

# THE EFFECT OF TWO DIMENSION MOTION PICTURE ON STUDENTS' VOCABULARY MASTERY

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## Abstract

This study was aimed to measure that students who are taught using two-dimensional motion picture provide a higher vocabulary mastery or not in seventh grade at SMPN 4 Satu Atap Murung. Quasi-experimental design was used in this research. Quasi-experimental aims to assess cause and effect between research objects. The instrument used is a test. The question is in the form of multiple choice, there are 50 items of vocabulary variety. Researchers designed lesson plans, administered treatment and calculated student scores through pre-test and post-test. The population in this study were 168 students of SMPN 4 Satu Atap Murung. While the sample in this study were 50 seventh grade students of SMPN 4 Satu Atap Murung. Data analysis used SPSS 24 software. Based on the results of the analysis, the two-tailed t-test significance was lower than alpha 0.05 or  $0.001 < 0.05$ . Based on manual calculations, the results obtained that the value obtained is higher than the ttable value at a significance level of 5% or  $3.5 > 2.01$ . Can say that teaching by using two dimension motion picture gives students higher English vocabulary.

**Keywords:** Effect, Two Dimension Motion Picture, Vocabulary Mastery

## INTRODUCTION

In English language, To strengthen the four language skills of listening, speaking, reading, and writing, vocabulary is required. Without grammar, nothing can be communicated, and without vocabulary, nothing can be communicated. We can't express ourselves if we only learn grammar without knowing language. It demonstrates that English holds a special position in the teaching of foreign languages in schools, particularly in junior high. (Dianitasari, 2019). According to Webb & Paul (2018, p.1) Effective vocabulary teaching necessitates preparation and strategy. Teachers must guarantee that their pupils spend time learning the terms that will be most beneficial to them and that they participate in a variety a variety of exercises that will assist students in learning vocabulary on both sides consciously and unconsciously. Teachers must also have specific goals for vocabulary learning during the course and communicate these goals to their students. It's also crucial for teachers to establish a method that will help their students build a thorough understanding of the target words and track their progress throughout the course.

According to Mukoroli (2011), Vocabulary teaching is a constant challenge for teachers Because there has historically been quite a focus on vocabulary education in ESL classrooms, it is a continuing struggle for both teachers and students. In junior high school, the capacity to master vocabulary is critical. In junior high school, the capacity to master vocabulary is critical. Vocabulary is as the key to improve English achievement. Cameron (2003), stated that building a meaningful vocabulary is essential to learning a foreign language at the elementary level

Students with a large vocabulary will find the English learning process to be simple. Students will struggle in their studies if they do not have a strong vocabulary.

According to Norhayati (2013, p. 33) Teaching and learning require the use of media. Because it motivates kids, English is a good choice. by bring a bit of real life into the classroom and demonstrating the full range of language. Media can also offer a lot of information to children and help them comprehend it.. Media can also deliver a dense amount of information and assist kids in processing it. According to Kristin C. Au (2014, p.3) Components built in a 2D context define 2D animation, while elements constructed in a 3D environment define 3D animation. According to Manarung (2021) Motion is defined as the act or process of moving or the manner in which anything moves. In science, motion refers to an object's position, direction, and speed. A natural event involving a change in the position or location of anything is also referred to as motion. Students can be stimulated by motion because it appeals to them. In addition, Olivia and Fadhilawati (2019) Said motion pictures are audiovisual works that comprise of a series of connected images, as well as any associated sounds, that are exhibited in order to create the illusion of motion.

According to Susanto (2016) stated "Junior high school kids still have a limited vocabulary that makes it difficult for them to learn English.,". "Sometimes students don't comprehend what the teachers are saying are attempting to say or convey." "Students still have difficulty using their mother tongue, there are some students who still have difficulty understanding what they read, and also have difficulty expressing their ideas using a foreign language due to their lack of vocabulary mastery. These claims is backed up by Ningrum's (2015) research, " Students' Vocabulary Learning Problems in Eighth Grade at One of Jambi's Junior High Schools", Students' aptitude in language, desire in vocabulary learning, and experience in vocabulary are all factors that contribute to their challenges in acquiring vocabulary.

## **METHOD**

Quantitative method was used in this research. The study was analyze by two dimension motion picture for teaching vocabulary. Ary et al., (2010, p.39) claims that quantitative research asks questions of relationship, cause and effect, or present state by statistically evaluating numeric data. Furthermore, according to Creswell (2014, p.236), quantitative research is a set of interconnected constructs (or variables) organized into a proposition, or hypothesis, that specifies the relationship between variables (typically in term of magnitude or direction). In a research study, a theory may seem as an argument, a discussion, a figure, or a justification, and it helps in the explanation (or prediction) of things that occur in the world. Quasi-experimental was used in this research . Ary et al., (2010, p.39) An experimental design, including this definition, is an experiment design that describes the used independent variables, their number of levels, how subjects are divided into groups, and the dependent variable. Because it is impossible to allocate patients to treatment groups at random. The population in this study were all SMPN 4 Satu Atap Murung pupils. While the sample in this study was class VII pupils, the researcher divided them into two groups as samples, Class VII A, the experimental group, which was taught using two-dimensional motion pictures, and Class VII B, the control group, who were taught using picture. Since the selected unit is not an individual, but a collection of people who are naturally gifted associate with one another, cluster sampling was used to select subjects. The use of a complete classroom as a cluster is the use of cluster sampling which is popular in education.

**Table 1. The Sample of Research**

No.	Name Classes	The Name of Group	Number of Students
1.	VII.A	Experimental	26
2.	VII.B	Control	24
<b>Total</b>			<b>50</b>

Instrument in this research is a test with the forms of multiple choice about vocabulary, multiple choice questions are taken from the result of the adoption of the Book entitled "Bright an English, Zaida (2013) English LKS (Student Worksheet) class VII Intan pariwara. This test is used to determine students' vocabulary mastery scores. The data was collected using some procedures by the researcher, namely: The experimental and control groups were established by the researcher, The experimental and control groups were given a pre-test by the researcher, The experimental group was taught using two dimension motion picture and the control group was taught using pictures by the researcher, The experimental and control groups were given a post-test by the researcher. The researcher collected data from both the experimental and control groups and evaluated them for normality and homogeneity, The researcher used the t-test to assess the data from the pre-test and post-test. The researcher was in charge of analyzing and drawing conclusions from the data analysis results.

Analysis the data, the researcher using statistical tests such as: Checking the students' value, determine the mean, median and modus of the students' vocabulary mastery, standard deviation, and standard error of experimental and control classes. Then, assess for normality and homogeneity. After that, to assess the research hypothesis, the data was computed using an independent t-test. The last, deciphering the result of independent t-test. The significance of a t-test is then recommended on the t-table at levels of significance of 1% and 5%. The researcher used a 5% significant threshold of significance in this study. The Null Hypothesis (Ho) is accepted if the t-test result is less than the t-table. The Alternative Hypothesis (Ha) is accepted if the t-test result is higher than the t-table.

## RESULTS AND DISCUSSION

### Results

The table 1 show that the description of pre-test and post-test data. Students' pre-test and post-test class experiment and control data were used to collect the data.. It consist 50 students from two class. The data obtained is described into tables as follows :

**Table 1. The Calculation of the Minimum/Maximum of the Students' Score, Mean, and Standard Deviation**

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
Pre-Test Experiment	26	30	76	50.54	13.384
Post-Test Experiment	26	46	90	67.00	11.527
Pre-Test Control	24	28	60	42.92	10.215
Post-Test Control	24	30	72	55.29	11.664
Valid N (listwise)	26				

According to the data above, it can be seen the difference in student scores between the experimental class and the control class. In the experimental pre-test results, the minimum value

is 30, the maximum value is 76, the mean is 50.54, and the standard deviation is 13.384. In the results of the post-test experiment, the minimum value was 46 the maximum value was 90, the mean was 67.00, and the standard deviation was 11.527. Meanwhile, in the results of the pre-test control, the minimum score is 28, the maximum value is 60, the mean is 42.92, and the standard deviation is 10.215. In the post-test control results, the minimum score was 30, the maximum score was 72, the mean was 55.29, and the standard deviation was 11.664.

**Table 2. Normality Distribution Test of Pre-test and Post-test Score of Experiment and Control Class**

		Tests of Normality					
		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Class	Statistic	df	Sig.	Statistic	df	Sig.
Score of Pre-test	Pre Test Experiment	.106	26	.200*	.960	26	.389
	Pre Test Control	.105	24	.200*	.939	24	.157

  

		Tests of Normality					
		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Class	Statistic	Df	Sig.	Statistic	df	Sig.
Score of Post-test	Post Test Experiment	.111	26	.200*	.974	26	.741
	Post Test Control	.115	24	.200*	.962	24	.486

Based on the data score of pre-test above, the significance value for the experiment class was 0.200, whereas the significance value for the control group was 0.200. The data was determined to be normally distributed because the significance value for Experiment class was 0.200. The control group was not regularly distributed since the significance value was less than 0.05. Then, based on the data score of post-test, The significance value for the experiment class was 0.200, whereas the control group's significance value was 0.051. Because the Experiment class had a significance value of less than 0.05, it was inferred that the data was not normally distributed and the control class was normally distributed.

**Table 3. Homogeneity Test of Post-test Score of Experiment and Control Class**

		Test of Homogeneity of Variance				
		Levene				
		Statistic	df1	df2		Sig.
Score of Post-test	Based on Mean	.000	1	48		.993
	Based on Median	.002	1	48		.966
	Based on Median and with adjusted df	.002	1	47.963		.966
	Based on trimmed mean	.001	1	48		.972

According to the post-test homogeneity criteria, the distribution was homogeneous if (probability value/critical value) is greater than or equal to the indicated alpha significant level ( $r > \alpha$ ). Based on the available data, the value (possible critical value) of the experimental and control class post-test in the sig column on the homogeneity of variance is 0.993. This value is higher or  $r = 0.993 < 0.05$ , this indicates that the experimental class and the control class do not have the same variation or are homogeneous.

**Table 4. The Calculation of T-test**

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Score of Post-Test	Equal variances assumed	.000	.993	3.568	48	.001	11.708	3.282	5.110	18.306
	Equal variances not assumed			3.566	47.584	.001	11.708	3.283	5.106	18.311

**Table 5. Using SPSS 24, calculate the Standard Deviation and Standard Error of the Experiment and Control Classes**

Group Statistics					
Class		N	Mean	Std. Deviation	Std. Error Mean
Score of Post-test	Experiment	26	67.00	11.527	2.261
	Control	24	55.29	11.664	2.381

The determined standard deviation for the experiment was 11.527 based on the data score, and the standard error of the mean was 2.261 based on the data score. The standard deviation was calculated to be 11.664, while the standard error of the mean was calculated to be 2.381.

**Table 6. The Result of T-test Manual Calculation**

Variable	T <sub>observed</sub>	t-table		df
		5%	1%	
X1-X2	3.5	2.01	2.68	48

Which the criteria:

If  $t\text{-test} (t_{\text{observed}}) \geq t_{\text{table}}$  :  $H_a$  was accepted and  $H_o$  was rejected

If  $t\text{-test} (t_{\text{observed}}) \leq t_{\text{table}}$  :  $H_a$  was rejected and  $H_o$  was accepted

The t-test, which was conducted using calculation with manual, revealed that the  $t_{\text{observed}}$  was larger than the  $t_{\text{table}}$  at a 5% significance level, or  $3.5 > 2.01$ . Then, based on calculation using SPSS 24 the result of sig (two-tailed) was lower than 0.05 or  $0.001 < 0.05$  to assess the reality of the false null hypothesis saying that pupils were taught vocabulary using two dimension motion picture, As a result,  $H_a$  was accepted but  $H_o$  was refused.

## Discussion

In the description of the data which was taken from 26 students of experiment class and 24 students of control class. In the background of the study that students' vocabulary mastery is still low. Two dimension flash animation media in this study was used to solve the problem and become a media reference solution for teachers in improving students' vocabulary mastery. This study's findings are consistent with the mean score of the experiment class between pre-test (50.54) and post-test (67.00) demonstrates this. It was discovered that after completing the treatment, the students' grades improved.

In during learning process, two dimension motion picture was used to teach vocabulary. Two dimensional motion picture is another alternative media that teachers can use in learning. In the process of teaching, English vocabulary by using two dimension motion picture is a tool using by the teacher to teach the students. The usage of media has a good effect on the vocabulary score of students, according to the findings of the study. It implied that the media plays a significant part in the teaching and learning process. According to Manarung (2021) said students who were taught with a motion film scored higher than those who were not. The use of motion pictures had a considerable impact on the pupils' writing ability, according to the findings. According to Raymuno (2020) A motion picture is an active image that begins with all of the creator's life or blows life into a thing that isn't living. Mention of picture being active is important because when you use a picture, you may manipulate it to make it look like a picture. This film was utilized to excite students and provide them with additional learning experience. According to Munadi (2008), The benefits of motion picture for students include improving vocabulary, engaging them, and preventing them from developing problems as a result of the motion pictures. When students watch movies, they will talk more in order to better interact with the movies. Students can form bonds in order to generate new ideas. As a result, motion pictures can effectively teach individuals about audiovisual media. When students study vocabulary through the use of motion pictures, they are receiving some instruction. Students can use motion visuals to respond to their vocabulary knowledge. Because they are involved in learning vocabulary through motion pictures, the learner can study hard.

It is possible to draw a conclusion based on the aforementioned theory. that two dimension motion picture was one way to provoke the motivation and interest of students in increasing vocabulary and task behavior. Besides that, two dimension motion picture can also motivate the students. One of the determinants of learning victory for students is motivation. When learning feels fun, students will be more influential in learning. The pupils were inspired by the researcher. by using two dimension flash animation to learn English in more enjoyable and

meaningful. According to Munadi (2008) the students will more motivated and learner will get more skill, which is the main reason to make them more motivated.

The t-test formula was used to calculate the data. The  $t_{\text{observed}}$  was 2.068, as shown in a calculated results. The test's criteria were to see if  $t_{\text{observed}} > t_{\text{table}}$   $H_a$  was received and  $H_o$  was rejected, it meant that the student who taught using two dimension flash animation give higher vocabulary mastery. Then, if  $t_{\text{observed}} < t_{\text{table}}$   $H_a$  was rejected and  $H_o$  was received, it meant that the students who taught using two dimension flash animation do not give higher vocabulary mastery. The formula  $Df = N_1 + N_2 - 2$  was then used to determine  $t_{\text{table}}$ , with  $N_1=26$ ,  $N_2=24$ .  $df = (26 + 24) - 2 = 48$  as a result.

The result  $t_{\text{table}}$  was used to consult the  $t_{\text{observed}}$ , which had a  $df = 48$ . The significant standard was 2.01 (5%). The  $t_{\text{observed}}$  was compared to the  $t_{\text{table}}$ , it was discovered that the  $t_{\text{observed}}$  was higher than the  $t_{\text{table}}$  value at the 5% significance level, or  $3.5 > 2.01$ . It mean from the preceding computation that  $t_{\text{observed}} > t_{\text{table}}$ . It's clear that  $H_a$  was accepted and  $H_o$  was turned down. Then, the results of the data are calculated using t-test SPSS 24 Independent Sample T-test. The results reveal that the two-tailed t-test of significance is less than alpha 0.05 or  $0.001 < 0.05$ . This result showed that the alternative hypothesis was correct the students who taught using two dimension motion picture give higher vocabulary mastery than those using picture at seventh grade of SMPN 4 Satu Atap Murung was approved. The null hypothesis, on the other hand, stated that the students who taught using two dimension flash animation do not give higher vocabulary mastery than those who taught using picture at seventh grade of SMPN 4 .

## CONCLUSION

The findings of the data analysis, employing two dimension motion picture resulted in greater vocabulary mastering in the seventh grade of SMPN 4 Satu Atap Murung. The English vocabulary mastery post-test score from experiment class that using two dimension motion picture improved significantly. In experiment class, it has been proven that students' post-test scores are greater than their pre-test scores. As a result, two dimension flash animation was proven to be effective. The outcome of a t-test using manual computation demonstrates this. The results of the t-test using manual calculations show that between  $T_{\text{observed}}$  and  $t_{\text{table}}$ , there were substantial differences. At the 5% level of significance,  $T_{\text{observed}} > t_{\text{table}}$  or  $3.5 > 2.01$ . The fact that the two-tailed t-test of significance is less than alpha 0.05 or  $0.01 < 0.05$  is also corroborated by SPSS 24. This showed that the alternative hypothesis, suggesting that students who taught using two dimension motion picture had greater vocabulary mastery than those taught using picture at SMPN 4 Satu Atap Murung seventh grade, was accepted. It was found that utilizing two dimension motion picture to teach students' vocabulary mastery in the seventh grade at SMPN 4 Satu Atap Murung.

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