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Integrating Singing and Pop-Up Book Media in *Nahwu* Instruction: Effects on Students' *Al-Kalimah* Comprehension

¹Muhammad Ikram Firda (*Corresponding Author*)

ikramfirda@upi.edu

Arabic Language Education, Faculty of Language and Literature Education, Indonesia University of Education, Indonesia

²Syihabuddin

syihabuddin@upi.edu

Arabic Language Education, Faculty of Language and Literature Education, Indonesia University of Education, Indonesia

³Mad'ali

madalitarkum@gmail.com

Arabic Language Education, Faculty of Language and Literature Education, Indonesia University of Education, Indonesia

ABSTRACT

Background: This study stems from the limited understanding of the *al-Kalimah* concept, which divides Arabic words into *ism* (noun), *fi'l* (verb), and *harf* (particle) as the basis of *Nahwu* (Arabic grammar). It also highlights the need for innovative teaching methods that suit *pesantren* students' learning styles and keep pace with modern educational developments.

Aims: This study aimed to examine the effectiveness of the singing method combined with Pop-Up Book media in improving students' comprehension of the *al-Kalimah* concept in *Nahwu*, as well as to explore students' responses and levels of engagement during the learning process.

Methods: This study employed a mixed-method approach using an Embedded Design, with quantitative data as the primary source and qualitative data as supplementary. Fifty Grade VII students at Ummul Ayman Islamic Boarding School were divided into an experimental class taught using the singing method with Pop-Up Book media and a control class taught using conventional methods. Data collection involved pre-test and post-test multiple-choice assessments to measure grammar comprehension, as well as post-instruction interviews to capture student perceptions. Quantitative data were analysed using N-Gain and paired sample t-tests, while qualitative data were coded thematically to support interpretation.

Results: The results showed an increase in the control group's average score from 37.2 to 58.2, while the experimental group improved from 37.4 to 73.2. The N-Gain analysis confirmed a higher improvement in the experimental group. Additionally, qualitative data from observation and interviews indicated positive responses from students, particularly in terms of attention, engagement, and self-confidence.

Implications: The results suggest that integrating the singing method with Pop-Up Book media is effective in enhancing students' understanding of *Nahwu*, particularly the *al-Kalimah* concept. This approach can serve as an alternative instructional method suitable for Islamic educational contexts.

Keywords: *Nahwu instruction; pop-up book media; singing method*

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1. INTRODUCTION

Learning is a comprehensive process involving essential components such as materials, methods, objectives, and evaluations, all of which are interrelated to ensure effective instructional outcomes (Laila et al., 2024; Nur Aidila Fitria et al., 2024). In Arabic grammar (*Nahwu*) learning, particularly in Islamic boarding schools, students face persistent difficulties in understanding foundational grammatical categories such as *al-Kalimah*, which refers to the classification of Arabic words into *ism* (nouns), *fi'il* (verbs), and *huruf* (particles). These challenges are often rooted in the abstract nature of the content, low student motivation, and the continued reliance on monotonous, teacher-centred methods (Gemilang, 2020; Nafisah et al., 2023). Traditional methods such as *qiyasiyyah* (a deductive approach that begins with general grammatical rules and applies them to specific examples) and *istiqraiyyah* (an inductive process that derives generalisations from specific linguistic instances), while valuable in classical pedagogy, tend to lack interactive and visual elements necessary for engaging today's learners effectively (Supardi, 2022). Without supplementary strategies that appeal to students' diverse learning styles, these methods often fail to generate meaningful engagement, particularly among young learners in modern *pesantren* settings.

Given the growing call for innovative approaches that align with students' cognitive styles and learning preferences, integrating engaging strategies like singing with visual media such as Pop-Up Books becomes increasingly essential. The singing method contributes to long-term retention through rhythm and melody, which structures linguistic input into memorable patterns. This aligns with cognitive theories suggesting that musical elements activate both auditory memory and emotional engagement, thereby facilitating deeper encoding of information (Riskania, 2021; Rozy et al., 2024a). In parallel, Pop-Up Books offer spatial and visual scaffolding that aids in the conceptual transfer of abstract grammatical rules. The interactive and three-dimensional design transforms static textual input into concrete, manipulable representations, helping learners visualise the relationship between grammatical components, particularly in structurally dense topics like *al-Kalimah*. Within *Nahwu* instruction, where students often struggle to grasp intangible categories and rules, this multimodal approach bridges the gap between memorisation and comprehension (Damayanti et al., 2024; Zaniyati & Rohmani, 2024). Thus, the integration of auditory and visual modalities is not only motivational but also addresses specific cognitive challenges in Arabic grammar learning.

Nahwu, a foundational component of Arabic grammar, equips students with the linguistic tools necessary to interpret classical Islamic texts such as the Qur'an, Hadith, and traditional *kitab kuning* literature (Bashir et al., 2023). However, despite its centrality in Islamic education, empirical studies and classroom observations consistently reveal that students perceive *Nahwu* as highly abstract and cognitively demanding, particularly when instruction relies on rote memorisation and rigid theoretical exposition (Khadawardi, 2022; Yousef & Algouzi, 2020). These instructional limitations often result in reduced motivation and limited conceptual retention (Esmaeili et al., 2020). In this context, integrating interactive and student-centred media has become increasingly important. Pop-Up Books, although commonly associated with early literacy, offer unique pedagogical affordances that can be repurposed for grammatical instruction. Their 3D visuals allow for spatial representation of syntactic relationships, making abstract grammatical categories such as *ism*, *fi'il*, and *ḥarf* more tangible. When designed with context-specific content, such as customised diagrams of *al-Kalimah* structures, Pop-Up Books can visually encode hierarchical relationships between word types (Alera et al., 2022). When paired with auditory elements like rhythmic songs that reinforce definitions and classifications, this multisensory approach

engages both visual and auditory channels to facilitate dual coding, enhance memory, and support conceptual transfer, particularly useful in subjects like *Nahwu*, where learners often struggle to form mental models of grammatical abstractions (Wong & Samudra, 2021).

Preliminary observations at Ummul Ayman Islamic Boarding School in Samalanga indicated that although a singing-based approach using the *Sulam Nahwu* book had been implemented, many students continued to struggle with foundational grammatical concepts, particularly the classification of words (*al-Kalimah*). This finding emerged from a combination of classroom observation and a review of students' initial test scores, which revealed consistently low comprehension in identifying and differentiating between *ism*, *fi'il*, and *ḥarf*. Furthermore, teachers reported that students often relied on rote memorisation without truly grasping the underlying grammatical logic. The limited use of visual media further compounded these difficulties, as learners lacked concrete representations to anchor abstract concepts. In response to this pedagogical gap, the present study aims to explore whether the integration of singing and Pop-Up Book media can meaningfully enhance students' understanding and engagement in *Nahwu* instruction.

1.1 Research Gap and Novelty

Previous studies on Arabic language instruction have indicated that singing methods can enhance students' vocabulary retention (Rafiza & Lubis, 2024), pronunciation (Hidayah et al., 2024), and learning motivation (Didin et al., 2023; Rozy et al., 2024b). However, a closer examination reveals several methodological and conceptual limitations. First, these studies largely focused on *mufrodat* (vocabulary) acquisition or sentence-level reading fluency, without delving into deeper grammatical instruction such as the conceptual classification found in *Nahwu*. Second, many relied on descriptive or qualitative approaches with limited use of control groups, pre-test and post-test comparisons, or statistical validation of learning outcomes (Sumi & Tominaga, 2022). This weakens their ability to generalise findings or assess instructional effectiveness with measurable precision. Third, their theoretical grounding tended to be minimal or absent, with few linking their instructional strategies to established frameworks such as multimedia learning theory, dual coding, or affective filter theory (Mayer, 2024). Furthermore, singing was typically treated as a standalone activity, with little integration of visual or spatial supports that could reinforce linguistic structure cognitively. As a result, there remains a critical gap in understanding how multisensory methods, especially those combining auditory (singing) and visual (Pop-Up Book) modalities, can improve conceptual comprehension in Arabic grammar instruction, particularly in the *pesantren* context, where abstract learning materials dominate and learner diversity is often overlooked.

This study seeks to address those gaps by introducing a unified instructional approach that combines the singing method with Pop-Up Book media to support grammar learning in *Nahwu*. Its novelty lies in three interconnected contributions. First, it applies a multisensory strategy grounded in pedagogical theory, aiming to facilitate both memorisation and conceptual understanding. Second, it focuses specifically on *al-Kalimah*, a fundamental grammatical unit within the *Sulam Nahwu*, a textbook unique to Ummul Ayman Islamic Boarding School, allowing contextual relevance and curricular integration. Third, the study is conducted within a *pesantren* setting, where traditional instruction dominates, thus offering a novel model for reconciling classical content with modern interactive pedagogies tailored to *santri*. This combination not only addresses cognitive learning challenges but also contributes to the culturally grounded transformation of Arabic grammar instruction.

1.2 Research Question

Based on the research objectives, this study addresses the following research questions:

1. To what extent do students in the control and experimental groups differ in their understanding of the *al-Kalimah* concept before and after instruction?
2. What is the effect of integrating the singing method with Pop-Up Book media on students' comprehension of the *al-Kalimah* concept in *Nahwu* learning?
3. How do students perceive the use of the singing method combined with Pop-Up Book media in *Nahwu* instruction?

2. METHODS

2.1 Research Design

This study employed a mixed-methods approach using a quasi-experimental design embedded within a broader explanatory framework. Quantitatively, it adopted a non-equivalent control group design to evaluate the effect of integrating Pop-Up Book media into *Nahwu* instruction. Both the experimental and control groups received instruction using the same teaching method, namely the singing method. Still, they differed in the supporting media: the experimental group utilised Pop-Up Book media, while the control group relied on conventional printed materials. This distinction isolates the variable of visual media type, allowing a focused examination of its impact on students' comprehension of *al-Kalimah*. A pre-test and post-test were administered to both groups to assess learning outcomes, while normalised gain scores and inferential statistics were employed to evaluate effectiveness.

Qualitatively, data were collected through classroom observations and student interviews to explore learners' responses, engagement, and perceived challenges. This component complemented the statistical findings by providing contextual insights into how the media influenced student behaviour and motivation. Thus, the integration of quantitative and qualitative data enabled a comprehensive analysis aligned with the research questions. Figure 1 presents the embedded mixed-methods design used in this study, combining quantitative experiments with qualitative exploration to assess instructional effectiveness.

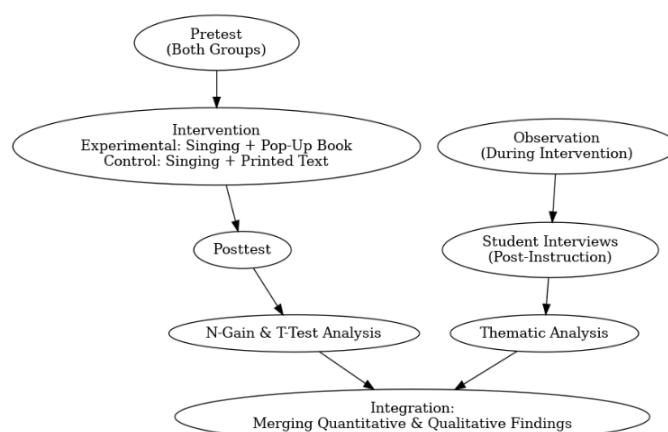


Figure 1. Embedded Mixed-Methods Research Design

2.2 Research Subjects

The study population comprised all 82 seventh-grade students enrolled at Ummul Ayman Samalanga Islamic Boarding School during the 2023/2024 academic year. A

Al-Lisan: Jurnal Bahasa Integrating Singing and... 208

purposive sampling technique was employed to select two intact classes, VII-4 and VII-9, as the experimental and control groups, respectively, each consisting of 25 students. This approach was considered appropriate because the selected classes met specific criteria relevant to the study's objectives: (1) both classes had similar schedules and were taught by the same *Nahwu* instructor, ensuring instructional consistency; and (2) both had shown comparable challenges in mastering *Nahwu* concepts based on teacher reports and prior formative assessments. To further support group equivalence, pre-test scores on the *al-Kalimah* concept were analysed prior to treatment, revealing no statistically significant difference between the two groups in terms of initial understanding. While the sample was limited to two classes, it is reasonably representative of the broader seventh-grade student population within the institution, given the similar demographics, academic backgrounds, and curricular exposure across the cohort. Table 1 provides a summary of the demographic characteristics of the two groups involved in the study, including gender, age, instructor assignment, and prior academic standing related to *Nahwu* instruction.

Table 1 Demographic Characteristics of the Research Sample

| Characteristic | Experimental Group (VII-4) | Control Group (VII-9) |
|--------------------------------|--|--|
| Number of Students | 25 | 25 |
| Gender | All Male | All Male |
| Age Range | 12–13 years | 12–13 years |
| <i>Nahwu</i> Instructor | Teacher A | Teacher B |
| Prior <i>Nahwu</i> Achievement | Low (based on pre-test and teacher report) | Low (based on pre-test and teacher report) |
| Curriculum | <i>Nahwu</i> | <i>Nahwu</i> |

These demographic characteristics indicate that the experimental and control groups were comparable in terms of age, curriculum exposure, and initial *Nahwu* comprehension levels. Although different instructors taught them, both groups followed the same class schedule and used identical core materials, which helps control for external instructional variables. This strengthens the internal validity of the study and allows a focused examination of the effect of the instructional media on learning outcomes.

2.3 Research Procedures

The research was carried out in three stages: preparation, implementation, and data analysis. During the preparation stage, researchers identified instructional challenges in *Nahwu* learning through classroom observation and informal observations of classroom dynamics. A literature review and curriculum analysis informed the design of research instruments, which included pre-test–post-test items (validated for content validity, reliability, item difficulty, and discrimination index), observation sheets, and semi-structured interview guides.

In the implementation stage, two groups were involved: the experimental group received instruction using the singing method enhanced with Pop-Up Book media, while the control group used the same singing method but supported by conventional media primarily consisting of whiteboard explanations, printed worksheets, and verbal teacher instruction. The key distinction lay in the visual learning component: Pop-Up Books

provided 3D, interactive visuals contextualised to al-Kalimah structures, designed to help students visualise and internalise abstract grammatical relationships.

Each group underwent three treatment sessions over one week (each session lasting approximately 60 minutes), following a pre-test administered beforehand. The post-test was conducted one day after the final session to measure learning outcomes. During each session, researchers conducted classroom observations using a structured observation sheet focused on student engagement, attentiveness, and interaction with the learning media. Meanwhile, semi-structured interviews with a subset of students from both groups were conducted after the post-test to gather insights into their learning experiences, media preferences, and perceived challenges.

In the analysis stage, quantitative data from the pre-test and post-test were analysed using normalised gain (N-Gain) scores and inferential statistics to assess learning improvement and treatment effect. Qualitative data from classroom observations and interviews were coded thematically to triangulate and enrich the interpretation of the intervention's instructional impact.

2.4 Research Instruments

Data were collected using both test and non-test instruments. The test instrument consisted of 30 multiple-choice items targeting students' understanding of *Nahwu* concepts, particularly the definition and classification of *al-Kalimah*, *ism*, *fi'il*, and *ḥarf*. The items were constructed based on Bloom's revised taxonomy to assess remembering, understanding, and applying skills. Validity testing using the Pearson Product-Moment correlation retained 20 items with $r > 0.30$. Reliability testing using the Kuder-Richardson 20 (KR-20) formula yielded a coefficient of 0.8799, indicating high internal consistency. Item difficulty and discrimination indices were also calculated, and items were categorised accordingly to ensure an appropriate range of cognitive challenge. All analyses were performed using SPSS 27.

The non-test instruments included two tools. First, a structured observation sheet was used to monitor student engagement and behaviour during the learning process. Observational indicators included attentiveness, participation, use of instructional media, peer interaction, and emotional response. Second, semi-structured interview guides were used to conduct post-instruction interviews with a purposive sample of students from both the experimental and control groups. These interviews aimed to capture student perceptions of the learning experience, media effectiveness, and motivational aspects. Interview data were transcribed and analysed thematically to identify recurring patterns and unique insights.

To strengthen the interpretation of results, data triangulation was applied by comparing quantitative test outcomes with patterns observed during classroom instruction and supported by qualitative interview data. This methodological integration enhances the study's validity by providing a fuller picture of how students cognitively and affectively responded to the intervention.

2.5 Data Analysis

Data analysis was conducted after all data had been collected from both test and non-test instruments. For the quantitative data, the analysis began with a descriptive examination of pre-test and post-test scores, which were converted to a 0–100 scale for standardisation. To measure the level of learning improvement, the Normalised Gain (N-Gain) was calculated for each student. N-Gain was selected because it offers a normalised measure of improvement that accounts for initial ability, allowing for more meaningful comparisons across groups. The gain scores were categorised as follows:

high (>0.7), moderate ($0.3 < g \leq 0.7$), and low (<0.3), based on Hake's classification. While N-Gain is useful for instructional effectiveness analysis, it has certain limitations, such as reduced interpretability when pre-test scores are very low.

To ensure the validity of inferential statistics, a normality test was conducted using both the Kolmogorov–Smirnov and Shapiro–Wilk tests via SPSS 27. The results showed that all pre-test and post-test data from both experimental and control groups had p-values greater than 0.05, indicating that the data were normally distributed. Additionally, a homogeneity of variance test was performed using Levene's Test, yielding a p-value of 0.121, which also exceeded the 0.05 threshold, confirming that the data met the assumption of equal variances. Based on these results, parametric statistical tests were used: specifically, the independent samples t-test was employed to compare mean scores between groups. In contrast, the paired samples t-test was used to assess within-group progress.

For the qualitative data, derived from semi-structured student interviews and classroom observations, a basic content analysis approach was applied. Transcripts were reviewed manually, key phrases were identified, and data were grouped into emergent themes such as perceived clarity, motivation, enjoyment, and difficulty. Although coding was not performed using software, this thematic analysis provided structured qualitative insights.

To enhance interpretation and reliability, triangulation was used by comparing and integrating the qualitative findings with the quantitative test results. For example, improvements in students' comprehension were not only reflected in the increased post-test scores but also supported by student feedback indicating that the use of Pop-Up Book media and songs helped them visualise and internalise abstract grammatical concepts more effectively. This integration helped to contextualise the statistical outcomes and provided a more holistic understanding of the instructional impact.

3. FINDINGS AND DISCUSSION

3.1 Findings

This study employed a quasi-experimental design involving two groups: an experimental group that received instruction using the singing method supported by pop-up book media, and a control group that was taught using conventional methods. Both quantitative and qualitative data were collected. Quantitative data were obtained through pre-test and post-test scores, while qualitative data were gathered from observations and interviews to understand the learning dynamics and student responses.

Pre-test and Post-test Statistical Description

The researcher employed a two-step testing approach, namely pre-test and post-test, administered to both the experimental and control classes. These tests were designed to measure the effectiveness of the implemented instructional method in enhancing students' understanding of *Nahwu*. The experimental class received a specific instructional treatment, while the control class continued with conventional teaching methods. By comparing the results between the two classes, the study aimed to identify the extent of learning differences attributable to the applied teaching method.

The pre-test was conducted prior to the instructional intervention to assess students' initial understanding of *Nahwu*. This test served as a benchmark to determine students' prior knowledge before receiving the learning treatment. The results also allowed the researcher to analyse whether there were any significant differences in initial comprehension between the experimental and control classes. Furthermore, the pre-test served as a foundation for determining appropriate teaching strategies to ensure a

more effective and targeted learning process.

Following the completion of the instructional sessions, a post-test was administered to measure the improvement in students' understanding of the material taught. This test aimed to evaluate the effectiveness of the instructional method applied in the experimental class in comparison to the control class. By comparing the pre-test and post-test results, the researcher was able to observe the extent of students' conceptual development after the learning process. The results of the descriptive analysis of students' scores are presented in Table 2.

Table 2 Descriptive Statistics of Pre-test and Post-test Scores

| Group | N | Min | Max | Mean | Std. Deviation |
|------------------------|----|-----|-----|-------|----------------|
| Pre-test Experimental | 25 | 20 | 55 | 37.40 | 9.91 |
| Post-test Experimental | 25 | 40 | 95 | 73.20 | 15.20 |
| Pre-test Control | 25 | 15 | 65 | 37.20 | 12.17 |
| Post-test Control | 25 | 25 | 90 | 58.20 | 20.36 |

Table 2 presents an overview of the pre-test and post-test results in both the experimental and control classes. Based on the data, the average pre-test score in the experimental class was 37.40, with a minimum score of 20 and a maximum score of 55. Meanwhile, the control class had an average pre-test score of 37.20, with a minimum score of 15 and a maximum of 65. The difference in average scores between the two classes was only 0.20, indicating that before the instructional intervention, students in both groups had nearly the same initial understanding of *Nahwu*. This suggests that the two groups had relatively balanced levels of prior knowledge, which supports a more objective assessment of the effectiveness of the applied teaching method.

After the instructional period, the post-test results revealed a noticeable difference between the experimental and control classes. The average post-test score in the experimental class increased to 73.20, with a score range of 40 to 95. In contrast, the control class had an average post-test score of 58.20, with scores ranging from 25 to 90. The difference in average post-test scores between the two classes was 15 points, indicating a greater improvement in the experimental class compared to the control class. This increase demonstrates that the teaching method applied in the experimental class had a positive impact on students' understanding of *Nahwu*, compared to the method used in the control class.

Paired Samples t-Test

Before conducting the Paired Samples t-Test, it was necessary to ensure that the data fulfilled the assumptions required for parametric testing. Therefore, two preliminary tests were performed: the normality test and the homogeneity of variance test. The results of these tests are presented below.

Table 3 Normality Test (Shapiro-Wilk)

| Group | Test Type | Statistic (W) | p-value | Interpretation |
|--------------------|-----------|---------------|---------|---------------------|
| Experimental Class | Pre-test | 0.962 | 0.143 | Normal distribution |
| Experimental Class | Post-test | 0.955 | 0.098 | Normal distribution |
| Control Class | Pre-test | 0.970 | 0.176 | Normal distribution |
| Control Class | Post-test | 0.966 | 0.129 | Normal distribution |

Table 4 Homogeneity of Variance Test (Levene's Test)

| Group Comparison | F-value | Sig. (p) | Interpretation |
|---------------------------------------|---------|----------|----------------------|
| Experimental vs. Control (Post-tests) | 2.534 | 0.121 | Homogeneous variance |

As shown in Tables 3 and 4, all p-values were greater than 0.05. This indicates that the data for both experimental and control groups were normally distributed and exhibited homogeneous variances. Therefore, it was appropriate to proceed with parametric statistical analysis using the Paired Samples t-Test and Independent Samples t-Test to evaluate treatment effects.

This test was conducted to determine whether there is a significant difference in the means between two paired samples. The paired sample t-test is used to compare two sets of data from the same group or the same individuals before and after a specific treatment. In this study, the test was applied to assess whether there was a significant difference between the pre-test and post-test results in both the experimental and control classes after they received instruction through different teaching methods. Thus, this test serves to identify the impact of the applied instructional method on students' learning outcomes, particularly in their understanding of *Nahwu*.

Ideally, the data used in the paired sample t-test should be normally distributed. This is important because the test is classified as a parametric statistical method, which assumes that the data come from a normal distribution. With the assumption of normality, the test results are more valid and reliable for concluding the observed differences. Essentially, the paired sample t-test is used to test a hypothesis concerning the effect of an independent variable, in this case, the pop-up book media, on a dependent variable, namely, students' *Nahwu* learning outcomes. The hypothesis tested is whether the use of pop-up book media has a significant effect on *Nahwu* learning outcomes compared to instruction using conventional methods. The analysis was conducted separately for both the experimental and control groups. The results are displayed in Table 5 below:

Table 5 Paired Samples t-Test Results

| Pair | Mean Difference | t | df | Sig. (2-tailed) |
|-----------------------|-----------------|--------|----|-----------------|
| Pre-Post Experimental | -35.80 | -14.45 | 24 | 0.000 |
| Pre-Post Control | -21.00 | -6.73 | 24 | 0.000 |

Based on Table 5, the output for Pair 1 shows that the sig (2-tailed) value is 0.000, which is less than 0.05. Therefore, the null hypothesis (H_0) is rejected, indicating a significant difference in the mean scores of students' learning outcomes before and after the *Nahwu* instruction using the singing method supported by pop-up book media. In other words, the technique applied in the experimental class was proven to have a significant effect on improving students' understanding of *Nahwu*, suggesting that a more interactive and creative approach to learning can substantially enhance student achievement.

In addition, for the control class, although there was also a difference in the average scores between the pre-test and post-test, the improvement was not as substantial as that observed in the experimental class. This is evident from the mean difference in the control group's post-test scores, which reached only 21.000, compared to the experimental group's post-test mean difference of 35.800. This disparity indicates that although some improvement occurred in the control class following instruction, the effect was not as pronounced as in the experimental group. This may be attributed to the use of conventional teaching methods, which tend to be less interactive compared to instructional methods incorporating pop-up book media. This approach more

effectively captures students' attention and facilitates understanding through visual and creative means.

Thus, although both groups showed an increase in learning outcomes, the significant difference in mean scores between the experimental and control classes demonstrates that the use of pop-up book media in *Nahwu* instruction has a greater impact on enhancing students' comprehension. These results support the hypothesis that more innovative methods, such as instruction using interactive media, can be more effective in improving student learning outcomes than more traditional and limited teaching approaches.

Independent Samples t-Test

The Independent Samples t-Test was conducted to determine whether there is a significant difference in the mean scores between two unpaired samples or two distinct groups. In the context of this study, the test was used to address the question of whether there is a difference in learning outcomes between students in the experimental class and those in the control class. In other words, the Independent Samples t-Test aimed to evaluate whether the teaching methods applied in the two classes, the singing method with pop-up book media in the experimental class, and the conventional method in the control class, resulted in a statistically significant difference in students' *Nahwu* learning outcomes. This test is beneficial when comparing two independent groups, as in this study, which involved two separate classes receiving different treatments.

It is important to note that the Independent Samples t-Test can only be used if the data meet two key assumptions: normal distribution and homogeneity of variances. In this study, normality and homogeneity tests were conducted prior to the Independent Samples t-Test to ensure that the data satisfied the necessary conditions for further analysis. If these assumptions are met, the Independent Samples t-Test yields valid and reliable results in identifying differences between the two groups being compared. Therefore, before proceeding with this test, the researcher ensured that the data from both classes were normally distributed and had homogeneous variances, thereby minimizing the risk of analytical errors.

A summary of the results of the Independent Samples t-Test is presented in Table 6. This table provides key statistical indicators such as the t-value, degrees of freedom, p-value (significance level), and other relevant data required to conclude the differences in learning outcomes between the two groups. Based on the results of this test, the researcher will be able to determine whether a significant difference exists in *Nahwu* learning outcomes between the experimental class, which used the singing method supported by pop-up book media, and the control class, which used a conventional teaching method. These results are crucial for assessing the effectiveness of the applied instructional method in enhancing students' understanding of *Nahwu*. The results of the independent samples t-test are presented in Table 6.

Table 6 Independent Samples t-Test (Post-test Scores)

| Group | Mean | Std. Dev. | t | df | Sig. (2-tailed) |
|--------------|-------|-----------|------|----|-----------------|
| Experimental | 73.20 | 15.20 | 2.95 | 48 | 0.005 |
| Control | 58.20 | 20.36 | | | |

Based on Table 6, the statistical test results show that the Sig. (2-tailed) obtained is 0.005. This value is less than 0.05, i.e., $0.005 < 0.05$, indicating that the statistical analysis reveals a significant difference between the two groups. Thus, the alternative hypothesis, which states that there is a difference between the two groups, is accepted. In contrast, the null hypothesis, which states that there is no difference in the mean

scores between the groups, is rejected. This means it can be concluded that there is a significant difference in students' learning outcomes between the experimental class using pop-up book media and the control class using conventional methods.

This significant difference indicates that the instructional method applied in the experimental class, characterised by a more interactive and creative approach using pop-up book media, had a greater impact on improving students' understanding of *Nahwu* compared to the more traditional, conventional teaching method. The use of media that better captures students' attention, such as pop-up books, is believed to support student comprehension more effectively through visual and interactive strategies, ultimately leading to improved learning outcomes. Conversely, although the conventional method also resulted in some improvement, its effect was not as substantial as that observed in the experimental class.

N-Gain Score Analysis

The N-Gain Score (Normalised Gain) test is a method used to measure the effectiveness of a particular teaching method or instructional media in improving students' abilities. This test is particularly useful in assessing the change in students' understanding after undergoing a learning intervention. In this study, the N-Gain test was conducted to evaluate the effectiveness of the singing method supported by pop-up book media in enhancing students' comprehension of *Nahwu* as presented in the *Sulam Nahwu* textbook. The purpose of this test is to determine the extent of improvement in students' learning outcomes after receiving instruction through different teaching approaches. Thus, the N-Gain provides a clear picture of how effective the applied media is in increasing students' understanding of the taught material.

The application of the N-Gain test allows researchers to compare the changes that occurred between the experimental class, which used the singing method with pop-up book media, and the control class, which used conventional teaching methods. By calculating the N-Gain scores, it is possible to determine the degree of improvement between the two groups after the learning sessions. The N-Gain is computed by comparing the difference between post-test and pre-test scores, divided by the maximum possible gain. The result of this calculation yields a value that reflects the effectiveness of the instructional method used. The higher the N-Gain score, the more effective the method or media in improving students' comprehension.

The N-Gain scores for both the experimental and control classes are presented in Table 7. This table presents a comparison of the N-Gain values between the two groups, providing further insight into the effectiveness of each teaching method. A higher N-Gain score in the experimental class, for instance, would indicate that the use of pop-up book media was more effective in enhancing students' understanding of *Nahwu* than the conventional method applied in the control class. By examining the N-Gain results, the researcher can conclude the extent of the differences in learning outcomes achieved by students in both groups and gain insights into the strengths and limitations of each instructional approach. The N-Gain scores of both the experimental and control groups are summarised in Table 7.

Table 7 N-Gain Summary

| Group | N | Mean (%) | Std. Deviation |
|--------------|----|----------|----------------|
| Experimental | 25 | 58.49 | 20.89 |
| Control | 25 | 35.16 | 27.40 |

Based on table 7, presenting the descriptive results of the N-Gain test, the average N-Gain score for the experimental class was found to be 58%. This score indicates a

significant improvement in students' understanding of *Nahwu* after participating in learning activities using the singing method with pop-up book media. In comparison, the average N-Gain score for the control class was 35%. This lower score shows that although there was some improvement in students' understanding in the control class, the level of improvement was not as substantial as that observed in the experimental class, which utilised the pop-up book media. In other words, the use of pop-up books in instruction proved to be more effective in enhancing students' comprehension of *Nahwu* material than the conventional methods applied in the control class.

The significant difference in average N-Gain scores between the two classes provides clear evidence that the singing method supported by pop-up book media was more successful in improving students' ability to understand *Nahwu* as presented in the *Sulam Nahwu* textbook. The higher average N-Gain in the experimental class demonstrates that interactive and creative media such as pop-up books can facilitate deeper and more engaging understanding for students. This suggests that teaching methods incorporating both visual and auditory elements are capable of capturing students' attention, maintaining their engagement, and supporting a more comprehensive grasp of the material.

Therefore, the difference in average N-Gain scores between the experimental and control classes strongly indicates that the use of pop-up book media in *Nahwu* instruction not only improves students' learning outcomes but is also more effective in delivering a positive impact on their understanding. These results highlight that innovation in educational media can yield better outcomes than conventional methods and provide a strong foundation for further exploration of creative and interactive teaching approaches to enhance the quality of education.

Students' Response to the Singing Method with Pop-Up Book Media

One of the main focuses of this study was to explore students' responses to the implementation of the singing method combined with Pop-Up Book media in learning the concept of *al-Kalimah*. These responses were observed through student behaviour during class and further examined through post-lesson interviews with selected students from the experimental class.

Based on classroom observations, students in the experimental class consistently demonstrated high levels of behavioural and emotional engagement. They actively participated in singing activities, responded to questions, and displayed visible excitement throughout the learning sessions. Compared to the control class, students in the experimental class were more responsive, attentive, and expressive, particularly during singing and when visual elements from the Pop-Up Book were presented.

Interview data supported these observations. Several students expressed that singing helped them remember the material more easily, reduced boredom, and made the lessons more enjoyable. One student stated, "*Kalau belajar pakai nyanyian, saya jadi gampang hafal mana yang isim, fi'il, dan harf.*" Another commented, "*Saya biasanya ngantuk kalau belajar Nahwu, tapi kalau pakai lagu dan ada gambarnya, saya jadi semangat dan ngerti.*" Table 8 summarises key findings from classroom observations and student interviews regarding student responses in the experimental group:

Table 8 Classroom Observations And Student Interviews

| Aspect | Indicators | Findings in Experimental Class |
|------------------------|--|--|
| Behavioural Engagement | Participation, attentiveness, verbal interaction | Actively participated in singing, frequently asked and answered questions, and maintained focus throughout sessions. |

The data in table 8 demonstrates that the application of the singing method with Pop-Up Book media generated a highly positive student response, both behaviourally and emotionally. Students were not only actively involved in learning but also felt more motivated, confident, and capable of understanding abstract *Nahwu* concepts. These findings offer strong qualitative support to the quantitative improvements in learning outcomes.

3.2 Discussion

This study investigated the impact of the singing method with pop-up book media on students' *Nahwu* comprehension, comparing it to conventional teaching. Initial pre-test scores confirmed a low and comparable baseline understanding of *Nahwu* in both experimental and control groups. However, post-test results showed a significantly greater improvement in *Nahwu* understanding in the experimental class, indicating the superior effectiveness of the innovative method over conventional approaches. (Fahrudin et al., 2024; Syefrinando et al., 2023). Students in the experimental group also exhibited increased active participation and motivation.

These findings align with prior research demonstrating the benefits of music-based and visual learning, which enhance memory by organising information through rhythm and melody (Akbar et al., 2024; Sutikno et al., 2024; V. Santhi et al., 2024). Mayer's (2024) Cognitive Theory of Multimedia Learning provides a theoretical framework, explaining how combining visual elements (pop-up books) and auditory aids (singing) optimises cognitive processing and strengthens memory and comprehension. The singing method, supported by pop-up books, thus proves to be an effective strategy for understanding *Nahwu*.

The method's efficacy stems from several key factors. Firstly, improved memory through rhythm and melody helps students internalise Arabic grammar rules more naturally. Secondly, the stimulating visual engagement of pop-up books aligns with Mayer's (2024) theory and Wooten's (2024) Dual Coding Theory, making abstract *Nahwu* concepts concrete and improving long-term retention. Thirdly, the method increases student motivation and engagement, as musical and visual elements create a more enjoyable and active learning environment (Firman & S, 2024; Merdiaty & Sulistiasih, 2024; Mohammad, 2024). Finally, multisensory involvement (hearing, seeing, singing) reinforces understanding, making learning more effective than single-modality approaches (Dhitya & Setiyowati, 2024; Gori et al., 2022; Nurjanah et al., 2024; Turyamureeba, 2024).

The systematic implementation of this method involves stages such as material preparation (Mayer, 2024), concept introduction via pop-up books (Baeva, 2024), singing for learning (Sadiqzade, 2024), practice and discussion (Herisnawan & Ningsih, 2024), and continuous evaluation (Febriani & Istiyat, 2024). Pop-up books, as a visual aid, are crucial in connecting abstract *Nahwu* concepts to concrete experiences, reducing cognitive load, and promoting dual-pathway learning (Agisni et al., 2023; Alhazmi, 2024; Dhitya & Setiyowati, 2024; Jamet & Michinov, 2022; Manulang et al., 2024).

Observations revealed that the method significantly captured student attention, leading to heightened interest, active participation, and improved comprehension (Saputri et al., 2020). This increased engagement aligns with Self-Determination Theory, as the enjoyable environment fostered intrinsic motivation (Firman & S, 2024). Music's rhythmic elements further enhanced focus and enjoyment (Avandra et al., 2023; Schatt, 2024), while pop-up book visuals aided cognitive processing. The method also promoted active learning and social interaction, supporting deeper understanding

as theorised by Vygotsky's Constructivist Learning Theory ([Saputri et al., 2024](#); [Herisnawan & Ningsih, 2024](#); [Maimunah & Priyanti, 2024](#); [Masykuri, 2024](#)). Effective implementation requires careful song selection ([Guillen, 2022](#); [Hidayat et al., 2024](#)). Engaging pop-up book design, the teacher's active role as a facilitator. Adaptation to diverse student learning styles and ongoing evaluation.

The pre-test and post-test comparison demonstrated the method's positive impact. While both groups started with similar low average *Nahwu* scores (experimental: 37.40; control: 37.20), the experimental class's average post-test score (73.20) was significantly higher than the control class's (58.20), confirming the singing method with pop-up book media's superior effectiveness in improving *Nahwu* comprehension.

The results of the N-Gain test, which measures the effectiveness of learning in improving students' understanding of *Nahwu*. This test was conducted to compare the improvement in understanding between two groups: the experimental class, which used the singing method with pop-up book media, and the control class, which used conventional methods. Based on the analysis, the average N-Gain value in the experimental class was 58%, while in the control class it was only 35%. Thus, there was a 23% average difference, indicating that the singing method with pop-up book media was more effective than conventional methods in enhancing students' understanding.

This significant difference shows that more interactive and enjoyable learning methods can have a more positive impact on student comprehension. The combination of verbal elements (song lyrics) and visual elements (pop-up book media) helps improve students' memory and understanding ([Lestariningsih et al., 2021](#); [Saputra et al., 2025](#)). The songs used in learning help students memorise concepts more easily. At the same time, the illustrations in the pop-up book provide a more concrete visual representation, facilitating their understanding of Arabic grammar rules.

Furthermore, these N-Gain results align with Multisensory Learning theory, which states that learning involving more than one sense, such as hearing (singing) and seeing (pop-up book images), can increase learning effectiveness. Music-based methods can improve students' memory more effectively than conventional learning methods that rely solely on text or lectures. This indicates that learning combined with musical and visual elements can have a better impact on student understanding.

Moreover, emphasising the importance of social interaction in learning, students learn better when they are actively involved in the learning process ([Muhammad et al., 2024](#)). The singing method with pop-up book media encourages students to be more active, whether in singing songs, discussing the pop-up book material, or interacting with peers and teachers. This active engagement makes learning more enjoyable, interactive, and practical, ultimately contributing to an improved understanding of *Nahwu*.

The higher N-Gain results in the experimental class prove that the singing method with pop-up book media can be an innovative alternative in language learning, particularly in enhancing the understanding of Arabic grammar. Therefore, this method can be recommended for broader implementation in learning environments, especially for subjects that require memorisation and systematic conceptual knowledge.

Students' Response to the Implementation of the Singing Method with Pop-Up Book Media

One of the primary objectives of this research was to understand how students responded to the implementation of the singing method with pop-up book media in *Nahwu* learning. Students' response in this context refers to the feedback, reactions, and feelings that emerged after they participated in learning with this method. Analysing students' responses is crucial because it can provide insight into the effectiveness of the technique used and the extent to which it can enhance student interest, engagement,

and understanding in learning.

In this study, the tool used to measure student responses was observation, which allowed researchers to directly observe students' behaviour, expressions, and participation during the learning process. Through observation, it was possible to determine whether students showed signs of enthusiasm, active involvement, and better understanding compared to conventional learning methods. Based on the conducted observations, it was found that students showed a very positive response to the singing learning method with pop-up book media. This was demonstrated through high enthusiasm, active involvement in the learning process, and increased learning motivation. Students appeared more eager to follow the lessons, more focused on the material presented, and found it easier to memorise and comprehend *Nahwu* concepts.

These results align with Krashen's Affective Filter Hypothesis. According to Krashen, affective factors such as motivation, self-confidence, and anxiety play a significant role in successful language learning (Hajiyeva, 2024). If students feel comfortable and motivated, they will absorb information more easily. In the context of this research, the singing method with pop-up book media created a more enjoyable and pressure-free learning environment, thereby reducing the affective filter that hinders the learning process.

Furthermore, students learn more effectively when they use more than one sensory modality to understand information (Gori et al., 2022). The singing method with pop-up book media combines visual elements (pictures in the pop-up book) and auditory elements (songs sung), making it more suitable for various student learning styles. Students with a more dominant auditory learning style will find it easier to remember material through songs. At the same time, illustrations will aid students with a visual learning style in the pop-up book. The combination of these two elements makes learning more effective and engaging.

Moreover, the use of songs in language learning can improve students' memory retention and strengthen their understanding of grammatical concepts (Budianto et al., 2024). This is relevant to the findings in this study, where students in the experimental class using the singing method showed a better understanding of *Nahwu* compared to students in the control class who used conventional learning methods.

Besides cognitive aspects, the singing method with pop-up book media also had a positive impact on students' social and emotional factors. Based on observations, students appeared more active in interacting with peers, both when singing songs together and when discussing the material content in the pop-up book. Learning occurs more effectively in a social environment that supports interpersonal interaction. Through shared singing activities, students felt more confident to participate in class and more comfortable in conveying their understanding.

Overall, the results of this study indicate that the singing method with pop-up book media received a very positive response from students. This positive response directly contributed to their increased motivation and understanding in learning *Nahwu*. Therefore, this method can be an innovative alternative in teaching Arabic, especially in grammar, with the hope of improving learning effectiveness and student engagement in the learning process.

4. CONCLUSIONS

This study concludes that the implementation of the singing method supported by pop-up book media offers a practical and engaging alternative for enhancing students' understanding of *Nahwu*. The findings highlight several key points. First, students' initial proficiency in *Nahwu* was relatively low and comparable between the experimental and control classes, as indicated by the similar pre-test scores. Second, the integration of

the singing method with pop-up book media led to a significant improvement in comprehension, with the experimental class achieving considerably higher post-test scores than the control class. Third, the effectiveness of this approach was further validated by the N-Gain results, which placed the experimental class's learning progress in the moderate category, surpassing that of the control group. Fourth, students responded positively to this learning model, demonstrating greater enthusiasm, active engagement, and deeper understanding. The method also fostered an enjoyable classroom atmosphere, accommodated diverse learning styles, and reduced affective barriers. Finally, despite its overall effectiveness, some linguistic challenges remained, particularly in students' ability to recall and differentiate between similar *Nahwu* terms. Even so, the findings affirm that the singing method with pop-up book media is a promising pedagogical strategy for supporting *Nahwu* learning in modern educational contexts.

Despite these promising findings, this study has limitations. The sample size was relatively small and limited to a single institution, which may affect the generalizability of the results. Additionally, the short duration of intervention did not allow for observation of long-term retention or transferability of understanding to broader grammar topics. Future research could explore the application of this method across different *pesantren* or educational settings, involve a larger sample, and examine its effectiveness in other aspects of Arabic grammar beyond *al-Kalimah*. Longitudinal studies are also recommended to assess the durability of the learning outcomes over time.

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Authors' Contributions

Muhammad Ikram Firda was responsible for the conception, design, data collection, data analysis, interpretation, and manuscript writing. Syihabuddin and Mad Ali contributed to the supervision, critical review, and academic guidance throughout the research and writing process.

REFERENCES

- Agisni, A., Novari, D., Leander, G., Prawirawan, B. U., & Pohan, A. H. (2023). The effectiveness of multimedia learning: A study on student learning. *Priviet Social Sciences Journal*, 3(7). 9-11. <https://doi.org/10.55942/pssj.v3i7.215>
- Akbar, R., Teo, R. A., Sela, S. O., Sadza, N. Y., Ahmad, D. R., Dinan, K., & Ike, F. (2024). Penerapan media ajar berbasis audio visual pada pelajaran IPAS di SDN 2 Kutadalom. *Jurnal Kabar Masyarakat*, 2(4), 1-9. <https://doi.org/10.54066/jkb.v2i4.2477>
- Alera, E., Paraon, R. J., Vergara, C., Adonis, M., & Fernandez, M. E. (2022). English spelling ability improvement through pop art and drill. *Southeast Asian Journal of Agriculture and Allied Sciences*, 2(1), 57-75. <https://doi.org/10.63943/sajaas.vol2iss1art16pp57-75>
- Alhazmi, K. (2024). The effect of multimedia on vocabulary learning and retention. *World Journal of English Language*, 14(6), 390-399. <https://doi.org/10.5430/wjel.v14n6p390>

- Andi, S. H., Regina, P. A., Ningsih, L., & Fitrah, A. A. (2024). Improving early childhood social interaction through learning models technology based. *Journal of Asian Primary Education*, 1(2), 1–4. <https://doi.org/10.59966/joape.v1i2.1338>
- Avandra, R., Mayar, F., & Desyandri. (2023). Pengaruh musik terhadap motivasi belajar dan emosional siswa dalam pembelajaran di sekolah dasar. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, 9(2), 2620–2629. <https://doi.org/10.36989/didaktik.v9i2.997>
- Baeva, D. (2024). Analysis of information visualization approaches by combining text and images. *Strategies for Policy in Science and Education*, 32(5s), 133–139. <https://doi.org/10.53656/str2024-5s-13-ana>
- Bashir, M. H., Azmi, A. M., Nawaz, H., Zaghouani, W., Diab, M., Al-Fuqaha, A., & Qadir, J. (2023). Arabic natural language processing for Qur'anic research: A systematic review. *Artificial Intelligence Review*, 56(7), 6801–6854. <https://doi.org/10.1007/s10462-022-10313-2>
- Budianto, S., Tobing, V. M. T. L., Brumadyadisty, G., Huda, N., & Budianto, S. P. (2024). The use of songs as a tool for language education in multilingual populations. *Eralingua: Jurnal Pendidikan Bahasa Asing dan Sastra*, 8(2), 332. <https://doi.org/10.26858/eralingua.v8i2.59597>
- Damayanti, G., Yudiyanto, M., Nurishlah, L., & Samadi, M. R. (2024). Pengaruh media pembelajaran pop-up book untuk meningkatkan hasil belajar siswa kelas V SDN Cicayur 02 Bandung pada pelajaran IPA materi siklus air. *MURABBI*, 3(1), 55–61. <https://doi.org/10.69630/jm.v3i1.30>
- Dhitya, G., & Setiyowati, A. J. (2024). Upaya meningkatkan motivasi belajar melalui bimbingan klasikal dengan media audio visual: Literatur review. *Jurnal Pembelajaran, Bimbingan, dan Pengelolaan Pendidikan*, 4(7), 4–15. <https://doi.org/10.17977/um065.v4.i7.2024.4>
- Didin, S., Muhammad, R. M., Putra, E. M. S., & Nenden, F. (2023). Implementasi metode bernyanyi pada pembelajaran Bahasa Arab di MIN 1 Bogor. *Tatsqifiy: Jurnal Pendidikan Bahasa Arab*, 4(1), 52–62. <https://doi.org/10.30997/tipba.v4i1.7482>
- Esmaeili, S., Tamjid, N. H., Sadeghi, K., & Seifoori, Z. (2020). Effects of flipped teaching method integrated with corrective feedback on EFL learners' grammar learning and retention. *International Journal of Learning Technology*, 15(4), 309. <https://doi.org/10.1504/IJLT.2020.113882>
- Fahrudin, F., Rosidi, M. I., Fitroh, I., Darsono, D., & Saefudin, A. (2024). Transforming history education: Enhancing student engagement and literacy through interactive methods. *SAR Journal: Science and Research*, 396–403. <https://doi.org/10.18421/SAR74-14>
- Febriani, E., & Istiyati, M. (2024). Efektivitas penggunaan essay pada evaluasi pembelajaran matematika kelas IV di MIN 2 Kota Palangka Raya. *Al-Ihtirafiah: Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah*, 4(1), 34–44. <https://doi.org/10.47498/ihtirafiah.v4i1.2508>
- Firman, E., & S, K. D. S. (2024). The effect of learning environment on students' motivation in learning. *Jurnal Ilmiah Mandala Education*, 10(4), 1047–1058. <https://doi.org/10.58258/jime.v10i4.7614>
- Gemilang, D. (2020). Teaching media in the teaching of Arabic language. *ATHLA: Journal of Arabic Teaching, Linguistic and Literature*, 1(1), 49–64. <https://doi.org/10.22515/athla.v1i1.3048>
- Gori, M., Price, S., Newell, F. N., Berthouze, N., & Volpe, G. (2022). Multisensory perception and learning: Linking pedagogy, psychophysics, and human–computer interaction. *Multisensory Research*, 35(4), 335–366. <https://doi.org/10.1163/22134808-bja10072>

- Guillen, Sabrina (2022). Who lives, who dies, who tells your story? Hamilton as a case study for musical mnemonics. Toronto Metropolitan University. Thesis. <https://doi.org/10.32920/19161650.v1>
- Hajiyeva, B. (2024). Language anxiety in ESL learners: Causes, effects, and mitigation strategies. *EuroGlobal Journal of Linguistics and Language Education*, 1(1), 119–133. <https://doi.org/10.69760/pn9wgqv05>
- Herisnawan, D., & Ningsih, T. (2024). Educational social interaction in learning development at SMP ZIIS Cilongok. *Jurnal Riset Ilmu Pendidikan*, 4(4), 6–12. <https://doi.org/10.56495/jrip.v4i4.767>
- Hidayah, N., Fitriani, L., & Aziz, A. (2024). Innovation in learning methods for improving mastery of Arabic vocabulary in Indonesian junior high schools. *Al-Ta'rib: Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab IAIN Palangka Raya*, 12(1), 159–170. <https://doi.org/10.23971/altarib.v12i1.7583>
- Hidayat, L. A. S. A., Dahlan, T. H., & Pangestu, F. H. (2024). Memorable music and cognitive development in emerging adulthood: A scientific perspective. *Journal of Science Education and Practice*, 8(1), 56–71. <https://doi.org/10.33751/jsep.v8i1.9701>
- Jamet, E., & Michinov, E. (2022). Effects of verbal and visual support on learning by tablet-based drawing. *Computers & Education*, 181, 104460. <https://doi.org/10.1016/j.compedu.2022.104460>
- Khadawardi, H. A. (2022). Saudi learners' perceptions of academic writing challenges and general attitude towards writing in English. *Journal of Language Teaching and Research*, 13(3), 645–658. <https://doi.org/10.17507/jltr.1303.21>
- Laila, L., Alawiyah, N., & Eka, W. (2024). Konsep dasar evaluasi pembelajaran. *Jurnal Manajemen dan Pendidikan Agama Islam*, 2(5), 252–262. <https://doi.org/10.61132/jmpai.v2i5.536>
- Lestariningsih, D., Rais, P., & Mutala'iah, N. N. (2021). Development of pop-up book learning media to improve understanding of teaching. *Middle European Scientific Bulletin*, 13. 72–77 <https://doi.org/10.47494/mesb.2021.13.625>
- Maimunah, & Priyanti, N. (2024). Social interaction and the quality of the learning environment have an impact on the language development of young children at TKIT Ulul Albaab. *Journal of Scientific Research, Education, and Technology (JSRET)*, 3(4), 1218–1227. <https://doi.org/10.58526/jsret.v3i4.489>
- Manulang, W., Haifaturrahmah, Linda, S. U., Syaharuddin, & Siti, A. (2024). The audio-visual media on cognitive learning outcomes. *Jurnal Ilmiah Sekolah Dasar*, 7(4), 641–648. <https://doi.org/10.23887/jisd.v7i4.61138>
- Masykuri, H. A. B. (2024). The role of social interaction in improving the quality of Islamic religious education learning. *Scaffolding: Jurnal Pendidikan Islam dan Multikulturalisme*, 4(3), 821–834. <https://doi.org/10.37680/scaffolding.v4i3.4835>
- Mayer, R. E. (2024). The past, present, and future of the cognitive theory of multimedia learning. *Educational Psychology Review*, 36(8), 1–25. <https://doi.org/10.1007/s10648-023-09842-1>
- Merdiaty, N., & Sulistiasih, S. (2024). Empowering learning: The mediating role of teachers in enhancing students' intrinsic motivation. *AL-ISHLAH: Jurnal Pendidikan*, 16(4), 5163–5172. <https://doi.org/10.35445/alishlah.v16i4.6430>
- Mohammad, U. (2024). Integrating music for acquisition of English as a second language. *International Journal of Advanced Research in Science, Communication and Technology*, 531–535. <https://doi.org/10.48175/IJARSCT-22762>
- Muhammad, B., Abdullah, I., & Karoma. (2024). Concept of educational social contact in family, school and community. *IJGIE (International Journal of Graduate of Islamic Education)*, 5(2), 170–187. <https://doi.org/10.37567/ijgie.v5i2.3317>

- Nafisah, J., Koderi, Akmansyah, M., Erlina, & Mukhlishin, A. (2023). Development of Nahwu learning module for students of Madrasah Diniyah Wali Songo Sukajadi Lampung. *Mantiqu Tayr: Journal of Arabic Language*, 3(2), 90–101. <https://doi.org/10.25217/mantiqu tayr.v3i2.3274>
- Nur, A. F., Muhammad, Y. J., & Eka, W. (2024). Langkah-langkah evaluasi pembelajaran. *PUSTAKA: Jurnal Bahasa dan Pendidikan*, 4(3), 285–294. <https://doi.org/10.56910/pustaka.v4i3.1572>
- Nurjanah, Kansil, I. C., Masturoh, I., & Hanwar, D. (2024). Multisensory learning: Improving conceptual understanding through an intuitive sensory approach. *Journal of Pedagogi*, 1(6), 56–64. <https://doi.org/10.62872/7ygyx095>
- Rafiza, S. N., & Lubis, Z. (2024). Teaching vocabulary using the Unisono singing method to students at MTs Hifzhil Qur'an Islamic Center Foundation North Sumatra. *Abjadia: International Journal of Education*, 9(1), 135–143. <https://doi.org/10.18860/abj.v9i1.26856>
- Riskania, A. (2021). Investigating the application of singing method in learning state primary school. *Tekno-Pedagogi: Jurnal Teknologi Pendidikan*, 11(2), 21–27. <https://doi.org/10.22437/teknopedagogi.v11i2.32723>
- Rozy, M. R. Z., Hariyanto, N., & Hidayatullah, R. (2024a). Efektivitas metode bernyanyi dalam matakuliah shorof bagi mahasiswa pendidikan bahasa Arab. *Al-Mitsali: Jurnal Penelitian dan Pendidikan Bahasa Arab*, 4(1), 12–28. <https://doi.org/10.51614/almitsali.v4i1.411>
- Rozy, M. R. Z., Hariyanto, N., & Hidayatullah, R. (2024b). Efektivitas metode bernyanyi dalam matakuliah shorof bagi mahasiswa pendidikan bahasa Arab. *Al-Mitsali: Jurnal Penelitian dan Pendidikan Bahasa Arab*, 4(1), 12–28. <https://doi.org/10.51614/almitsali.v4i1.411>
- Sadiqzade, Z. (2024). The impact of music on language learning: A harmonious path to mastery. *EuroGlobal Journal of Linguistics and Language Education*, 1(1), 134–140. <https://doi.org/10.69760/zma1bn56>
- Saputra, D. A. W., Zuniati, M., Hasyim, U. A. F. A., Suhono, S., Irhammudin, I., & Sari, Y. A. (2025). Developing pop up books as learning media to teach reading comprehension at senior high school Bangun Cipta Rumbia. *International Journal on Advanced Science, Education, and Religion*, 8(1), 1–16. <https://doi.org/10.33648/ijoaser.v8i1.503>
- Saputri, K. Y., Santosa, S., & Indrayani, A. (2020). Effectiveness model ARCS (Attention, Relevance, Confidence, and Satisfaction) in learning process to increase learning motivation. *International Journal of Education and Social Science Research*, 3(2), 268–273. <https://doi.org/10.37500/IJESSR.2020.30220>
- Schatt, M. (2024). Increasing musical persistence and engagement in the contemporary music classroom. *Music Educators Journal*, 110(3), 20–27. <https://doi.org/10.1177/00274321231220348>
- Sumi, A., & Tominaga, M. (2022). Different methods and approaches for teaching Arabic grammar. In *Teaching and Learning Arabic Grammar* (pp. 190–210). Routledge. <https://doi.org/10.4324/9781003034209-12>
- Supardi, A. (2022). Pembelajaran Nahwu dengan metode deduktif dan induktif. *Jurnal Keislaman dan Pendidikan*, 3(1), 23–32. <https://doi.org/10.62285/alurwatulwutsqo.v3i1.43>
- Sutikno, P. Y., Jazuli, M., Utomo, U., & Sunarto. (2024). The effects of singing activities on children's memory, learning motivation, and creativity in an Indonesian kindergarten for preschoolers. *Journal of Law and Sustainable Development*, 12(1), e3123. <https://doi.org/10.55908/sdgs.v12i1.3123>
- Syefrinando, B., Pramita, C., Puri, T. R., Sofna, A., Adha, A. F. R., & Sulman, F. (2023). Analysis of students' conceptual understanding when the discovery learning model
- Al-Lisan: Jurnal Bahasa* Integrating Singing and... 223

- is applied: Does it have a real impact? *Edumaspul: Jurnal Pendidikan*, 7(2), 3308–3317. <https://doi.org/10.33487/edumaspul.v7i2.6896>
- Turyamureeba, S. (2024). Integrating music education into the curriculum for cognitive development. *Research Invention Journal of Research in Education*, 4(3), 50–54. <https://doi.org/10.59298/RIJRE/2024/435054>
- V. Santhi, Malathi, R., & Adappatu, A. A. (2024). Integrating pop music in English language teaching to enhance listening, vocabulary, and cultural awareness among learners. *International Research Journal on Advanced Engineering and Management (IRJAEM)*, 2(11), 3282–3284. <https://doi.org/10.47392/IRJAEM.2024.0483>
- Wong, K. M., & Samudra, P. G. (2021). L2 vocabulary learning from educational media: Extending dual-coding theory to dual-language learners. *Computer Assisted Language Learning*, 34(8), 1182–1204. <https://doi.org/10.1080/09588221.2019.1666150>
- Wooten, J. O., & Cuevas, J. A. (2024). The effects of dual coding theory on social studies vocabulary and comprehension in elementary education. *International Journal on Social and Education Sciences*, 6(4), 673–691. <https://doi.org/10.46328/ijonses.696>
- Yousef, A. M., & Algouzi, S. (2020). Revisiting grammar teaching in a Saudi EFL context: Teachers' perceptions and practices. *Arab World English Journal*, 11(4), 291–306. <https://doi.org/10.24093/awej/vol11no4.19>
- Zaniyati, M., & Rohmani, R. (2024). Analysis of the effectiveness of pop-up book media on science learning in elementary schools. *IJORER: International Journal of Recent Educational Research*, 5(4), 919–934. <https://doi.org/10.46245/ijorer.v5i4.641>