

Implementation of the Al-Bayan Method in Qur'anic Learning and Its Impact on Early Childhood Hijaiyah Letter Recognition

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Abstract: Hijaiyah letter recognition is a fundamental aspect of early Qur'anic literacy that requires developmentally appropriate teaching methods. However, early childhood education institutions still face challenges in selecting effective approaches to support children's early reading skills. This study aimed to examine the effectiveness of the Al-Bayan method in improving Hijaiyah letter recognition among early childhood learners at TK Negeri Pembina Rantau, Aceh Tamiang Regency. The research employed a quantitative quasi-experimental design using a one-group pretest-posttest model. The sample consisted of 35 children selected through total sampling. Data were collected using Hijaiyah letter recognition tests and structured observation sheets. Data analysis included descriptive statistics, normality testing, paired sample t-test, and N-Gain analysis. The results showed a significant improvement in children's Hijaiyah letter recognition after the implementation of the Al-Bayan method, with a mean difference of 26.30 and a significance value of $p < 0.05$. The N-Gain analysis indicated a moderate level of improvement, demonstrating the instructional effectiveness of the method. These findings suggest that the Al-Bayan method can be effectively implemented in early childhood Qur'anic learning to strengthen Hijaiyah letter recognition through structured repetition, guided practice, and child-centered instruction, providing practical guidance for educators in designing effective early Qur'anic literacy programs.

Keywords: Al-Bayan Method; Early Childhood Education; Hijaiyah Letter Recognition; Qur'anic Learning; Quasi-Experimental Study.

Introduction

Early childhood education plays an essential role in establishing the foundations of literacy development, including religious literacy such as Qur'anic reading skills. In the context of Islamic education, the recognition of Hijaiyah letters represents the initial stage of Qur'anic literacy that must be introduced from an early age. Developmentally appropriate learning experiences are therefore required to ensure that children are able to recognize the forms and sounds of Hijaiyah letters effectively. According to early literacy theory, children's ability to recognize letters is a fundamental prerequisite for developing reading skills because it supports the formation of phonological awareness and symbol recognition in the early stages of language development

(Whitehurst & Lonigan, 1998). However, in many early childhood education institutions in Indonesia, Hijaiyah letter learning has not yet been positioned as a central component of daily classroom activities. As a result, children often lack adequate foundational skills in recognizing Arabic letter symbols, which subsequently affects their early Qur'anic reading (Aisyah et al., 2022; Maharani & Izzati, 2020).

Learning Hijaiyah letters requires instructional approaches that align with early childhood cognitive development. From a developmental perspective, children aged 4–6 years are generally in the preoperational stage, in which learning is most effective when supported by concrete representations, visual stimuli, and interactive experiences (Piaget, 1972). Arabic letters present a unique level of complexity

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because their shapes may change depending on their position within words, making visual support essential for accurate recognition (Boudelaa, 2020). Research also emphasizes the importance of integrating visual perception and phonological awareness to help children connect letter forms with their corresponding sounds (Ibrahim, 2020). Furthermore, multisensory learning theory suggests that combining visual, auditory, and kinesthetic stimuli can significantly enhance children's memory and comprehension because information is processed through multiple sensory channels simultaneously (Fiorella & Mayer, 2016; Mayer, 2020). Instructional media that incorporate visual aids, interactive materials, and multisensory stimulation have therefore been shown to enhance children's engagement and improve early Arabic literacy development (Alghail & Mahfoodh, 2019; Bani Salameh & Bani Salameh, 2022; Farah & Ridge, 2021).

Despite these theoretical recommendations, traditional teaching methods remain dominant in many early childhood classrooms. Teachers frequently rely on blackboard instruction and memorization techniques with limited use of visual media. Such approaches often cause Hijaiyah letters to be perceived by children as abstract and difficult symbols. Previous studies indicate that learning methods that are not adapted to children's developmental characteristics tend to result in low levels of Hijaiyah literacy (Maulida & Setiawan, 2019; Oktavia, 2025). Similar conditions were observed at TK Negeri Pembina Rantau, Aceh Tamiang Regency, where preliminary observations revealed that many children experienced difficulties in recognizing Hijaiyah letters. Learning activities were not implemented in a structured and systematic manner, and greater emphasis was placed on reading, writing, and arithmetic activities rather than Qur'anic literacy. This situation indicates a gap between theoretical recommendations for early literacy instruction and actual classroom practices.

Various structured methods such as Tilawati, Ummi, and Iqra' have been implemented to improve early Qur'anic literacy through staged and systematic instruction (Kholilah & Yuliani, 2021; Khumairoh & Andriyani, 2022; Susanti & Nurhayati, 2022). These methods emphasize repetition, guided practice, and gradual learning progression, which align with scaffolding principles in early childhood learning theory. Scaffolding, as proposed by Vygotsky (1978), suggests that children can achieve higher levels of understanding when learning activities are supported by structured guidance from teachers. However, empirical studies examining the effectiveness of the Al-Bayan method in early childhood contexts remain limited. The Al-Bayan method offers a structured and sequential learning approach designed to improve

Hijaiyah letter recognition through gradual stages and guided repetition. Recent studies indicate that structured instructional sequencing can significantly enhance early reading abilities among young learners (Setiawan, 2024).

Therefore, this research is conducted for several important reasons. First, there is a practical need to improve the quality of early Qur'anic literacy instruction in early childhood education institutions, particularly in strengthening children's foundational ability to recognize Hijaiyah letters. Second, empirical evidence regarding the implementation of the Al-Bayan method in early childhood settings is still limited, indicating a research gap that needs to be addressed. Third, evaluating the effectiveness of structured instructional approaches is essential for developing evidence-based teaching strategies that are aligned with children's developmental characteristics. For these reasons, quantitative investigation is necessary to examine the effectiveness of the Al-Bayan method in supporting early Qur'anic literacy development. This study aims to analyze the effectiveness of the Al-Bayan method in improving Hijaiyah letter recognition among early childhood learners at TK Negeri Pembina Rantau, Aceh Tamiang Regency. The findings are expected to contribute theoretically to the development of early Qur'anic literacy research and practically to provide educators with effective instructional strategies for teaching Hijaiyah letters in early childhood education.

Method

Research Design and Procedure

This study employed a quantitative approach using a quasi-experimental design, specifically the one-group pretest-posttest design. This design was selected to examine the effectiveness of the Al-Bayan method in improving early childhood Hijaiyah letter recognition by comparing children's abilities before and after the treatment. The research design followed the pattern $O_1 - X - O_2$, where O_1 represents the pretest, X denotes the implementation of the Al-Bayan learning method, and O_2 represents the posttest. This design was considered appropriate for the PAUD context, as the formation of a control group was not feasible due to institutional constraints and the limited number of participants.

The research procedure consisted of three main stages: preparation, implementation, and outcome measurement. The preparation stage began with preliminary observations at TK Negeri Pembina Rantau, Aceh Tamiang Regency, to identify problems related to Hijaiyah letter learning. Coordination was conducted with the school principal and PAUD teachers to obtain research permission and align the implementation process. Research instruments, including pretest-

posttest instruments and observation sheets, were developed based on Hijaiyah letter recognition indicators and the instructional steps of the Al-Bayan method.

The implementation stage started with the administration of a pretest to measure the children's initial Hijaiyah letter recognition abilities. The pretest assessed the ability to recognize letter shapes, mention letter names, differentiate similar letters, and associate letters with their corresponding sounds. The pretest was administered individually with teacher assistance to ensure that children understood the instructions. Pretest scores served as baseline data prior to treatment.

The treatment stage involved the application of the Al-Bayan method over 10-12 instructional sessions in accordance with the standard implementation guidelines of the method. Each session included teacher-led demonstrations, imitation activities through *talaqqi* and *musyafahah*, structured repetition, and reinforcement using supporting media such as letter cards and phonetic games. Learning activities were conducted consistently by classroom teachers under the supervision of the researcher to ensure fidelity to the instructional procedures.

The outcome measurement stage was conducted through a posttest using the same indicators as the pretest. The posttest was administered individually to minimize peer influence. Differences between pretest and posttest scores were analyzed to determine the effectiveness of the Al-Bayan method in enhancing early childhood Hijaiyah letter recognition skills.

Population and Sample

The population of this study consisted of all children enrolled at TK Negeri Pembina Rantau, Aceh Tamiang Regency, who participated in Hijaiyah letter learning activities using the Al-Bayan method. The total population comprised 35 children from Group A and Group B.

A total sampling technique was employed, as the population size was relatively small and all members could be included as research participants. Accordingly, the sample size was 35 children, identical to the population.

Research Variables and Operational Definitions

This study involved two variables: an independent variable and a dependent variable. The independent variable (X) was the Al-Bayan learning method, while the dependent variable (Y) was early childhood Hijaiyah letter recognition ability.

Conceptually, the Al-Bayan method is a Qur'anic learning approach that emphasizes systematic stages of demonstration, imitation, and repetition. The method introduces Hijaiyah letters gradually, from single letters

to simple letter combinations, making it suitable for early childhood learners who require step-by-step instruction. Operationally, the Al-Bayan method was measured through observation of instructional implementation, including demonstration of pronunciation, imitation practice, repetition drills, use of Al-Bayan instructional media, structured material presentation, and children's active participation.

Conceptually, Hijaiyah letter recognition ability refers to children's capacity to identify letter shapes, name letters, and distinguish visually similar letters as a foundational stage of Qur'anic literacy. Operationally, this ability was measured using pretest and posttest scores based on indicators of recognizing letter forms, naming letters, differentiating similar letters, identifying letters mentioned by the teacher, and arranging simple letter sequences appropriate to the child's developmental level.

Data Collection Techniques

Data were collected through tests, observations, and documentation. Tests were used to measure Hijaiyah letter recognition skills through pretest and posttest instruments. Observations were conducted to assess the implementation of the Al-Bayan method and children's engagement during learning activities. Documentation was used to obtain supporting data, including school profiles, lesson plans, and relevant administrative records. Research instruments were reviewed prior to use to ensure content validity. Instrument reliability was examined statistically following pilot testing.

Data Analysis Techniques

Data analysis was conducted quantitatively. Descriptive statistics were used to present minimum scores, maximum scores, mean values, and standard deviations of pretest and posttest results. A normality test using the Shapiro-Wilk test was conducted to ensure that the data were normally distributed. The effectiveness of the Al-Bayan method was analyzed using a paired sample t-test with a significance level of 0.05. An N-Gain analysis was employed to determine the level of improvement in children's Hijaiyah letter recognition abilities. Observation data were analyzed descriptively to support quantitative findings.

Research Ethics

This study was conducted in accordance with ethical research principles. Permission was obtained from the school authorities and parents prior to data collection. Participants' identities were kept confidential, and all data were used solely for academic purposes. Research activities were adapted to the developmental characteristics of early childhood

learners and did not involve any harmful procedures. Academic integrity and transparency were maintained throughout the research process.

All the methods described earlier are visualized in the flowchart below. The flowchart presents the steps in sequence, illustrates the relationships between each stage, and facilitates understanding of the logical flow of each method. This representation allows readers to gain a comprehensive view of how these processes are integrated and contribute to the final outcome.

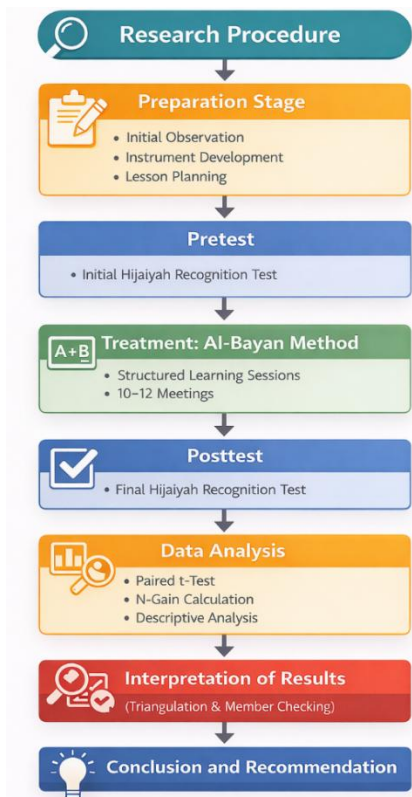


Figure 1. Methods flowchart

Results and Discussion

Results

Descriptive Statistics of Hijaiyah Letter Recognition Ability

Descriptive statistical analysis was conducted to describe children’s Hijaiyah letter recognition ability before and after the implementation of the Al-Bayan method. The analysis included minimum score, maximum score, mean, and standard deviation of pretest and posttest results for 35 participants.

Table 1. Descriptive Statistics of Pretest and Posttest Scores

Test	Mean	Standard Deviation	Minimum	Maximum
Pretest	56.40	8.90	40	72
Posttest	82.70	6.50	68	95

The descriptive data indicate a substantial increase in the mean score after the implementation of the Al-Bayan method. The mean pretest score of 56.40 reflects a relatively low initial ability in Hijaiyah letter recognition. After the intervention, the posttest mean score increased to 82.70, indicating a notable improvement. The decrease in standard deviation from 8.90 to 6.50 suggests that students’ abilities became more homogeneous following the learning intervention. Figure 1 presents a visual comparison of pretest and posttest mean scores, clearly illustrating the improvement in Hijaiyah letter recognition after the application of the Al-Bayan method.

Normality Test Results

A normality test was conducted to determine whether the pretest and posttest data met the assumptions required for parametric statistical testing. The Shapiro-Wilk test was applied due to the relatively small sample size ($n = 35$).

Table 2. Normality Test Results

Test	Shapiro-Wilk Sig.	Interpretation
Pretest	0.124	Normal distribution
Posttest	0.087	Normal distribution

The significance values for both pretest and posttest scores were greater than 0.05, indicating that the data were normally distributed. Therefore, the use of a paired sample t-test was considered appropriate for further analysis.

Paired Sample t-Test Results

A paired sample t-test was performed to examine whether there was a statistically significant difference between pretest and posttest scores following the implementation of the Al-Bayan method.

Table 3. Paired Sample t-Test Result

Comparison	Mean Difference	t-value	Sig. (p)
Pretest - Posttest	26.30	14.82	0.000

The results of the paired sample t-test showed a significance value ($p = 0.000$) that was lower than the 0.05 significance level. This finding indicates a statistically significant difference between pretest and posttest scores. The result confirms that the implementation of the Al-Bayan method had a significant positive effect on children’s Hijaiyah letter recognition ability.

N-Gain Analysis Results

An N-Gain analysis was conducted to measure the magnitude of improvement in children's Hijaiyah letter recognition ability after the learning intervention.

Table 4. N-Gain Analysis Results

Indicator	Value
Mean Pretest Score	56.40
Mean Posttest Score	82.70
Mean N-Gain	0.61
Improvement Category	Moderate

The mean N-Gain value of 0.61 falls within the moderate improvement category, indicating that the Al-Bayan method was effective in improving Hijaiyah letter recognition skills among early childhood learners. This result suggests that the structured, repetitive, and visually supported learning stages of the Al-Bayan method contributed meaningfully to children's learning progress.

Discussion

Descriptive Statistical Results

The results of the descriptive statistical analysis indicate a clear improvement in early childhood learners' ability to recognize hijaiyah letters after the implementation of the Al-Bayan method. The increase in the posttest mean score compared to the pretest score demonstrates that children were able to better understand both the forms and sounds of hijaiyah letters. Structured and sequential learning activities have a positive impact on early Qur'anic literacy skills. Early childhood religious literacy develops optimally when instructional strategies are aligned with children's developmental characteristics (Bani Salameh & Bani Salameh, 2022). Systematic methods provide more meaningful learning experiences than conventional approaches.

The improvement in hijaiyah letter recognition cannot be separated from the characteristics of the Al-Bayan method, which emphasizes gradual and repetitive letter introduction, supported by visual and interactive media. Arabic letter instruction requires strong visual support due to the complexity and similarity of letter forms (Boudelaa, 2020). Visual-based presentations reduce children's difficulty in distinguishing hijaiyah letters and enhance cognitive processing (Alghail & Mahfoodh, 2019). Interactive game-based and multimedia approaches have also been shown to improve recognition skills and engagement among young learners (Susanti & Nurhayati, 2022; Utami, 2023).

Equitable learning outcomes were also observed, as indicated by the decrease in the standard deviation of

the posttest results. Structured, multisensory, and repetitive instructional strategies benefit both high-ability and low-ability learners, thereby promoting more equitable learning opportunities. Multisensory learning experiences allow children to process information through multiple sensory channels simultaneously, which strengthens memory and comprehension (Solichah & Fardana, 2023). This finding is consistent with studies highlighting the importance of visual attention and perceptual processing in Arabic letter recognition and early reading development (Ghandour et al., 2025).

These findings indicate that the Al Bayan method, particularly when combined with visual and multisensory learning support, provides meaningful, equitable, and developmentally appropriate learning experiences that strengthen early Qur'anic literacy. The integration of structured instruction and visual learning media supports children's ability to recognize hijaiyah letters more effectively and enhances engagement during the learning process.

Normality Test Results

The results of the normality test indicate that both pretest and posttest data were normally distributed, fulfilling the assumptions required for parametric statistical analysis. A normal distribution suggests that children's abilities were relatively evenly distributed and were not influenced by extreme values, indicating that structured and sequential instruction produces consistent learning effects across participants. Structured Arabic letter instruction supports children's visual and phonological processing abilities, which are essential components of early literacy development (Alluhaybi & Witzel, 2020; Maroun et al., 2020). The presence of normally distributed data also reflects the stability of the learning process implemented during the instructional intervention.

Systematic learning enables each child to progress according to their individual learning capacity. Child-centered and developmentally appropriate approaches are fundamental in early childhood education to support equitable learning opportunities (Mason et al., 2019; Ruhaena & Moordingsih, 2019). The Al-Bayan method provides opportunities for repetition, direct teacher interaction, and visual support, which facilitate gradual and sustainable skill acquisition. A consistent instructional structure helps children follow learning activities more easily and improves learning stability, particularly in the acquisition of unfamiliar scripts such as Arabic letters (Maroun et al., 2020).

The normal distribution of the data also suggests minimal disparities between children with higher and lower initial abilities. Previous studies indicate that systematic and multisensory instructional approaches

can reduce learning gaps by providing multiple sensory pathways for processing information, thereby supporting more equitable learning outcomes (Solichah & Fardana, 2023; Zulhendri & Warmansyah, 2020). Interactive and visual-based learning media further strengthen learning consistency by reinforcing letter recognition and increasing children's engagement during the learning process.

The fulfillment of the normality assumption strengthens the validity of subsequent parametric analyses, ensuring greater rigor and reliability in educational research (Creswell & Creswell, 2018). These findings indicate that the Al-Bayan method has the potential to improve the overall quality of Qur'anic literacy instruction effectively and evenly. Consequently, this method may serve as an evidence-based instructional approach that can be implemented more broadly in early childhood education institutions.

Paired Sample t-Test Results

The paired sample t-test results indicate a statistically significant difference between pretest and posttest scores following the implementation of the Al-Bayan method. The significance value below the accepted threshold confirms that the improvement in Hijaiyah letter recognition was not due to chance. This finding provides strong empirical evidence that the Al-Bayan method has a measurable impact on early childhood Qur'anic literacy outcomes. Structured and sequential instructional stages facilitate more effective learning processes, particularly in early literacy development where children benefit from guided and organized learning experiences (Mason et al., 2019; Ruhaena & Moordiningsih, 2019). Research in Indonesian educational contexts also demonstrates that structured instructional models significantly improve learning outcomes and conceptual understanding among learners (Saputri et al., 2025).

The substantial mean difference between pretest and posttest scores reflects meaningful learning progress rather than short-term memorization. The Al-Bayan method emphasizes demonstration, imitation, and repetition, which align with early childhood learning principles that require concrete and multisensory experiences. Multisensory instructional strategies enable children to process information through visual, auditory, and kinesthetic channels simultaneously, thereby strengthening memory retention and comprehension (Solichah & Fardana, 2023; Zulhendri & Warmansyah, 2020). Studies in Indonesian learning environments also indicate that interactive learning media and technology-supported instruction significantly enhance student engagement and learning effectiveness (Mayasari et al., 2023; Rachmayani & Setyasto, 2025).

The statistically significant improvement indicates that the Al-Bayan method effectively addresses challenges faced by children who are more familiar with the Latin alphabet. Differences in letter shapes, phonological patterns, and writing systems often cause confusion among early learners. Research on Arabic orthographic processing shows that strong visual attention and orthographic awareness are necessary to recognize Arabic letters accurately due to their structural similarities and contextual forms (Alluhaybi & Witzel, 2020; Maroun et al., 2020). Consistent visual exposure supported by interactive learning media can help reduce these difficulties and improve recognition accuracy.

The effectiveness of the Al-Bayan method also reflects the importance of systematic instructional design in literacy learning. Sequential learning stages allow children to gradually construct knowledge while reinforcing previously acquired skills. Previous studies indicate that structured and project-based learning approaches contribute to improved cognitive engagement and learning sustainability among students (Mutiarra et al., 2024; Sagita et al., 2023). These findings support the importance of structured instructional organization in facilitating effective learning processes.

The results further highlight the importance of teacher-guided learning in early childhood Qur'anic education. Direct interaction between teachers and learners enables immediate feedback and corrective guidance, which are essential for developing phonological awareness and accurate letter pronunciation. Guided instruction combined with visual learning support creates a balanced learning environment where children can progress according to their individual learning pace while maintaining equitable learning outcomes.

Overall, the statistically significant findings confirm that the Al-Bayan method is an effective instructional strategy for improving early childhood Hijaiyah letter recognition. Instructional approaches that integrate structured stages, visual support, and repetitive multisensory learning experiences provide more effective outcomes than unstructured teaching practices. These results support the broader implementation of the Al-Bayan method as an evidence-based approach to strengthening early Qur'anic literacy development in early childhood education settings, particularly within Indonesian educational contexts where structured and interactive instructional models have demonstrated consistent effectiveness (Rahmawati & Mulyati, 2020; Saputri et al., 2025).

N-Gain Analysis Results

The N-Gain analysis indicates a moderate level of improvement in children's Hijaiyah letter recognition

ability following the implementation of the Al-Bayan method. This moderate gain reflects realistic learning progress in early childhood education, where skill acquisition requires repeated exposure and gradual development. Structured and sequential learning activities facilitate meaningful outcomes, aligning with studies emphasizing systematic approaches in early Arabic literacy (Alghail & Mahfoodh, 2019; Ibrahim, 2020).

The moderate N-Gain value suggests that the Al-Bayan method promotes sustainable learning rather than short-term memorization. Repetition, imitation, and guided practice are central to the method, supporting gradual internalization of letter forms and sounds. Similar findings were reported by Lestari, showing that structured repetition combined with visual support produces steady improvement in Hijaiyah letter recognition (Fadillah & Nurhaliza, 2022; Lestari, 2020). Consistent outcomes reflect the suitability of the method for early childhood contexts and reinforce instructional reliability.

The N-Gain results also demonstrate that the Al-Bayan method accommodates individual differences among learners. Children develop literacy skills at varying paces, and moderate gain indicates that learners progress according to their developmental readiness. Child-centered approaches that allow individualized pacing improve overall learning equity (Bani Salameh & Bani Salameh, 2022; Yuliani & Asmarani, 2021). The method provides flexibility within a structured framework, ensuring all learners benefit from repeated exposure and guided practice.

The observed moderate improvement contrasts with methods that produce rapid but unstable learning gains. Approaches focused solely on rote memorization often result in high short-term gains but poor retention. Studies on multisensory and visual-phonological strategies highlight that durable literacy outcomes require consistent engagement and reinforcement (Abu-Rabia & Taha, 2019; Rosyidah, 2020). The Al-Bayan method integrates visual aids, oral repetition, and interactive teacher guidance to foster long-term letter recognition.

The N-Gain findings reinforce the critical role of multisensory learning in early Qur'anic education. Integrating visual, auditory, and kinesthetic elements enhances cognitive processing and supports gradual acquisition of Hijaiyah letters (Boudelaa, 2020; Shams & Seitz, 2008). Moderate N-Gain values indicate that this multisensory strategy effectively promotes steady improvement while reducing confusion between Arabic and Latin scripts.

The N-Gain analysis provides strong justification for recommending the Al-Bayan method in early childhood Qur'anic education. The observed

improvement demonstrates that the method is both effective and developmentally appropriate. Structured and sequential instructional strategies are essential for fostering religious literacy in young learners (Rachmayani & Setyasto, 2025; Younis & Abdalla, 2023). These findings support the broader implementation of the Al-Bayan method to enhance Hijaiyah letter recognition skills in PAUD institutions.

Conclusion

This study concludes that the Al-Bayan method is effective in improving early childhood learners' ability to recognize Hijaiyah letters. Through structured, sequential, and repetitive learning activities supported by visual media and teacher guidance, children can better understand the forms and sounds of Hijaiyah letters. The method provides developmentally appropriate learning experiences that facilitate early Qur'anic literacy and support more meaningful and effective learning for young learners.

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Author Contributions

Z.A. conceptualized the study, conducted data collection, performed the data analysis, and prepared the original draft of the manuscript. A.F. contributed to the research methodology. D. supervision, and review and editing of the manuscript. All authors have read and approved the final version of the manuscript.

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Conflicts of Interest

The authors declare no conflict of interest

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