Indonesian Journal of Education Research (IJoER)
Vol. 2, No. 4, August 2021, pp. 87~94
ISSN: 2722-1326, DOI: 10.37251/ijoer.v2i4.533

The Effect Of Using Animation Videos In English Teaching On Students' Listening Skills: An Experimental Study At Sma N 10 Batanghari Grade X Academic Year 2016/2017

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Article Info

Article history:

Received Jul 4, 2021
Revised Jul 25, 2021
Accepted Aug 10, 2021

Keywords:

Animation Videos
Effect
English
Listening Skills

ABSTRACT

Purpose of the study: The purpose of this study was to determine the significant effect of using animated videos in teaching on students' listening skills.

Methodology: This research used a true experimental design with pre and posttest design. The sample was tested by using pretest-posttest control group designs. There were four classes for tenth grade student there. It was started from X1 to X4. The design of this research was an experimental research. The population of this research was the tenth (X) grade students of SMA N 10 Batanghari, in 2016/2017 of academic year. The totals sample is of tenth graders are 113 students. The classes were taken for experimental and control classes were X3 and X4. In experimental research, we need pre-test and post-test to measure the ability of the students. The data gathered from students' score in posttest and pretest from control and experimental class. The data were analyzed by using the independent t-test to see the significant effect of using animation videos on students' listening skills. This research compared to both of experimental class and control class by using media in teaching. The experimental class used some animation videos, while the control class used the conventional way. The formula of T-test.

Main Findings: The findings of this study indicate that the use of animated videos has a significant effect in teaching English on students' listening skills at SMA N 10 Batanghari.

Novelty/Originality of this study: This study uses animated videos in teaching English to determine the effect on students' listening skills.

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1. INTRODUCTION

Media in teaching learning process are one of the effective ways in helping and motivating students to learn English. According to Endang dkk, tools, resources, and educational materials can be consideration for everything that can be used to facilitate the process of learning from language with different criteria [1]. Learning process with media can help students comprehend the material easily. Media in teaching learning process are needed to facilitate the students in learning process. Media can be a component of active learning strategies such as a group discussion. The use of media is to enhance teaching and learning process. By using media, students will engage, aid student retention of knowledge, and motivate the students' interest in subject

matter. Media can be used to motivate students to be more enthusiastic in teaching learning process. One of media that can be used in teaching learning process is the use of animation videos.

According to David, animation is a part of art that comes from everywhere that is produced by someone who works in a particular studio company or just an individual project and we can watch it through seeing it in the cinema or just in our phone [2]. In learning second language, students face some problems in learning listening skill. One of the problems that student always face is they cannnot hear clearly the pronunciation of what a native speaker says on the audio. Moreover, they also do not understand what the speaker is talking about in the audio. Another reason is the way of teachers in presenting the listening material is boring. Traditionally, teachers only give an audio of native speaker to the students. In addition, the students will answer the questions based on the context in the audio.

According to some researchers such as Kretsai, Kiki dkk, Logi dkk, it is assumed that the using of animation video as the media in teaching is an effective way in motivating the students to help them in comprehending and acquiring the language easily [3]-[5]. As an interesting medium, animation video covers some important parts of media including recording, reproducing, and displaying moving images with sound. Students do not only hear the information, but they also can see the image by themselves. Based on the background above, the researcher is interested in conducting the research about "The Effect of Using Animation Videos in English Teaching on Student Listening Skills: An Experimental Study at SMA N 10 Batanghari Grade 10 academic year 2016/2017". The purpose of this study was to determine the significant effect of using animated videos in teaching on students' listening skills.

2. RESEARCH METHOD

The design of this research was an experimental research. The important thing for experimental research was this research made a change between one variable to another variable. The method that was used in this research was "true experimental design: pretest-posttest designs" since it described the quantitative degree to the variables that related before and it compared the groups through random assignment to the participant in different condition of variables.

Population means a group of individual which have a similar characteristic. According to Marczyk dkk, population is a group of people that make the researcher interested to them [6]. The design of this research was an experimental research. The population of this research was the tenth (X) grade students of SMA N 10 Batanghari, in 2016/2017 of academic year. There were four classes of the tenth (X) grade student of SMA N 10 Batanghari. Each class consisted of 27-30 students. The population of the research is shown in the Table 1. below.

Table 1. Population of the Research

No	Classes	Number of students
1	X1	27
2	X2	30
3	X3	28
4	X4	28
Total		113

A sample is a part of what the researcher need in doing the research. The sample itself can be called as a part of population. Emphasized that randomization is a way that can minimize the effect of extraneous variables by using random selection and random assignment [6]. This research used a true experimental design with pre and posttest design. The sample was tested by using pretest-posttest control group designs. There were four classes for tenth grade student there. It was started from X1 to X4. The totals of tenth graders are 113 students. The classes were taken for experimental and control classes were X3 and X4.

In experimental research, we need pre-test and post-test to measure the ability of the students. According to Creswell, pretest provides a measurement of the same characteristic that will be assessed to the participant in experiment before they get a treatment, pretest take time and effort to the students and pretest also has a significance influence to the treatment [7]. While posttest is the measurement of some characteristic that will be assessed in experiment after they get the treatment as the final assessment. For this research, the data obtained from listening comprehension tests. They were pre-test and posttest. The instrument used for this research was listening comprehension test. The test was adapted from the test that was used by the teacher in order to make the topic more interesting for student and the topic of the test could be appropriate to the participant ability. The questions of the test were 20 multiple choice questions with an appropriate audio so that the participant could listen to the audio clearly and they answer the question correctly.

The data gathered from students' score in posttest and pretest from control and experimental class. A correct answer of the test was accumulated with formula:

$$X = \frac{R}{S} \times 100$$

Notes:
X : The score
R : Correct answer
S : Number of items

The data were analyzed by using the independent t-test to see the significant effect of using animation videos on students' listening skills. This research compared to both of experimental class and control class by using media in teaching. The experimental class used some animation videos, while the control class used the conventional way. The formula of T-test form [8]:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left(\frac{SS_1 + SS_2}{n_1 + n_2 - 2}\right)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Here is the formula to look for X1, X2, SS1, and SS2 as the following:

$$\bar{X}_1 = \frac{\sum X_1}{n_1}$$

$$\bar{X}_2 = \frac{\sum X_2}{n_2}$$

$$ss_1 = \sum X_1^2 - \frac{(\sum X_1)^2}{n_1}$$

$$ss_2 = \sum X_2^2 - \frac{(\sum X_1)^2}{n_2}$$

Based on the formula above, if the t-test is higher than t-table, the hypothesis 1 (H1) is accepted. It means that there is significant effect of using animation video on students' listening skills. And if the t-test is smaller than t-table, the hypothesis 0 (H0) is accepted, and it means that there is no significant effect of using animation videos on students' listening skill.

3. RESULTS AND DISCUSSION

In experimental class, there were 21 students and their score was taken for pre-test and post-test data. For pre-test result, it shows that the mean score of data is 55.71. From the pre-test results, it can be seen that the lowest score is 40 and thehighest score is 75. The results of pretest can be seen on the Table 2. below:

Table 2. Result of Pre-test in Experimental Class

Pre-test		
Code	Score (X)	X^2
1	50	2500
2	60	3600
3	55	3025
4	50	2500
5	50	2500
6	55	3025
7	65	4225
8	60	3600
9	65	4225
10	55	3025
11	45	2025
12	60	3600
13	50	2500
14	75	5625

15	55	3025
16	70	4900
17	50	2500
18	45	2025
19	40	1600
20	60	3600
21	55	3025
TOTAL	$\sum X = 1170$	$\sum X^2 = 66650$

Mean of Pre-test

$$\overline{X} = \frac{\sum X}{n}$$

$$= \frac{1170}{21}$$

$$= 55.71$$

The experimental class had given the treatments, and it was the using of animation videos. After the treatment was conducted for six meetings, the post-test 55 was given to this class. The post-test result for this class shows that the mean score of data is 72.95. In addition, the lowest score is 55 while the highest score is 95. The result of post-test can be seen on the Table 3. below:

Table 3. Result of post-test in experimental

Post-test		
Code	Score (X)	X^2
1	65	4225
2	65	4225
3	65	4225
4	70	4900
5	60	3600
6	75	5625
7	90	8100
8	85	7225
9	95	9025
10	70	4900
11	80	6400
12	80	6400
13	65	4225
14	65	4225
15	70	4900
16	70	4900
17	70	4900
18	55	3025
19	70	4900
20	80	6400
21	90	8100
TOTAL	$\sum X = 1532$	$\sum X^2 = 114425$

Mean of Post-test

$$\overline{X_1} = \frac{\sum X_1}{n_1}$$

$$= \frac{1532}{21}$$

$$= 72.95$$

The result of pre-test and post-test can be interpreted based on the score interpretation for the students' achievement which is adapted from [9].The table below shows about the distribution of pre-test and post-test score in experimental class.

Table 4. The distribution of Pre-test and Post-test score in Experimental Class

Score	Category	Pre-test		Post-test	
		Frequency	Percentage	Frequency	Percentage
81-100	Very Good	-	-	5	24%
61-80	Good	4	19%	14	66%
41-60	Fair	16	76%	2	10%
21-40	Weak	1	5%	-	-
0-20	Poor	-	-	-	-
Total		21	100%	21	100%

From the distribution table above, it can conclude that before the treatment was given to the experimental class, the pre-test results shows that the lowest score is in weak category and the highest score is in good category. But after the treatment was given to the experimental class, the post-test result shows that the lowest score is in fair category and the highest score is in very good category. It means that the students' ability in learning listening skill increase because of the using of the animation videos as their treatment.

The pre-test result in experimental class can be seen that there is only one student (5%) is in the weak category, 16 students (76%) who are in fair category, and four students (19%) who are in good category. However, there is no student who is inthe other categories in term of poor and very good category. For post-test results, it can be seen from the table that there are two students (10%) who are in the fair category, 14 students (66%) who are in good category, and five students (24%) who are in very good category. In the end, there is no student who is in between both weak and poor category.

For control class, there are also 21 students who were tested for pre-test and post-test score. The pre-test result in the control class shows that the mean score of data is 55.71. From the results of the pre-test, it shows that the lowest score is 40 and the highest score is 75. The results of pre-test can be seen below:

Table 5. Result of Pre-test in Control Class

Pre-test		
Code	Score (X)	X^2
1	55	3025
2	55	3025
3	45	2025
4	60	3600
5	60	3600
6	55	3025
7	65	4225
8	60	3600
9	75	5625
10	45	2025
11	55	3025
12	50	2500
13	65	4225
14	60	3600
15	70	4900
16	40	1600
17	55	3025
18	50	2500
19	50	2500
20	50	2500
21	50	2500
TOTAL	$\sum X = 1170$	$\sum X^2 = 66650$

Mean of Pre-test

$$\bar{X} = \frac{\sum X}{n}$$

$$= \frac{1170}{21}$$

$$= 55.71$$

Difference with experimental class which was given the animation video asthe treatment in learning listening, control class did not learn with animation video, this class learned the material by using the conventional ways. After the students learned in six meetings, they were tested for obtaining the score for post-test. The result of pos-test shows that the mean score of the data is 63.80. From the post-test result, the lowest score is 45 and the highest score is 80. The result of post-test can beseen on the Table 6. below:

Table 6. The Result of Pre-test in Control Class

Post-test		
Code	Score (X)	X^2
1	70	4900
2	60	3600
3	70	4900
4	60	3600
5	80	6400
6	70	4900
7	55	3025
8	65	4225
9	70	4900
10	65	4225
11	65	4225
12	60	3600
13	65	4225
14	65	4225
15	75	5625
16	45	2025
17	65	4225
18	60	3600
19	75	5625
20	55	3025
21	45	2025
TOTAL	$\sum X$ = 1340	$\sum X^2$ = 87100

Mean of Post-test

$$\overline{X_2} = \frac{\sum X_1}{n_2}$$

$$= \frac{1340}{21}$$

$$= 63.80$$

The result of pre-test and post-test in control class can be interpreted based on the score interpretation for the students' achievement which is adapted from [9]. The table below shows about the distribution of pre-test and post-test score in experimental class.

Table 7. The distribution of Pre-test and Post-test score in Control Class

Score	Category	Pre-test		Post-test	
		Frequency	Percentage	Frequency	Percentage
81-100	Very Good	-	-	-	-
61-80	Good	4	19%	12	57%
41-60	Fair	16	76%	9	43%
21-40	Weak	1	5%	-	-
0-20	Poor	-	-	-	-
Total		21	100%	21	100%

In control group, the result of pre-test shows that lowest score is in weak category and the highest score is in the good category. But after that, the post-test result shows that the lowest score is in fair category and the highest score is in the good category. It means that the students' ability in learning listening skill increase however the increasing is not more than the increasing in the experimental class which was given the animation videos as their treatment.

From the table above, the pre-test shows more detail that there are no students who is in poor and very good category. In contrary, there is only one student (5%) in weak category, 16 students (76%) who are in fair category, and four students (19%) who are in good category. For the post-test result, it shows that there are no students who are in poor, weak, and very good category. But, there are nine students (43%) who are in fair category and there are 12 students (57%) who are in the good category.

To know whether there was statistical difference between pre-test and posttest between experimental class and control class, it is calculated by using t-test formula. When the t-test formula is applied, the score needed for t-test calculation is presented on the calculation below:

1. ***Mean of Post-test***

$$\overline{X_1} = \frac{\sum X_1}{n_1}$$

$$= \frac{1532}{21}$$

$$= \mathbf{72.95}$$

2. ***Mean of Post-test***

$$\overline{X_2} = \frac{\sum X_2}{n_2}$$

$$= \frac{1340}{21}$$

$$= \mathbf{63.80}$$

3. SS_1

$$SS_1 = \sum {X_1}^2 - \frac{(\sum X_1)^2}{n_1}$$

$$SS_1 = 114425 - \frac{(1532)^2}{21}$$

$$SS_1 = 114425 - \frac{(2347024)}{21}$$

$$SS_1 = 114425 - 111763.04$$

$$SS_1 = 2661.96$$

4. SS_2

$$SS_2 = \sum {X_2}^2 - \frac{(\sum X_2)^2}{n_2}$$

$$SS_1 = 87100 - \frac{(1340)^2}{21}$$

$$SS_1 = 87100 - \frac{(1795600)}{21}$$

$$SS_1 = 87100 - 85504.76$$

$$SS_2 = 1595.24$$

5. *T –test*

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\left[\frac{SS_1 + SS_2}{n_1 + n_2 - 2}\right]\left[\frac{1}{n_1} + \frac{1}{n_2}\right]}}$$

$$t = \frac{9.16}{\sqrt{[96.43][0.04]}}$$

$$t = \frac{9.16}{\sqrt{3.85}}$$

$$t = \frac{9.16}{1.96}$$

$$t = 4.67$$

6. *Df*

$$df = n_1 + n_2 - 2$$
$$df = 21 + 21 - 2$$
$$df = 40$$

From that calculation, it is found that the value of t-test is 4.67. It means that it is higher than the value of t-table 2.02 with df 40 and the level of confidence is 0.5. The value of T-Table is distributed and adapted from [10]-[12].

4. CONCLUSION

Based on the result of the research, it conclude that Storytelling have positive effect toward students' speaking ability. The result of the data analysis indicated that the students' speaking skill in terms of pronunciation, grammar, fluency, and vocabulary have increased from the pretest to posttest. The result of posttest in experimental class is higher than in control class. The mean score of the students' speaking skill in experimental class is also higher than in control class. Storytelling makes students more active and creative in shared their ideas by speaking English. It indicated the treatment by using storytelling have positive affect for students' speaking skill.

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