

THE EFFECT OF JOYFUL LEARNING ON STUDENTS' VOCABULARY MASTERY AT SMPN 4 GUNUNGSITOLI SELATAN

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Abstract:

This study aims to determine the effect of implementing Joyful Learning on the English vocabulary mastery of seventh-grade students at SMP Negeri 4 Gunungsitoli Selatan. The study employed a quantitative approach using a quasi-experimental method with a non-equivalent control group design. The sample consisted of 34 students, including 20 in the experimental class and 14 in the control class, selected through purposive sampling. Data were collected using pretests and posttests and analyzed through descriptive statistics, Normalized Gain (N-Gain), normality, homogeneity, and independent sample t-tests. The experimental class mean score increased from 56.60 to 67.40 with an average N-Gain of 0.25, while the control class increased from 46.79 to 48.43, with an average N-Gain of 0.03. The homogeneity test showed a significance value of $0.690 > 0.05$. The hypothesis test yielded a t-value of 3.689 and a significance value of $0.002 < 0.05$, indicating that Joyful Learning significantly improved students' English vocabulary mastery.

Keywords:

Keywords: N-Gain, Joyful Learning, vocabulary mastery, quasi-experiment



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INTRODUCTION

English is an international language that plays a vital role in education, communication, and technological development. In English learning, vocabulary mastery is a crucial aspect because it supports students' listening, speaking, reading, and writing skills. Students with a strong vocabulary tend to more easily understand learning materials and use English in various contexts. Conversely, limited vocabulary can hinder the learning process and the development of students' language skills (Uswar et al., 2023).

Vocabulary is one of the main components in learning English that plays an important role in supporting students' language skills (Azzahra, 2024). Good vocabulary mastery will help students understand the learning content, develop reading and writing skills, and improve their ability to communicate effectively. Mastery of English is important as a second language, because it allows students to understand and use words and their meanings accurately. Without sufficient words, students may have difficulty in putting together sentences, phrases, and interconnected statements, which ultimately can hinder their ability to compose, read, and interact well in English (Rizky et al., 2025).

However, vocabulary mastery remains a common problem in English learning (Amalia, 2023). Many students experience difficulty remembering, understanding, and using newly learned vocabulary. These difficulties can be influenced by various factors, such as low motivation to learn, lack of practice, and the use of less engaging learning methods. Lack of encouragement to remember and expand students' vocabulary can further hinder their progress, leading to difficulties in communicating and expressing themselves in English (Harselina et al., 2024).

A similar problem was also found at SMPN 4 Gunungsitoli Selatan. Based on initial interviews with English teachers, it was discovered that most seventh-grade students still had low English vocabulary mastery. The teacher revealed that this condition was influenced by the lack of basic English skills that students had developed since elementary school. Furthermore, students also showed relatively low interest and enthusiasm in participating in English lessons. As a result, students often had difficulty understanding learning materials and remembering new vocabulary taught by teachers.

To overcome these problems, a learning approach is needed that can increase student engagement and enthusiasm during the learning process. One approach that can be applied is Joyful Learning. Joyful Learning is a learning approach that emphasizes the creation of a fun, active, and interactive learning atmosphere so that students can learn without feeling stressed (Rahma & Hidayah, 2022). Through fun learning, students are expected to be more motivated to participate in learning activities and more easily understand and remember the vocabulary they learn. English teachers at SMPN 4 Gunungsitoli Selatan also stated that students tend to be more active and responsive when learning is packaged in interesting and fun activities.

Research by Az-zahra & Hikmat shows that in using the Joyful Learning method for English language learning in the classroom, this approach has proven successful in creating a fun, comfortable, dynamic, and innovative learning environment. It can be concluded that this method not only overcomes student boredom in learning English, but also increases student motivation and engagement (Az-zahra & Hikmat, 2025).

Other studies have found that a more interactive and fun approach successfully overcomes previous weaknesses in vocabulary mastery, then this helps reduce anxiety because students do not feel burdened by conventional learning methods (Hidayah et al., 2023). Az-zahra & Hikmat, 2025 also showed that by doing role-playing with students, such as singing, doing ice breaking at the beginning of learning, or making new words, students can gain vocabulary knowledge through games (Az-zahra & Hikmat, 2025). However, research that specifically examines the effect of Joyful Learning on English vocabulary mastery of seventh grade junior high school students is still limited, especially in the context of SMPN 4 Gunungsitoli Selatan. The novelty of this study lies in the focus of the study on seventh grade students' English vocabulary mastery through the application of Joyful Learning in a school context that has relatively low basic English skills.

Based on the description, this study was conducted to determine the effect of Joyful Learning on the English vocabulary mastery of seventh-grade students at SMPN 4

Gunungsitoli Selatan. The results are expected to provide information on the effectiveness of Joyful Learning in improving students' vocabulary mastery and serve as an alternative learning approach that can be applied in English learning.

METHOD

This study used a quantitative approach with a quasi-experimental design. The design selected for this study was the Non-equivalent Control Group Design because the experimental and control groups were naturally formed classes in the school (intact groups); therefore, the subjects could not be randomly assigned to each group. A quasi-experimental design is based on Rubin's (1974) theory of causality through the potential outcomes framework, which states that causal relationships are determined by comparing the outcomes after treatment with the outcomes that would have occurred without treatment (Anantasia & Rindrayani, 2025). This design uses a control group and pretest–posttest measurements to approximate the conditions of a true experiment. It is appropriate when researchers cannot randomly assign participants to experimental conditions and therefore use existing groups to compare the effects of different treatments. This study aimed to determine the effect of implementing Joyful Learning on the English vocabulary mastery of seventh-grade students at SMP Negeri 4 Gunungsitoli Selatan by comparing the pretest and posttest learning outcomes of the experimental and control groups.

Research Design

This research design involved two groups: an experimental group given Joyful Learning treatment and a control group taught using conventional methods by subject teachers. Both groups were given a pretest before treatment and a posttest after treatment to measure changes in vocabulary mastery. The structure of the group design in this study is presented in Table 1.

Table 1. Research Design Table

CLASS	GROUP	TREATMENT
VII A	Experiment	×
VII B	Control	-

Source : Primary research data

Population and Sample

The population in this study comprised all students of SMP Negeri 4 Gunungsitoli Selatan, totaling of 142 students. From this population, the research sample was determined using a purposive sampling technique based on specific considerations from the researcher. The consideration for selecting the specific classes was based on teacher recommendations, as both classes shared an equal average ability level and were taught by the same teacher. Through this technique, the researcher selected seventh-grade students as the research subjects, totaling 34 students. This sample consisted of class VII-A with 20 students as the experimental group, which received the Joyful Learning

treatment, and class VII-B with 14 students as the control group, which was taught using conventional learning methods.

Research Variables

This study consists of two variables, namely the independent variable in the form of the application of Joyful Learning, and the dependent variable in the form of students' mastery of English vocabulary.

Research Procedures

This research was conducted in four consecutive meetings. In the first meeting, the researcher administered a pretest in the form of a vocabulary test to classes VII A and VII B to determine the students' initial abilities before the treatment was given. Subsequently, the Joyful Learning approach was consistently applied in the experimental class from the beginning to the end of the class, integrating icebreaker activities and sing-alongs using lyrics from songs themed "describing the classroom" at the beginning of each session.

The difference in intervention between meetings lies in the type of educational game used in the core activities. In the second meeting, reinforcement of new vocabulary was carried out through a word chain game, where students took turns being asked to name nouns in the class that began with the last letter of the previous partner's word. Meanwhile, in the third meeting, the activity was advanced to the contextual stage through a guessing game. In this game, one student had to describe the characteristics of an object in the classroom orally using vocabulary that had been learned, while other students competed to guess the name of the object in question quickly.

This series of integrated activities ensured that all stages of learning in the experimental class took place in an active and enjoyable atmosphere without causing students to feel stressed. Meanwhile, in the second and third meetings, class VII B, the control group, continued to be taught using conventional methods by an English teacher. In the fourth meeting, both classes were given a posttest using the same instrument to measure students' vocabulary mastery.

RESULTS AND DISCUSSION

The instrument used in this study was a written vocabulary mastery test developed by the researcher for the describing classroom topic. This instrument consisted of three types of questions: multiple-choice, short answer, and essay, which were used in both the pre-test and post-test. The highest or ideal maximum score that students could obtain on this test instrument overall was 100.

Table 2. Reliability Test

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.731	.847	21

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.735	.863	21

Source: SPSS Data Processing, 2026

Homogeneity Test

Before conducting hypothesis testing to draw conclusions, prerequisite data analysis tests were first conducted, including the Shapiro-Wilk normality test and Levene's homogeneity test . The results of the prerequisite tests indicate that the N-Gain index data from both sample groups are normally distributed and have homogeneous data variance.($p > 0,05$).

Table 3. Normality Test

GROUP	SHAPIRO-WILK SIG.	CONCLUSION
Experimental class	0.080	Normal
Control class	0.435	Normal

Source: SPSS Data Processing, 2026

The Shapiro-Wilk test was performed because the sample size for each group was less than 50 respondents. The test results showed a significance value of 0.080 for the experimental class and 0.435 for the control class. Because both significance values were greater than 0.05, the data in both groups were normally distributed, thus meeting the requirements for an Independent Samples t-test.

Table 4. Homogeneity Table

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
POSTTEST	Based on Mean	.162	1	32	.690
	Based on Median	.336	1	32	.566
	Based on Median and with adjusted df	.336	1	29.436	.566
	Based on trimmed mean	.226	1	32	.637

Source: SPSS Data Processing, 2026

The homogeneity test aims to determine whether the data variances of two compared groups are similar or homogeneous. This test is performed as one of the requirements for

using parametric statistical analysis. In this study, the homogeneity test was conducted using Levene's Test and obtained a significance value of 0.690. Because the significance value is greater than 0.05 ($0.690 > 0.05$), it can be concluded that the data variances between groups are homogeneous, thus one of the assumptions for conducting parametric tests has been met.

Data Analysis Techniques

Pretest and posttest data from both sample groups were analyzed through several statistical steps. The first step was to calculate the students' net improvement scores using the Normalized Gain Score (N-Gain) formula to determine the effectiveness of the treatment. The mathematical formula for calculating the N-Gain score index is shown in equation 1.

$$\text{N-Gain} = \frac{\text{Skor Posttest} - \text{Skor Pretest}}{\text{Skor Maksimum} - \text{Skor Pretest}} \quad (1)$$

In the equation of formula 1, the N-Gain value is determined by the difference between the posttest score and the student's pretest score, then divided by the result of subtracting the ideal maximum score, namely 100, from the student's pretest score. After the N-Gain value is obtained, a prerequisite analysis test is carried out which includes a normality test using the Shapiro-Wilk method to determine the distribution of data, as well as a homogeneity test with Levene's Test to check the similarity of variance between data groups. The final stage is a comparative hypothesis test using an independent sample t-test at an alpha significance level of 0.05 because the data is normally distributed and homogeneous (Sugiyono, 2019). To determine the category of the level of effectiveness of improving students' vocabulary skills, the N-Gain Score index is classified based on the N-Gain level criteria adapted from Abdul Wahab and Junaedi as contained in (Fatimah et al., 2025)

Table 5. Table of N-Gain Score Level Criteria

N-Gain Value	Category
$g > 0,7$	Tall
$0,3 \leq g \leq 0,7$	Currently
$0 < g < 0,3$	Low
$g \leq 0$	Fail

Source : Fatimah et al. (2025)

The entire statistical data processing process is assisted by using the Microsoft Excel and SPSS computer programs.

This experimental study was conducted to determine the effectiveness of using certain learning media on improving students' vocabulary skills. Research data was obtained through pretest and posttest instruments given to the experimental class (Class A) and the control class (Class B). After the raw scores were obtained, the Normalized Gain Score (N-Gain) index was calculated to determine the extent of the net increase in vocabulary

skills for each student. A summary of descriptive data on the pretest , posttest , and average N-Gain scores for both groups is presented in detail in Table 3.

Table 6. Descriptive Summary of Student Grades and N-Gain Score

GROUP	NUMBER OF STUDENTS	PRE-TEST AVERAGE	POST-TEST AVERAGE	AVERAGE N-GAIN	N-GAIN CATEGORY
Class VII A (Experiment)	20	56.60	67.40	0.25	Low
Class VII B (Control)	14	46.79	48.43	0.03	Low

Source : Processed primary data (2026)

Based on Table 2, it can be seen that the experimental class (Class VII A) experienced a much better increase in vocabulary skills compared to the control class (Class VII B). This is indicated by the average N-Gain value of the experimental class which reached 0,25(low category), while the control class only achieved an average increase of 0,031(low category). Referring to the N-Gain level classification criteria adapted from Abdul Wahab and Junaedi as stated in (Fatimah et al., 2025), the mathematical index acquisition of both classes is indeed in the low category because the value $g < 0,3$. However, the experimental class showed a much higher effectiveness trend and almost approached the threshold of the medium category ($0,3 \leq g \leq 0,7$) compared to the control class whose increase was almost stagnant approaching zero.

Table 7. Independent Samples-Test

		Paired Samples Test							
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Pretest - Posttest	-10.800	13.093	2.928	-16.928	-4.672	-3.689	19	.002

Source: SPSS Data Processing, 2026

Because the prerequisite assumptions have been met, the statistical analysis is continued with the parametric statistical method, namely the independent sample t- test at the significance level $\alpha = 0,05$. The results of the hypothesis testing show a value of $t_{hitung} \alpha 3,689$ with a significance value $p - \text{value}(2\text{-tailed})$ of $\alpha 0,0002$. Because the significance value is much smaller than the specified real level ($0,0002 < 0,05\alpha$), the statistical test decision is to reject H_0 and accept H_α . These results empirically prove that there is a real and significant difference in increasing students' vocabulary skills between the experimental class (Class VII A) which uses new learning media and the control class (Class VII B) which uses conventional methods.

The results of the study showed that the implementation of Joyful Learning had a significant effect on improving the English vocabulary mastery of seventh grade students of SMP Negeri 4 Gunungsitoli Selatan. This was proven by the results of the independent sample t-test which obtained a t-value of 3.689 with a significance value of $0.002 < 0.05$, so there was a significant difference between the experimental group and the control group after the treatment was given. The increase was also seen from the average posttest

score of the experimental group which was higher than the control group and the N-Gain value of the experimental group of 0.25 which was greater than the control group of 0.03.

These findings align with Az-Zahra and Hikmat's research, which found that the Joyful Learning method creates a fun, comfortable, and interactive learning environment, increasing student motivation and engagement in English learning (Az-zahra & Hikmat, 2025). In this study, students in the experimental class were seen to be more active in participating in learning activities such as singing, icebreakers, word chain games, and descriptive guessing games. These activities made it easier for students to remember and use new vocabulary compared to conventional learning.

The results of this study also support the research of Hidayah, Sabarun, and Widiastuty (2023), which found that game-based learning can improve EFL students' vocabulary mastery. The use of educational games in this study provided students with the opportunity to practice vocabulary directly in a non-stressful environment, thereby helping to improve their understanding and retention of the vocabulary learned.

Furthermore, the results of this study support the opinion of Harselina, Idayani, and Sailun (2024), who stated that limited vocabulary mastery is one of the main difficulties in learning English. The low initial abilities of students, as seen in pretest scores, indicate that they indeed experience difficulties in understanding and using English vocabulary. After implementing Joyful Learning, students' vocabulary skills improved, making this approach a potential alternative to addressing vocabulary mastery issues.

The improvement in vocabulary skills in the experimental group is also in line with research by Fatimah, Abror, and Zuhdi (2025), which states that the use of educational games can help improve vocabulary mastery because students learn through interesting and enjoyable activities. Although the N-Gain category in this study was still at a low level, the results showed better improvement compared to the control group, which experienced almost no significant improvement.

Thus, based on the results of statistical analysis and support from previous research, it can be concluded that the implementation of Joyful Learning is effective in improving the English vocabulary mastery of seventh grade students of SMP Negeri 4 Gunungsitoli Selatan because it is able to increase students' motivation, involvement, and opportunities to use vocabulary actively during the learning process.

CONCLUSION

Based on the results of the study, it can be concluded that the implementation of Joyful Learning has a significant effect on improving the English vocabulary mastery of seventh grade students of SMP Negeri 4 Gunungsitoli Selatan. This is evidenced by the results of the Independent Samples t-test which shows a calculated t value of 3.689 with a significance value of $0.002 < 0.05$, so that H_0 is rejected and H_1 is accepted. In addition, the average N-Gain value in the experimental class is 0.25 higher than the control class of 0.03, which indicates that the increase in students' vocabulary skills in the experimental class is better than the control class. Thus, the implementation of Joyful Learning is able

to create an active, fun, and interactive learning atmosphere so that it is effective in improving students' English vocabulary mastery compared to conventional learning.

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