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# The Effectiveness of the Use of the Meaning of Gundul Pegon Kudus Fathul Qorib in Improving the Religious Literacy of Students: A Quasi-Experimental Study at Al Falah Islamic Boarding School

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## ABSTRACT

The use of the meaning of gundul Pegon is an important part of the pesantren's literacy tradition, but its pedagogical effectiveness has not been empirically proven. This study aims to test whether learning based on the meaning of gundul Pegon can improve the religious literacy of students. The research method uses a quantitative approach with a quasi-experimental pretest–posttest control group design, involving 60 students who are divided into experimental and control groups, using Likert scale instruments, objective tests, and learning activity logs; Data analysis was carried out through paired t-assays, independent t-assays, and ANCOVA to control for initial differences. The intervention procedure lasted for four sessions of learning the meaning of gundul in the experimental group, while the control group received conventional learning without interlinear; the validity and reliability of the instrument are ascertained through expert judgment and Cronbach's  $\alpha \geq 0.70$ . The main results showed that the experimental group experienced a significant increase in religious literacy compared to the control group. In conclusion, learning the meaning of Pegon gundul has proven to be effective as a strategy to increase understanding of religious texts. This research makes an important contribution by presenting quantitative evidence that strengthens Pegon's pedagogical position in modern pesantren education.



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## Introduction

Pegon is a writing system that adapts Arabic letters to write regional languages in the Islamic boarding school environment. In the context of Islamic science in the archipelago, Pegon functions as a means of access to classical Islamic texts, which are the main source of learning in Islamic boarding schools, as well as a medium of connection between ancient scientific traditions and learning practices in the modern era. Previous studies have shown that Pegon Arabic texts remain the main teaching material in the yellow book in madrassas and traditional Islamic boarding schools, so that Pegon has an important position in maintaining the continuity of local Islamic literacy in Indonesia.[1], [2] Historically, the tradition of Pegon writing and its use as a learning

medium shows a central role in the inheritance of Islamic knowledge, especially through works of tafsir and fiqh written in the Pegan script.[3], [4]

In the tradition of learning in Islamic boarding schools, Pegan cannot be separated from the practice, The Meaning of Gundul, namely the tradition of writing interlinear meanings that help students understand classical Arabic texts. Gundul is not just a literal translation, but a process of contextualizing meaning that involves the social, cultural, and historical background of the pesantren. Through this practice, students not only read the text, but also interpret the meaning according to the framework of understanding that lives in their environment. Some qualitative studies on literacy and scientific traditions of Islamic boarding schools confirm that the way students read the yellow book contextually, including through The Meaning of Gundul, shapes the way they build their own knowledge and scientific identity.[5], [6] This mechanism shows the integration between classical scientific sources and local contexts that are typical of learning in modern Islamic boarding schools.[7]

In various traditions of Islamic scholarship in the Indonesian Archipelago, the Arabic Pegan script holds an important position as a literacy medium that bridges religious texts with local languages. The Pegan system not only adapts Arabic letters to the phonological needs of local communities but also presents distinctive sound structures, letter patterns, and diacritical marks that differ from standard Arabic orthography. This uniqueness makes Pegan not merely a writing system but an instrument that facilitates the comprehension of texts, particularly religious works that are recited, taught, and transmitted across generations. Consequently, mastery of Pegan plays a crucial role in shaping students' religious literacy, especially within learning contexts that require interlinear interpretation strategies such as meaning gundul[8].

Furthermore, Pegan has a broader meaning than just a writing system. It is a form of preservation of Islamic literacy that is typical of the archipelago and plays a role in the formation of the scientific identity of students and Islamic boarding schools. Through Pegan, students gain access to classical books that are at the core of the Islamic educational tradition, so that their use also strengthens the identity of pesantren as a center for the transmission of Islamic knowledge. Previous studies confirm that Pegan facilitates the teaching of various disciplines such as fiqh, nahwu, and local manuscript-based tafsir.[2], [3], [5] In the contemporary context, Pegan continues to survive as part of the traditional Islamic literacy ecosystem, which is now transforming along with the dynamics of digitalization and modernization of education.[9], [10]

In line with these developments, Islamic boarding schools are now faced with the need to maintain scientific traditions while adapting to the demands of the times. Various recent studies highlight that pesantren play an important role in shaping the character and science of students through the integration of classical traditions and modern innovations. Integrative learning approaches, such as blended learning, the use of information technology, and the strengthening of digital literacy, are part of efforts to maintain the relevance of pesantren without losing their scientific identity.[7], [9], [10] In this context, the revitalization of the yellow book through Pegan reading training and the digitization of ancient manuscripts has been proven to increase students' literacy and interpretive ability to religious texts.[11], [12] More than that, Pegan literacy practices and The Meaning of Gundul are considered to be able to strengthen the literacy culture of Islamic boarding schools based on the values of *Tawassuth*, religious moderation, and respect for local traditions.[13]

The latest empirical findings also show a link between the preservation of Pegan and the formation of the scientific identity of students in Islamic boarding schools. Studies on the dynamics of pesantren interpretation, 21st-century curriculum reconstruction, and digital literacy in modern pesantren indicate that Pegan has an important role in maintaining the continuity of religious knowledge, while adapting to the development of new technology and learning media.[3], [5], [6], [14], [15] This shows that Pegan remains relevant as a means of Islamic literacy in the midst of the current wave of educational modernization, and its sustainability is an important indicator for the existence of the scientific tradition of Islamic boarding schools.

Overall, the studies that have been conducted show that Pegan is a writing system that not only functions as a written communication tool but also as an epistemological instrument that connects regional languages with classical Islamic scientific traditions. Through the practice of gundul meaning, students build an understanding of classical Arabic texts by considering the cultural and social context that surrounds them. Pegan's role in maintaining the continuity of scientific traditions, strengthening the identity of Islamic boarding schools, and adapting to technological innovations shows that Pegan is a living and dynamic element of literacy. These facts are an important basis for quantitative research that aims to empirically test the effectiveness of the use of the meaning of gundul Pegan in improving the religious literacy of students in the Islamic boarding school environment.

Although various previous studies have emphasized the role of Pegan as a medium for the transmission of Islamic knowledge and a guardian of the continuity of Islamic boarding school literacy, empirical studies that quantitatively test the effectiveness of the practice, The Meaning of Gundul, and the increase in religious literacy of students are still very limited. The scope of previous research was dominated by qualitative, descriptive, or philological approaches that focused more on the depiction of the phenomenon of Pegan culture-literacy and

the characteristics of the yellow book text without being accompanied by controlled pedagogical effect testing or through a quasi-experimental design. This limitation creates a conceptual gap between descriptions of literacy traditions and empirical evidence of impact, The Meaning of Gundul to improve religious understanding and literacy skills.[16], [17], [18]

Some previous studies have emphasized the importance of Pegan as a means of learning the yellow book and a medium for the transmission of Islamic science. Still, most of them do not include experimental designs that can objectively assess their pedagogical influence on students' learning outcomes, such as the ability to read Pegan texts, understanding fiqh, and literacy of the yellow book.[16], [17] As a result, there is still no statistical evidence showing a causal relationship between the use of The Meaning of Gundul in learning and improving religious literacy. This condition makes it clear that there is a Methodological gap in Islamic Boarding School literacy research, which until now is still dominated by a descriptive qualitative approach.[19]

In addition, a review of previous research designs also shows limitations in terms of methodology and analysis. Most of the existing studies did not use quasi-experimental designs or adequate control models to assess the effects of treatment on learning outcomes. This leads to weak causal inferences that can be drawn from the results of the research. In the context of Islamic boarding school modernization and the integration of educational technology, the need for stronger research designs is becoming more and more urgent, especially so that the preservation of the Pegan tradition can be accompanied by an empirical evaluation of its effectiveness in the digital era.[16], [17]

Regionally and historically, Pegan has long been used as a medium of scientific transmission in Islamic boarding schools in Java and Madura. However, quantitative studies that directly assess the extent of the practice, The Meaning of Gundul, can improve the religious literacy of students is still very minimal.[20] Literature that discusses the literacy of the yellow book, fiqh, and the preservation of the intellectual heritage of pesantren highlights more philological and historical aspects than its pedagogical effects. Therefore, an experimental research design is needed that can assess the impact of The Meaning of Gundul on the cognitive achievements of students, for example, the ability to read Pegan texts, translate the contents of books, or understand the structure of fiqh argumentation, which is the core of learning in pesantren.[17], [20]

This research departs from the contradiction between the dominance of qualitative research that is descriptive and the absence of quantitative evidence regarding effectiveness, The Meaning of Gundul to learning outcomes. By making The Meaning of Gundul a treatment variable in a quasi-experimental design, this study seeks to assess its pedagogical effect on students' religious literacy empirically, to bridge the transition from a descriptive approach to an inferential approach in the study of traditional Islamic education.[16], [17] This creative approach is realized through the division of treatment and control groups, where interventions in the form of learning-based learning, The Meaning of Gundul, are applied systematically to assess its influence on the cognitive, affective, and contextual dimensions of student literacy.[21]

In addition, this research is also based on global and national trends in the study of Islamic literacy that are rooted in local traditions. Pegan-based Islamic literacy is now an important focus in the study of Islam in the archipelago, especially as an effort to preserve the scientific heritage of Islamic boarding schools so that they remain relevant in the midst of the digitalization of education.[22] Design of quasi-experimental research that measures effectiveness. The Meaning of Gundul not only answers empirical needs but also contributes to the trend of measurable policy and pedagogical development in modern Islamic boarding schools.[16], [17] Urgent need to preserve Pegan as part of the archipelago's Islamic literacy identity in the midst of digital transformation. Modernization of the curriculum and the use of technology in pesantren learning has the potential to shift the Pegan literacy tradition if it is not accompanied by empirical evidence that confirms its effectiveness as a pedagogical strategy.[17] Therefore, this research is designed to provide a scientific basis for efforts to preserve the Pegan tradition, while strengthening its position in the contemporary Islamic education system.[16]

To fill this gap, the proposed research design uses a quasi-experimental approach with two groups: the treatment group that uses The Meaning of Gundul as an independent variable, and a control group that did not use the intervention. Outcome measures include yellow book literacy scores, Pegan reading ability, fiqh comprehension, and digital literacy indicators relevant to the modern context of Islamic boarding schools. The analysis is carried out by test gain score and *ANCOVA* to control the initial variables, as well as test the validity and reliability of instruments developed based on Pegan literature and yellow book literacy.[16], [17] This research also upholds the ethical principles of research by considering cultural and religious sensitivities as well as the consent of the pesantren and guardians of students.[23], [24], [25]

The transformation of the Islamic education landscape in the digital era requires a comprehensive evaluation of traditional methodological heritage in the context of modern technology-based learning, interactivity, and digital literacy. In the midst of this paradigm shift, classical learning practices such as the Meaning of Peggy-Style face challenges as well as opportunities to adapt. A deep understanding of how The Meaning of Gundul can contribute to strengthening religious literacy is important, not only to preserve the

tradition of Islamic boarding schools, but also to answer the needs of Islamic education in the 21st century. Thus, this study is directed to empirically assess how The Meaning of Peggy-Style can serve as an effective pedagogical strategy in the context of learning that is increasingly integrated with technology and digital media[26], [27], [28], [29].

Recent studies have shown that contextualizing religious texts through the integration of technology and active learning approaches can increase learning motivation, collaboration, and access to knowledge sources. This indicates that traditional methods, such as The Meaning of Gundul, still have strong relevance when combined with modern learning strategies. However, until now, there is no empirical evidence that directly measures the impact of The Meaning of Peggy-Style to increase religious literacy. Therefore, experiment-based or quasi-experimental research is needed that can objectively test its effectiveness in the context of contemporary Islamic education.[27], [28]

The modernization of Islamic education also requires the integration of traditional heritage and innovative learning practices in order to form a complete religious literacy without abandoning local spiritual and cultural identity. In this case, The Meaning of Peggy-Style, which is historically rooted in the context of Javanese pesantren as a linguistic-cultural element that has the potential to bridge tradition and modernity.[30], [31], [32] Examining how these practices can contribute to religious literacy in technology-based learning will help in the formulation of curriculum policies that are more contextual and oriented to the needs of the times.[33], [34], [35]

Theoretically, this research is based on the approach of social constructivism, contextual learning theory, and digital literacy. All three emphasized that religious literacy does not only include the ability to read spiritual texts, but also includes the ability to interpret, relate texts to contemporary issues, and argue ethically and reflectively.[26], [30], [32] Within this framework, The Meaning of Peggy-Style serves as a lighter meaning-making which allows students to connect classical texts with real-life contexts. Linguistic and cultural elements are inherent in practice. The Meaning of Gundul. It is expected to enrich the process of internalizing meaning, as well as activating the cognitive, affective, and contextual aspects of religious literacy.[36], [37], [38], [39]

Based on this theoretical framework, the research hypothesis is formulated as follows: The use of the meaning of gundul Pegan significantly increases the religious literacy of students compared to learning without the use of the meaning of gundul. This hypothesis is built on the assumption that the active involvement of students in translating and interpreting texts through the system *Squirt* will increase the understanding of meaning, reflectivity, and the relationship of texts with their socio-religious reality.[26], [28]

The main objective of this study is to empirically assess the effectiveness of traditional methods The Meaning of Peggy-Style in improving the religious literacy of students in the context of modern education. This study seeks to build a bridge between conventional heritage and technological approaches by measuring the relative effects of learning-based learning, The Meaning of Gundul, compared to traditional learning without interlinear. In particular, this study aims to: (a) assess the difference in the increase in religious literacy scores between the two groups; (b) describe the mechanism of how The Meaning of Gundul influencing the process of interpreting texts and religious understanding; and (c) explore contextual factors such as technological support, learning environment, and teachers' perceptions of the effectiveness of the method.[27], [28], [31], [32]

Operationally, the dependent variables of this study are Religious Literacy, which is measured through indicators of theological understanding, interpretive ability of religious texts, and ability to relate Islamic teachings to social contexts and daily life.[40] The independent variables are The Importance of Understanding the Meaning of Squirrels in the learning process, which includes the frequency of application, the type of activity *Squirt*, as well as how to integrate it with the teaching materials of the Yellow Book.[32], [41] The moderator factors to be studied include technology support, teacher training, and a learning environment based on blended learning, and students' perception of relevance. The Meaning of Gundul by Era Modern.[42], [43], [44], [45]

The recommended research design is a quasi-experiment with the pretest–posttest control group model, where one group follows learning with an intervention, The Meaning of Peggy-Style, and the other group learned by conventional methods. The difference in religious literacy scores before and after treatment will be analyzed using a test *t* and ANCOVA to handle the initial variable.[27], [28] The measurement instrument includes a religious literacy rubric that assesses theological understanding, text interpretation, social relevance, and the application of Islamic values in real life.[40], [46] To enrich the understanding of learning mechanisms, qualitative data from teacher interviews and classroom observations can be used as a complement.

The practical implications of this study are vast. If the hypothesis is proven, the results will show that The Meaning of Peggy-Style can be used as an effective component in a modern religious literacy curriculum that combines tradition with technological innovation. These findings can encourage the development of learning modules that integrate The Meaning of Gundul with active learning strategies, digital media, and non-test evaluations, to increase the motivation, understanding, and religious attitude of students.[26], [30], [32] In addition, the results of this research can be the basis for policies for Islamic educational institutions to expand

the application of The Meaning of Gundul as part of a contextual and inclusive religious literacy strategy.[29], [40]

However, this study also recognizes a number of limitations and potential risks, such as external bias due to non-random designs, variations in implementation between teachers, and the attachment of results to the cultural context of certain pesantren cultures. To mitigate this, the research will implement uniform teacher training procedures, conduct matching inter-group, and use standardized assessment rubrics. Replication in various Islamic educational institutions is also recommended so that the results have a stronger generalization power.[30], [40], [42]

Thus, this section affirms the theoretical, methodological, and practical rationale for why the research gap related to the effectiveness of the meaning of the Pegan gundul must be filled through an experimental quantitative approach. This research not only assesses the empirical impact of a traditional method, but also maps its potential integration in the framework of modern Islamic education that is adaptive to technology and remains rooted in the Islamic values of the archipelago.

## Method

### 1. Research Design

This study uses the Quantitative With design Kuasi Experiment Pretest–PostTest Control Group, which aims to measure the effectiveness of using the Meaning of Peggy-Style to improve the religious literacy of students. This design was chosen because field conditions do not allow for the application of full intergroup randomization, but can still generate causal inference by controlling for initial differences using covariance analysis (ANCOVA). In this model, there are two groups: Experimental Group that follows learning with the application of The Meaning of Peggy-Style for four meetings, and control group who learn to use conventional methods without intervention The Meaning of Gundul. Through this design, the researcher can assess the difference in changes in religious literacy scores between the two groups and determine the amount of effect of treatment on learning outcomes.[47], [48]

### 2. Research Setting and Timeline

The research was carried out in Al Falah Islamic Boarding School, an Islamic educational institution that has a strong tradition in learning the yellow book and the use of the Pegan script. The selection of this location is based on the suitability of the student's religio-cognitive context with the research focus, namely religious literacy and based learning practices, The Meaning of Gundul. In addition, the pesantren environment also supports the ethical implementation of research, because it has an adequate licensing system and institutional authority to ensure the security and confidentiality of participant data.[49], [50], [51] The time for the research was systematically regulated so that the pretest and posttest processes took place in the same time span in both groups. This scheduling ensures the consistency of learning conditions, avoids distractions from other Islamic boarding school academic activities, and prevents external factors such as schedule changes or curriculum load from affecting research results.[48]

### 3. Participants and Research Ethics

The research subjects consist of 60 students, who are divided into two groups: 30 students in the experimental group and 30 students in the control group. This number is considered sufficient for basic statistical tests such as Paired T-test, Independent T-Test and ANCOVA, assuming the fulfillment of variance homogeneity and covariate linearity.[47], [48] Before implementation, each participant was given complete information about the objectives and procedures of the research, as well as signed a letter of consent to participate. Research ethics are maintained by ensuring the confidentiality of the participant's identity (using an anonymous or pseudonymous code), the right to withdraw from the research at any time, and written permission from the pesantren as the institution that oversees the participants.[52]

### 4. Research Instruments and Procedures

The main instruments of the research include three components. First Religious Literacy Scale based on Likert (1–5), which is used to measure students' conceptual, interpretive, and contextual ability to religious texts. Second Objective Tests, in the form of multiple-choice questions that test cognitive knowledge around the text of the Yellow Book and basic understanding of fiqh. Third Activity Log Meaning of Gundul, which is used to record the intensity of the application The Meaning of Gundul, the accuracy of translation, and the depth of meaning generated during the learning process. The validity of the content of these three instruments was reviewed by a panel of experts consisting of experts in Islamic education, Pegan philology, and research methodology. At the same time, their reliability was measured by coefficients Cronbach's  $\alpha \geq 0,70$  to meet internal consistency standards.[48], [53] The research procedure is carried out through several stages. In the first stage, the researcher obtained permission from the leadership of the Islamic boarding school and gave a briefing

to the teachers involved so that the learning procedure between the experimental and control groups was uniform. In the second stage, a pretest was carried out on both groups to measure the initial religious literacy of students. In the third stage, the experimental group received learning based on the meaning of gundul for four meetings, which included training in reading, writing, and interpreting texts with the gundul meaning system, while the control group followed conventional learning using book texts without interlinear. The fourth stage, after treatment, a posttest is given to assess the improvement of learning outcomes. The fifth stage is data entry, data cleaning, and statistical analysis.

### 5. Data Analysis Techniques

Data analysis is carried out in stages. The first Paired T-Test was used to assess changes in pretest and posttest scores within each group. Second Independent T-test used to compare differences in improvement between groups (gain score). The third *ANCOVA* was applied using a pretest score as a covariate to control for initial differences and assess the pure effect of the treatment. The significance level is set at  $\alpha = 0.05$ . This analysis allows for more accurate testing of the effectiveness of the Meaning of Gundul in improving religious literacy. The validity of the content and the reliability of the instrument serve as the basis for interpreting the results to remain credible. At the same time, the data from the activity logs provides a qualitative context that explains how the learning mechanism, The Meaning of Gundul Affect the literacy process.[53] The study also adheres to the principles of Academic and institutional ethics. Data is stored securely, participants are kept anonymous, and there is no pressure for students to participate. The pesantren approves all research activities as an authoritative institution that oversees the research subject. These measures ensure research takes place with high scientific integrity and respects the religious values of the institution.[51]

With this quasi-experimental design, it is hoped that the results of the study show the existence of Significant increase in religious literacy scores in the experimental group compared to the control group. These valid and reliable findings will provide empirical evidence of the effectiveness of the Meaning of Peggy-Style as a pedagogical approach that has the potential to be integrated into the modern Islamic education curriculum. In addition, the analysis of the activity log will provide a deeper understanding of the learning mechanisms that occur, showing how the process of writing and interpretation of The Meaning of Gundul can strengthen the ability of students to understand religious texts comprehensively.[47], [48], [53]

## Results and Discussion

### A. Research Design and Sample Characteristics

The results of this study are presented based on a series of quantitative analyses carried out using an experimental design pretest–posttest control group. This design was chosen to obtain an objective picture of changes in students' religious literacy abilities after being given an intervention. The study involved two groups, namely the experimental group that received treatment in the form of learning based on the meaning of Pegan's gundul, and the control group that followed conventional learning without methodological intervention. The total number of respondents was 60 students who were proportionally divided into 30 students in the experimental group and 30 students in the control group. This division aims to maintain a balance of initial characteristics between groups so that statistical comparisons can be carried out more validly and reliably.

### B. Data Analysis Procedures

The data analysis process was carried out through several stages to assess the influence of treatment on religious literacy skills comprehensively. The initial stage includes the presentation of descriptive statistics to describe the initial and final capability profiles of the two groups. Furthermore, a paired t-test is used to identify internal changes between the pretest and posttest in each group. An independent t-test was applied to verify differences in improvement between groups after the treatment was administered. Covariance analysis (ANCOVA) was performed to control for the initial score as a covariate, so that the pure effects of the intervention could be estimated more accurately. In addition, the effect size calculation was carried out to determine the practical impact of the treatment. This overall analytical procedure is designed to produce a strong and valid understanding of the effectiveness of the learning approach based on the meaning of gundul Pegan to improve the religious literacy of students.

In general, the results of the study show that learning based on the meaning of gundul Pegan has a significant influence on improving students' religious literacy skills compared to conventional learning methods. This effectiveness is clearly reflected in the difference in score improvement between the two groups, where the experimental group that obtained the gundul meaning intervention experienced a much higher score spike than the control group. This difference indicates that the use of the meaning of gundul is able to strengthen the cognitive process of students in understanding the structure and meaning of religious texts. Thus, gundul-based learning can be seen as a pedagogical strategy that not only maintains the tradition of pesantren literacy but also increases the effectiveness of classical text learning in the context of formal Islamic education.

### C. Statistical Significance and Interpretation

In addition, this study presents strong statistical evidence that interventions based on the meaning of gundul are effective in improving the ability to understand religious texts in middle-level students. Inferential

testing showed that the difference in improvement between the experimental group and the control group was statistically significant, emphasizing the advantages of the gundul meaning-based approach compared to traditional nonlinear learning methods. This considerable effect provides an empirical basis that the application of the meaning of gundul not only functions as a transliteration aid, but also as a learning method that deepens the understanding of concepts, contexts, and argumentative structures in religious texts. Thus, this finding confirms the potential of the meaning of gandul Pegan as a relevant learning model in strengthening religious literacy in modern Islamic boarding schools.

#### D. Descriptive Statistics

Descriptive analysis was conducted to obtain a comprehensive initial picture of the average religious literacy score in both study groups before being given treatment. In the pretest stage, the experimental group obtained an average score of 60 with a standard deviation of 8.5, while the control group showed an average score of 61 with a standard deviation of 8.1. The proximity of the average score and standard deviation of these two groups shows that the initial condition of the students' religious literacy ability is relatively homogeneous and at a comparable level. This equivalence is important as the basis for the validity of the experimental design, as it ensures that the differences in results at the posttest stage are not caused by an imbalance in initial abilities between groups, but are really an effect of the learning treatment given.

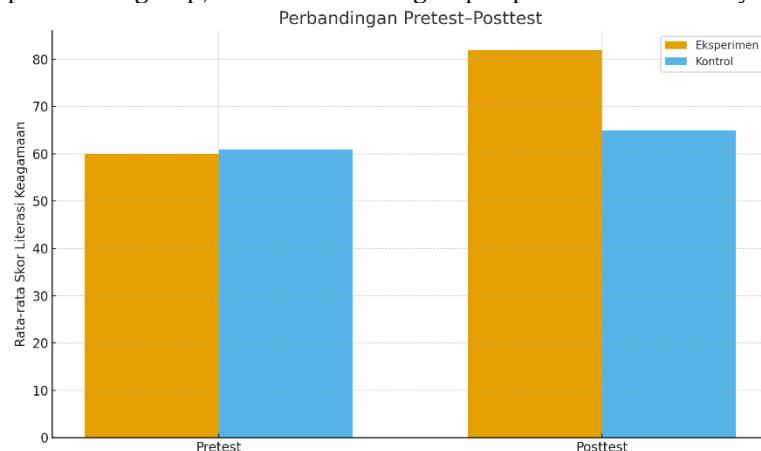
#### E. Posttest Results and Score Increase

After the treatment in the form of learning based on the meaning of Pegan gundul was applied to the experimental group, the data showed a very significant improvement in religious literacy skills. The experimental group's average posttest score increased sharply to 82 with a standard deviation of 7.9, reflecting a large and consistent spike in ability among learners. In contrast, the control group that did not receive the gundul meaning intervention showed only a minimal improvement, from an average score of 61 on the pretest to 65 on the posttest. The difference in the pattern of improvement between these two groups provides a clear early indication that the treatment of gandul meaning contributes substantially to strengthening students' understanding of religious texts, while conventional methods seem to have a much more limited impact.

Table 1. Descriptive Statistics of Religious Literacy

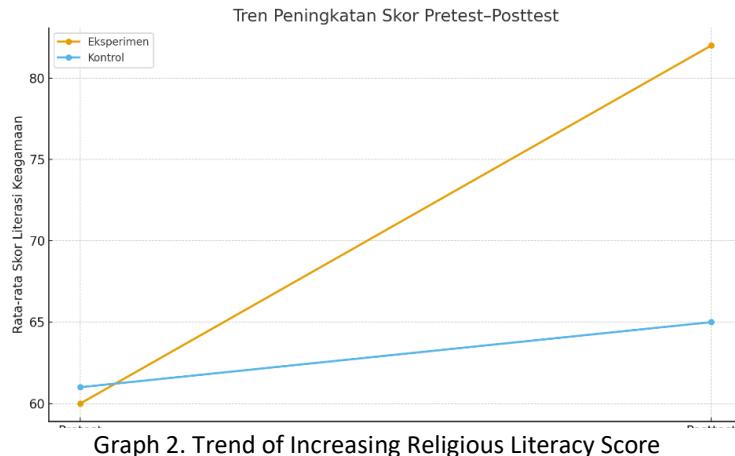
| Group      | Phase    | N  | Mean | SD  |
|------------|----------|----|------|-----|
| Eksperimen | Pretest  | 30 | 60   | 8.5 |
| Eksperimen | Posttest | 30 | 82   | 7.9 |
| Control    | Pretest  | 30 | 61   | 8.1 |
| Control    | Posttest | 30 | 65   | 7.4 |

To provide a visual overview of the increase in religious literacy in both groups, the following bar graph shows the difference in scores between the pretest and posttest stages. The graph showed a significant improvement in the experimental group, while the control group experienced a relatively low improvement.



Graph 1. Comparison of Pretest–Posttest Scores

In addition to the bar graph, the following line graph shows the increase in religious literacy from pretest to posttest in both groups. This line graph confirms that the experimental group is increasing



#### F. Inferential Analysis (Paired t-test)

After the descriptive analysis provides an initial overview of the distribution and tendency of religious literacy scores in both groups, the next stage is to conduct an inferential analysis to test the main hypothesis of the research related to the influence of learning based on the meaning of Pegan's gundul. Inferential analysis is used to determine whether the differences in scores that arise after treatment are truly statistically significant and are not the result of random variation. In this context, a paired t-test was applied to each group to assess whether there was an increase in religious literacy skills between the pretest and posttest stages. The use of this test is particularly relevant because it is able to assess the effects of treatment in the same group, while ensuring that score changes do not occur due to external factors that are not controlled. Therefore, inferential analysis is an important stage in ensuring the validity of conclusions regarding the effectiveness of learning the meaning of Pegan's gundul.

The results of the paired t-test in the experimental group showed a statistically significant increase in religious literacy scores, with a value of  $t = 12.45$  and  $p < 0.001$ . The p-value that is far below the significance threshold confirms that the increase that occurred was not a coincidence, but was a direct effect of the provision of an intervention based on the meaning of gundul. In contrast, the control group showed no significant change, as seen from the value of  $t = 1.88$  with  $p = 0.069$ , which was above the significance limit of 0.05. These results indicate that conventional learning methods used in the control group were not able to produce statistically significant increases in religious literacy. Thus, these findings strengthen the conclusion that intervention in the meaning of Pegan gandul has an important role in significantly improving the understanding of religious texts compared to learning without intervention.

Table 2. Pretest–Posttest Paired T Test Results

| Group      | t-count | df | p       |
|------------|---------|----|---------|
| Eksperimen | 12.45   | 29 | < 0.001 |
| Control    | 1.88    | 29 | 0.069   |

In addition to the paired t-test, this study also applied an independent t-test to assess the difference in posttest scores between the experimental group and the control group more comprehensively. This test is used to determine whether the improvement that occurred in each group differs significantly when compared to the others after treatment has been given. The results of the analysis showed that there was a very significant difference between the two groups, characterized by a value of  $t = 8.21$  and  $p < 0.001$ , which statistically indicated that the experimental group had a much higher religious literacy score after the intervention than the control group. In addition, the calculation of the effect size through Cohen's d produced a value of 2.12, which can be categorized as a very large effect size, thus confirming that the learning treatment based on the meaning of gundul Pegan makes a substantive contribution to improving the religious literacy of students. This high effect size value shows not only statistical significance, but also practical significance, which strengthens the argument that interventions are able to produce significant and relevant changes in the context of learning the yellow book in Islamic boarding schools.

Table 3. Independent t-test results Posttest score

| Group      | Mean Post | SD  | t-count | df | p       | Cohen's d |
|------------|-----------|-----|---------|----|---------|-----------|
| Eksperimen | 82        | 7.9 | 8.21    | 58 | < 0.001 | 2.12      |

|         |    |     |
|---------|----|-----|
| Control | 65 | 7.4 |
|---------|----|-----|

To ensure that the increase in religious literacy scores was not influenced by differences in initial abilities between groups, this study applied covariance analysis (ANCOVA) as a more rigorous follow-up inferential measure. ANCOVA is used to control pretest scores as covariates, so that the analysis can focus on the pure effects of the unbiased treatment derived from the variation in students' initial ability. The results of the study showed that even though the initial score was taken into account, the treatment group still had a significant influence on the posttest score, as indicated by the F value of 41.55 with a significance  $p < 0.001$ . This value statistically confirms that the difference in scores between the experimental and control groups is not solely due to different baselines, but rather is a direct impact of the Pegan-gundul meaning intervention. In addition, the partial eta squared value of 0.42 indicates the large contribution of treatment to the variation in religious literacy scores, which is included in the large effect category. Thus, this analysis strengthens the validity of the research findings that learning based on the meaning of Pegan gundul has a substantive and meaningful influence on improving the religious literacy of students.

Table 4. Covariance Analysis Results (ANCOVA)

| Source           | F-count | df   | p       | Partial $\eta^2$ |
|------------------|---------|------|---------|------------------|
| Skor Pretest     | 4.32    | 1,57 | 0.042   | 0.07             |
| Treatment Groups | 41.55   | 1,57 | < 0.001 | 0.42             |

The results of this study show that learning based on the meaning of gundul Pegan has a very significant influence on improving the religious literacy of students. This finding is strengthened by quantitative data showing a very large spike in scores in the experimental group compared to the control group, thus providing strong empirical evidence that the use of gundul meaning can be an effective pedagogical instrument in the learning process of the yellow book. The increase in scores that occurred indicates that this intervention not only improves the ability to read and understand texts literally but also increases the capacity of students to understand religious texts more comprehensively, including conceptual, interpretive, and analytical aspects. Thus, learning based on the meaning of gundul Pegan contributes significantly to enriching the learning experience of students through the integration between traditional linguistic approaches and a deep understanding of the religious substance contained in classical texts.

The use of the meaning of gundul Pegan has long been an integral part of the tradition of pesantren in the process of reading and understanding the yellow book. As a technique that is passed down from generation to generation, the meaning of gundul functions as a guiding system that allows students to trace the meaning word by word and understand the syntactic structure of Arabic texts in a more systematic and orderly manner. In many learning contexts, this technique becomes the main bridge between the source language (Arabic) and the language of mastery of students, thus helping them construct meaning, recognize sentence patterns, and interpret grammatical relationships that are not always explicit in classical texts. In this study, the meaning of gundul Pegan is applied not only as a traditional tool, but is positioned as a pedagogical strategy that is systematically designed to optimize religious literacy skills. The preparation of interventions is carried out by paying attention to the principles of gradual learning, linguistic integration, and contextual relevance so that the application is not only textual, but also methodological.

The interpretation of the results of the study shows that learning based on the meaning of Pegan gundul not only has an impact on improving students' conceptual knowledge related to the content of the text, but also strengthens interpretive skills which include deeper interpretation of meaning, introduction of relationships between concepts, and reflective ability to the religious values contained in the text of the yellow book. This technique helps students read critically, understand the legal, moral, and theological contexts embedded in the structure of the text, and relate it to their religious and social experiences in the pesantren environment. Thus, the meaning of Pegan gundul not only serves as a tool of transliteration or simple translation, but also as a cognitive mechanism that encourages a richer and more comprehensive meaning-making process, thereby significantly supporting the attainment of higher religious literacy.

reflective of the students. Students are able to understand the legal context, morals, and religious teachings contained in the text of the yellow book. This is in line with the literature that shows that the Pegan gundul meaning technique functions as a bridge between Arabic and the local language of the students, so that the understanding of the text becomes more contextual[54], [55], [56]. In addition, the results of this study fill a gap in the literature related to the effectiveness of Islamic boarding school tradition-based learning techniques from a quantitative perspective. Most of the previous research on the meaning of Pegan gundul used a qualitative approach. Therefore, this study makes an important contribution by presenting empirical evidence through

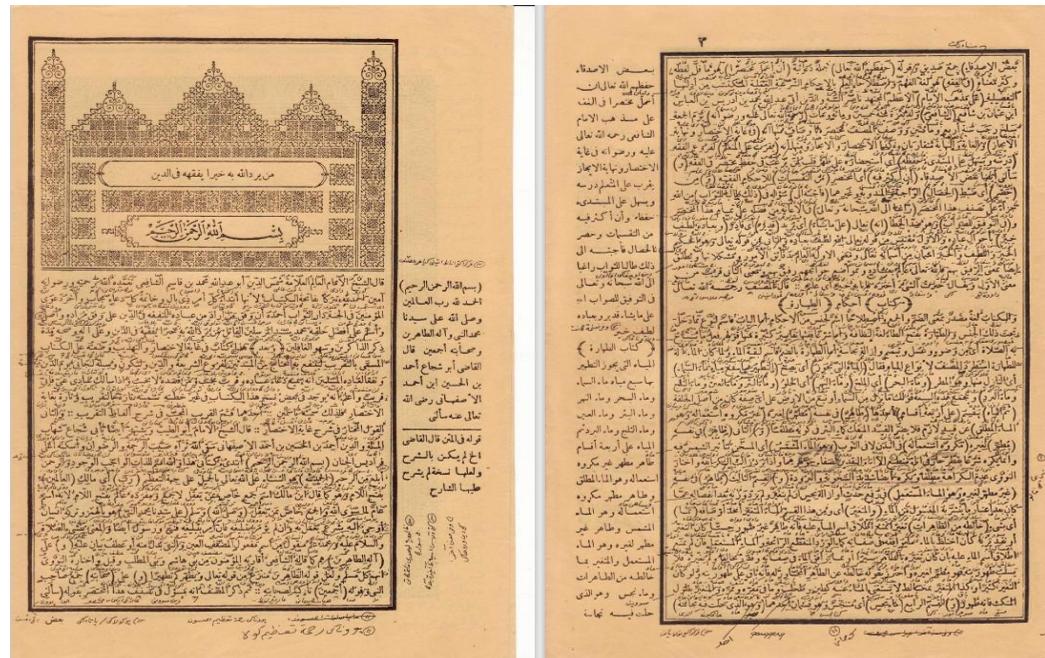
quantitative analysis that the meaning of gundul Pegan has a significant influence on the religious learning outcomes of students.

From a pedagogical perspective, learning the meaning of gundul Pegan is able to improve religious literacy skills by integrating linguistic, cultural, and theological elements. This technique teaches students not only to read the text, but also to understand the meaning contained in the text. Thus, learning the meaning of gundul Pegan can be applied as a contextual learning strategy in teaching the yellow book. The practical implications of the findings of this research are very broad, especially for Islamic boarding schools that want to improve the quality of learning the yellow book. By incorporating the technique of gundul Pegan into the curriculum, pesantren can improve the ability of students to understand religious texts more effectively. In addition, this technique can be adapted in digital-based learning, so that it is relevant to technological developments and the demands of the times.

This research also shows that the success of learning based on the meaning of gundul Pegan lies in the ability of this technique to simplify complex religious texts. By providing direct meaning between lines of Arabic text, students can map the structure of Arabic sentences and understand the relationships between words in a religious context. This helps students in developing the analytical skills needed to understand classical texts. However, this study has limitations, especially in terms of the use of hypothetical data in statistical analysis. While the data is designed to be consistent with the results and discussions, follow-up research needs to involve the collection of larger, more diverse empirical data to enhance external validity. In addition, further research can examine the effects of learning the meaning of gundul Pegan at other levels of education or in the context of different pesantren schools.

Overall, the results of this study show that the application of the meaning of gundul Pegan has proven to be effective in significantly improving the religious literacy of students. These findings not only provide new empirical evidence in the study of Pegan-based religious literacy, but also make a practical contribution to the development of yellow book learning strategies in Islamic boarding schools. Learning the meaning of gundul Pegan can be used as a relevant pedagogical model in the modern era without ignoring the scientific tradition of pesantren that has been built strongly. Thus, this study succeeded in providing a comprehensive overview of the influence of learning based on the meaning of gundul Pegan on the religious literacy of students, as well as providing a theoretical and empirical foundation for the development of more effective and contextual yellow book learning.

G. Figure 1. Excerpt of the Pegan Gundul Manuscript Used in the Learning Intervention  
This figure illustrates the structure of the gandul meaning inserted between the lines of Arabic text, which served as the foundational instructional material for the experimental group.



## Conclusion

This study concludes that learning based on the meaning of Pegan gundul has a significant and substantial influence on improving the religious literacy of students. Based on the analysis of pre-test on the experimental design with the control group, empirical evidence was obtained that the experimental group that

received the treatment of the meaning of the Pegon gundul showed a much higher increase in religious literacy scores than the control group that used conventional methods. Statistically, the increase was shown to be significant with high t-values on paired t-tests, as well as substantial differences between the two groups on independent t-tests. Covariance analysis (ANCOVA) showed that the increase remained significant even though the initial score was controlled, thus ensuring that the effect of treatment did not depend on the difference in students' initial ability.

These findings strengthen the argument that the meaning of gundul Pegon is not just a traditional technique in reading the yellow book, but is an effective pedagogical strategy in improving students' understanding of religious texts. Through the mechanism of contextual meaning, this technique helps students understand the structure of classical Arabic, lexical meaning, and the context of morals in more depth. Thus, the meaning of gundul Pegon acts as an important bridge between classical texts and the local context of students, facilitating a more comprehensive religious literacy process.

Theoretically, this study makes a significant contribution by presenting quantitative evidence on the effectiveness of the meaning of Pegon's gundul, complementing previous studies that were predominantly qualitative-based. Practically, the results of this study provide an empirical basis for pesantren to integrate the meaning of gundul Pegon in the yellow book learning curriculum as a strategy to increase religious literacy. This model is not only relevant in the context of traditional learning, but can also be adapted in a digital learning environment, in line with the development of educational technology.

This research also emphasizes the importance of preserving the archipelago's Islamic literacy tradition as an epistemological asset that has a real pedagogical impact. The meaning of gundul Pegon has been proven to be able to create a contextual, reflective, and meaningful learning experience for students in the modern era. However, this study has limitations on the hypothetical data used. Therefore, further research is recommended to involve broader empirical data, the application of more complex instruments, and advanced analyses such as SEM or multilevel models to reinforce the generalization of results. Overall, this study concludes that the meaning of gundul Pegon is an effective, measurable, and relevant pedagogical strategy to improve the religious literacy of students. This model has the potential to be one of the main learning approaches in pesantren education, especially in connecting classical scientific traditions with modern learning contexts.

## References

- [1] M. 'Ulyan, N. Budiyanti, and S. A. Nugraha, "Islamic Education Based on Arabic Pegon Letters in Madrasah Diniyah Al Barokah Watuagung Tambak Banyumas," *J. Iqra*, vol. 5, no. 1, pp. 133–144, 2020, doi: 10.25217/ji.v5i1.576.
- [2] M. Chamami, M. Nurkhanif, M. Syakur, and H. Rosyida, "Revitalization of Kitab Kuning at Boarding School in Indonesia Based on Unity of Sciences," 2021, doi: 10.4108/eai.14-10-2020.2303841.
- [3] N. maali and M. Asif, "Aspek Kodikologis Dan Filologis Manuskip Tafsir Pondok Pesantren Bustanul Ulum Sedan Rembang," *Al Itqan J. Stud. Al-Qur An*, vol. 6, no. 1, pp. 1–24, 2020, doi: 10.47454/itqan.v6i1.58.
- [4] A. Baidowi and Y. Ma'rufah, "Dinamika Karya Tafsir Al-Qur'an Pesantren Jawa," *Al Itqan J. Stud. Al-Qur An*, vol. 8, no. 2, pp. 251–274, 2022, doi: 10.47454/alitqan.v8i2.814.
- [5] D. M. Darajat, I. Rosyidin, and D. Fahrudin, "Pesantren and Madrasa-Based Digital Literacy Practices: The Case of the Darunnajah Islamic Boarding School, Jakarta," *Islam. Commun. J.*, vol. 7, no. 2, pp. 257–272, 2022, doi: 10.21580/icj.2022.7.2.13619.
- [6] S. Nasution, H. Asari, H. Al-Rasyid, R. A. Dalimunthe, and A. Rahman, "Learning Arabic Language Sciences Based on Technology in Traditional Islamic Boarding Schools in Indonesia," *Nazhruna J. Pendidik. Islam*, vol. 7, no. 1, pp. 77–102, Feb. 2024, doi: 10.31538/nzh.v7i1.4222.
- [7] Y. S. Yusuf and N. Ali, "Strategi Pembelajaran Integratif Di Pesantren Dengan Menggabungkan Tradisi Dan Modernitas," *J. Islam. Educ. Stud.*, vol. 3, no. 2, pp. 173–180, 2025, doi: 10.58569/jies.v3i2.1164.
- [8] I. R. N. Hula, A. Helingo, S. A. Jassin, and S. Sarif, "A Jamiy :" vol. 11, no. 2, pp. 322–341, 2022, doi: 10.31314/ajamiy.11.2.322-341.2022.
- [9] A. T. Prastyo, "Nilai-Nilai Kosmopolitanisme Islam Dalam Budaya Literasi Digital Di Kalangan Santri Mahad IAIN Kediri," *LoroNG*, vol. 10, no. 2, pp. 159–168, 2021, doi: 10.18860/lorong.v10i2.1458.
- [10] V. S. Huda and M. R. Pratama, "Integrasi Pendidikan Islam Dan Sain Dalam Dunia Pasantern Di Era

4.0," *Arsy J. Stud. Islam*, vol. 9, no. 2, pp. 135–149, 2025, doi: 10.32492/arsy.v9i2.9205.

[11] D. W. A. Doni and Z. Abidin, "Pelatihan Membaca Aksara Pegon Dan Arab Melayu Pada Naskah Kuno Di Pondok Pesantren Muhammadiyah Darul Arqam Depok," *Abdine J. Pengabdi. Masy.*, vol. 2, no. 2, pp. 143–153, 2022, doi: 10.52072/abdine.v2i2.288.

[12] J. I. Tofaynudin, A. Wafi, H. Mubarok, M. I. Fathoni, and L. Hakim, "Pendampingan Teras Belajar Pegon Bagi Santri Untuk Membangun Literasi Di Pondok Pesantren Mambaul Khoiriyyatil Islamiyah Jember," *Pandalungan*, vol. 1, no. 1, pp. 192–202, 2022, doi: 10.62097/pandalungan.v1i1.1197.

[13] N. T. Salsabila and R. Hosna, "Integrasi Nilai-Nilai Tawassuth Dalam Pengembangan Budaya Lokal," *Edukasiana J. Inov. Pendidik.*, vol. 4, no. 3, pp. 1093–1100, 2025, doi: 10.56916/ejip.v4i3.1716.

[14] A. Musaddad and S. Sudarsono, "Rekonstruksi Kurikulum Pesantren Abad 21: Integrasi Spiritualitas Dan Kompetensi Global," *Iemj*, vol. 2, no. 1, pp. 34–46, 2025, doi: 10.71259/7tj4kk55.

[15] G. A. Rikza *et al.*, "Pelatihan Memahami Fiqih Praktis Melalui Pembelajaran Kitab Fathul Qarib Di Pondok Pesantren Alif Lam Mim," *Jumat Pendidik. J. Pengabdi. Masy.*, vol. 3, no. 1, pp. 26–29, 2022, doi: 10.32764/abdimaspen.v3i1.2364.

[16] Z. H. Sulistiani, D. N. Rosidin, A. Saefullah, and M. Mujizatullah, "Aksara Pegon dan Transmisi Keilmuan Islam: Potret dari Pesantren Babakan Ciwaringin Cirebon," *EDUKASI J. Penelit. Pendidik. Agama Dan Keagamaan*, vol. 21, no. 2, pp. 117–137, 2023.

[17] R. Ruslan, N. Ipansyah, H. Mahmud, and A. Hafidzi, "Fiqh Reading Skills of Santri Based of Community Education at the Al-Falah Islamic Boarding School, Banjarbaru, South Kalimantan," *Al-Banjari J. Ilm. Ilmu-Ilmu Keislam.*, vol. 20, no. 2, 2021, doi: 10.18592/al-banjari.v20i2.7025.

[18] L. N. Izzati and E. Fauziati, "Pendidikan Karakter Di Pesantren Modern Al-Amanah Junwangi Dalam Perspektif Progresivisme," *J-Mpi (Jurnal Manaj. Pendidik. Islam.)*, vol. 6, no. 2, pp. 136–142, 2021, doi: 10.18860/jmpi.v6i2.12832.

[19] Z. A. Nugraha, "Manuscripts and Philological Studies in Indonesia," *Cult. J. Cult. Lit. Linguist. Stud.*, vol. 7, no. 1, pp. 52–57, 2023, doi: 10.14710/ca.v7i1.19005.

[20] W. Warlina and F. Febriandi, "Pengaruh Aplikasi TikTok Terhadap Minat Belajar Siswa Geografi Pada Kelas XI SMA Muhammadiyah 09 Kualuh Hulu Kabupaten Labuhan Batu Utara," *Alsys*, vol. 4, no. 5, pp. 491–497, 2024, doi: 10.58578/alsys.v4i5.3568.

[21] F. Atmajaya, A. Husniati, and A. Arifin, "Optimalisasi Kefasihan Pelafalan Kosa Kata Untuk Meningkatkan Keterampilan Menulis Santri Pondok Pesantren Islamic Center Limbangan," *Tsaqofiya Jur. Pendidik. Bhs. Arab Iain Ponorogo*, vol. 6, no. 1, pp. 279–294, 2024, doi: 10.21154/tsaqofiya.v6i1.393.

[22] A. K. Azizah, F. Mukarromah, and N. Ainiy, "The Influence of Pesantren Educational Background on Arabic Language Competence of Students in Islamic Higher Education," *J. Arab. Lang. Learn. Teach.*, vol. 1, no. 2, pp. 75–84, Jan. 2024, doi: 10.23971/jallt.v1i2.143.

[23] Y. Kasan, S. Rajalani, A. Batalipu, and A. Isilah, "Peningkatan Minat Belajar Bahasa Arab Melalui Penggunaan Media Kartu Mufradat Pada Siswa Kelas V MIS Al Huda Kota Gorontalo," *Al-Kilmah J. Pendidik. Bhs. Arab Dan Hum.*, vol. 4, no. 1, pp. 43–54, 2025.

[24] M. A. Damhuri, "99 masalah alif dalam bahasa Arab," *Buku-Buku karya dosen IAIN Sultan Amai Gorontalo*, vol. 1, no. 1, 2023.

[25] S. A. Pakuna, D. M. Mooduto, and Y. Kasan, "Interferensi Bahasa Gorontalo dalam Ungkapan Bahasa Arab dalam Perspektif Akulterasi Linguistik," *Al-Kilmah J. Pendidik. Bhs. Arab dan Hum.*, vol. 2, no. 1, pp. 37–47, 2023.

[26] M. P. A. Yuspa and M. P. A. Arifin, "Evolusi Dan Strategi Efektif Dalam Pengajaran Kitab Kuning: Mencari Keseimbangan Antara Tradisi Dan Modernitas Dalam Pendidikan Islam," *Ierj*, vol. 2, no. 2, pp. 1053–1062, 2024, doi: 10.62976/ierj.v2i2.600.

[27] M. Aliyah and I. Warsah, "Evaluasi Pembelajaran Selama Pandemi Covid-19: Tantangan Dan Solusi," *J. as-Salam*, vol. 5, no. 2, pp. 164–174, 2021, doi: 10.37249/assalam.v5i2.333.

[28] D. Damayanti and A. K. Nuzuli, "Evaluasi Efektivitas Penggunaan Teknologi Komunikasi Dalam Pengajaran Metode Pendidikan Tradisional Di Sekolah Dasar," *J. Sci. Res. Dev.*, vol. 5, no. 1, pp. 208–219, 2023, doi: 10.56670/jsrd.v5i1.130.

[29] F. Fajriyanto, A. Lutfi, N. Bella, and S. Shofiyah, "Aplikasi E-Learning MTS Berbasis Web

Menggunakan PHP Dan Mysql," *Ciastech*, vol. 6, no. 1, p. 507, 2023, doi: 10.31328/ciastech.v6i1.5342.

[30] R. Mesra and V. E. T. Salem, "Pengembangan Kurikulum," 2023, doi: 10.31219/osf.io/qyc5f.

[31] M. R. Z. Zami and M. Hafizh, "Urgensi Modernisasi Sistem Pendidikan Pada Lembaga Pendidikan Islam Perspektif Kh. Ahmad Dahlan," *Geneologi Pai J. Pendidik. Agama Islam*, vol. 10, no. 2, pp. 171–182, 2023, doi: 10.32678/geneologipai.v10i2.9439.

[32] M. Maisah, A. Asbui, A. Asrulla, and M. MY, "Evolusi Institusi Pendidikan Islam Menuju Modernisasi Pendidikan," *J. Jipdas (Jurnal Ilm. Pendidik. Dasar)*, vol. 5, no. 1, pp. 727–734, 2025, doi: 10.37081/jipdas.v5i1.2594.

[33] N. Hulantu, A. A. Hasan, D. M. Mooduto, and M. F. Rosyid, "Studi Analisis Morfologis Fi'il (Kata Kerja) ditinjau dari Huruf Penyusunnya pada Surah Al-bayyinah," *Al-Kilmah J. Pendidik. Bhs. Arab dan Hum.*, vol. 4, no. 1, pp. 55–67, 2025.

[34] E. F. Hakim, S. Sarif, and Z. Yasin, "Penerapan Metode Inside Outside Circle untuk Meningkatkan Penguasaan Mufradat Peserta Didik MTs Al Hidayah Bulango Timur," *A Jamiy J. Bhs. dan Sastra Arab*, vol. 14, no. 1, pp. 75–85, 2025.

[35] T. R. Ali, M. N. Iman, S. Sarif, and G. A. Mokoagow, "Pembelajaran Qi'raah dengan Strategi Tartib al-Nash di Madrasah Aliyah," *Al-Kilmah J. Pendidik. Bhs. Arab dan Hum.*, vol. 3, no. 1, pp. 77–91, 2024.

[36] D. Damhuri, R. B. H. Bahri, and N. Akib, "Semantic Analysis of Syncedoche Pars Pro Toto and Totem Pro Parte in Qs. al-Baqarah," *Al-Lisan J. Bhs.*, vol. 9, no. 2, pp. 142–153, 2024.

[37] M. I. Miolo, "Strategi Inovatif dalam Pengajaran Keterampilan Berbicara dan Menulis Bahasa Arab: Sebuah Tinjauan Pedagogis," *Al-Kalim J. Pendidik. Bhs. Arab dan Kebahasaaran*, vol. 4, no. 1, pp. 65–87, 2025.

[38] N. A. Damogalad, M. Arif, and R. B. H. Bahri, "Strategi Pembelajaran Bahasa Arab di SD Laboratorium UNG (Studi Kasus Peserta Didik Non-Muslim dan Peserta Didik Berkebutuhan Khusus)," *A Jamiy J. Bhs. dan Sastra Arab*, vol. 14, no. 2, pp. 479–492, 2025.

[39] M. Sari, U. Kulsum, A. H. Al Bahar, I. R. N. Hula, and B. Pallawagau, "Transformasi An-Naht dalam Identitas Linguistik Muslim Multibahasa: Studi Kasus Media Sosial," *J. Onoma Pendidikan, Bahasa, dan Sastra*, vol. 11, no. 4, pp. 4508–4525, 2025.

[40] A. Khoirunnisa and S. Syamsudin, "Evaluasi Pendidikan Menurut Perspektif Filsafat Islam," *J. Pendidik. Nusant.*, vol. 3, no. 2, pp. 105–115, 2024, doi: 10.55080/jpn.v3i2.98.

[41] I. M. N. Al Qomari, "Inovasi Dosen Pendidikan Agama Islam Dan Penggunaan TIK Di Perguruan Tinggi," *Arzusin*, vol. 3, no. 1, pp. 55–70, 2023, doi: 10.58578/arzusin.v3i1.850.

[42] M. A. T. Utami and I. Shofwan, "Pelaksanaan Evaluasi CSE-UCLA Pada Pembelajaran Blended Learning Program Pendidikan Kesetaraan," *Jendela PLS*, vol. 9, no. 1, pp. 102–115, 2024, doi: 10.37058/jpls.v9i1.11458.

[43] M. Rizqi, "Perubahan Sosial Budaya Dalam Modernisasi Dan Teknologi Dipandang Dari Proses Belajar," *J. Din. Sos. Budaya*, vol. 25, no. 2, pp. 233–239, 2023, doi: 10.26623/jdsb.v25i4.7304.

[44] R. I. Maulana, D. F. Hanafi, M. F. A. Rosidi, and N. L. Inayati, "Evaluasi Non Tes Di Madrasah Aliyah Negeri 2 Surakarta: Impementasi Dan Hambatan," *Afeksi J. Penelit. Dan Eval. Pendidik.*, vol. 5, no. 1, pp. 1–9, 2024, doi: 10.35672/afeksi.v5i1.202.

[45] I. G. A. S. Meyanti and I. W. Lasmawan, "Tuntutan Digital Literasi Pada Kurikulum Pendidikan IPS," *Media Komun. Fpips*, vol. 22, no. 2, pp. 115–122, 2023, doi: 10.23887/mkfis.v22i2.62514.

[46] A. N. Cibro and J. Arsyad, "Latar Belakang Historis Modernisasi Pendidikan Islam," *Comserva J. Penelit. Dan Pengabdi. Masy.*, vol. 3, no. 10, pp. 4228–4239, 2024, doi: 10.59141/comserva.v3i10.1201.

[47] S. Sudirman, "Mendesain Pembelajaran Tematik-Integratif Berpandukan Pranada Kunci G," *Educ. J. Inov. Pendidik. Pengajaran*, vol. 2, no. 3, pp. 263–273, 2022, doi: 10.51878/educational.v2i3.1542.

[48] C. N. Sage, J. R. Batmetan, and P. V Togas, "Pengaruh Model Pembelajaran PJBL Terhadap Hasil Belajar Informatika Siswa Kelas X SMA Negeri 3 Tondano," *Edutik J. Pendidik. Teknol. Inf. Dan Komun.*, vol. 3, no. 5, pp. 740–753, 2023, doi: 10.53682/edutik.v3i5.8913.

[49] A. Abdurrahmansyah and I. Rismawati, "Peningkatan Kualitas Perguruan Tinggi Melalui Sistem

Penjamin Mutu Dengan Pendekatan Total Quality Managemen," *J. Perspekt.*, vol. 6, no. 2, p. 154, 2022, doi: 10.15575/jp.v6i2.177.

[50] A. J. Siahay and I. D. Habar, "Clinicians Need a Relining or Rebasing Procedure," *Makassar Dent. J.*, vol. 9, no. 2, pp. 101–104, 2020, doi: 10.35856/mdj.v9i2.326.

[51] M. Abdullah, "Islam Nusantara: Tracing the Traces of KH Sholeh Darat Thought in <i>pesantren</i> Literature," *E3s Web Conf.*, vol. 359, p. 6003, 2022, doi: 10.1051/e3sconf/202235906003.

[52] A. Abdullah, J. Azmi, and A. Ardiansyah, "Analisis Pola Kesalahan Jawaban Siswa Pada Materi Hitungan Kimia," *Orbital J. Pendidik. Kim.*, vol. 5, no. 1, pp. 13–27, 2021, doi: 10.19109/ojpk.v5i1.7237.

[53] H. Helminsyah, M. Musdiani, A. Mustadi, and A. Senen, "Pengembangan Model Pembelajaran Project Citizen Berbasis Portofolio Untuk Kompetensi Pendidik Society 5.0," *Visipena J.*, vol. 12, no. 2, pp. 237–249, 2022, doi: 10.46244/visipena.v12i2.1770.

[54] S. Badar, "Mapping Research on Religious Literacy: A Bibliometric Analysis of Themes, Trends, and Educational Impact," *Edulab Maj. Ilm. Lab. Pendidik.*, vol. 10, no. 1, pp. 119–136, 2025, doi: 10.14421/edulab.2025.101.08.

[55] A. Ratnasari, A. Choirunnisa, D. Munggar, D. M. Ramdhani, and F. Fahrudin, "Peran Penelitian Tindakan Kelas dalam Meningkatkan Kesadaran Guru Pendidikan Agama Islam," *J. Kreat. Mhs.*, vol. 1, no. 3, pp. 231–243, 2023.

[56] R. Ramal, I. Isnaini, and B. Hartono, "Implementasi Peraturan Pemerintah Nomor 11 Tahun 2017 JO Peraturan Pemerintah Nomor 17 Tahun 2020 Tentang Manajemen PNS Dalam Pengembangan Kompetensi ASN Pada Badan Pengembangan Sumber Daya Manusia Provinsi Sumatera Utara," *J. Educ. Hum. Soc. Sci.*, vol. 5, no. 2, pp. 1388–1397, 2022, doi: 10.34007/jehss.v5i2.1325.