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Deep Learning Approach as an Effective Strategy for HOTS Skill Development for Grade 2 MTs Wali Songo Students in Muthola'ah Subjects

Annida Azka Putri Salsabila[1], Neny Qurrota A'yun[2]
Madrasah Ibtidaiyah Teacher Education Study Program, Faculty of Tarbiyah,
Islamic Religious Institute Riyadlotul Mujahidin Ngabar Ponorogo
Jl. Sunan Kalijaga Ds, Dusun I, Ngabar, Siman District, Ponorogo Regency, East Java 63471, Indonesia.

Corresponding author
annidaazka0@gmail.com[1], princesscubby0910@gmail.com[2]

Abstract: Muthola'ah learning is a subject that focuses on a deep understanding of Arabic texts, which requires critical and analytical thinking skills from students. However, in practice, the learning process still tends to be textual and centered on memorization, so it has not been able to encourage the development of high-level thinking skills (HOTS). This study aims to determine the effectiveness of the deep *learning* approach in developing the high-level thinking skills (HOTS) of second-grade MTs Wali Songo students in the subject of Muthola'ah. The deep learning approach emphasizes students' deep understanding and reflective ability to interpret teaching materials. This study uses a descriptive qualitative method with data collection techniques through observation, in-depth interviews, and documentation. The subjects of the study are teachers and 2nd grade students of MTs Wali Songo who are involved in the Muthola'ah learning process. The results show that the deep learning approach is able to create an active, collaborative, and reflective learning environment. Students show improved ability to understand the meaning of the text and relate the content of the reading to the context of life. Teachers are also experiencing a shift in teaching strategies that focus more on conceptual understanding than just recitation or memorization. Thus, the deep learning approach has proven to be effective in developing students' high-level thinking skills (HOTS), especially in Muthola'ah learning, and can be an alternative learning strategy that is relevant in the madrasah environment.

Keywords: Deep Learning, Effective Strategies, HOTS Skills, Muthola'ah.

Abbreviation: Higher Order Thinking Skills (HOTS)

Introduction

Education has a central role in shaping the ability of individuals to face the challenges of an increasingly complex era. In the context of Islamic education, learning Arabic, especially Muthola'ah subjects, plays a crucial role (Harleli, n.d.). Muthola'ah, which literally means to read and understand, is a discipline that emphasizes a deep understanding of various Arabic texts. More than just translation, this subject actually requires the development of students' critical and analytical thinking skills in order to be able to interpret, evaluate, and reflect on the meanings contained in these texts. This ability is an integral part of high-level thinking skills or *Higher-Order Thinking Skills* (HOTS) (Maisaroh et al., 2023).

The development of higher level thinking skills (HOTS) in national and international curricula is recognized as the main urgency of 21st century education. Higher-level thinking skills (HOTS) include skills such as analysis, synthesis, evaluation, and creation, which are essential for students to solve non-routine problems and make informed decisions in a variety of situations (Rachmatia et al., n.d.). This ability determines the success of students at the next level of education and in their professional lives. In Muthola'ah

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learning, the ability to think at a higher level (HOTS) is realized through the ability of students to not only remember vocabulary and rules, but also formulate conclusions, relate text messages to real-life contexts, and dissect the author's structure and arguments (Maisaroh et al., 2023).

However, the reality of learning practices in many educational institutions, including madrasas, often shows that there is a gap between curriculum demands and implementation in the field. The learning process of Muthola'ah still tends to be dominated by traditional approaches that are textual and centered on memorization (recitation) (Hidayatullah, 2024). The main focus often lies only on the mastery of grammar (*Nahwu Shorof*) and literal translation, rather than on the exploration of deep meaning and critical reflection on the content of the text. This condition directly hinders the development of students' high-level thinking skills. When students are only encouraged to memorize without being encouraged to analyze or evaluate, learning outputs become less optimal in producing adaptive and reflective graduates (Nurdianto, 2020). Previous studies have shown that the lack of implementation of strategies that trigger high-level thinking skills (HOTS) contributes to students' low reasoning power and problem-solving ability, including in the context of comprehension of foreign texts (Syaifulloh, 2025).

Responding to this challenge, there is a need for learning strategy innovations that are able to transform the learning environment from one oriented towards superficial knowledge transfer to one that encourages solid conceptual understanding (Widyastuti, 2024). One relevant and promising approach to addressing such problems is the deep learning approach (*Deep Learning Approach*). In contrast to the superficial learning approach (*Surface Learning*) that focuses on memory and reproduction, *Deep Learning* Emphasizing on a thorough understanding, connections between ideas, and students' reflective ability to interpret teaching materials (Santiani, 2025).

This approach encourages students to take an active role, collaborate, and connect new knowledge with existing knowledge schemas. From an education policy perspective, the implementation of deep learning also supports global agendas such as *Sustainable Development Goals* (SDGs). Goal number 4 on quality education emphasizes the importance of ensuring everyone acquires the skills relevant to decent work, entrepreneurship, and global citizenship. Deep learning answers these targets because it focuses not only on knowledge transfer, but also on character building, ethical values, and adaptability. In other words, the deep learning approach (*Deep Learning*) is aligned with the vision of continuing education at the international level (*E-Books Deep Learning Approach in Learning*, n.d.). In the context of Muthola'ah, the deep learning approach (*Deep Learning*) can encourage students to discuss the social or historical implications of a text, rather than simply translating it (Zakiyyah, 2025).

Implementation of the approach *Deep Learning* is expected to be able to bridge the gap between the demands of the curriculum for the development of higher thinking skills (HOTS) and the practice of Muthola'ah learning which is still dominated by memorization (Hidayatullah, 2024). Improving high-level thinking skills (HOTS) through *Deep Learning* It is assumed that it will make second-grade MTs students more capable in processing Arabic text information, not only linguistically, but also philosophically and contextually. Based on the urgency of developing high-level thinking skills (HOTS) and the potential of deep learning approaches, this study is considered necessary to test its effectiveness and implementation (Aziz et al., 2024).

Therefore, this study aims to determine the effectiveness of the deep *learning* approach in developing high-level thinking skills (HOTS) of 2nd grade MTs Wali Songo students in the subject of Muthola'ah.

Materials and Methods

Learning Area

This research is a field study carried out at MTs Wali Songo which integrates two curricula, namely the national curriculum and the religious curriculum. The main focus of the research is the learning process of Muthola'ah subjects in 2nd grade students of MTs Wali Songo. This area was

chosen because learning in grade 2 MTs is already actively using Arabic and is based on the need to test the effectiveness of deep *learning* approaches in the madrasah environment, which still faces challenges in developing students' higher level thinking skills (HOTS) in learning Arabic texts.

Figure 1. Learning Activities for Muthola'ah Subjects with an In-Depth Learning Approach (*Deep Learning*).

In the learning process, the method used is still conventional, where learning activities are centered on the teacher, students only listen to explanations and then reread the material. This kind of approach tends to be limited to understanding explicit information from the text, so students are less given space to express personal ideas or views. This condition shows the importance of implementing defense strategies that can stimulate high-level thinking skills, so the location of this study is considered appropriate to test the effectiveness of the deep learning approach.

Procedure

This research uses a descriptive qualitative method. Qualitative research is research that is conducted to understand the phenomena that occur by the research subject holistically and by describing in words or language in a certain context that utilizes various natural methods (Adlini et al., 2022). Meanwhile, descriptive according to Sugiyono is research that aims to describe the existence or characteristics of one or more independent variables (independent variables) without making comparisons between these variables or investigating their relationship with other variables (Theng & MM, 2022). The data collection procedure is designed to obtain a comprehensive and in-depth picture of the implementation of the deep learning approach (*Deep Learning*) and its impact on development high-level thinking skills (HOTS) students (Prawiyogi & Rosalina, 2025).

1. Participatory Observation of the Learning Process

The data collection process began with participatory observation in the classroom during the Muthola'ah learning activities. Observations are focused on two main aspects:

a. Implementation of Deep Learning Approach

In learning muthola'ah, teachers apply two main strategies, namely inquiry and contextual learning strategies. Inquiry learning strategies are believed to be able to create a more interesting and enjoyable learning atmosphere. So, with the implementation of this strategy, students' understanding of the concepts they discover themselves increases (Rustandi, 2023). In addition, the implementation of contextual learning is defined as a comprehensive learning process. The main goal is for students to understand the subject matter in depth by connecting it to the real context of their daily

lives – be it personal, social, or cultural contexts (Fahrieyah, 2024).

The interactions and activities that occur in muthola'ah learning are of course carried out based on the principles of deep *learning* approaches that encourage a deep understanding of Arabic texts, as well as develop students' high-level thinking skills (HOTS). During the learning process, teachers not only play the role of conveying information but also facilitate students to be able to explore meaning, understand context, and develop interpretations based on the results of their reasoning.

At the beginning of the lesson, the teacher uses a spark question to trigger students' attention to the text of Muthola'ah. Instead of presenting translations or direct explanations, teachers encourage students to actively analyze the text. Students are directed to observe the structure of the language, identify unfamiliar vocabulary, and ask questions about the meaning of words or sentences that they do not yet understand. With this step, the interaction between teachers and students is well created, and there is reciprocity between the two.

Teachers also apply *discussion by group* centered on a concerted effort to express the core message of the text, discover the educational values it contains, and connect the textual material to the students' daily experiences. In these sessions, students actively collaborate by exchanging views, proposing rebuttals, and building consensus through shared analysis. This activity fundamentally requires students to process information in depth and critically in order to achieve a contextual and comprehensive understanding of the main idea of the text (Elisabethangreiny & Saragih, 2025).

b. Manifestation of Students' Higher Level Thinking Ability (HOTS)

The process of student change in higher level thinking skills (HOTS) is seen through a variety of behaviors that can be observed during the learning process. In the context of Muthola'ah learning, High-level thinking skills (HOTS) is not only reflected in students' ability to understand the literal meaning of the text, but also from their ability to analyze arguments, evaluate the correctness of information, and draw relevant conclusions (Maisaroh et al., 2023c).

The first aspect of high-level thinking skills (HOTS), which is the ability to analyze, is seen when students are able to break down the content of the text into essential components. This includes activities such as identifying key ideas, finding logical connections between sentences, and understanding the purpose you want to convey (Witdianti, 2023). Students demonstrate a high-level thought process when they not only identify, but are also able to explain the reasoning behind the structure of a language or a meaning, and relate it relevantly to the context of the text or their personal experience.

The second aspect that arises in learning evaluation, students are able to compare opinions between groups, providing an assessment of the arguments presented. This ability to evaluate information emerges in group discussion sessions, when responding to a friend's opinion with a logic supported by evidence from the text (Sinaga et al., 2024).

The third aspect is the student's ability to create conclusions based on the content of the text and considerations of social and real-life contexts. Students who have demonstrated high-level thinking skills (HOTS) is able to interpret the messages in the text more broadly, and then relate them to the situation they are experiencing at school, or the surrounding environment. This shows that students have internalized the meaning of the text and applied it in a broader context (Endrayanto, 2021).

Table 1. Participatory Observation Checklist.

A. Implementation of Deep Learning Approach				
Observation Components	**Key Indicators Observed**	**Yes**	**Not**	**Information**
1. Use of Inquiry Strategies	Teachers use starter questions at the beginning of learning	✓		The teacher uses the spark questions to trigger students' attention to the Muthola'ah text.
2. Use of Contextual strategies	Students are encouraged to come up with concepts on their own (instead of receiving direct explanations)	✓		The teacher encourages students to actively analyze the text, instead of presenting translations or direct explanations.
	There is good interaction and good lead between teachers and students	✓		Good interaction and reciprocity are created because the teacher encourages students to analyze and ask questions
	Teacher/Student connects the text material with the real context of daily life	✓		Teachers implement group discussions centered on trying to connect the text material with the students' daily experiences.
3. The Role of Teachers as Facilitators	The teacher encourages students to explore the meaning and understand the context of the text	✓		Teachers not only play the role of conveyors of information but also facilitate students to explore meaning and understand the context
4. Active Text Analysis Activity	The teacher does not directly present a direct translation/explanation.	✓		The teacher does not present translations or direct explanations, but rather encourages students to analyze.
	Students observe the structure of the text language	✓		Students observe the structure of the text language
	Students identify unfamiliar vocabulary			Students are directed to observe the structure of the language.
5. Implementation of *Discussion by Group*	Students ask questions about the meaning of words/sentences that they have not yet understood.	✓		Students are directed to ask questions about the meaning of words or sentences that they do not yet understand.
	There is active collaboration	✓		Students actively collaborate, exchange views, and build

				consensus.
B. Manifestation of Students' Higher Level Thinking Ability (HOTS)				
1. Analytical Ability (C4)	Students are able to break down the content of the text into essential components	✓		Analytical ability is seen when students are able to break down the content of the text into essential components.
	Students are able to identify the main ideas of the text	✓		Students are able to identify key ideas.
	Students are able to find logical connections between sentences	✓		Students are able to find logical connections between sentences.
2. Evaluation Ability (C5)	Students are able to explain the reasoning behind the structure of language/meaning	✓		Students are able to explain the reasoning behind language structure or meaning.
	Students are able to compare opinions between groups/friends	✓		Students are able to compare opinions between groups
	Students are able to give an assessment of the arguments presented (supported by text)	✓		Students give an assessment of the arguments presented (supported by evidence from the text).
3. Creative Ability/Critical Thinking (C6)	Students are able to respond to friends' opinions with logic	✓		Students respond to friends' opinions with logic.
	Students are able to draw relevant conclusions	✓		Students draw relevant conclusions.
	Students are able to interpret text messages broadly	✓		Students draw conclusions based on the content of the text and the context.
	Students are able to relate / apply the meaning of the text broadly	✓		Students are able to interpret the messages in the text more broadly.
	Students are able to relate / apply the meaning of the text in a broader context (school/environment)	✓		Students associate text messages with the context of life.

Table 1. The Participatory Observation Checklist shows that the implementation of the deep learning approach (*Deep Learning*) and the manifestation of students' high-level thinking skills (HOTS) have been well implemented during the Muthola'ah learning process. In its implementation, teachers apply an inquiry strategy by using starter questions at the beginning of learning to trigger students' attention to the Muthola'ah text. Teachers also use contextual strategies, where students are encouraged to actively analyze the text instead of just receiving translations or direct explanations. This creates good interaction and reciprocity, and teachers apply group discussions to connect the text material with the real-life context of students' daily lives. The role of the teacher shifts to becoming a facilitator who encourages students to explore

meaning and understand the context of the text, not just convey information (Jufri et al., 2023). Active text analysis activity is seen when students are directed to observe language structure, identify unfamiliar vocabulary, and ask questions about the meaning of words or sentences that they do not yet understand. In addition, the implementation of group discussions (*discussion by group*) shows active collaboration where students exchange views and build consensus (Hijriyah, 2018).

The manifestation of students' higher level thinking skills (HOTS) appears in three main aspects: analyzing (C4), evaluating (C5), and creating (C6). Analytical skills are seen when students are able to break down the content of the text into essential components, identify key ideas, and find logical connections between sentences (Aji, 2020). Meanwhile, evaluation ability is shown when students are able to explain the reasoning behind the structure of language or meaning, compare opinions between groups, and provide an assessment of the arguments presented supported by evidence from the text. Finally, the ability to create/think critically can be seen from the ability of students to respond to the opinions of friends with logic, draw conclusions based on the content of the text and context, interpret the message in the text more broadly, and relate or apply the meaning of the text in a broader context (school/environment).

2. In-Depth Interview

In-depth interviews were conducted with the research subjects, namely the Muthola'ah subject teacher and representatives of 2nd grade students of MTs Wali Songo. The purpose of the interview is to dig into data that is not directly observed:

a. Teacher

   According to Muthola'ah subject teachers, the application of the deep learning approach has a positive impact on the learning process and outcomes of students. With this approach, students become more active, and the learning atmosphere is more enjoyable, because students have a great opportunity to actively ask questions, discuss together and try to understand the meaning of the text in depth.

   Behind that, teachers admit that there are several challenges in its implementation. The main challenge is the difference in students' ability to follow the deep learning process. Some students are still passive and need longer to adapt. In addition, teachers must prepare materials and ignition questions more carefully so that the discussion runs effectively.

   Even so, the application of the deep learning approach in the dissemination makes teachers change strategies to be better and more effective. If previously learning focused a lot on lectures, now teachers more often use inquiry models, group discussions, and contextual approaches. With this change in strategy, teachers feel that learning becomes more lively and provides space for students to develop critical and creative thinking skills.

b. Student

   As a result of student interviews, learning with a deep learning approach makes it easier for them to understand the content of the Muthola'ah text because they can not only read but also discuss with friends, find meaning, and explain Again in their own language. Students' motivation to learn is increased, so they can ask questions, work together in groups, and express opinions.

   They also said that this approach makes them dare to think critically and analytically. Students learn to analyze the messages in the text, find reasons or evidence from the reading, and connect them to real situations. Although challenging, they admit that this way of learning makes understanding more profound than the usual lecture method.

3. Learning Outcome Documentation

Documentation was collected from various sources related to the learning process. These include:

a. Learning Implementation Plans (RPPs) used by teachers to see a shift in strategic focus.

   The RPP documentation was used by the researcher to see a shift in the focus of teachers' teaching strategies. This change in strategy supports the findings in the results and discussion sections, where teachers acknowledge a change in teaching strategies

that now focus more on conceptual understanding (relating the content of the text to contemporary issues) rather than just grammatical mastery. This change also makes teachers more likely to use inquiry models, group discussions, and contextual approaches, which shift away from the focus of previous lectures.

b. Students' notes and assignments containing the results of analysis, interpretation, or reflection on the Muthola'ah text to assess the improvement in the quality of their conceptual understanding and higher-level thinking skills (HOTS).

The use of this documentation is in line with the results of data analysis, where:

1) Student interviews show that they become easier to understand the reading because they are directly involved in the process of interpretation and discussion.
2) The results show that students' creative abilities (C6) are seen when they are able to draw new conclusions that are then linked to real situations relevant to their lives.

Data analysis

The qualitative data collected (from observations, interviews, and documentation) are analyzed using an interactive analysis model (as proposed by Miles and Huberman), which consists of three main stages that are carried out interactively and continuously (Miles et al., 1996):

1. Data *Reduction*

At this stage, the data is categorized and focused according to the needs of the research. Observations show that there is a change in student activity after a change in the approach to deep learning (*Deep Learning*), such as the ability to analyze texts and conclude the content of the reading. The teacher's interview summarizes that students become more active in asking questions and dare to explain the content of the text. Student interviews show that they understand the reading more easily because they are directly involved in the process of interpretation and discussion (Sandika et al., 2025).

2. Data Display

The data that has been reduced is compiled in the form of a narrative description. Observations of teacher interviews, and student interviews consistently show that the deep learning approach (*Deep Learning*) reminds participation, the ability to think deeply, and cooperate in understanding the Muthola'ah technique. Group discussions and reflection are the elements that help students the most in understanding reading (Ramadan et al., 2025).

3. Conclusion Drawing/Verification

Overall, the data show that the deep learning approach approach (*Deep Learning*) able to create a more active and challenging learning environment, thus having a significant effect on improving Level-Thinking Ability tall (HOTS)) students. Students become more engaged, able to connect information, and generate a deeper understanding of the text being studied (Panca & Parisu, 2025).

Results and Discussion

This deep learning *approach learning learning* strategy has a positive impact on student learning development. The application of deep learning *approaches in* Muthola'ah learning makes a significant contribution to the development of Shiva's higher level thinking skills (HOTS). Based on data analysis, students' ability to think analytically begins to appear by identifying the main idea, information presentation pattern, and purpose of the text writer. Creativity is also seen when students are able to draw new conclusions that are then related to real situations that are relevant to their lives.

Thus, the success of learning depends on how the learning strategy is developed to improve students' deep thinking skills. The results of this study are based on the effectiveness of the deep learning approach *in improving students' high-level thinking skills* (HOTS) in Muthola'ah learning at MTs Wali Songo, namely:

Changing Learning Environments: From Textual to Reflective

The implementation of the deep learning approach significantly changed the atmosphere and interaction mechanism in the Muthola'ah classroom. The results of the observations showed a shift in focus from the process of recitation and passive memorization to a more active, collaborative, and reflective learning environment. Before implementation, learning is dominated by teacher explanations and *word-by-word* translation. After the adoption of *the deep learning approach*, teachers began to implement strategies such as *think-pair-share* or focused group discussions that required students to *interpret* and *evaluate the* implicit meaning of the text, not just its literal meaning (Figure 1).

After the implementation of deep learning strategies, the interaction between students becomes stronger. This shows that student learning transforms into more reflective by using *student-centered* in learning, where students actively play a role in identifying the main ideas of the text, comparing opinions between groups, and conducting final reflections to conclude their understanding independently. The learning environment becomes more open, collaborative, and oriented towards the development of higher-level thinking skills (HOTS) (Adiputra & Hidayah, 2025).

The findings of this change are in line with the view of Deputera and Zulpan who stated that the deep learning approach (*Deep Learning*) provide encouragement for students to understand the meaning contained in the material presented and foster the habit of reflective thinking. The effectiveness given to this approach is certainly very helpful for learning that is connected to the real context of the social situation in their own environment (Nadawina et al., 2025).

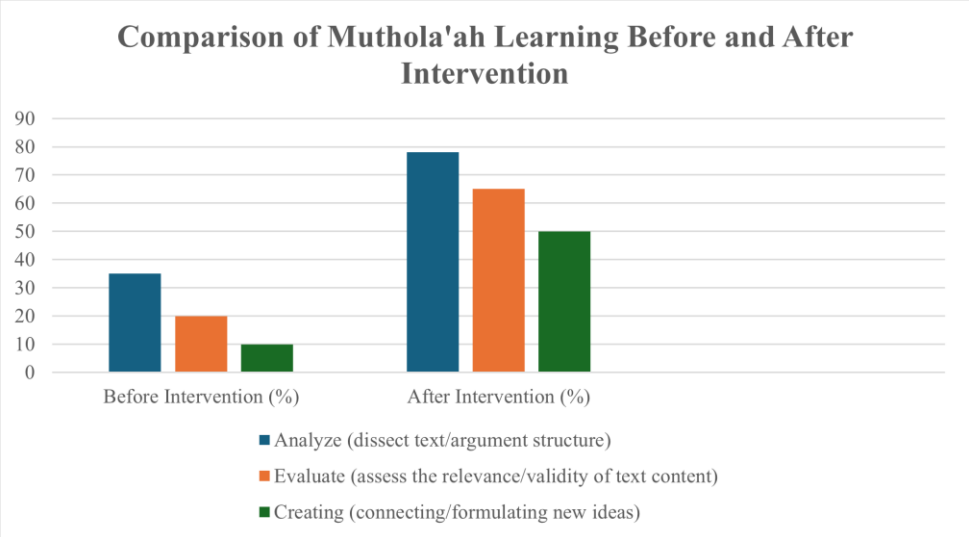

Figure 2. Comparison of Muthola'ah Learning Before and After Intervention.

Remarks: The diagram above illustrates the increase in time dedicated to collaborative and reflective activities (deep learning) compared to the lecture and memorization methods (surface learning) before and after the intervention.

Learning interventions have succeeded in improving students' ability in Muthola'ah learning. The comparison chart (Figure 2), shows a drastic spike in all indicators of *High Order Thinking Skills* (HOTS), namely the ability to analyze, evaluate, and create. This significant improvement proves that the implementation of the method not only makes students better at understanding the content of ordinary texts, but also succeeds in changing the essence of student interaction with teaching materials. The transformation from a low initial score to a much higher achievement post-intervention indicates that students are now more deeply engaged in the process of critical and creative thinking.

These results show that the learning atmosphere in the classroom changes to be more active. This text-focused learning develops into a process that becomes more lively. Students no longer just read and translate, but begin to discuss, exchange opinions, and reflect on their understanding. In other words, the changes that have occurred illustrate a shift from a textual learning environment to a more participatory, cooperative, and meaning-oriented atmosphere.

This change is supported by the findings of the interview. Teachers acknowledge that there is a change in teaching strategies that focus more on conceptual understanding (relating the content of the text to *maqasid sharia* or contemporary issues) rather than just grammatical mastery. The adoption of *a deep learning* approach requires teachers to ask *higher-order* questions (e.g., "Why do writers use this diction?" or "What are the implications of this text in our social context?") rather than factual questions.

Table 2. Indicators of Students' Higher Level Thinking Skills (HOTS) in Muthola'ah Tasks.

Indicators of High-Level Thinking Skills (HOTS)	**Before Intervention (%)**	**After Intervention (%)**	**Key Qualitative Changes**
Analyze (dissect text/argument structure)	35	78	Students are able to identify *the author's goals* and *point of view*.
Evaluate (assess the relevance/validity of text content)	20	65	Students begin to provide *arguments* supported by *arguments* based on text and context.
Creating (connecting/formulating new ideas)	10	50	Students are able *to relate the* text to current social/religious issues.

Note: Percentage increase in students' higher level thinking skills (HOTS) indicators in Muthola'ah assignments*: Significant increases occurred in all indicators, demonstrating the effectiveness of deep learning approaches* in *triggering higher thinking skills* (HOTS).

Significant improvements in all indicators showed the effectiveness of the deep *learning approach* in triggering students' high-level thinking skills (HOTS).

1. Analyze (C4)

This indicator has increased from 35% to 78%

This improvement reflects the students' ability to dissect the structure of Arabic texts. Students are no longer just translating, but are able to identify the main idea, information presentation pattern, and the purpose of the text writer as well as the author's point of view. This is in line with the change in the teacher's strategy who now asks "Why does the writer use this diction?" instead of factual questions.

2. Evaluate (C5)

This indicator has increased very drastically, from 20% to 65%.

The ability to evaluate appears in group discussion sessions, where students are able to compare opinions and give ratings on arguments presented by friends. This improvement suggests that students are able to provide arguments supported by arguments based on text and context, rather than simply passively receiving information.

3. Creating (C6)

This indicator shows the lowest level initially, but jumps from 10% to 50%.

This is a manifestation of the student's high-level thinking skills (HOTS). Creativity is seen when students are able to draw new conclusions that are then connected to real situations relevant to their lives. This improvement is also characterized by the ability of students to relate the text to current social/religious issues and interpret the messages in the text more broadly. This proves that students have internalized the meaning of the text.

The documentation of learning outcomes which includes the Learning Implementation Plan (RPP) and student notes/assignments serves as important evidence that supports the conclusion of the

research regarding the effectiveness of *the deep learning* approach in developing students' higher level thinking skills (HOTS).

1. Learning Implementation Plan (RPP)
   a. Changes in Teacher Teaching Strategies
      The results show that the adoption of a deep learning approach requires teachers to change teaching strategies. If previously learning was dominated by lectures and memorization, now teachers apply better and more effective strategies, focusing on conceptual understanding.
   b. Implementation of Deep Learning Approach
      Changes to the lesson plan inevitably reflect the implementation of inquiry and contextual strategies, as well as the use of *higher-order questions* (e.g., "Why did the author use this diction?") rather than factual questions. This change directly transforms the learning environment from a textual one to an active, collaborative, and reflective one. This is supported by the data in the diagram (Figure 2) which shows an increase in all indicators after the intervention, thus confirming that the transformation of the learning environment is in line with the increase in student achievement.
2. Student Notes and Assignments
   Student notes and assignments, which contain the results of analysis, interpretation, or reflection, are used to assess the improvement in the quality of students' conceptual understanding and higher-level thinking skills (HOTS). This correlation is evident in the increase in the higher level thinking ability (HOTS) indicator:
   a. Improved Analytical Ability (C4)
      Students' assignment notes show they are able to identify the main idea, information presentation patterns, and goals of the text writer. The increase in this indicator from 35% to 78% is proof that students are no longer just translating, but capable of dissecting the structure of texts.
   b. Improved Evaluation Ability (C5)
      Students' assignments and interpretive notes reflect their ability to provide arguments supported by arguments based on text and context, a drastic increase from 20% to 65%.
   c. Improved Evaluation Ability (C5)
      Students' assignments and interpretive notes reflect their ability to provide arguments supported by arguments based on text and context, a drastic increase from 20% to 65%.

Overall, this documentation provides objective evidence that reinforces the results of interviews and observations that deep learning *approaches have* proven to be effective in developing students' higher level thinking skills (HOTS).

Effectiveness of *Deep Learning* Approach

The results of the study collectively confirm that the deep learning approach has proven to be effective in developing high-level thinking skills (HOTS) students in the subject of Muthola'ah. This effectiveness comes from the emphasis on deep learning approaches (*Deep Learning*) on conceptual understanding and self-reflection (Maisaroh et al., 2023d). In the context of learning Arabic, this approach has succeeded in breaking the dominance of memorization which has been the main obstacle to development high-level thinking skills (HOTS). Students learn to see the text as a tool for exploration of knowledge, not as the end goal of learning (Husin, 2024).

The increase can also be seen from the results of participatory observations carried out throughout the learning process. The students seemed more enthusiastic about participating in class discussions, were able to express their views with confidence, and showed a willingness to delve deeper into the subject matter. They no longer just remember the facts conveyed by the teacher, but are able to relate them to real situations in daily life. Some students began to actively ask critical questions and express simple arguments that showed a deep understanding of the content of the material presented (Rasyidi, 2024).

As a supporter of the deep learning approach (*Deep Learning*), The existence of learning activities

with exploration and collaboration methods makes learning activities more effective (Khotimah & Abdan, 2025). In his training, students are able to express what they know about the learning materials that have been learned and what will be learned (Sutikno, 2021). The teacher takes the first step by asking questions related to learning, whether it has happened or what will happen in the future.

In addition to improving academic understanding, the deep learning approach strategy developed by MTs Wali Songo, provides an example of real implementation to carry out meaningful learning transformation. This success is proof that limited resources are not a barrier to implementing learning innovations. Strong commitment from all school components is one of the supports for this success accompanied by the implementation of the right strategy.

Discussion

The results of the study show that the application of the *Deep Learning* in learning Muthola'ah has a positive impact on students' high-level thinking skills (HOTS). Students are not only able to understand the content of the text better, but also demonstrate the ability to analyze, evaluate, and draw conclusions independently. These findings indicate that the deep learning approach (*Deep Learning*) effectively improve the quality of the learning process, especially in deeper thinking skills (Dewindri & Sa'diah, 2025).

The increase occurred due to the learning approach of deep learning (*Deep Learning*) requires students to be actively involved, discuss, convey their knowledge, and reflect on their understanding. This approach helps connect the learning students with their own experiences so that the understanding formed becomes more meaningful (Moses, 2025). This is in line with Sugiyanto's view, which states that deep understanding cannot be achieved through mechanical exercises such as *drill and kill,* but requires a challenging learning process and encourages students to think critically (Prakoso et al., 2024).

These findings explain that learning strategies that emphasize students' active involvement tend to be more effective in improving higher-level thinking skills. This research also makes a new contribution because it shows that the deep learning approach (*Deep Learning*) is well applied in the context of Arabic language learning, especially Muthola'ah, which has been using more memorization and explanation methods in lectures (Yetti, 2025).

From the results of the study, it can be seen that the deep learning approach (*Deep Learning*) has the potential to be an alternative learning strategy that can be applied in madrasas. This approach not only helps students understand the material, but also develops thinking skills that are essential for future learning challenges (Mahardika & Jaya, 2025). However, this study has limitations in the number of samples and the relatively short research time. Therefore, further research is recommended to be carried out with a larger sample and a longer time so that the results obtained are more comprehensive.

Conclusion

Based on the results of the research and discussion that has been presented, it can be concluded that the deep learning approach has proven to be effective in developing high-level thinking skills (HOTS) of second-grade MTs Wali Songo students in the subject of Muthola'ah. This approach successfully transforms a learning environment that was originally textual and memorization-centered into an active, collaborative, and reflective environment. Students show significant improvements in the ability to analyze, evaluate, and relate the meaning of Arabic texts to real-life contexts, which is a key indicator of higher-level thinking skills (HOTS). Therefore, the deep learning approach is a relevant learning strategy and can be recommended as an innovative alternative to improve the quality of Muthola'ah learning in the madrasah environment.

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