



**The Effect Of Using Animation Video Youtube Towards Students’ English Vocabulary Mastery At SMA Negeri 2 Tebing Tinggi Academic Year 2021/2022**

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**ABSTRACT**

This research discussed the effect of using YouTube animation videos on students' English vocabulary mastery at SMA Negeri 2 Tebing Tinggi. The formulation of the problem is: for the first time, students usually misinterpret the word, then have difficulty pronouncing it. The objective of this research was: to determine whether or not there was a significant effect and difference on students’ achievement in vocabulary mastery before and after being taught using animated videos. The population were students of grade X SMA Negeri 2 Tebing Tinggi which consisted of two classes. So the sample was grade X MIA 4 consisted of 29 students as the experimental group (using animated youtube videos) and X MIA 1 consisted of 29 students as control groups (without using animated youtube videos). The results in the experimental group showed that the mean value of the pre-test was 69.89 while the average value of the post-test was 78.96. The results in the control group showed that the average value of the pre-test was 55.37 while the post-test was the average test score was 58.51. The results of data analysis, the value of t-test > t-table, where the t-table is 1.674 and the result of the t-test is 7.55 so that the t-test is higher than the t-table. It was concluded that the effect of using youtube animated videos was more significant than the effect without using youtube animated videos on students' vocabulary learning achievement.

**Keyword**

*Vocabulary, Animation Video, Quantitative Research*

**INTRODUCTION**

Vocabulary is extremely important in promoting the potential of listening, speaking, reading, and writing skills. Without vocabulary, students will face difficulties in enhancing their ability to communicate without it. Sometimes, when it is related to vocabulary, students have problems recognizing the meaning, written forms, grammar, spelling, pronunciation, etc. Students with limited vocabulary are unable to express themselves clearly and are unlikely to recognize any texts written in English. It was difficult to master vocabulary because of the lack of practice in vocabulary and a lack of practice in communicating in English.

Therefore, the researcher wants to build on their motivation and hobby for their language improvement in English vocabulary. The researcher found the problem was that students usually make a mistake in the meaning of the word. Then there were difficulties with pronunciation because they still use the manual learning method by memorizing directly, not using the media.

Based on what student learning problems had been identified during the observation, the researchers would apply the animation video. The use of animation video can interestingly guide students' activities. The animation video can provide authentic and natural material, and it could be a very good example for the students. In learning vocabulary, students can directly imitate how the words are written and spelled. Moreover, the animation video can help students recognize and master the vocabulary.

However, YouTube has developed into one of the significant online materials that may be integrated into English Language Teaching (ELT). YouTube is considering a supply of online courses that may have a place in the teaching and learning area. It has ended up more popular with humans, especially among adults. In addition, according to Green and Robelia (2009) states that "connections may be made to what they learnt in their classroom". There was a capability for YouTube, as an instructional media of mastering in particular audio-visual media, to enhance college students' creativity.

Teaching vocabulary for students in senior high school is not the same as teaching a person because they have different characteristics and motivation. If the teachers cannot educate students well, the students may not enjoy their learning. Consequently, the teaching process may also fail. The teachers need to make studying fun for students to properly obtain the material. The teacher must be creative in the use of learning strategies.

The researcher considers that teaching a language, particularly English, is very complicated. May also college students feel bored and tired of getting to know vocabulary only via book? The books might also not attract the scholars' interest in studying vocabulary. A teacher is supposed to be able to consider internal and external factors, such as motivation and a conducive classroom. These aspects have to be made triggers to provide themselves with the necessary knowledge. According to Harmer (2007, p. 20) states that "the trainer's technique in teaching could be intrinsic motivation the students learn." Therefore, it was crucial for the trainer to have some knowledge of coaching methods and implementation. Based on the background above, the researcher is curious to do research entitles "The Effect of Using Animation Video Youtube towards Students' English Vocabulary Mastery At SMA Negeri 2 Tebing Tinggi Accademic Year 2021/2022".

## RESEARCH METHOD

This research was conducted using quantitative research. According to Louis Cohen (2007:501), quantitative research was "a powerful research form, emanating in part from the positivist tradition". The researcher divides this research into two variables, those are independent (animation video) and dependent (students' vocabulary mastery). The researcher used classes in this research. One of the classes was taught with an animation video, and it was known as an experimental class or as a treatment. Meanwhile, the opposite class is taught with a conventional method and referred to as the control class.

The research design was primarily based on using control and experimental design. The research design used experimental design. The design, which was a pretest-posttest control group design, requires at least two groups. Each of those was formed via random assignment. Both groups were administered a pre-test, each group received a different treatment, and both groups were post-tested at the end of 36 the study. Posttest scores are compared to determine the effectiveness of the remedy. The design of research can be seen in table 1.

**Table 1.**  
**Research Design**

<b>Class</b>	<b>Pre-test</b>	<b>Treatment</b>	<b>Post test</b>
<b>Experiment class</b>	✓	✓	✓
<b>Control class</b>	✓	X	✓

The population of this research was the students of the tenth grand class of SMA Negeri 2 Tebing Tinggi, where the total number of 58 students was divided into two classes. The classes were (X MIA 1 and MIA 4). Class XMIA 1 consists of 29 students, and X MIA 2 consists of 29 students. The researcher used a total sampling technique which takes all classes as the samples which divided into experimental classes and control classes. So the researcher chose two classes, namely classes (X-MIA 1 and 4) so that the researcher would easily manage the class.

The instrument of this research to acquire the data was a multiple choice test. A test, in easy terms, was a method of measuring a person's ability, knowledge, or performance in a given domain. The researcher uses the instruments to get the data, and the instruments have two kinds of instruments. first instrument for the pre-test and then for the post-test.

After getting the data the writer analyzed the data with some steps below:

1. Collect the data from the scoring of experimental and control group.

2. Identify the score of the students who were being treated with video YouTube and who are not.
3. Compare the score.
4. The writer calculate the mean score of both group by using the following formula:

$$\bar{X} = \frac{\sum fx}{N}$$

Where:

- $\bar{X}$  = the average score
- $\sum fx$  = sum of the raw score
- $N$  = number of students

5. The writer calculate the Standard Deviation both of groups by using the following formula:

$$S = \frac{\sqrt{\sum d^2}}{N-1}$$

Where:

- $S$  = standard deviation
- $\sum d^2$  = sum of mean deviation
- $N$  = number of students
- $1$  = constant number

6. The writer calculate the standard error of difference of mean from both of groups by using the following formula:

$$SE (\chi e - \chi c) = \sqrt{\left(\frac{se}{\sqrt{N1}}\right)^2 + \left(\frac{sc}{\sqrt{N2}}\right)^2}$$

Where:

- $SE (\chi e - \chi c)$  = standard error
- $se$  = standard deviation of experimental
- $s$  = standard deviation of control
- $N1$  = number of students of experimental
- $N2$  = number of students of control

7. Draw the conclusion and testing the hypothesis.

$$t_{test} = \frac{\bar{x}_e - \bar{x}_c}{SE (\chi e - \chi c)}$$

Where:

- $\bar{x}_e$  = Mean of Post Test in Experimental
- $\bar{x}_c$  = Mean of Post Test in Control
- $SE (\chi_e - \chi_c)$  = standard error

The alternative Hypothesis (Ha) and Null Hypothesis (Ho) should be proposed as follow:

- Ha : The Effect of Using Animation Video Youtube towards Students' English Vocabulary Mastery is more significant than without The Effect of Using Animation Video Youtube towards Students' English Vocabulary Mastery "The value of t-test is higher than the value of t-table (t-test>t-table)".
- Ho : The Effect of Using Animation Video Youtube towards Students' English Vocabulary Mastery is not more effective than without The Effect of Using Animation Video Youtube towards Students' English Vocabulary Mastery "The value of t-test is the same or less than the value of t-table" (t-test = t-test < t-table).

**RESULT AND DISCUSSION**

The data was taken from the sample in First Years Students in SMA Negeri 2 Tebing Tinggi. The first year population was divided into eleven classes. The researcher uses two classes as a sample. One was chosen as the experimental group and the other one as the control group. Each class has twenty-nine students and twenty-nine students.

The researcher began by providing the students to teach the vocabulary. For class X MIA 4 (experimental class), the researcher gives treatment, which was the video from Youtube. Then, for the control class X MIA 1, the researcher only gives an explanation about vocabulary. The researcher used the test method and there were two tests in the study, namely the Pre-test and Post-test. Pre-test to measure based on student knowledge before treatment, and Post-test to determine the level of students' ability related to the material that has been given. The data was collected from pre-test and post-test after applying the test to the experimental group and control group. The results from both groups can be seen below.

**Table 2.**  
**Scores of Pre-Test and Post-Test (Experimental Group)**

No.	Name	Pre-Test (x)	Post-test (y)	Range (D)
1	AS	70	72	2
2	AZS	72	73	1

3	APS	70	80	11
4	AY	74	76	2
5	ACL	76	92	16
6	BPM	68	76	7
7	BSA	76	77	1
8	DLL	44	65	21
9	CSH	78	88	11
10	DS	72	80	8
11	DA	76	77	1
12	FTA	75	76	13
13	FA	67	88	9
14	GES	66	92	22
15	GM	72	60	20
16	IW	57	60	3
17	JSG	75	92	27
18	KW	66	70	4
19	LC	76	88	12
20	MIS	77	80	3
21	MOS	74	75	1
22	MIM	76	88	12
23	MNF	55	60	5
24	NAT	80	84	9
25	PAL	77	92	15
26	PSS	44	60	16
27	RRIS	77	92	15
28	RSM	67	70	3
29	RS	70	80	10
	$\Sigma$	1957	2211	270
	<b>Mean</b>	69.89	78.96	

N = 28

$\Sigma x$  = 1957

$\Sigma y$  = 2211

$\Sigma d$  = 270

Note:

N = total number of samples in experimental group

$\Sigma x$  = total of students' scores of pre-test in experimental group

$\Sigma y$  = total of students' scores of post-test in experimental group

$\sum d$  = range scores of pre-test and post-test in experimental group

The result of the student's means score in experimental group. The highest score of pre-test was 80.00 and the lowest score of pre-test was 44. The total score in pre-test was 1957 which the mean score calculated was 69.89. The total score in post-test was 2211 where the mean score calculated was 78.96.

**Table 3.**  
**Scores of Pre-Test and Post-Test (Control Group)**

No.	Name	Pre-Test (x)	Post-test (y)	Range (D)
1	AN	44	44	0
2	AN	44	48	4
3	BIS	68	60	-8
4	CDOH	60	65	5
5	CTA	64	68	4
6	DF	44	50	6
7	DAP	56	56	0
8	DW	60	60	0
9	ENA	60	65	5
10	FAA	55	62	7
11	GSA	52	60	8
12	GFD	64	64	0
13	IAP	65	64	-1
14	MP	60	60	0
15	MFA	54	60	6
16	MIL	64	76	12
17	MAA	44	50	6
18	NN	44	48	4
19	NAT	66	76	10
20	PMD	69	74	5
21	RHP	56	60	4
22	SM	68	74	6
23	SR	50	55	5
24	TTA	60	61	1
25	TAP	52	52	0
26	WA	52	53	1
27	ZAP	44	45	1
28	CPR	44	44	0

No.	Name	Pre-Test (x)	Post-test (y)	Range (D)
29	VTL	66	70	4
	$\Sigma$	1495	1580	85
	<b>Mean</b>	55.37	58.51	

$N = 27$   
 $\Sigma x = 1495$   
 $\Sigma y = 1580$   
 $\Sigma d = 85$

Note:

- $N$  = total number of samples in control group  
 $\Sigma x$  = total of students' scores of pre-test in control group  
 $\Sigma y$  = total of students' scores of post-test in control group  
 $\Sigma d$  = range scores of pre-test and post-test in control group

Table 4.2 showed the result of scores in control group, the highest score of pre-test was 69 and the lowest scores of pre-test was 44. The total score in pre-test was 1495 which the mean score calculated was 55.37. The total score in post-test was 1580 where the mean score calculated was 58.51.

**Table 4.**

**Variance and Standard Deviation in Post-test in Experimental Group**

Students	Score (x)	Mean ( $\bar{X}$ )	Difference ( $x-\bar{X}$ )	Difference Squared ( $(x-\bar{X})^2$ )
1	72	78.96	6.96	48.44
2	73	78.96	5.96	35.52
3	80	78.96	-1.04	1.08
4	76	78.96	2.96	8.76
5	92	78.96	-13.04	170.04
6	76	78.96	-2.96	8.76
7	77	78.96	1.96	3.84
8	65	78.96	13.96	194.88
9	88	78.96	-9.04	81.72
10	80	78.96	-1.04	1.08
11	77	78.96	-2.96	8.75
12	88	78.96	-9.04	81.72



Students	Score (x)	Mean ( $\bar{X}$ )	Difference ( $x-\bar{X}$ )	Difference Squared ( $x-\bar{X}$ ) <sup>2</sup>
13	76	78.96	-2.96	8.76
14	88	78.96	-9.04	81.72
15	92	78.96	-13.04	170.04
16	60	78.96	18.96	395.48
17	92	78.96	-13.04	170.04
18	70	78.96	8.96	80.28
19	88	78.96	-9.04	81.72
20	80	78.96	-1.04	1.08
21	75	78.96	3.96	15.68
22	88	78.96	-9.04	81.72
23	60	78.96	18.96	395.48
24	84	78.96	-5.04	25.40
25	92	78.96	-13.04	170.04
26	60	78.96	18.96	395.48
27	92	78.96	-13.04	170.04
28	70	78.96	8.96	80.28
$\sum(x-\bar{X})^2 = \sum d^2$				<b>2937.83</b>

From the table 4 above, the writer calculated and got the total sum squares of the respondents at the time of administering the post-test in experimental group was 2837.83 points. In order to know the standard variation for post-test in experimental group, those points were required which was in turn to compare the data at post-test in control group.

The following formula is the standard deviation of post-test in experimental group:

$$S^e = \sqrt{\frac{\sum d^2}{N-1}}$$

$$S^e = \sqrt{\frac{2937.83}{28-1}}$$

$$S^e = \sqrt{\frac{2937.83}{27}}$$

$$S^e = \sqrt{108.80}$$

$$S^e = 10.43$$

Where:

N = number of students

1 = constant number

$\sum d^2$  = sum of the mean deviation

$S^e$  = standard deviation of experimental

From the formula above, the researcher get the result of standard deviation of experimental ( $S^e$ ) is 10.43. To calculate the  $S^e$ , the researcher have to get the result of  $\sum d^2$  (sum of the mean deviation) first. Then, divided with N-1 (28-1) and calculate the square root all of it and the result will added or use on next step (Standard Error).

**Table 5.**  
**Variance and Standard Deviation in Post Test of Control Group**

Students	Score (x)	Mean ( $\bar{X}$ )	Difference (x- $\bar{X}$ )	Difference Squared (x- $\bar{X}$ ) <sup>2</sup>
1	44	58.51	14.51	210.54
2	48	58.51	10.51	110.46
3	60	58.51	-1.49	2.22
4	65	58.51	-6.49	42.12
5	68	58.51	-9.49	90.06
6	50	58.51	8.51	72.42
7	56	58.51	2.51	6.30
8	60	58.51	-1.49	2.22
9	65	58.51	-6.49	42.12
10	62	58.51	-3.49	12.18
11	60	58.51	-1.49	2.22
12	64	58.51	-5.49	30.14
13	64	58.51	-5.49	30.14
14	60	58.51	-1.49	2.22
15	60	58.51	-1.49	2.22
16	76	58.51	-17.49	305.90
17	50	58.51	8.51	72.42
18	48	58.51	10.51	110.46
19	76	58.51	-17.49	305.90
20	74	58.51	-15.49	239.94
21	60	58.51	-1.49	2.22

Students	Score (x)	Mean ( $\bar{X}$ )	Difference (x- $\bar{X}$ )	Difference Squared (x- $\bar{X}$ ) <sup>2</sup>
22	55	58.51	3.51	12.32
23	61	58.51	2.49	6.20
24	52	58.51	6.51	42.38
25	53	58.51	5.51	30.36
26	45	58.51	13.51	182.52
27	44	58.51	14.51	210.54
$\Sigma(x-\bar{X})^2 = \Sigma d^2$				<b>2122.22</b>

$$S^c = \sqrt{\frac{\Sigma d^2}{N - 1}}$$

$$S^c = \sqrt{\frac{2176.52}{27 - 1}}$$

$$S^c = \sqrt{\frac{2176.52}{26}}$$

$$S^c = \sqrt{83.71}$$

$$S^c = 9.14$$

Where:

N = number of students

1 = constant number

$\Sigma d^2$  = sum of the mean deviation

$S^c$  = standard deviation of control

From the formula above, the researcher get the result of standard deviation of control ( $S^e$ ) is 10.43. To calculate the  $S^e$ , the researcher have to get the result of  $\Sigma d^2$  (sum of the mean deviation) first. Then, divided with N-1 (28-1) and calculate the square root all of it and the result will added or use on next step (Standard Error). Standard Error of the Difference of Mean:

$$SE (\chi_e - \chi_c) = \sqrt{\left(\frac{se}{\sqrt{N1}}\right)^2 + \left(\frac{sc}{\sqrt{N2}}\right)^2}$$

$$SE (\chi_e - \chi_c) = \sqrt{\left(\frac{10.43}{\sqrt{28}}\right)^2 + \left(\frac{9.01}{\sqrt{27}}\right)^2}$$

$$SE(\chi_e - \chi_c) = \sqrt{\left(\frac{10.43}{5.2}\right)^2 + \left(\frac{9.01}{5.1}\right)^2}$$

$$SE(\chi_e - \chi_c) = \sqrt{(2.0057)^2 + (1.766)^2}$$

$$SE(\chi_e - \chi_c) = \sqrt{7.14}$$

$$SE(\chi_e - \chi_c) = 2.67$$

From the formula above the researcher calculate the data. The result in  $S^e$  (standard experimental) and  $S^c$  (standard control) added in there. N (number of students in experiment and control) added too. Then calculate the square root all of it and the result of Standard Error 2.67 will be used to calculate T-test.

Where:

- SE ( $\chi_e - \chi_c$ ) : Standard Error
- se : Standard deviation of experimental
- sc : Standard deviation of control
- N1 : Number of students of experimental
- N2 : Number of students of control

Finding out t-test:

$$t_{test} = \frac{\bar{X}_e - \bar{X}_c}{SE(\chi_e - \chi_c)}$$

$$t_{test} = \frac{78.76 - 58.51}{2.67}$$

$$t_{test} = \frac{20.25}{2.68}$$

$$t_{test} = 7.55$$

From the formula of T-test the writer get the result 7.55. For the  $\bar{X}_e$  (mean of post test in experimental) the writer get 78.76 and  $\bar{X}_c$  (Mean of post-test in control). Then the result of SE will divided with the result  $\bar{X}_e - \bar{X}_c$  (78.76- 58.51)

Where:

- $\bar{X}_e$  = Mean of post-test in experimental
- $\bar{X}_c$  = Mean of post-test in control
- SE ( $\chi_e - \chi_c$ ) = Standard error

Finding out the degree of freedom (df) as follow:

- df : (Ne-1) + (Nc-1)
- : (28-1) + (27-1)
- : 27 + 26
- : 53

t-table at 5% of level of significance is **1,674**

Based on formula of hypothesis which was designed before, Null Hypothesis is rejected if t-test is higher than t-table. After calculated the data and got the result, so the hypothesis could be constructed as follow:

t-test > t-table of 5%

7.55 > 1.674

The score of t-test (7.55) was higher than t-table (1,674) at level of significant 5% for two tailed test, so Null Hypothesis was rejected and Alternative Hypothesis was accepted.

## CONCLUSIONS

According the result of the data analysis, the writer concludes:

1. In SMA Negeri 2 Tebing Tinggi, the researcher found the problem of the students are lack and less of motivation in English lesson, especially doing vocabulary. The students confuse to understand the new word or the other words. Teacher just teach the students using common method. That is why it is far undeniable that vocabulary has been considered that important thing of gaining knowledge of a foreign language. Without grammar little or no may be conveyed. In mastering vocabulary, there are moving the statistics through language: oral and written. Written vocabulary is word identified and utilized in studying and writing. Even as oral vocabulary is word identified and used listening and speaking.
2. The Animation video from Youtube had significantly effects over the students' vocabulary achievement. It could be seen by the score of the students that taught by using animation video youtube was higher that without animation video youtube.
3. In experimental group the students are able use vocabulary well by using the concept. Students in experimental make it clear in the exercise of the animation video youtube that the researcher gave. While, in control group the students are difficult to use or to answer the questions that the researcher gave.

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