategies, or mindful approaches, without looking

at the readiness of teachers and comprehensive school management support in applying deep learning to the world of Islamic education. Therefore, there is a lack of research data on the readiness of teachers to implement deep learning of managerial analysis in Islamic education, including in Muhammadiyah schools, which are known to focus on Islamic education.

Therefore, research on teachers' readiness in implementing deep learning, particularly in relation to Islamic education, is gaining momentum, focusing on the importance of recognizing and appreciating the natural potential of each student.(Fathinnaufal & Hidayati, 2020). Without the readiness of schools and teachers to understand and adjust learning methods, the development of students' potential will be hampered. Therefore, schools need to ensure that teachers have an adequate understanding, the necessary skills, and the necessary support for facilities and infrastructure (Aprilianto et al., 2025; Siswanto & Hidayati, 2020). To apply deep learning effectively so that it can be applied in daily life with Islamic values. Deep learning is not only about learning methods, but also a part of Islamic education management that emphasizes the quality of teaching and character development of teachers, as reflected in the practice of character education in Muhammadiyah schools.(Jannah & Sontani, 2018).

Muhammadiyah schools offer several programs, including leadership training, strengthening daily worship, and integrating the values of rahmatan lil alamin into the school culture.(Nurjunaedah et al., 2025)Provide space for teachers to instill Islamic character and foster meaningful, aware, and joyful learning in students. The support of the Muhammadiyah organization, in the form of training, incentives, and strengthening school culture, ensures that teachers can adapt learning methods to meet the needs of students without compromising Islamic principles.(Dwiayama et al., 2025). Thus, Muhammadiyah school management not only focuses on the academic aspect but also on the development of the character and integrity of teachers, so that they can become role models and facilitators of deep learning based on Islamic values.(Sumarsono et al., 2025).

This research aims to explore the readiness of teachers in implementing a deep learning approach to managerial analysis in Islamic education, particularly at SD Muhammadiyah, an educational institution renowned for its Islamic values and innovative learning. This research will examine several key aspects, including the role of school management in preparing teachers to implement deep learning, the application of deep learning concepts in learning planning, attitudes towards policy changes, and the readiness of adequate supporting facilities and infrastructure in accordance with Islamic values. For this reason, the following problem formulation was prepared: how is the readiness of Muhammadiyah elementary school teachers in implementing deep learning and managerial roles in the Mantrijeron Ministry of Education?

## **METHODS**

This study uses a qualitative method with a case study approach. (Moleong, 2021)Case studies offer researchers a convenient means to explore events that occur in the field, including activities, programs, and more profound learning experiences. (Cahyadi et al., 2025; Sri Kadarsih et al., 2025)The purpose of this research is to gain a deep understanding of teacher readiness and managerial analysis in Islamic education for the implementation of deep learning. The focus of the research includes the exploration of teachers' knowledge and skills in designing learning, teachers' attitudes towards policies, the availability of supporting facilities and infrastructure with Islamic values. Additionally, this study examines the specific role of school management and the Muhammadiyah Foundation in supporting the implementation of deep learning within the school

environment. The participants were the supervisors of Muhammadiyah schools, all principals and teachers of Muhammadiyah elementary schools in the Mantrijeron District, Yogyakarta City, who were the subjects of this study. The purposive sampling technique was used to determine participants. (Sugiyono, 2018)

Data collection is carried out through interviews, observations, and documentation. (Masnun, 2023) The data collection instrument for this research is the researcher himself. (Sugiyono, 2018) When the researcher conducts research in schools, they serve as a human instrument that plays a role in determining the research focus, serving as a data source, collecting data, and analyzing it with the help of the atlas.ti application<sup>9</sup>. The data analysis process begins with writing interview transcripts, observation results, and documentation analysis in the form of teaching modules, with steps such as interview transcripts uploaded to the application, identifying relevant opinions, analyzing and forming codes, followed by creating group codes and code networks, and then forming themes, as well as describing data relevant to the focus of the research. (Rony Edward Utama et al., 2025)

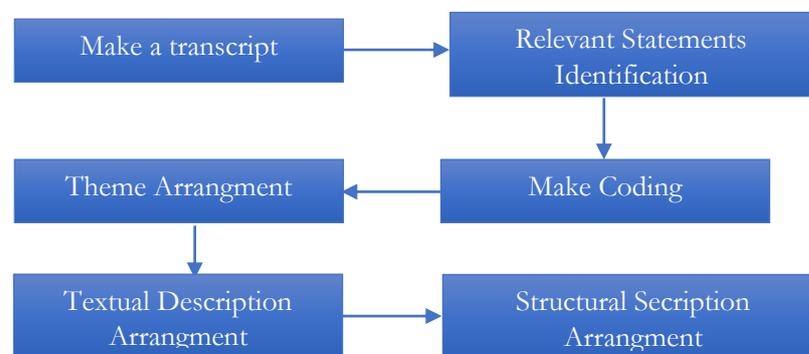


Figure 1. Data Analysis Steps

## RESULTS AND DISCUSSION

### Results

#### Teacher Readiness in Implementing Deep learning Elementary Schools

##### *Teachers' Perceptions of Deep Learning*

Based on the results of interviews, observations of classroom learning, and documentation of teaching modules, several themes emerge that describe the readiness of Muhammadiyah elementary school teachers in implementing deep learning. Based on data on teacher readiness in implementing deep learning learning of Islamic education managerial studies, teachers have several perceptions about the concept of deep learning learning, as conveyed by teachers that deep learning learning is learning that applies three pillars, namely awareness, meaning, and joy, as stated in the following statement;

This aligns with Islamic education, which emphasizes that seeking knowledge should be a meaningful endeavor. Furthermore, teachers believe that learning should be tailored to students' needs, applied to everyday life, and provide meaningful, deep learning that is also enjoyable, while maintaining Islamic values to ensure everything has meaning. Muhammadiyah School. Implementing deep learning is realized through the application of Islamic religious values in learning activities, where students can solve problems in everyday life. As conveyed by the teacher, deep learning emphasizes the formation of student character, so that they become accustomed to solving problems.

In my opinion, deep learning learning is like what the minister said about the new curriculum, the aim of which is to provide more learning to children with a strategy that has three pillars, namely meaningful, mindful, and joyful, namely deep, meaningful, and enjoyable (interview N2. Line 60-63)

Children are given problems that may be somewhat difficult to solve, and the learning is meaningful, joyful, and so on. (Interview N3 Line 229-231)

Teachers' knowledge of the concept of implementing deep learning learning is reflected in the principal's managerial readiness to support teachers' knowledge and foster their perceptions of deep learning learning. According to a statement from a Muhammadiyah school principal in the Mantrijeron sub-district of Yogyakarta,

#### *Teacher Strategies for Implementing Deep Learning*

Implementing deep learning learning requires teacher skills in designing teaching modules and selecting appropriate learning strategies for learning planning. School management and foundations play a strategic role in supporting the development of teacher skills by preparing and implementing learning plans. The accuracy of choosing learning strategies affects the results and achievement of learning objectives. In Islamic Education, it also requires teachers to be accurate in determining learning strategies or methods so that they are not dull.

Based on the results of the analysis of documentation in the form of teaching modules, teachers began designing learning plans by integrating project-based and problem-based learning methods, which are effective in fostering critical thinking skills, collaboration, and student creativity, while strengthening the internalization of Islamic character values such as honesty, responsibility and cooperation, reinforced by the opinion of one of the Muhammadiyah Elementary School teachers who stated that they began making teaching modules that use problem-based learning, project and cooperative learning methods by teachers.

In Islamic education, it is crucial to employ learning methods that enhance students' intelligence both spiritually and academically, where students are encouraged to express their opinions and collaborate with others, fostering a sense of sympathy and mutual respect. One teacher said that deep learning learning can be seen from the following teacher's statement. In addition, school management and the foundation play a role in creating a conducive environment, providing resources, and conducting continuous monitoring and evaluation of the implementation of Islamic character education integrated into deep learning learning. The active involvement of the principal who builds the teacher's perspective in implementing deep learning learning can be described as teachers have linked and implemented deep learning learning with adapted contextual learning methods in accordance with the following teacher opinions;

I have tried to create a module that includes learning activities that promote meaningful learning. I also design group activities that usually make students happy, and I include learning media modules such as games (Interview N1. Line 18-20)

"It varies, ma'am. It depends on the material we are presenting. Usually, there is PBL, PJBL, and sometimes the children are asked to take a spin or quiz. So, the learning method is connected to the context of everyday life." (Interview N3, Lines 245-247)

The principal also emphasized that Islamic education takes place not only in the classroom but also in daily life through habituation programs, such as religious services within the school environment. Based on observations, the implementation of these Islamic values is carried out through various activities, such as habituating prayer, congregational prayer, the 5S program

(Smile, Greet, Greet, Politeness, and Courtesy), and a queuing program, all of which aim to shape students' character and morals.

#### *Attitudes Towards Policy and Facilities and Infrastructure Used*

The principal of Muhammadiyah Elementary School in the Mantrijeron Sub-district area accepted and implemented the policy of implementing deep learning learning. This was demonstrated by the principal's openness in communicating with teachers about the concept of deep learning learning and in making policies related to the division of teacher tasks. The principal's openness can influence teachers' attitudes toward policies, making them more receptive to innovations. The resource person stated that policy changes, especially in the curriculum, are commonplace because they adapt to the demands of the times. Education should adapt to these developments. Several resource persons welcomed and expressed positive responses to deep learning learning, noting that teachers are ready to learn and innovate.

This reflects the values of Islamic education, where teachers are ready to embrace change for the better. Teachers view the deep learning learning policy as part of an effort to improve the quality of education and student character, in accordance with Islamic teachings, which emphasize that education should be adapted to the demands of the times, as exemplified by the following attitude of one teacher.

The Muhammadiyah Foundation provides support in implementing deep learning at Muhammadiyah Elementary School in the Mantrijeron Regency area by providing classrooms that support active learning, a library, and a prayer room as a space to develop Islamic character. In implementing deep learning learning, the principal acts as a facilitator in terms of providing learning media, where the school provides audio-visual media in classrooms to support deep learning learning that supports Islamic values, as conveyed by one of the following teachers;

I am constantly sharing new information with my teachers, especially now about deep learning, as this is new to our school (Interview N4, Lines 33-34).

In fact, we adapt to the activities conveyed by the ministry, both in our service and always welcome them well; in other words, we constantly innovate based on existing policies (Interview N3, lines 260-262).

The facilities prepared by the school to support the implementation of deep learning learning can make learning in the classroom successful, thus serving as an initial foundation in realizing deep learning learning that is not only oriented towards academics, but also towards the formation of students' Islamic character, because meaningful learning is reflected in the application of everyday life. In addition, the school provides a conducive learning environment, which is part of the media and learning resources for students. This environment can be utilized in implementing deep learning, allowing students to benefit from it.

### **The Managerial Role of Schools Prepares Teachers to Implement Deep Learning.**

#### *Organizing Workshops, Training, and Webinars.*

The results of interviews with Muhammadiyah school supervisors, principals and several Muhammadiyah elementary school teachers show that the principal plays a full role in the readiness of teachers to implement deep learning learning and is adapted to the conditions of Muhammadiyah elementary schools which are Islamic values education, in addition to the managerial role of the school, teachers stated that they can access deep learning learning through social media, participate in training and several workshops held by the Department of Education.

Regarding the latest policy from the Ministry of Education and Culture, the principal said that the school welcomed the existence of this deep learning learning approach, while the principal's efforts were to make several preparations to support teachers in implementing it in the learning process, this is also in line with the statement of the Muhammadiyah school supervisor to provide facilities to the principal and teachers to hold training, workshops, and good practices to support the implementation of deep learning learning by integrating Islamic religious values. In accordance with the following source's statement.

We, as school companions, especially supervisors from Muhammadiyah, are ready to find resource persons and collaborate with AUM to support teachers in this deep learning learning... because this deep learning learning is actually in line with Islamic values in the Muhammadiyah organization... so we can help by holding training or also providing dharul arqam (interview N6 Line 15-19)

The role of school management in preparing teachers to implement deep learning learning by holding direct training on the implementation of deep learning learning materials held at one of the schools. The webinar was conducted by the principal when face-to-face meetings were not possible. One of the principals of Muhammadiyah Elementary School in the Mantrijeron Sub-district stated that to support teachers' abilities in implementing deep learning learning, it was adjusted to the needs of Islamic-based schools and adapted to the Muhammadiyah curriculum, in accordance with the statement of one of the principals.

And I have also facilitated the teachers by holding several trainings on deep learning, and I also collaborated with PCM to facilitate teachers using webinars so that teachers understand the Muhammadiyah version of deep learning, ma'am (interview N4 Line 38-41)

Teacher training at Muhammadiyah Elementary School is provided through several activities, including 1) Baitul Arqam, which aims to strengthen teachers' ideology, morals, and understanding of Islamic values. Schools and foundations implement this before teachers introduce the new paradigm to students. Muhammadiyah carries out Baitul Arqam at the beginning of the new school year, 2) training webinars that are carried out during, teachers are equipped with student-centered learning, problem-based learning and reflective approaches so that students experience deep learning, meaningful, conscious and joyful learning in the Islamic religious college, 3) Learning communities, this is what the principal said that in building new knowledge teachers are facilitated by forming learning communities between teachers such as between class teachers, subject teachers and teachers according to their phases.



**Figure 2. Observation in the Classroom Studi Islam**

Based on the observation of Islamic religious learning conducted by teachers by implementing deep learning learning in Muhammadiyah Elementary School, it can be seen that

teachers in learning activities, starting from teachers asking with trigger questions, using digitalized learning media, the practice of making works shows that the learning begins to involve student activity and is linked to students' daily lives. In pre-learning, teachers begin to collaborate with parents of students to strengthen Muhammadiyah's unique content such as Al-Islam by practicing performing the five daily prayers at home, Muhammadiyah which is manifested in the habit of giving alms, simple Arabic is also practiced in conversations at home in addition to being integrated with national learning such as Indonesian subjects using reading texts about the Muhammadiyah organization.

Documentation of the teaching module for the subject of Islamic Religion and Muhammadiyah in one of the Muhammadiyah Elementary Schools in Kemantren Mantrijeron shows that there are several components of the teaching module that lead to active student activities, in the initial activity, students together with teachers do Tadarus Muroja'ah of the 30th chapter of the Qur'an, after the reading one of the students is asked to interpret the contents of the Qur'an that is read, in the teaching module there is a section that includes the profile of Muslim students such as having noble and pious morals, being responsible, disciplined, collaborating, being grateful and being independent, this is in line with the components of the teaching module that contain an deep learning learning approach. The teaching module implemented by Muhammadiyah Elementary School is equipped with learning achievements for each subject, the methods used, as well as assessment instruments and reflection activities for students and teachers after carrying out learning.

## **DISCUSSION**

### **Implementation of Managerial Strategy in Deep Learning**

Deep learning is a learning approach that emphasizes joyful learning, characterized by active engagement in an aware, meaningful, and joyful learning atmosphere that encompasses the heart, thoughts, and experiences, as well as sports and other activities. The theory suggests that deep learning is designed to enhance students' learning outcomes. (Feriyanto & Anjariyah, 2024; Nofamataro Zebua, 2025; Rogante & Santelli, 2023b). Just as teachers appreciate every student's effort and respect the student's learning process, they always provide students with opportunities to develop. (Kuala, 2025; Pal et al., 2022; Subekti et al., 2025). SD Muhammadiyah in learning begins to create and understand that conscious learning, such as that of students, is fully present in the learning process, meaning that students are mentally and emotionally engaged, actively involved, and consciously engaged in the learning process, where they are willing to ask questions. (Karmila & Sari, 2025; Sun et al., 2019) Having a sense of curiosity and learning is not just about looking for value, but students feel the need to learn (Mulyani et al., 2022; Theobald et al., 2020).

The principle of meaningful deep learning, where learning is connected to real-life materials, such as learning prayers before meals, alms-giving practices, and prayer rituals. Learning means that students understand when and how knowledge is applied, and they are actively engaged in the learning process. The following key to deep learning is to be encouraging, where learning must create a sense of pleasure and comfort, while also being challenged. Students often exhibit enthusiasm, and learning can enhance their understanding and memory. (Andini et al., 2023; Ristiawan et al., 2024; Rzabayeva et al., 2024). In line with research on fun learning, the concept of deep learning knowledge is interpreted as an approach that emphasizes appreciation for the diversity of students' abilities (Afriliandhi et al., 2022; Dhamayanti et al., 2024). Create fun

learning (Lindriany et al., 2023; Octavia, 2023). The framework in deep learning comprises several components, including the dimensions of the graduate profile, learning principles, learning experiences, and learning frameworks (Purnawanto, 2022).

Teachers at Muhammadiyah Elementary School in the Mantrijeron Elementary School area recognize that deep learning is not just about transferring knowledge, but also about creating a sense of happiness for students, thereby fostering a conducive atmosphere for learning. Another theory states that deep learning is emphasized on the pillars that create an atmosphere of learning and the learning process of being aware of the Islamic aspect of students, who are aware of the principle of monotheism and realize that everything comes from Allah SWT, meaning in religious life, imbued with karimah morals and righteous deeds, and encouraging them always to be grateful in the souls of students. (Diputera & Zulpan, 2024).

By implementing deep learning, students achieve the dimensions of graduation: Faith and Piety towards God Almighty, where students have a firm belief in the existence of God, Citizenship, students have a sense of love for the homeland, critical thinking, students can think logically, analytically, and reflectively, and creativity, and can think innovatively. (Azrul & Rahmi, 2021), collaboration; able to cooperate effectively with others, independence; able to take responsibility for their own learning process and outcomes (Diputera & Zulpan, 2024; Setyawan, 2023) Students have an excellent physique, fitness, and health, and can maintain a balance between mental and physical well-being, as well as practical communication skills, including intrapersonal and interpersonal communication. (Darma & Rani, 2020).

The readiness of Muhammadiyah elementary school teachers in the Mantrijeron Elementary School area to implement deep learning, in terms of determining or selecting the proper learning method, such as the problem-based learning method, enables students to solve problems. (Fathinnaufal & Hidayati, 2020; Theobald et al., 2020) and classroom learning ensures that the learning materials delivered are in accordance with real life (Wening & Hasanah, 2020; YILMAZ, 2022) Along with the values of Islamic education, a project-based learning model is also chosen for its active learning approach, which aims to enhance students' abilities by having them produce products or works. (Dye et al., 2000; Mathew et al., 2021; Patmasari et al., 2023).

At Muhammadiyah Elementary School, this is implemented in Islamic Religion lessons by having students write Arabic and practice calligraphy as part of their student work. The deep learning approach also emphasizes the effective acquisition of the latest knowledge, including the understanding and interconnectedness of conceptual and procedural knowledge. It can be applied in new and relevant contexts. (Pratama & Artha, 2024), as well as fostering a sense of joy both innately and mentally in the learning process. In addition, according to research, deep learning also promotes the improvement of educational quality while remaining rooted in the community's culture. (Saimima, 2023), so that it is in line with and supports the achievement of the vision of education in Muhammadiyah, which is oriented towards the development of noble and moral people as a whole (Anzilni et al., 2023; Seneru & Andriyaningsih, 2023).

The changing times require Muhammadiyah teachers to adapt to new situations and remain prepared to do so. (Afista et al., 2020). Teachers should strive to be positive by stepping out of their comfort zone to continually learn and update their knowledge. (Anzilni et al., 2023; Mutalib et al., 2023). As is known, the empirical foundation of deep learning is that curriculum changes in Indonesia have occurred 11 times since 1947. Until now, the Independent Curriculum has focused on future competencies, such as creativity, collaboration, and mastery of technology. (Nursyamsiyah & Iman, 2024) So, deep learning that emphasizes mindfulness, meaning, and joy is

based on a global approach, emphasizing learning that is not only fun but also interactive and inspiring. (Andriani et al., 2025; Santika, 2021).

This is in accordance with the juridical foundation of deep learning, namely Article 31 of the 1945 Constitution that every citizen has the right to quality education, Law No. 20 of 2003 on the development of human potential of faithful, moral, and competent people, Law No. 8 of 2016 states about inclusive education for people with disabilities and Law No. 6 of 2023 Vocational and technological partnerships for adaptive learning. (Hidayati et al., 2023). This aligns with previous research that suggests teachers should prepare themselves to implement new government policies, enabling them to make learning, particularly Islamic religious lessons, enjoyable and meaningful for students. (Andriani et al., 2025) So that teachers are always ready and willing to adapt to new policies (Marhaeni, 2015; Purnawanto, 2022).

Facilities and infrastructure that should support the implementation of deep learning in Islamic education in SD Muhammadiyah in the Mantrijeron Kemantren area, such as adequate places of worship, comfortable classrooms, digital learning media such as audio-visual, libraries with book collections that are appropriate to the age and needs of students, laboratories, and school environments that support an interactive and practical learning process (Anshori et al., 2022). The use of facilities and infrastructure in implementing deep learning is carried out in a planned manner. (Nasution, 2022), starting from the planning, procurement, inventory, maintenance, and periodic evaluation by the school principal to support the achievement of Muhammadiyah's holistic and meaningful educational goals. Facilities and infrastructure in deep learning can emphasize the use of learning media (Faris Nazriansyah & Uswah Hasanah, 2025), such as the Qur'an, pictures, and some daily hadiths, which are suitable for the elementary school level in learning about the Islamic Religion. (Afriantoni, 2024; Rahmatullah & Syafri, 2025).

SD Muhammadiyah utilizes infrastructure facilities commonly employed in deep learning, including LCD projectors in each classroom, school environments, teaching aids, and books, to support the learning of Islam, Arabic, and Muhammadiyah. (Jannah & Sontani, 2018). Teachers should use learning media. (Afriantoni, 2024; Hermawan et al., 2018) This can support conscious, meaningful, and joyful learning, such as by creating simple game-based learning tools. In conscious learning, teachers can use inspirational videos to arouse students' awareness of the importance of learning. In the context of learning, it means that teachers can utilize the environment around the school, such as through project-based learning. (Sholeh et al., 2021) Teachers can use games to create a learning atmosphere that makes students happy. (Dhamayanti et al., 2024).

### **The Role of School Managers Prepares Teachers to Implement Deep Learning**

The management of Muhammadiyah Elementary School in the Mantrijeron Elementary School Area is carried out starting from the Regional Executive of Yogyakarta City, Muhammadiyah Branch Leaders and in synergy with the Yogyakarta City Education Office, managerial in this case the principal collaborates with the Foundation and the Education Office to prepare teachers in implementing deep learning learning in schools starting from Islamic teachers, Muhammadiyah teachers, Arabic teachers, and classroom teachers. At the beginning of the school year, the principal indicated that the workshop was held early because the principal considered that the deep learning approach needed to be prepared more carefully.

Through the principal's workshop, collaboration between teachers can be encouraged to understand and practice this method, allowing them to create a more professional and innovative learning community. (Siraj et al., 2018; Tuasikal et al., 2024). A study discusses the role of school

principals in supporting the implementation of positive cultural programs in schools from the perspective of an independent curriculum. (Nursyamsiyah & Iman, 2024). One of them is done by the school through workshops for teachers to improve the quality of education. (Priyambodo & Hasanah, 2021).

One theory suggests that a workshop is a program of activities designed for a community or group of people with a specific purpose to achieve a particular goal. (Sataroh et al., 2025) The theme or material presented is adjusted to the needs and interests of the workshop participants. The workshop can be arranged with several interactive activities. (Dhamayanti et al., 2024; Santika, 2021) It is typically a more comprehensive form of training, with its primary objective being to develop participants' skills, knowledge, and attitudes through hands-on practice. This aligns with Muhammadiyah's efforts in hosting a workshop on the implementation of deep learning in Muhammadiyah subjects. The workshop involved the Foundation's permanent teachers, focusing on collaboration and direct practice to apply the deep learning approach in learning activities. (Bengio et al., 2021; Mathew et al., 2021) Such as the students' activeness in group work and practicing the reading of their daily prayers.

The managerial role of Muhammadiyah elementary schools in the Mantrijeron Kemantren area in the readiness of teachers to implement deep learning by holding trainings, webinars, and workshops can affect teachers' knowledge in the concept of knowledge about deep learning, teachers choose strategies that are in accordance with the concept of deep learning, influence the attitude of Muhammadiyah elementary school teachers in the Mantrijeron Elementary School area towards the policies conveyed by the Ministry of Elementary and Secondary The Republic of Indonesia and affects the way teachers determine the learning media or infrastructure used in classroom learning. (Priyambodo & Hasanah, 2021).

The implementation of Islamic Education at SD Muhammadiyah is inseparable from the influence of school management in providing support to teachers to implement the curriculum effectively. (Rahmatullah & Syafri, 2025) That applies in Muhammadiyah. The managerial role in the context of Muhammadiyah, where the principal, as the school manager, is very important (Ilma et al., 2024) Through the typical Muhammadiyah curriculum (Al-Islam, Kemuhammadiyah, Arabic), teachers are directed so that learning does not stop at memorization, but fosters a deep understanding and reflection of Islamic values in daily life (Cahyadi et al., 2025).

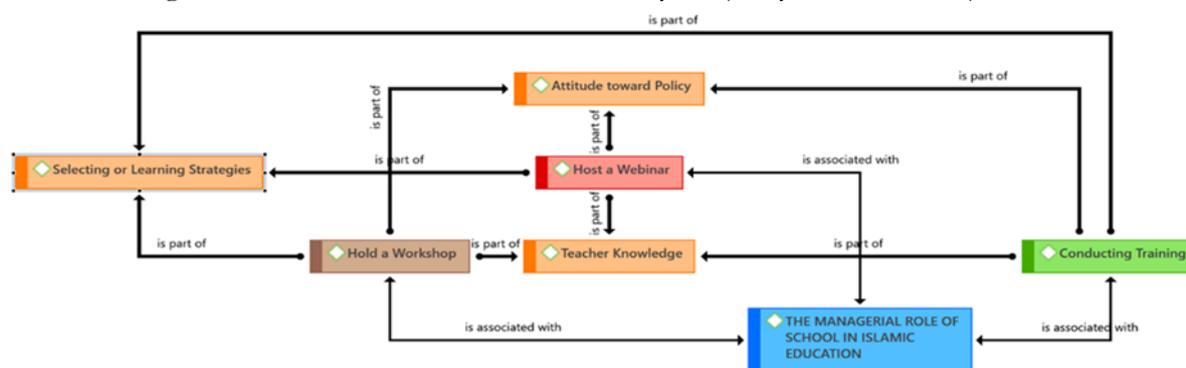


Figure 3. School Managerial Role

The steps taken by the principal and supervisor in preparing the teacher's ability to apply deep learning are very intense, especially in subjects such as Islamic Education, because, as a characteristic of Muhammadiyah, students are instilled with the value of direct practice, such as

carrying out congregational prayers, associating learning materials with Islamic values contained in core activities.

## **CONCLUSION**

Based on the results of the research analysis, it can be concluded that the readiness of teachers in implementing deep learning learning managerial analysis in Islamic education begins to understand the concept of deep learning in accordance with the statements of several teachers, Muhammadiyah elementary school teachers choose strategies in the learning design that are aware, meaningful, and encouraging to students even though they are still very minimal because they have not been fully implemented due to the limitations of examples and understanding. Components that must be integrated into the teaching module, especially in Muhammadiyah Elementary School, include applying Islamic values in classroom learning activities. The Muhammadiyah Foundation plays a role in preparing teachers to implement deep learning by facilitating several activities that support teacher knowledge and deep learning, adapted to the curriculum of Muhammadiyah schools. The foundation collaborates with school principals to hold trainings, webinars, workshops, and learning communities in schools, supporting teachers' readiness to implement deep learning.

The author hopes that research on the implementation of deep learning will not only find out how teachers' knowledge in understanding deep learning and the managerial role supports teachers' readiness, especially in Islamic education, but in the future there should be research that evaluates how learning outcomes in schools after implementing this learning whether by implementing deep learning students always learn with awareness, meaningful, and encouraging and can increase awareness to carry out the teachings of the Islamic religion. Consistency needs to be maintained by educators in implementing deep learning, not just the spirit at the beginning of the policy, but carried out continuously in accordance with the goals of national education, which ultimately creates independent, responsible, and happy students who are genuinely in accordance with the demands of the times and Islamic teachings.

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