Article

THE IMPACT OF SHORT ANIMATED MOVIE ON IMPROVING STUDENTS' ENGLISH VOCABULARY MASTERY: A CASE AT SMA LAB SCHOOL

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Abstract. This research aims to examine the effectiveness of short animated movies in enhancing students' English vocabulary mastery. Vocabulary is a crucial component in language learning, yet many students struggle to acquire and retain new words through traditional teaching methods. To address this issue, the study used the short animated film *Purl* as a learning medium to create a more engaging and contextual learning experience. The research was conducted at SMA Labschool Semarang, involving 26 eleventh-grade students from class XI Aceh.

A pre-experimental method was applied using pre-test and post-test design. The results showed a significant increase in vocabulary scores, from an average of 55.38 in the pre-test to 75.00 in the post-test. Statistical analysis using a paired sample t-test yielded a p-value of 0.000, indicating a significant difference after the treatment. The findings suggest that integrating animated movies into English instruction can effectively improve students' vocabulary mastery by combining visual, auditory, and contextual elements. Therefore, animated movies can be a valuable tool for teachers in creating interactive and student-centered learning environments.

Keywords: *Animated movie; Vocabulary mastery, English learning*
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Introduction

Vocabulary mastery is essential for language learners, forming the bedrock upon which all other language skills are built. For students learning English as a (EFL), developing a robust vocabulary is crucial for effective communication and comprehension (Kacani & Cyfeku, 2015). foreign language. (*FARADILLAH,* 2024 emphasized that vocabulary knowledge extends beyond mere word definitions; it also includes an understanding of how

words fit into various contexts and situations. Traditional vocabulary teaching methods, such as rote memorization and repetitive exercises, often fail to engage students. Consequently, educators are exploring innovative and interactive methods to improve vocabulary learning and one such method is using animated movies, which combine visual and auditory elements to create a rich and engaging learning experience.

Despite the importance of vocabulary mastery, many EFL learners struggle to acquire and retain new words. Research indicates that the vocabulary knowledge of high school students remains inadequate (Sultra & Baharudin, 2020). These students often face challenges in understanding and using new vocabulary in both spoken and written forms. Traditional vocabulary teaching methods, which rely heavily on textbooks and audio recordings, often fail to fully engage students or cater to their diverse learning styles (Santillan & Daenos, 2020). In contrast, animated movies offer a multisensory approach to

vocabulary learning that can address these challenges and significantly improve students' vocabulary mastery.

Furthermore, integrating technology through animated movies within a Problem-Based Learning (PBL) framework can further improve the learning process. PBL is an instructional method that uses real-world problems as the context for students to develop problem-solving skills and acquire new knowledge. Animated movies can serve as a technological tool to present these problems in an engaging manner, providing a meaningful context for language learning. Unlike live-action films, animations are often created through a sequence of drawings, computer-generated imagery (CGI), or other artistic methods that create the illusion of motion (Khan et al., 2024). The primary characteristic of animated movies is their ability to visually represent stories and concepts in a dynamic and engaging manner, often incorporating elements such as vibrant colors, imaginative characters, and expressive narratives (Wikayanto et al., 2023). They present vocabulary in dynamic, situational contexts, making it easier for students to understand and remember new words. Unlike traditional text-based learning, animated movies capture students' attention and maintain their interest, thereby facilitating better retention of vocabulary (Muftah, 2023). Furthermore, the use of subtitles in animated movies can improve vocabulary mastery by providing a visual representation of spoken words, aiding students in associating the auditory and written forms of language.

Several studies support the use of animated movies as a medium for vocabulary learning. For instance, Romadhon, Indrayanti, and Qurohman (Romadhon et al., 2022) conducted a study that involving 23 students aged 16-19. The T-test results indicated significant improvements in picture identification and word meaning. The study concluded that animated films are an effective tool for improving certain aspects of vocabulary learning, particularly picture identification and word meaning.

Another relevant study by Nurmi, Meutia, and Susiani (Meutia et al., 2021) involved six fifth-grade elementary students at a Private English Course.

Utilizing a pre-experimental design, the study employed pre-tests, treatments, and post-tests to gather data. The pre-test results showed a mean score of 61, while the post-test results indicated a significant improvement, with a mean score of 83. This increase in scores suggests that the use of cartoon movies positively impacts students' vocabulary mastery, as the post-test scores were notably higher than the pre-test scores.

Based on (Rizky & Lestari, 2025) Strong vocabulary foundations help young learners communicate more effectively and improve their comprehension and production of language in both written and spoken forms. However, in current learning, many teachers still rely only on books as learning media. Learning without using media can reduce students' interest in learning English. In accordance with previous research, animated movie have been proven to improve students' vocabulary mastery. And then accroding to

In this case, this study aims to evaluate students' performance in vocabulary mastering based on "The Impact of Short Animated Movie on Improving Students' English Vocabulary Mastery: A Case at SMA Lab School". Through several stages, researchers can prove whether there are significant changes in students after being given animated movie as a fun learning medium at SMA Lab School.

Methodology

By using statistical tools, this approach helps to quantify the impact of the intervention and provides a clear understanding of how animated movies contribute to students' vocabulary acquisition (Li et al., 2021). So the study utilized a quantitative research method with a pre-experimental design to evaluate the effectiveness of short animated movies in enhancing students' English vocabulary mastery. The research was conducted at SMA Labschool UPGRIS, focusing on class XI Aceh, which consisted of 26 students selected through cluster sampling. The study involved three phases: pre-test, treatment,

and post-test. The vocabulary test used as the research instrument included 30 multiple-choice questions and 10 matching items. According to (Safira, 2022) Vocabulary is used to classify nouns, verbs, adjectives, and adverbs in order to clarify the speaker's meaning. So the question focusing on four parts of speech: nouns, verbs, adjectives, and adverbs. The short animated movie *Purl* was used as the teaching media during the treatment phase to assess its impact on students' vocabulary acquisition.

To collect and analyze the data, the study employed pre-tests and post-tests as the main tools, administered before and after the treatment to measure any improvements in students' vocabulary knowledge. Data were analyzed using both descriptive statistics and paired sample t-tests, with SPSS software ensuring accurate calculations. The descriptive statistics is The first stage in any applied scientific study is to rationally simplify vast amounts of data (Franzese & Iuliano, 2019) while A paired t test is employed in such crossover test designs to compare the amount of change for the identical participants in A and B (Kim, 2015). The descriptive analysis included frequencies, percentages, means, and standard deviations, while the t-test measured the significance of the difference between pre- and post-test results using a 5% significance level ($p < 0.05$). The results aimed to provide empirical evidence on whether animated movies are an effective and engaging alternative to traditional vocabulary instruction in EFL classrooms.

Results and Discussion

The researchers has colleted data through pre-test and post-test from variable, which is in XI Aceh class as the only one experimental class who was received the treatment for four day. The pre-test and post-test are in the form of a vocabulary test since the research focuses on vocabulary competence. All students were required to complete the pre-test, which included 30 multiple-choice and 10 matching questions on a paper that the researchers had given

them. It was to determine the extent of the student's vocabulary mastery. The researchers administered a post-test following the treatment. It was to determine how well the students understood the terminology in the short animated movie that the researchers had showed them, and to determine the significant differences in the result between before and after the treatment.
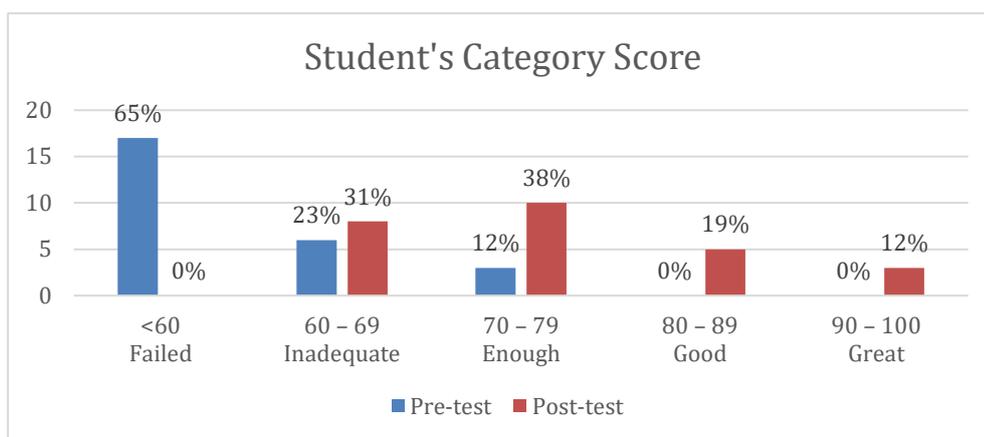
1. Data Results

Diagram 1 Diagram of Student's Category Score

Based on the diagram above, the researchers found the percentage of the score both the pre-test and post test. It can be seen starting from the pre-test which is blue then the post-test which is red. Most students are in a position of failed. The total percentage is 65% containing 17 students. Then the second highest position is in the inadequate. The total percentage is 23% containing 6 students. Next from the enough category. The total percentage is 12% containing 3 students. The last from pre-test is in the good and great category. The total percentage is 0%, nothing students in this category. Next from post-test column. There are good different categories in the post-test, namely is 0% in failed. Total percentage in inadequate category is 31% containing 8 students. Total percentage in enough category is 38% containing 10 students. Next total percentage in good category is 19%

containing 5 students. And the last total percentage in great category is 12% containing 3 students.

2. Data Analysis

In two steps, the researchers used IMB SPSS version 25 to examine the students' scores. The normality test was used to determine whether the pre- and post-test results were normally distributed. The purpose of the normality test is to determine if the population from which our study data originates has a normal distribution (Fiandini et al., 2023). A t test is a statistical test that used to compare two groups' means. The t-test formula was used to determine whether there had been a significant difference in the students' vocabulary mastery before and after the treatment. The paired sample t-test was employed by the researchers. To determine whether there is a mean difference between paired data, the paired sample t-test is utilized. Following a comprehensive analysis of the data, the findings addressed the study question. Below are the findings from the data analysis:

a. Normality Test

In order to determine whether or not the data is regularly distributed, the normality test is the initial step in any data analysis process. Data from the pre-test and post-test scores are used in the paired sample t test's normality test. Using IMB SPSS version 25, the researchers applied Lilliefors Significance Correction. The requirement to determine whether the data is normally distributed is to look at the significance. If Sig. is higher than $\alpha = 0.05$ (5%) so the data is normally distributed. The normality test results from the study can be seen as follows:

Table 1 The Normality Test Results

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
LEARNING OUTCOME RESULTS	,111	52	,152	,966	52	,144
a. Lilliefors Significance Correction						

From the table above, it can be concluded that the test was normally distributed. It can be seen from the Sig. column from Shapiro-Wilk. The significance of learning outcome results from experiment class is 0.144 > 0.05. it is higher than (>) the degree if significance α = 0.05 (5%). So it can be concluded that the data pre-test and post-test was normally distributed. A diagram illustrating that all tests were normally distributed is in the image below :
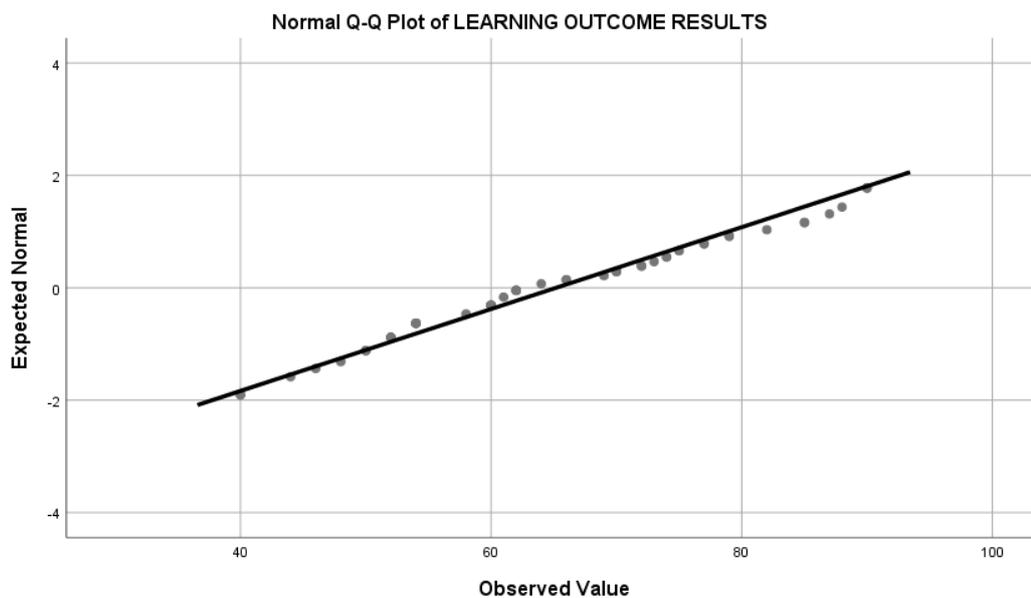

Normal Q-Q Plot of LEARNING OUTCOME RESULTS

Diagram 2 Diagram of Normal Q-Q Plot of Learning Outcome

Results

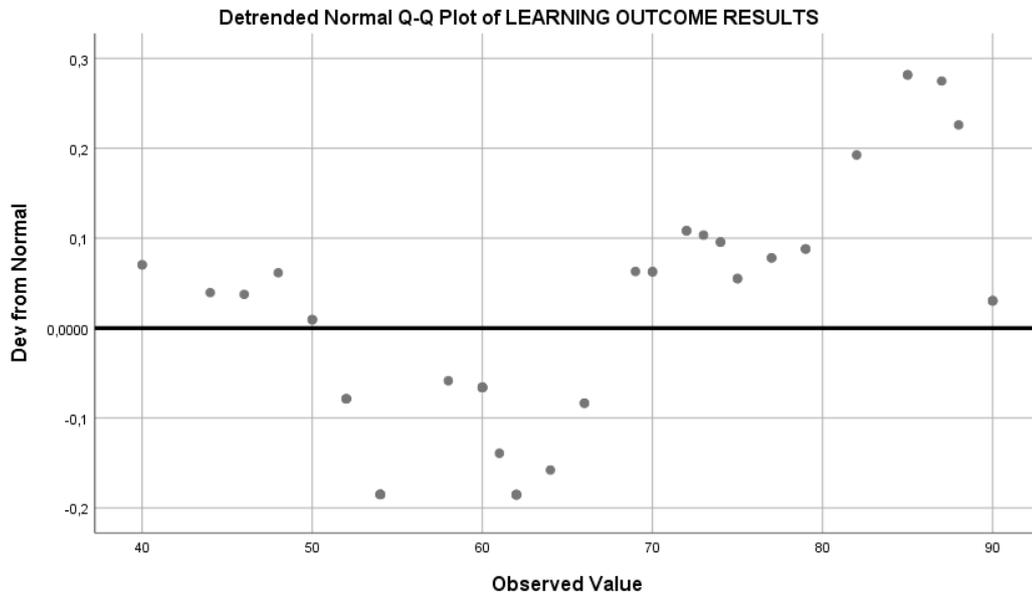Detrended Normal Q-Q Plot of LEARNING OUTCOME RESULTS

Diagram 3 Diagram of Detrended Normal Q-Q Plot of Learning

Outcome Results

b. Hypothesis Test

The final step is to do the t-test once it has been shown that the data is normally distributed. Finding differences between before and after treatment is the goal of the t-test. The paired sample t test was employed by the researchers. To ascertain whether there is a statistically significant difference between the means of two paired samples, the paired sample t-test is utilized.

The requirement to determine whether the data is significanse is to look at the value of Sig.(2-tailed). If the value is lower than (<) Sig.(2-tailed) < 0.05, then there is a significant difference between before and after

the treatment. After carrying out the t-test, the problem of the research can answer whether the short animated movie as a learning media can improve students' vocabulary mastery or not. The result can be seen as follows:

Table 2 Paired Sample Statistics

Paired Samples Statistics		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE TEST	55,3846	26	8,86827	1,73921
	POST TEST	75,0000	26	10,26450	2,01303

From the table above, it can be seen that the mean of pre-test is 55,3846 and the mean of post-test is 75,0000 and the total sample in both is same, namely 26. And then the standart deviation of the pre-test is 8,86827, while the standart deviation of post-test is 10,26450. The las standart error mean of pre-test is 1,73921, while the standart error mean of post-test is 2,01303.

Table 3 Paired Sample Correlations

Paired Samples Correlations		N	Correlation	Sig.
Pair 1	PRE TEST & POST TEST	26	-,097	,638

From the table above it can be seen that the total sample when pre-test also post-test still same, namely 26. Next the value in the significant column is 0,638 > 0.05. So it means there is unsignificant correlation between pretest score and post-test score.

Table 4 Paired Sample Test

Paired Samples Test									
					95% Confidence Interval of the Difference				Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	
Pair 1	PRE TEST - POST TEST	-19,61538	14,19881	2,78462	-25,35041	-13,88036	-7,044	25	,000

From the table above, it can be seen that the significant in Sig.(2-tailed) column. The pre-test and post-test is Sig.(2-tailed) 0.000 < 0.05. So it can be conluded that there is a significant difference in the average student learning outcome between before and after the treatment.

Results and Discussion

The results of the pre-test dan post-test, before and after the treatmenet have been analyzed. Based on paired sample statistics, it can be seen that the mean of pre-test is 55. It means, students' vocabulary mastery was still low before being given treatment. This is proven by the lowest and highest scores

in the class. The lowest score is 40 and the highest score is 72. It shows that none of the students got a score above the average of 75. After the lesson was given, the class received short animated movie, the post-test was analyzed and produced different results. Based on paired sample statistics, it can be seen that the mean of post-test is 75, the lowest score is 60, and the highest score is 90. This shows that the class improves the different score results. Compared to the pretest which had a smaller average, minimum score and maximum score, the post test showed a higher value after being given treatment. And then according to the diagram 1, the failed category decreased from 17 to 0. Some students in this category move to a higher level category. Next the Inadequate category increased from 6 to 8. The 8 students consist of 4 students from failed to inadequate. And then, there were 2 students still in inadequate cate gory. The last, there were 2 students decreased from enough to inadequate. However, this decline does not make the results of this study insignificant. The enough category increased from 3 to 10. The 10 students consist of 8 students from failed to enough and 2 students from inadequate to enough. Next, the good category increased from 0 to 5. The 5 students consist of 4 students from failed to good and 1 student from inadequate to good. The last, the great category increased from 0 to 3. The 3 students consist of 1 student from failed, enadequate, and enough to great. After examining the experimental class's data results, it can be conclude that both the pre-test and the post-test showed significant differences. Even though there is a decline and only three students in the great category, the number of students in the failed category had significantly decreased after the researchers used a short animated film as a learning medium to explain the material, and the students had responded favorably to the learning process. The researchers discovered that students' language mastery in the experimental class had significantly improved.

Through analysis using IMB SPSS version 25, all tests have been analyzed for normality. Based on table 1, It can be seen that the Shapiro-Wilk significance of learning outcome results is 0.144. The significance show that the number

was higher than the degree if significance α = 0.05 (5%). So it can be conclude that the data pre-test and post-test was normally distributed. After know that the data was normally distributed, it conducted the paired sample t test. From the table 4, The value from pre-test and post-test is Sig.(2-tailed) 0.000. So it can be conluded that the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. Since the (Ha) is axxepted and the (Ho) is rejected, So the problem of the research has been answered that the animated movie as a learning media are effective in improving students' vocabulary mastery.

The research findings are similar to several theories that used by researchers. The researchers used pre experimental method and taught animated movie to one sample group as (Agustin et al., 2022) said. The conclusion of their research states that using short animation videos had a substantial impact on seventh-grade pupils at SMP Negeri 7 Baubau's vocabulary mastering based on the data analysis results. At a significant level of 0.05, the post-test mean score (68.85) was greater than the pre-test mean score (44.12). Consequently, it may be said that following the treatment, the class's score changed. The same thing was discovered by (Zelamutia, n.d., 2019). The study used a pre-experimental method and it was one group pretest-posttest. the students did the pre-test and pos-test by answered the multiple choice question of narrative text as the instrument of the study. Animation film content has a big impact on how well pupils understand terminology. The researcher's assumption that animation movie media can significantly improve students' vocabulary mastery is supported by the data calculation results in the previous chapter, which showed that the alternative hypothesis (Ha) was accepted and the null hypothesis (Ho) was rejected. The research finding is similar with a study done by (*Nassar*, 2018). In their study, it stated that the use of animated movie can increase motivation and participation. students feel enthusiasm, happy, active, and motivated. Students like the experiment and they ask for repeating such activities. They argue that if students want to make progress in their English language learning, they must eventually learn to view

films without subtitles. Another similar study is from (Fitri & Ma'rifah, 2022). The result presenting pupils entertaining animated films with subtitles may help them understand what they read and expand their vocabulary. The results of a study on how watching animated videos with subtitles affects students' vocabulary and reading comprehension in English show a noticeable improvement in both domains. Although this study used a different research design using experimental and control classes and was also conducted in Thailand, the results of this study showed the same results. This is proven by the average score for each class reveals this; the experimental class's score is significantly higher than the control class's. Thus, it has been demonstrated that watching animated films with subtitles helps and may improve the vocabulary and reading comprehension of primary school students in Ban Erawan.

The difference between this study and previous studies is in the sample used by the researchers. Over time and changes in technology have produced different generations. In this case, English foreign language learners (EFL) are children from the GenZ generation where the power of technology is more advanced than before, new applications are emerging, and whatever they watch has a great influence on their lives. There are also changes in the curriculum that are always changing, making it difficult for teachers to adapt and choose to use traditional learning methods. However, it needs to be studied further whether all teachers act the same or not. What is certain is that in this study, researchers have observed the problems that exist at SMA Lab School and think that further research is needed to prove whether previous studies can be effective in the current generation.

Significant changes between the pre-test and post-test results before and after the treatment demonstrate that animated movies are effective in enhancing students' vocabulary acquisition, which is the research problem that the experiment has addressed. Students learn a variety of language through animated films with subtitles. It can help pupils remember the synonim and

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antonym from vocabulary by using graphics that offer engaging passages and distinct English pronunciations. After that, students can easily comprehend the animated film and use facial expressions and body language to increase their vocabulary.

Conclusion and Suggestion

Based on all the data presented in the previous chapter, it can be concluted that before the animated movie was played, the pretest results showed poor scores; even the highest score fell short of the average of 75. Furthermore, the average score was low overall—55. And then following the treatment of presenting an animated movie, the posttest results showed higher scores. The highest score was 90, even though not all of them averaged 75. Additionally, the average score was 75. The last, students' vocabulary mastery before and after being taught through animated films differed significantly. The paired sample t-test data indicates that the significant value was 0.000, which was less than $\alpha = 0.05$ (5%). Due to the fact that the p-value, or sig (2-tailed), 0.000, is less than $\alpha = 0.05$ (5%), the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted. Thus, it can be said that using animated films helped kids become more proficient in language.

Suggestion

The fact that classes after taught using an animated movie have better vocabulary mastery than before taught using an animated movie, Suggestions offered to teachers, students and researchers. The first for English teachers, because it relates to efficient methods of teaching students to increase their vocabulary mastery, the research's findings have a significant impact on English teachers. In order to encourage pupils to learn English, the researchers advises English teachers to use animated films that are engaging for their students. Activities related to teaching and learning will therefore be more successful and pleasurable. The second for students, since the consistency of student learning

outcomes cannot be guaranteed by a single treatment, the researchers advises students to watch English-language movies with English subtitles. The experiment then necessitates student cooperation even though the treatment's outcomes were not entirely successful for every student. When the teacher is speaking, students need to pay attention and support one another in encouraging their peers to learn English in their own unique ways. The last for the next reseachers, it is advised that future researchers utilize this study as a reference when conducting more research. By employing animated movies as a learning medium, the goal is to develop insight while incorporating other skills. One recommendation from researchers is to help pupils become more proficient in another language's vocabulary.

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