

THE USE OF CARTOON VIDEO IN TEACHING STUDENTS VOCABULARY

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ABSTRACT

This paper aims to discuss vocabulary and cartoon video, and how to teach vocabulary by using cartoon video. Cartoons are designed not only to entertain children, but cartoons can be also used to teach and educate children. In order to find the relationship between cartoon and education, the writer writes a paper which the title is “The Use of Cartoon in Teaching Students Vocabulary”. It has a purpose to help children in learning English, more specifically it aims to improve English vocabulary for children whose age are between seven years old to fourteen years old. The method of the research is quantitative research in design experiment class and control class. The Reseacher could take conclusion that there was a significant between experiment class and control class, The mean of experiment class is greater than the mean of control class (77,25 > 57,75). on the other hand, the test of hypothesis using t-test formula shows the value of t-test is greater than the value of the t-table. The value of t-test is 3,712 while the value of t-table on t-table in degree of freedom of 38 with level of significant of 0.01 is 2,42. The hypothesis is accepted. Based on the result of this study, it is accepted to be a good information for many teachers especially English teachers. It is one solution to be used as appropriate method in teaching learning proses. It could be an alternative that could be used in teaching.

Keywords : *Vocabulary, cartoon video, media teaching.*

INTRODUCTION

Learning a language is not something new for people who have been interested in it since a long time ago. It is caused by the main function of language that is for communication. Larsen (2003, p.2) states, “ language is means of interaction between among people”. In the learning process, one of the important parts in creating and understanding the language is vocabulary mastery. People can not express their opinion and ideas in English without knowing their vocabulary. Low vocabulary mastery also makes them unable to express the o pinion properly. Vocabulary is one of English

sub skills that must be taught to the students because vocabulary has an important role for all language skills. David Wilkins in Thornburry (2002, p.13) states, “that without grammar very little can be conveyed, without vocabulary nothing can be conveyed”. In other words, the first thing that has to be mastered by language learners in learning language is vocabulary. In listening, students vocabulary influences their understanding toward teacher’s speech, class discussion, and other speeches. The words that they choose in speaking affect how well they deliver a message. In reading, students’ vocabulary affects their

ability to understand and comprehend a text. In addition, dealing with writing, students' vocabulary also influences how clear they convey their thought to the reader. In conclusion, vocabulary takes an important role in equipping students to be able to communicate in English.

Based on the observation that conducted in SMP, the researcher found some problems related to the vocabulary teaching and learning process. The traditional method is usually used by looking for difficult words and finds the meaning in the dictionary and students supposed to memorize the words. They were lazy to memorize the unfamiliar words that they heard or read in the text. They had difficulties in understanding or comprehending the meanings of unfamiliar words and memorizing new words. They had low vocabulary mastery. The class activities depend on textbook and LKS (Lembar Kerja Siswa), so that the lesson do not run effectively and often makes both students and teacher get bored with the lesson and unmotivated to learn. Also, the students had low participation in English class. Those problems must be solved because it can be difficult for students to continue for the next level or grade. They also may have low motivation in learning English because they thought English was difficult. Furthermore, they have boredom in English class. To make students motivate and enjoyable to study vocabulary, the teacher should be creatively in delivering material. writer should use variative strategies in teaching vocabulary. One of the strategies that can be used by teacher is using media to support the teaching learning process. There are some teaching media available

now, so the writer uses cartoon video in teaching students' vocabulary.

In order to be able to teach well, teacher must have professional ability that consists of four teachers' competences. One of the competences is a pedagogical competence involving creating meaningful and interesting learning. Allah said in the Qur'an surah An-Nahl 125, "Invite (all) to the way of the lord with wisdom and beautiful preaching: and argue with them in ways that are best and most gracious: for they lord knoweth best who have strayed from his path and who receive guidance." The verse states above explains that as a teacher must be able to teach well and interesting learning. For engaging students, cartoon video is a good alternative media for teaching vocabulary. It is an interesting which given audio visual examples through the acting in the scenes. It can be a stimulant to find imagination in order to improve students' ability in English. By watching cartoon, they will know the plot, which occurs in the cartoon that they will have watched based on the steps and its language features. Finally, they engage, not feel bored and get vocabulary improvement. Based on the problems and the potentials of cartoon in improving students' vocabulary mastery, the researcher intended to improve the students' vocabulary mastery through cartoon video. Therefore, this study is important for SMP Islam AL-Badariyah in order to improve the students' vocabulary in the teaching and learning process. The Reserach question of this reserach are:

How is the vocabulary of the students who are taught using Cartoon video?, How is the vocabulary of the students who are taught Using LKS?, Is there any significant differences Vocabulary between the students who are taught Using cartoon video and who are taught Using LKS ?

THEORETICAL FRAMEWORK

Definition of Vocabulary

According to Richards (2002, p.255), "vocabulary is the core component of language proficiency and provides much of the basis for how well learners speak, listen, read, and write". Therefore developing learners' progress in understanding English, learners should keep on learning new vocabulary is an important element in acquisition of a second language.

Kinds of Vocabulary

According to Marianne Celce and Murcia Elite Olshtain (2010, p.33), "There are two kinds of vocabulary: they are function words and content words".

1. The function words are those vocabulary items that belong to closed word classes (i.e. word classes that do not readily admit new items or lose old ones: pronouns, auxiliary verbs, prepositions, determiners and adverbs).
2. The content words are those vocabulary items that belong to open word classes (words classes that readily accept new words and discard old ones).

The content words can be divided into three general classes:

- a) Words that refers to a person, a place or a thing that we might call them nouns.
- b) Words that express an action, an event or a state are called verbs
- c) Words are used to describe the qualities of thing or action are called adjectives and adverbs.

Kinds of Media in Teaching

The kinds of teaching media can be divided into three categories:

Visual, Audio and Audio visual media
(Arsyad, 2009, p.29)

- a. Visual media : Visual media is all kind of media that can be seen or touch by the students. The examples of visual media are: picture, photos, real things, chart, miniatures, cards.
- b. Audio media; Audio media is also called by the listen media. It is usually used to listen and understand the passage. The characteristic of this media is that they show one way communication. The kinds of audio media such as : Radio, Tape recorder, Cassete, Compact disc.
- c. Audio visual media

Audible means can be heard, and visible means can be seen. Arsyad (2009, p.31) that there are some characteristics of audio visual media: linearity, show dynamic visual, can be implemented by using the ways which stated by the maker, as physical representation of real or abstract ideas, it was developed based on behaviorism psychology and cognitive principle, teacher oriented through the low student's interactive involve level. The kinds of this media such as : Video, Movie, Television

Cartoon

According to Sadiman (2010, p. 45) Cartoon as one of graphic communication form is a representatif picture which use symbols to convey the message quickly and briefly. It can be the form of attitude how to people behave or situation. Cartoon has very attractive way to attract students attention, influence attitude and behavior. Usually cartoon convey the message in a simple picture. If the cartoon is meaningful, the message can be delivered briefly, so that it will give more impression.

Definition of Video

According to Arsyad (2009, p.49) video can visualize the object movement with natural or appropriate sound. It visualize live picture and also include the sound make video as the interesting media. In education, the use of audio visual media has been popular. Video as audio visual media present the movement. The message from video show the fact (important event and news) and also fiction. The characteristic of the message can be informative, educative and instructional (Sadiman et al, 2010, p.74). Video allows us to introduce any aspect of real life into the language learning environment, contextualizing the learning process (Sherman, 2003, p.1). The great value of video lies in its combination of sounds, images, and sometimes text in the form of subtitle. Actually this media has the purpose to entertainment, documentation and education. It can provide information, explain the process, explain complicated concept and the most useful of this media can shorten or long then the time in teaching and learning process.

METHOD

This research used experimental research. The purpose of this research was to find out whether watching cartoon is effective in teaching English writing for students. The object of this research was the second graders of SMP. In order to describe the developed skills of the students after taught using cartoon, this research divided the students into groups: *experiment* and *control class*. Class VIII-1 (control class) was taught using lecture and class VIII-2 (experiment class) was taught using cartoon. Vocabulary mastery of the experiment and control class be compared to prove which treatment was more developed.

The population of this research was the second grade students of SMP Islam, Bogor 2017. There were two classes in second grade. In this paper, the researcher took sample in each classes consists of 20 students. The sample in this research divided into two classes. Class VIII-1 is the control class where improving vocabulary was taught by using lecture and class VIII-2 is the experiment class where improving vocabulary was taught by using cartoon. In this research the sample is called population sample. Because all the students are mixed up.

Creswell (2012, p.14) state that "An instrument is a tool for measuring, observing, or documenting quantitative data. It contains specific questions and response possibilities that you establish or develop in advance of the study." The data needed in this research is improving vocabulary mastery of the experiment class (X_1) and the control class (X_2). The instrument used to gain the data is a

written test to determine the students' English Vocabulary. In this test, The test are take from the cartoon give to the students. The text in the form of narrative text and the test is 20 gap filling (missing word). The writer give score 1 for right answer and score 0 for the wrong answer.

In order to collect the data, the researcher makes schedule activities during three times. The first meeting and the second meeting the students were given learning process in the class, and the last meeting, the students were given written test (post-test).

Table 1 Control Class Schedule
English Schedule of 8 Grade Students in SMP Islam Al Badariyah

Meeting	Day /Date	Basic Competency	Material
Meeting 1	Thursday 24-11-2016 Time 09.20-10.40	To write English text properly based on the topic given	Narrative text
Meeting 2	Friday 25-11-2016 Time 08.00-09.00	To watch cartoon video based on the topic given	"the monkey referee"
Meeting 3	Tuesday 29-11-2016 Time 09.20-10.40		Examination/ written test about narrative text

Table 2 Experiment Class Schedule
English Schedule of 8 Grade Students in SMP Islam Al Badariyah

Meeting	Day /Date	Basic Competency	Material
Meeting 1	Monday 20-03-2017 Time 11.00-12.20	To write English text properly based on the topic given	Narrative text
Meeting 2	Tuesday 21-03-2017 Time 09.00-10.00	To write English text properly based on the topic given	"the monkey referee"
Meeting 3	Thursday 23-03-2017 Time 11.00-12.20		Examination/ written test about narrative text

The procedure of Data Analysis

The data analyzed, the statistical analyses involve:

Central Tendency

According to Creswell (2012, p.184) that "Measures of central tendency

are summary numbers that represent a single value in a distribution of scores." He also said that "They are expressed as an average score (the mean), the middle of a set of scores (the median), or the most frequently occurring score (the

mode).” Those are three measurements for central tendency.

Mean

Creswell (2012, p.184) stated that “A mean (M) is the total of the scores divided by the number of scores. To calculate the mean, you sum all of the scores and then divide the sum by the number of scores.

According to Sugiyono (2013, p.49) the formula to calculate the mean is:

$$Me = \frac{\sum x_1}{n}$$

Where: Me = Mean (*rata-rata*)

\sum = Epsilon (*bacajumlah*)

X_1 = Total score (*nilai x keisampaike n*)

n = Total number of student

Median

Median is the score, which is at the center of the distribution. According to Creswell (2012, p.185) “The median score divides the scores, rank-ordered from top to bottom, in half.”

According to Sugiyono (2013, p.53) the formula of median is:

$$Md = b + p \left(\frac{\frac{1}{2}n - F}{f} \right)$$

Where: Md = Median

b = Lower limit

p = Long of interval class

n = Number of sample

F = Number of frequency before the median class

f = Frequency of median class

Mode

“The mode is the score that appears most frequently in a list of scores” (Creswell, 2012, p.185).

Sugiyono (2013, p.52) stated that the formula of the mode is:

$$Mo = b + p \left(\frac{b_1}{b_1 + b_2} \right)$$

Where: Mo = Mode

b = Boundary interval class with the more frequency

p = Length of interval class

b_1 = Smallest frequency

b_2 = Biggest frequency

Dispersion

Dispersion is the variability or spread in a variable or a probability distribution. According to Creswell (2012, p.186) “Variability indicates the spread of the scores in a distribution. Range, variance, and standard deviation all indicate the amount of variability in a distribution of scores.”

Range

The range of scores is the difference between the highest and the lowest scores to items on an instrument.

The formula of range is as follows:

$$R = H - L$$

Where: R = Range

L = the lower score

H = the highest score

Variance

Creswell (2012, p.186) stated “The variance indicates the dispersion of scores around the mean.”

The formula of variance is as follows:

$$S^2 = \frac{\sum f(xt - \bar{x})^2}{n}$$

Where: S^2 = Variance

\sum = Epsilon (*bacajumlah*)

f = Frequency

xt = Median

\bar{x} = Mean

n = Number of sample

Standard Deviation

Creswell (2012, p.186) states "Standard deviation as an indicator of the dispersion or spread of the scores."

Sugiyono (2013, p.58) states that the formula is as follows:

$$S = \sqrt{\frac{\sum f(x_i - \bar{x})^2}{n - 1}}$$

Where: S = Standard deviation
 x = Student's score of the interval class
 \bar{x} = Mean
 N = Total number of students

Distribution of Sampling

The formula of distribution of sampling is:

$$\sigma_{\bar{x}_1\bar{x}_2} = \sqrt{\frac{(nx_1 - 1)SDx_1^2 + (nx_2 - 1)SDx_2^2}{(nx_1 - 1) + (nx_2 - 1)}} \sqrt{\frac{1}{N_{x_1}}} + \sqrt{\frac{1}{N_{x_2}}}$$

Where: $\sigma_{\bar{x}_1\bar{x}_2}$ = Distribution of sample test
 nx_1 = Total number of students of variable X_1
 nx_2 = Total number of students of variable X_2
 SDx_1^2 = Standard deviation of variable X_1
 SDx_2^2 = Standard deviation of variable X_2

t-test

t-test is taken to gain the t-observed and the t-table which are used to compare variable X_1 and X_2 to know whether the difference is significant. If the t-observed is higher than the t-table it means that (H_0) is rejected and (H_a) is accepted. Which is there is significant differences between two variables.

t- observed

t-observed can be formulated as follows (Sugiyono, 2010, p.122):

$$t\text{-observed} = \frac{(\bar{M}X_1 - \bar{M}X_2)}{\sigma_{\bar{x}_1 - \bar{x}_2}}$$

Where: $\sigma_{\bar{x}_1\bar{x}_2}$ = Distribution sampling of sample
 $\bar{M}X_1$ = Mean of students in variable X_1
 $\bar{M}X_2$ = Mean of students in variable X_2

t-table

To get the t-table, the degree of freedom should be counted first. Degree of freedom is used to describe the number of scores in a sample that are independent and free to vary. The formula of degree of freedom (df) is as follows:

$$df = (NX_1 - 1) + (NX_2 - 1)$$

Where: df = Degree of freedom
 $N X_1 - 1$ = Total number of the students in variable X_1
 $N X_2 - 1$ = Total number of the students in variable X_2

The criteria for accepting or rejecting the hypothesis data are according to Sugiyono (2013, p. 97) are:

H_a is accepted if the t-observed > t-table.

H_0 is rejected if the t-observed \leq t-table.

FINDINGS AND DISCUSSION

The researcher conducted the research at SMP Islam at Kota Bogor. The researcher collected the data on March 20th until 25th, 2017. It was done by taking the sample of eight grade students experimental research. The aim of this paper aimed to know the different result between the students who are taught using cartoon as experiment class

(X₁) and the students who are taught using lecture as control class (X₂).

In collecting the data, the students were given written test. In this case, the

students were asked to answer 20 gap filling (missing word) the form of the narrative text given.

Table 3 The score of students' writing skill of Experiment class (X₁) and Control class (X₂)

No	Experiment x1		Control X2	
	Participant	Score	Participant	Score
1	Student 1	85	Student 1	60
2	Student 2	90	Student 2	65
3	Student 3	75	Student 3	75
4	Student 4	80	Student 4	50
5	Student 5	65	Student 5	40
6	Student 6	100	Student 6	55
7	Student 7	75	Student 7	55
8	Student 8	90	Student 8	50
9	Student 9	65	Student 9	60
10	Student 10	75	Student 10	65
11	Student 11	50	Student 11	75
12	Student 12	75	Student 12	70
13	Student 13	80	Student 13	65
14	Student 14	70	Student 14	55
15	Student 15	80	Student 15	60
16	Student 16	80	Student 16	40
17	Student 17	85	Student 17	40
18	Student 18	95	Student 18	60
19	Student 19	55	Student 19	55
20	Student 20	75	Student 20	60
n=20	Total	∑ X₁= 1545	Total	∑ X₂= 1185

The table showed clearly that the total scores of experiment class (X₁) were higher than the score of control class (X₂) (1545>1185). It means that the experiment class (X₁) of the students who were taught using cartoon was more successful than the control class (X₂) of the students who were taught using lecture. The researcher further did statistical calculation including the frequency distribution, central tendency

(mean, median and mode) dispersion (range and standard deviation), distribution of sampling, and t-test. A frequency distribution (f) was used to know distribution of score, how many times each scored appeared and average of experiment and control class score. The following table and charts showed the frequency distribution of experiment class (X₁) and control class (X₂):

Table 4 The Frequency Distribution of Experiment class (X₁) and Control class (X₂)

Score (x)	Experiment Class		Control Class	
	F	f.x ₁	F	f.x ₂
40	0	0	3	120
45	0	0	0	0
50	1	50	2	100
55	1	55	4	220
60	0	0	5	300
65	2	130	3	195
70	1	70	1	70
75	5	375	2	150
80	4	320	0	0
85	2	170	0	0
90	2	180	0	0
95	1	95	0	0
100	1	100	0	0
Total	20	Σ f . x₁ = 1545	20	Σ f . x₂ = 1155

From the chart above, it can be concluded. The data can be seen as follow: The frequency distribution of experiment class (X₁), there was 1 student who got 100, 1 student who got 95, 2 students who got 90, 2 students who got 85, 4 students who got 80, 5 students who got 75, 1 student who got 70, 1 student who got 65, 1 student who got 60, 1 student who got 55, and 1 student who got 50.

Furthermore, the frequency distribution of control class (X₂), there were, 2 students who got 75, 1 students who got 70, 3 students who got 65, 3 students who got 60, 5 students who got 55, 4 students who got 50, and 3 students who got 40.

Central Tendency

Central tendency is used to know whether there is a difference between experiment class (X₁) and control class (X₂). The central tendency consists of mean, median and mode.

Mean

The calculation of mean as follow:

$$Me = \frac{\sum x_1}{n}$$

Where: Me = Mean (*rata-rata*)
 Σ = Epsilon (*bacajumlah*)
 X₁ = Total score (*nilai x keisampaikan*)
 n = Total number of student

- Mean of experiment class:
 $Me = \frac{\sum x_1}{n} = \frac{1545}{20} = 77.25$
- Mean of control class:
 $Me = \frac{\sum x_2}{n} = \frac{1155}{20} = 57.75$

Mean is used to determine the average of students' vocabulary on cartoon. By comparing both means, it can be concluded that X₁ was higher than X₂. Therefore, round table technique has a positive contribution in increasing students' vocabulary on cartoon.

Median

The second measurement of central tendency is median. The researcher calculate the median in distribution of score arranged in sequence. (see table 4.2.1.1 in page 38-39).

The calculation of median as follow:

$$Md = b + p \left(\frac{\frac{1}{2}n - F}{f} \right)$$

Where: Md = Median, b = Lower limit,

p = Long of interval class

n = Number of sample

F = Number of frequency before the median class

f = Frequency of median class

- Median of experiment class:

$$Md = \frac{75 + 80}{2} = 77.5$$

- Median of control class:

$$Md = \frac{60 + 60}{2} = 60$$

From the calculation above it can be concluded that the median of

experiment class was 77.5 and the median of control class was 60.

Mode

The third measurement of central tendency is mode. Mode is collecting the score which has maximal frequency. The mode of experiment class is 7.5 and the mode of control class is **60**. The writer makes it clear thus mean, median, and mode of experiment class and control class on the table below:

**Table 5 Central Tendency
(Mean, Median and Mode)**

Class	Mean		Median	Mode
Experiment Class	77,25		77,5	7,5
Control Class	57.75		60	60

Dispersion

Dispersion is calculated to know how similar the scores between experiment class and control class. There two ways of examining dispersion:

Range

The calculation of range as follow:

$$R = H - L$$

Where: R = Range

L = the lower score

H = the highest score

- The range of experiment class (X_1) was:

$$\begin{aligned} R &= H - L \\ &= 100 - 50 \\ &= 50 \end{aligned}$$

- The range of control class (X_2) was:

$$R = H - L$$

$$= 75 - 40$$

$$= 35$$

The result of both ranges was different. It can be seen that the range of X_1 was 50 and the range of variable X_2 was 35. The range of variable X_1 was higher than the range of variable X_2 . Therefore, in terms of the students' vocabulary in the experiment class is more effective than control class using cartoon.

Standard Deviation

Standard deviation has an important role in statistic. Standard deviation is used to know the deviation of the score from the result of research data. The result of standard deviation between experiment and control class:

Table 6 The Frequency Distribution of Experiment Class (X₁)

Score	F	$X_1 - \bar{X}$	$(X_1 - \bar{X})^2$	$f \cdot (X_1 - \bar{X})^2$
50	1	-27.25	742.5625	742.5625
55	1	-22.25	495.0625	495.0625
60	0	-17.25	297.5625	0
65	2	-12.25	150.0625	300.1250
70	1	-7.25	52.5625	52.5625
75	5	-2.25	5.0625	25.3125
80	4	2.75	7.5625	30.25
85	2	7.75	60.0625	120.125
90	2	12.75	162.5625	325.125
95	1	17.75	315.0625	315.0625
100	1	22.75	517.5625	517.5625
Total	20			2960.50

Based on the table above, the standard deviation of X₁ was counted as follows:

$$S = \sqrt{\frac{\sum f(x_1 - \bar{x})^2}{n - 1}} = \sqrt{\frac{2960.50}{20 - 1}} = \sqrt{\frac{2960.50}{19}} = \sqrt{155.81} = 12.48$$

Where: S = Standard deviation
 x = Student's score of the interval class
 \bar{x} = Mean
 N = Total number of students

Table 7. The Frequency Distribution of Control Class (X₂)

Score	F	$X_2 - \bar{X}$	$(X_2 - \bar{X})^2$	$f \cdot (X_2 - \bar{X})^2$
40	3	-19.25	370.5625	1111.6875
45	0	0	0	0
50	4	-9.25	85.5625	342.25
55	3	-4.25	18.0625	326.2539
60	5	-0.75	0.5625	2.8125
65	2	5.75	33.0625	66.125
70	1	10.75	115.5625	115.5625
75	2	15.75	248.0625	496.125
80	0	0	0	0
85	0	0	0	0
90	0	0	0	0
95	0	0	0	0
100	0	0	0	0
Total	20			2460.81

Based on the table above, the standard deviation of X₂ was counted as follows:

$$S = \sqrt{\frac{\sum f(x_2 - \bar{x})^2}{n - 1}} = \sqrt{\frac{2460.81}{20 - 1}} = \sqrt{\frac{2460.81}{19}} = \sqrt{129.51} = 11.38$$

Where: S = Standard deviation

x = Student's score of the interval class
 \bar{x} = Mean
 N = Total number of students

From the calculation above, the result of the standard deviation of experiment class X₁ was **12.48** and the

standard deviation of control class X_2 was **11.38**. The standard deviation of experiment class (X_1) was higher than the standard deviation of control class (X_2).

Distribution of Sampling

The distribution of sampling is a technique to measure the accuracy of students' achievement in both groups. The formula of distribution of sampling as follows:

$$\sigma_{\bar{x}_1\bar{x}_2} = \sqrt{\frac{(Nx_1 - 1)SDx_1^2 + (Nx_2 - 1)SDx_2^2}{(Nx_1 - 1) + (Nx_2 - 1)}} \sqrt{\frac{1}{Nx_1}} + \sqrt{\frac{1}{Nx_2}}$$

Where: $\sigma_{\bar{x}_1\bar{x}_2}$ = Distribution of sample test
 NX_1 = Total number of students of variable X_1
 NX_2 = Total number of students of variable X_2
 SX_1^2 = Standard deviation of variable X_1
 SX_2^2 = Standard deviation of variable X_2

$$\sigma_{\bar{x}_1\bar{x}_2} = \sqrt{\frac{(Nx_1 - 1)SDx_1^2 + (Nx_2 - 1)SDx_2^2}{(Nx_1 - 1) + (Nx_2 - 1)}} \sqrt{\frac{1}{Nx_1}} + \sqrt{\frac{1}{Nx_2}}$$

$$\sigma_{\bar{x}_1\bar{x}_2} = \sqrt{\frac{(20 - 1)12.48^2 + (20 - 1)11.38^2}{(20 - 1) + (20 - 1)}} \sqrt{\frac{1}{20}} + \sqrt{\frac{1}{20}}$$

$$\sigma_{\bar{x}_1\bar{x}_2} = \sqrt{\frac{(19)12.48^2 + (19)11.38^2}{(20 - 1) + (20 - 1)}} \sqrt{\frac{1}{20}} + \sqrt{\frac{1}{20}}$$

$$\sigma_{\bar{x}_1\bar{x}_2} = \sqrt{\frac{(19)155.75 + (19)129.50}{(19) + (19)}} \sqrt{0.05} + \sqrt{0.05}$$

$$\sigma_{\bar{x}_1\bar{x}_2} = \sqrt{\frac{2959.25 + 2460.5}{(38)}} \cdot 0.22 + 0.22$$

$$\sigma_{\bar{x}_1\bar{x}_2} = \sqrt{\frac{5419.75}{(38)}} \cdot 0.44$$

$$\sigma_{\bar{x}_1\bar{x}_2} = \sqrt{142.62} \cdot 0.44$$

$$\sigma_{\bar{x}_1\bar{x}_2} = 11.94 \cdot 0.44$$

$$\sigma_{\bar{x}_1\bar{x}_2} = 5.253$$

From the calculation above, the result of distribution of

sampling between experiment class X_1 and control class X_2 is **5.253**.

t-test

T-test is used to know the significance different between two classes. T-test was taken to gain t-observed and t-table.

t-observed

The formula of t-Observed is as follows (Sugiyono, 2010, p.122):

$$t - \text{observed} = \frac{Mx_1 - Mx_2}{\sigma_{\bar{x}_1\bar{x}_2}}$$

Where: $\sigma_{\bar{x}_1\bar{x}_2}$ = Distribution sampling of sample

$M\bar{X}_1$ = Mean of students in variable X_1

$M\bar{X}_2$ = Mean of students in variable X_2

$$t - \text{observed} = \frac{Mx_1 - Mx_2}{\sigma_{\bar{x}_1\bar{x}_2}} = \frac{77.25 - 57.75}{5.253} = \frac{19.5}{5.253} = 3.712$$

t-table

To gain t-table, the degree of freedom (df) should be counted first.

4.1.1.1.1 Degree of freedom

The formula degree of freedom (df) is as follows:

$$df = (NX_1 - 1) + (NX_2 - 1)$$

Where: df = Degree of freedom

$NX_1 - 1$ = Total number of the students in variable X_1

$NX_2 - 1$ = Total number of the students in variable X_2

$$df = (Nx_1 - 1) + (Nx_2 - 1)$$

$$= (20 - 1) + (20 - 1)$$

$$= 19 + 19 = \mathbf{38}$$

4.1.1.1.2 Level of Significant

$$t\text{-table } 1\% = 0.01 = 2.423$$

$$t\text{-table } 5\% = 0.05 = 2.704$$

Based on the degree of freedom (df) = 38 and $\alpha = 0.01$ the t-table is 2.423.

Criteria

The criteria of accepting or rejecting the hypothesis the data are:

4.2.5.3.1 H_a is accepted if $t\text{-observed} > t\text{-table}$.

4.2.5.3.2 H_0 is rejected if $t\text{-table} < t\text{-observed}$.

The criteria of accepting or rejecting the hypothesis the data are:

Based on the analysis above, $t\text{-observed}$ (3.712) is higher than $t\text{-table}$ (2.423) in df 38. It means H_0 was rejected and H_a was accepted. It can be concluded that the differences between experiment and control class was very significant.

Research findings

Based on data processing and analysis, the average score (mean) of experiment class (77.25) was higher than control class (57.75). Meanwhile, the most frequent score in experiment class is 80, and the most frequent score in control class is 60. By comparing that mean, it can be concluded that the mean of experiment class (77.25) is higher than control class (57.75). The result of standard deviation between experiment class and control class is different. It can be seen that the standard deviation of experiment class was 12.48 and standard deviation of control class is 11.38.

In this case, the result of $t\text{-observed}$ was 3.712 and $t\text{-table}$ was 2.423. It can be concluded that $t\text{-observed}$ was higher than $t\text{-table}$. Also from the data table shows that there was a very significant difference between the experiment class and control class. Since the result of $t\text{-observed}$ is higher than $t\text{-table}$,

it means the hypothesis (H_a) was accepted if $t\text{-observed}$ was higher than $t\text{-table}$ and hypothesis (H_0) was rejected if $t\text{-table}$ was lower than $t\text{-observed}$. It was clear that hypothesis (H_a) is accepted and (H_0) is rejected

Discussion

The result of the test from teaching English vocabulary by using cartoon video indicate the students easy to understand some vocabulary, it also motivate the students to learn vocabulary and make the atmosphere of teaching and learning more interesting and fun. They feel something new and different from what they usually get in their class. this in line with Azhar (2011, p.4) "media is a tool that convey or deliver the message of learning". So, it can be concluded that teaching English it is found vocabulary by using cartoon video is effective, and it can be used as alternative media to teach vocabulary.

Based on the data analysis in research findings, the researcher discussed the previous research question (see chapter 1). First, how is the vocabulary of the students who are taught by using cartoon. The second, how is the vocabulary of the students who are taught by using lecture. The third, whether there is any significant difference of English vocabulary between the student who are taught using cartoon and those who are taught using lecture. As we can see in research findings, the researcher found significant differences in experiment and control class. The mean in experiment class is (77.25), while in control class (57.75). It means that the average score of students in experiment class were higher than control class. It

could be concluded that the students' vocabulary is more developed when they were taught using cartoon than using lecture.

The result of students' score on vocabulary that were taught using cartoon is better than the students who were taught using lecture. It can be showed by the mean score of experiment class 77.25 that was higher than the mean of control class 57.75. It means cartoon is effective in teaching and learning vocabulary and it can help the students to develop their writing skill. The development of students writing skill was proven that there is significant difference as showed by t-observed (3.712) that was higher than t-table (2.423). It means that t-observed was higher than t-table, because if t-observed was higher than t-table, it means that there is significant difference development between students who were taught using cartoon technique and students who were taught using lecture.

From the research findings, the researcher found a significant difference that is the students' score who were taught using cartoon is better than the students' score who were taught using lecture.

In conclusion, teaching Vocabulary, the teacher could use cartoon as a reference. As we can see in research findings that the students' score developed after taught using cartoon.

According to Sadiman (2010, P.45) Cartoon as one of graphic communication form is representative pictures which use symbols to convey the message quickly and briefly. It can be the form of attitude how to people behave or situation. And according to Arsyad (2009, P.49) video can visualize the object

movement with natural or appropriate sound. It visualize live picture and also include the sound make video as the interesting media. The great value of video lies in its combination of sounds, images, and sometimes text in the form of subtitle. Video is one kind of audio visual media, audio visual media has more benefits than others, such as it can visualize the abstract things or non verbal vocabularies, to overcome the limitation of place and time, to overcome the limitation of people sense, to attract students' attention, and develop students' knowledge. From this theory, the researcher can conclude that the use of cartoon video in the teaching and learning process make the students more enthusiastic and motivate them to learn. The use of cartoon video also can make the teaching and learning process more fun. The students are also can understand some vocabulary in easy way because the video can visualize it into real situation with the combination of sound. Video can be as a good media to teach, especially in vocabulary teaching. Video as media has many advantages in the teaching and learning process. It is also very appropriate with the result of the research that cartoon video is effective to teach English vocabulary, since cartoon video can make the students' more interest in learning vocabulary.

CONCLUSION

Based on the analysis result in the previous chapter, the researcher took the conclusion as follows: First The students' taught by using cartoon video was better than the students' taught vocabulary using lecture. It can be shown from the total score of experiment class (x_1) 1545

which was higher than the total score of control class (x_2) 1155. Then, the mean of experiment class (77.25) was higher than the mean of control class (57.75). Meanwhile, the median of experiment class (80) was higher than the median of control class (60). The mode of experiment class (77.5) was higher than the mode of control class (60). The range of experiment class (50) was higher than the range of control class (35), so the range of experiment class was higher 15 points than the range of control class. Besides, the score of standard deviation (SD) of experiment class is 12.48 and standard deviation (SD) of control class is 11.38. The score of distribution of sampling between experiment and control class is 5.253, it can be concluded that experiment class (x_1) was higher than control class (x_2). Second There is significant difference of vocabulary mastery between the students who were taught using cartoon that was better than the students who were taught using lecture. It was verified from the t-observed 3.664. Meanwhile, the t-table in degree of freedom of 38 with level of significant of 0.01 is 2.423. The result of t-observed (3.712) was higher than t-table (2.423). If t-observed is higher than t-table, it means that there is very significant difference between experiment class (x_1) and control class (x_2).

REFERENCES

- Allen, V. F. 1983. *Technique in Teaching Vocabulary*. New York: Oxford University Press
- Arsyad, Azhar. 2009. *Media Pembelajaran*. Jakarta: Rajawali Press
- Creswell, J.W. (2012). *Educational Research: planning, conducting, and evaluating quantitative and qualitative research*. (4thed). New York: Pearson Education.
- Daryanto. (2010). *Media pembelajaran*, Yogyakarta : Gava Media.
- Djamarah, Syaiful Bahri dan Zain, Aswan, *Strategi belajar mengajar*, Jakarta : PT.Rineka Cipta
- Departemen Agama Republik Indonesia, *Al Qur'an dan Terjemahnya*, Depok: Sabaq, 2009.
- Dewi S. (2009) The use of English films to improve student's mastery in vocabulary the case study of tenth research focus on general vocabulary Tugas akhir IKIP PGRI Semarang
- Gerlach, Veron. 1980. *Teaching and Media a Systematic Approach*. USA: Prentice-Hall. Inc.
- Hamalic. 2003. *Media Pembelajaran*. Jakarta: PT Raja Grafindo Persada.
- Harmer, Jeremy (2007). *The practice of English language teaching*. Essex, England: Pearson Education Limited.
- Kathory, C. R. (2004). *Research methodology: Method and techniques*. Second Edition. New Delhi: New Age International Publisher.
- Larsen, F.D. (2003). *Techniques and principles in language teaching*.

New York, NY: Oxford University
press.

Thornbury, Scott. (2002). *How to teach
vocabulary*. London, England:
Longman.

Sadiman, Arief. (2010). *Media
Pendidikan (Pengertian,
Pengembangan, dan Pemanfaatan)*.
Jakarta: PT Raja Grafindo

Sugiyono. (2010).
*Statistika untuk penelitian (cetakan
ke-21)*. Bandung: Penerbit Alfabeta

Sugiyono. (2013).
Statistika untuk penelitian. Bandung:
Penerbit Alfabeta

Schmitt, N., and McCarthy, M. 1997.
*Vocabulary: Description,
Acquisition and
Pedagogy*. Cambridge: Cambridge
University.