

ENHANCING ENGLISH VOCABULARY ACQUISITION IN GRADE 1 STUDENTS: A COMPARISON OF SONG-BASED AND STORYTELLING LEARNING STRATEGIES.

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ABSTRACT

In Indonesia, formal foreign language learning typically begins in school. Among the various challenges that students often encounter, vocabulary acquisition is a significant one. An adequate vocabulary base is crucial as it enables learners to effectively comprehend linguistic input (through listening and reading) and to produce coherent output (in speaking and writing). Therefore, this study investigated the effectiveness of song-based and storytelling-based learning methods on English vocabulary acquisition among first-grade elementary school students. A quasi-experimental pretest-posttest control group design was employed with 30 participants, divided into three groups: a song-based learning group (n=10), a storytelling-based learning group (n=10), and a control group (n=10) that received no specific intervention. Results indicated that the song-based learning group achieved the highest mean gain score in vocabulary acquisition (61.2), compared to the storytelling-based learning group (45.0) and the control group (20.0). Statistical analyses confirmed significant differences in vocabulary acquisition gain scores among the groups. Post-hoc tests revealed that both intervention groups performed significantly better than the control group. Although the song-based learning group showed a descriptively higher mean gain score than the storytelling group, this difference was not statistically significant. These findings suggest that incorporating songs can effectively enhance engagement and retention in early English language learning.

Keywords: Vocabulary acquisition, Song-based learning, Storytelling, First-grade students, Quasi-experimental design, Early language learning.

INTRODUCTION

English is the most widely spoken global language, impacting various fields of work. It is utilized not only in business but also in education, serving as an official language for numerous international organizations. In the contexts of global understanding and education, English proficiency is often considered synonymous with success (Shrishthy, 2022). Mastery of the English language is emerging as an important and empowering asset for individuals navigating a diverse and interconnected global society (Fitria, 2024).

In many countries, including Indonesia, formal foreign language learning typically begins in schools several years after children have acquired their mother tongue (Salomé et al., 2024). Early foreign language learning has been shown to enhance cognitive abilities, including concentration, attention, and creativity, as

well as strengthen linguistic skills. The early strengthening of phonological skills facilitates vocabulary and grammar acquisition, leading to more comprehensive language proficiency, including comprehension and the transfer of skills between languages (Mamadayupova & Khaydarova, 2025).

Despite its clear urgency, numerous challenges exist in the process of learning English as a foreign language. Students often encounter difficulties, including native language interference, fear of making mistakes, limited vocabulary, and insufficient practice opportunities (Boy Jon et al., 2021). Among these challenges, vocabulary acquisition is a crucial skill. Adequate vocabulary enables learners to effectively comprehend input (listening and reading) and produce output such as speaking and writing (Salomé et al., 2024). Therefore, a lack of vocabulary becomes a significant obstacle to achieving overall English proficiency.

The process of vocabulary acquisition in this second language context is inseparable from psychological and pedagogical aspects. From a psychological perspective, factors such as learner motivation play a central role in driving effort and persistence in learning (Delbio & Ilankumaran, 2018). Young learners often exhibit a positive attitude towards learning a new language, which can be nurtured by creating an enjoyable and engaging learning environment. Activities, tasks, and parental support play an important role in maintaining high levels of motivation (García Mayo, 2017). Consequently, it is important to consider learning methods that can not only maximize students' vocabulary acquisition but also enhance their motivation to learn a foreign language.

Among various alternative foreign language teaching methods, songs are recognized as a tool that can enhance student motivation for language learning and serve as a valuable means of introducing foreign language practice (Kusnierek, 2016). Learning English through songs allows students to engage with rhythmic patterns while acquiring vocabulary and practicing pronunciation. This type of introductory activity helps students feel part of a group, become comfortable with their peers, and adjust to a shared classroom atmosphere (Torras Vila, 2021). Strong empirical support also indicates that English songs effectively increase the vocabulary of English as a Foreign Language (EFL) learners (Murphy Odo, 2022). While also positively contributing to their pronunciation and grammar development

(Agaj Avdiu, 2021; Setia et al., 2012).

Cognitively, songs aid vocabulary comprehension and retention; affectively, their use can increase student interest and engagement in learning activities (Setia et al., 2012). Repetition within songs plays a crucial role in memory enhancement (English & Visser, 2014; Greene, 2007). The rhythm and repetition in music provide a framework for memory encoding and recall (Thaut et al., 2008, 2014). Therefore, musical elements are highly recommended in educational contexts to optimize learning and memory.

Although previous research has indicated the benefits of song-based learning strategies (Kuśnierek, 2016; Murphy Odo, 2022), and the potential of storytelling has been explored separately in several studies, there is a scarcity of comparative studies that directly contrast the efficacy of song-based learning, storytelling-based learning, and a control group. This scarcity is particularly evident in the context of English vocabulary acquisition among first-grade elementary school students. This limitation in the literature marks a significant research gap, considering that English language instruction often commences at the elementary education level in various countries, including Indonesia (Salomé et al., 2024).

The novelty of this research lies in three fundamental aspects. Firstly, this study conducts a simultaneous comparison of three treatment conditions: the song-based method, the storytelling-based method, and a control group. This approach allows for a more comprehensive assessment of the relative efficacy of each method compared to studies that only test a single intervention. Secondly, the specific focus on first-grade elementary school students fills a lacuna in the literature regarding the unique learning characteristics of this age group, which often represents a crucial initial stage in foreign language introduction. Thirdly, through the direct measurement of vocabulary acquisition, this research presents more focused empirical evidence regarding the practical impact of these methods.

This research is important to conduct to provide evidence-based recommendations for educators and curriculum developers regarding the most effective English vocabulary learning strategies for young learners. The identification of optimal teaching methods at the initial stage of education will have

a long-term positive impact, supporting students' ability to master English as a global language (Fitria, 2024; Shrishthy, 2022). Therefore, this study aimed to:

1. Examine the effectiveness of a song-based learning strategy compared to a storytelling-based learning strategy and a control group in improving English vocabulary acquisition among first-grade students.
2. Compare the relative effectiveness of the song-based learning strategy and the storytelling-based learning strategy.

METHOD

This study employed a quasi-experimental pretest-posttest control group design. Participants were 30 first-grade students from SD Negeri 26 Air Tawar Padang Timur. They were assigned to one of three groups (n=10 per group): (1) a song-based learning group (Experimental Group 1), which received English learning treatment using songs; (2) a storytelling-based learning group (Experimental Group 2), which received English learning treatment using storytelling; and (3) a control group (Group C), which received no specific English vocabulary intervention during the study period. The research design is illustrated in Table 1

Table 1. Research Design

Group	Pretest (01)	Treatment (X)	Posttest (02)
Experimental Group 1	01	Teaching with song	02
Experimental Group 2	01	Teaching with storytelling	02
Control Group	01	-	02

Note: 01 = Pretest measurement, X= Treatment, 02=Posttest measurement

Song and storytelling materials focused on a consistent theme: farm animals. Pretest and posttest assessments consisted of an English worksheet requiring

students to match 8 vocabulary items (pictures) with their corresponding English words. Each correct match was awarded 12.5 points, with no penalty for incorrect answers, yielding a maximum possible score of 100.

Data from pretest and posttest results (gain scores) were analyzed. Due to the data distribution not meeting normality assumptions for all groups (despite homogeneity of variance), the non-parametric Kruskal-Wallis test was used to assess significant differences in gain scores among the three groups. Post-hoc tests were conducted to identify specific group differences.

RESULT

Table 2. Descriptive Statistics of Research Data

Group		N	Mean	Std. Deviation	Minimum	Maximum
Experimental Group 1 (Song-based)	Pre-Test	10	31.2	23	.0	62.5
	Post-Test	10	92.5	10.5	75.0	100.0
	Gain Score	10	61.2	23.1	37.5	100.0
Experimental Group 2 (Storytelling)	Pre Test	10	35.0	21.8	0.0	50.0
	Post Test	10	80.0	20.5	37.5	100.0
	Gain Score	10	45.0	17.8	12.5	75.0
Control Group	Pre Test	10	21.2	13.2	.0	37.5
	Post Test	10	41.2	10.2	25.0	50.0
	Gain Score	10	20.0	15.8	0.0	37.5

Descriptive statistics (Table 2) present the mean pretest, post-test, and gain scores for vocabulary acquisition across the three groups. The song intervention group exhibited a mean pretest score of 31.2, a post-test score of 92.5, and a gain score of 61.2. The storytelling intervention group showed a mean pretest score of 35, a post-test score of 80, and a gain score of 45. In contrast, the control group had a mean pretest score of 21.2, a post-test score of 41.2, and a gain score of 20. These findings suggest that both song and storytelling interventions positively influenced

mean vocabulary acquisition scores, though the improvement in the storytelling group was less substantial than that observed in the song intervention group.

Furthermore, to evaluate the effectiveness of the interventions, a Kruskal-Wallis non-parametric test was conducted. This test was chosen because some data distributions in this study did not follow a normal distribution, although the assumption of homogeneity of variances was met for all variables (Levene's Test, $p > 0.05$). The Kruskal-Wallis test results (Table 3) revealed a statistically significant difference in vocabulary acquisition levels among the three groups ($p < .001$). This outcome indicates that the absence of an intervention in the control group resulted in posttest vocabulary acquisition scores that were significantly different from those of the experimental groups.

This significant inter-group difference indicates that the applied learning strategies (songs and storytelling) had a markedly different impact compared to the control condition (no intervention). Moreover, the effect size (Rank $\epsilon^2 = 0.658$) demonstrates a large effect of the interventions on improving students' vocabulary acquisition. Therefore, in addressing the research question, the findings indicate that both intervention strategies (songs and storytelling) were effective in enhancing vocabulary acquisition, with the song-based learning strategy exhibiting superior effectiveness.

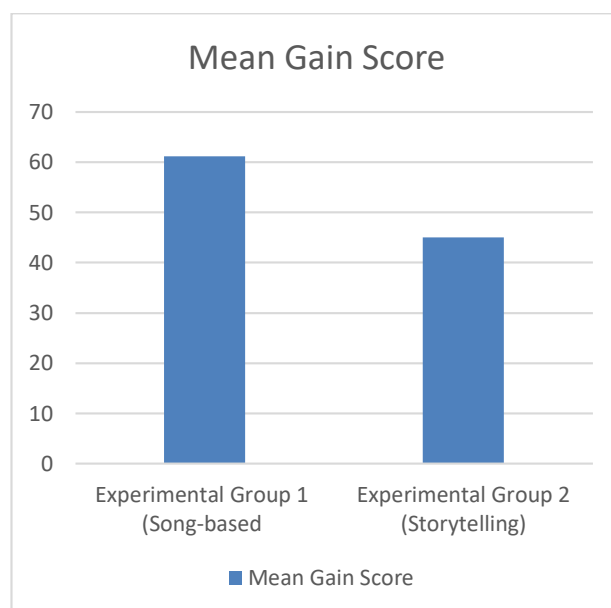
Table 3. Kruskal-Wallis Hypothesis Test Result for Gain Scores

95% CI for Rank ϵ^2						
Factor	Statistic	df	p	Rank ϵ^2	Lower	Upper
Group	19.070	2	< .001	0.658	0.537	0.829

Tabel 4. Uji Post Hoc Comparisons – Group (Gain Scores)

		95% CI for Mean Difference					
		Mean Difference	Lower	Upper	SE	t	P_{Tukey}
Experimental Group 1 (Song-based)	Experimental Group 2 (Storytelling)	12.5	-3.7	28.7	6.5	1.9	0.154
	Control	51.3	35.1	67.5	6.5	7.8	< .001
Experimental Group 2 (Storytelling)	Control	38.8	22.5	54.9	6.5	5.9	< .001

Note. P -value and confidence intervals adjusted for comparing a family of 3 estimates (confidence intervals corrected using the tukey method).



Picture 1: Mean gain score chart

To address the second research question concerning the comparative effectiveness between the song-based learning group and the storytelling-based learning group a post-hoc test was conducted (Table 4). Although the results of this test indicated no statistically significant difference between the song-based learning group and the storytelling-based learning group ($p=0.154$), an analysis of effectiveness based on mean gain scores (Picture 1) revealed that the song-based learning group (experimental group 1) had a higher mean gain score ($M=61.3$) compared to the storytelling-based learning group (experimental group 2) ($M=45.0$). Therefore, while both intervention methods (songs and storytelling) proved effective in enhancing English vocabulary acquisition among first-grade elementary school students compared to the control group, the song-based learning approach demonstrated a higher effectiveness level in this study.

DISCUSSION

The results of the hypothesis testing revealed a significant difference in English vocabulary acquisition gain scores among the experimental groups receiving interventions and the control group. Specifically, the song-based learning group demonstrated the largest increase in vocabulary scores, with its mean score improving from 31.25 at pretest to 92.50 at posttest. This finding aligns with previous research indicating that the use of children's songs positively impacts

English vocabulary acquisition in first-grade elementary students (Dinda Aliyah Putri et al., 2024). The observed increase in vocabulary acquisition could be attributed to songs' capacity to enhance enthusiasm and motivation among elementary students, and to improve various English skills, including vocabulary, pronunciation, reading, and listening (Manurung & Yana, 2018).

The storytelling-based intervention also yielded positive effects on vocabulary acquisition scores, with the mean score increasing from 35.00 to 80.00, although this improvement was numerically smaller than that of the song-based group. This is consistent with previous studies showing that methods like TPR storytelling can help elementary students understand English vocabulary more quickly (Puspawati, 2021). This storytelling method positively affects vocabulary expansion by helping students understand word meanings and usage in an engaging context (Awaliyah, 2024).

Although post-hoc tests did not show a statistically significant difference in gain scores between the song-based and storytelling-based learning groups, the descriptive analysis indicated a numerically higher mean gain score for the song-based learning group ($M = 61.25$) compared to the storytelling group ($M = 45.00$). This descriptive difference suggests that the song-based intervention may be practically more advantageous for enhancing English vocabulary acquisition in this context. This observation is consistent with a previous study (Hampu, 2018), which found songs to be more effective than stories for improving English vocabulary acquisition in fourth-grade students. The lack of statistical significance between the two active intervention groups in the current study might be due to factors such as a relatively small sample size per group, which could limit statistical power to detect more subtle differences.

The improvement in the control group (mean gain score of 20.00) warrants consideration. This could be attributed to maturation, test-retest effects, or learning occurring outside the experimental context, which are common in quasi-experimental designs without a no-contact control group.

Limitation and Suggestions for Future Research

This study's quasi-experimental design, lacking full participant randomization, inherently limits the generalizability of its findings. Future research should therefore consider employing a true experimental design with randomized participant allocation to enhance both internal validity and the potential for broader generalization.

Key limitations also include the small sample size (N=30) and the single-school setting, which may restrict statistical power and the transferability of results. Consequently, subsequent studies would benefit from larger, more diverse samples across various educational contexts to improve the generalizability of the findings.

Methodologically, the reliance on a single worksheet for vocabulary assessment might not have comprehensively captured the full spectrum of students' understanding, and the uniform material theme ("farm animals") could have led to differential participant engagement. Future investigations should incorporate more varied assessment tools and explore the impact of diverse thematic content.

Finally, given the superior effectiveness of the song-based learning method, subsequent research should focus on identifying specific song elements (e.g., rhythm, melody, lyric repetition) that significantly contribute to memory enhancement and vocabulary mastery. Additionally, evaluating the efficacy of combined learning strategies, such as integrating songs with appropriate supporting activities, warrants consideration for subsequent research.

CONCLUSION

This study demonstrated that both song-based and storytelling-based learning methods significantly improved English vocabulary acquisition in first-grade elementary school students compared to a control group. While both interventions were effective, the song-based learning method resulted in descriptively higher vocabulary gain scores compared to the storytelling-based method (mean gain of 1.5 for song-based and 1.0 for storytelling-based). Although this specific difference between the two active interventions was not statistically significant, the findings suggest that song-based learning is a highly effective and potentially more advantageous approach for enhancing English vocabulary acquisition in this age group. Educators are encouraged to consider the integration of songs into early English language curricula to foster vocabulary

development engaging and memorable manner. Further research with larger samples is warranted to confirm the potential statistical superiority of song-based learning over storytelling.

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