

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

The aim of this research is to investigate whether video podcast as media is more effective than traditional media in teaching writing to the eleventh graders of SMA Antartika Sidoarjo. This chapter presents the result of research findings which is utilized to answer the problem of the study and research discussion. This chapter is divided into three subheadings: data presentation, data analysis and discussion.

A. Data Description

This research was designed in quasi- experimental research. The aim of this research is to investigate whether or not video podcast as media is more effective than traditional media in teaching writing to the eleventh graders.

The data in this research were collected from both groups, the experimental group and the control group. The following is the description of the data.

1. The Result of Test of the Experimental and the Control Groups

The test was attended by 60 students. There were 30 students from the experimental group and 30 students from the control group. To easily calculate the data from both of the control group and the experimental group, Microsoft Excel program was used.

a. The Result of Final Test of Experimental Group

The data on the students' score were collected by giving test after giving treatments using video podcast to the experimental group. The members of the experimental group are students of XI IPA Effective 1 of SMA Antartika. Then, the final test scores of the experimental group were assessed based on the writing scoring profile adapted from Jacob et, al (see chapter II page 13-14). The scores of test of the experimental group were analyzed in five components: content, organization, vocabulary, language use and mechanic. The complete table of score has been presented in Appendix 3. To make the result of the test of experimental group easier to understand, the data is presented in interval data. The result of the test of the experimental group can be seen in the following table 4.1.

Table 4.1

The Result of Test of Experimental Group

INTERVAL OF SCORE	THE TOTAL NUMBER OF STUDENT
70-74	2
75-79	4
80-84	6
85-89	10
90-94	6
95-99	2
TOTAL	30

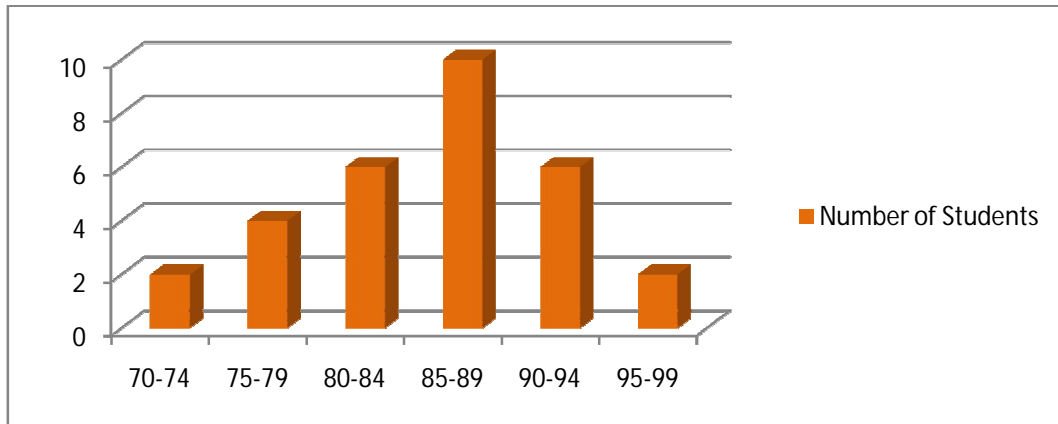


Chart 4.1
Chart of Interval of Final Score in Experimental Group

Table 4.1 and chart 4.1 above show that there are two students in interval 70-74 and 4 students in interval 75-79. Six students are in interval 80-84 and 10 students are in interval 85-89 while the other 6 students are in interval 90-94. The last interval 95-99 has two students. In short, the higher interval score is in interval 85-89 with the total number of students of 10 and the lower interval is interval 70-74 and 95-99 with two students in each interval. Yet, the highest score in this test is 95 and the lowest score is 75.

After identifying the interval of students' scores in the final test in the experimental group, the next step was calculating the means of the scores. The mean of the total score is gotten from the total score divided by 30 (the total number of students in the experimental group). The total score was gotten from the total score of the five components

in writing' scoring rubric adapted from Jacob et, al, starting from content, organization, vocabulary, language use and mechanics divided by the total number of students in the experimental class (30 students). The result of the calculation is presented in table 4.2.

Table 4.2

The Mean of Final Test of the Experimental Group

	COMPONENTS					
	C	O	V	LU	M	Σ
TOTAL	776	537	535	602	134	2584
MEAN	25.87	17.9	17.83	20.07	4.47	86.13

The table above shows that the mean score of the final test in the experimental group is 86.13. The students' writing was first scored on the content of their writing. That table above also shows that the mean of content is 25.87 which can be rounded into 26. It means that the score includes in level 26-22. That range describes that the content of students' writing is mostly related to assigned topic. Even though it lacks detail but this score still belongs to the criteria of good to average level.

The second assessment criterion is the organization of students' writing. The mean of organization is 17.9 that can be rounded into 18.

That score is categorized in the level of excellent to very good with the range of 20-18. It tells that the ideas of students are clearly stated in their writing. Furthermore, that score also shows that the text is well organized and is related with the generic structure of the text type (report text).

The third scoring criterion is vocabulary. The mean score of vocabulary use of the experimental group's writing is 17.83 which can be rounded into 18. This score belongs to excellent to very good with the level of 20-18. This score indicates that the chosen words or idiom in their writing are effective and used appropriately.

The fourth criterion is the scoring of language use. The table shows that the mean of language use is 20.07 which can be rounded into 20. It is included in the range of 21-18 and is categorized into the good to average level. It indicates that the construction of their writing is effective but simple. There are only several errors of subject-verb agreement, tenses, number, word function, article, pronoun and preposition but the meaning is the meaning is still conveyed.

The last component of scoring is the mechanic with the mean of 4.47 which can be rounded into 5. This score includes in the criteria of excellent to very good with level 5. It shows that most of their writing

demonstrates mastery in convention. There are only a few errors of spelling, punctuation, capitalization and paragraphing.

b. The Result of Final Test of Control Group

The test was also given to the class XI IPA Effective of SMA Antartika as a control group. The control group was the group which was not taught by video podcast but through traditional teaching way. The scores of the test in the groups control group were also assessed based on the writing' scoring profile adapted from Jacob et, al (see chapter II page 13-14). Those scores were analyzed based on five components, too: content, organization, vocabulary, language use and mechanic. The complete table of score can be seen in Appendix 4. To make the result of the test of control group easier to understand, the data is presented in interval data. The result of the final test of the control group is shown in the following table 4.3.

Table 4.3

The Result of Final Test of Control Group

INTERVAL OF SCORE	THE TOTAL NUMBER OF STUDENT
70-74	3
75-79	7
80-84	9
85-89	5
90-94	3
95-99	3
TOTAL	30

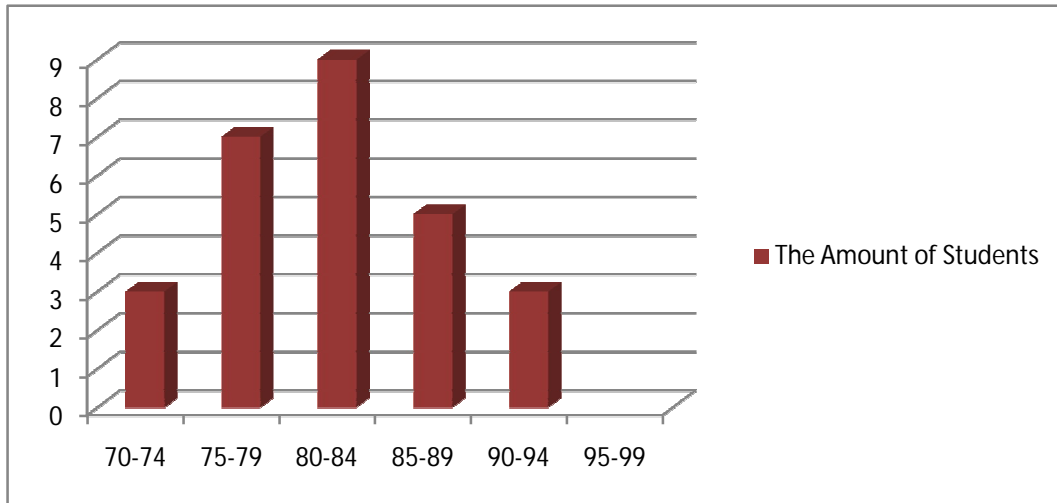


Chart 4.2

Chart of Interval of Final Score in Control Group

The table 4.3 and chart 4.2 above show there are three students in interval 70-74 and seven students in interval 75-79. Then, there are 9 students in interval 80-84 and five students in interval 85-89. Afterwards, there are three students of each in interval 90-94 and interval 95-99. It concludes that interval 80-84 has the highest number of students (nine) and interval 70-74, 90-94 and 95-99 have the list number of students with three students in each interval. Yet, the highest score in the test of control group was 95 and the lowest score was 70.

After identifying the interval of students' scores in the final test in the control group, calculating the means of the scores was the next step. Before calculating the mean of the score, the total score should be calculated at first. The total score was analyzed from the total score

of the five components in writing' scoring rubric adapted from Jacob et, al, starting from content, organization, vocabulary, language use and mechanics divides by the total number of students in the control class (30 students). Then, the mean of the total score is collected from the total score divided by 30 (the total number of students in the control group). The result of the calculation is presented in table 4.4.

Table 4.4

The Mean of Final Test of the Control Group

	COMPONENTS					
	C	O	V	LU	M	Σ
TOTAL	736	523	523	571	128	2481
MEAN	24.53	17.43	17.43	19.03	4.27	82.7

The table 4.4 shows that the mean of the control group is 82.7. The students' writing was scored on the content of their writing at first. That table above also shows that the mean of content is 24.53 which can be rounded into 25. That score includes in good to average criteria in the level of 26-22. That score shows that the content of students' writing in the control group is mostly relevant to the assigned topic even though it lack detail.

The second assessment criterion is scoring of organization. The students' mean in organizing their ideas in writing is 17.43 which can be rounded to be 17. It indicates that the score includes in level of 17-14. That level is categorized in criteria good to average. The mean of organization tells that the ideas of students' writing are loosely organized but the main ideas stand out. Moreover, their ideas have limited support and the structure is still logical but it is in incomplete sequencing.

The third is assessment of the vocabulary. The mean of vocabulary is 17.43 that is rounded to 17. It is included in the criteria good to average with level of 17-14. That score indicates that there are some occasional errors either words or idiom in their writing but meaning of that words or idiom was clearly enough. It means that their writing is still understandable even though they have some mistakes in using appropriate words.

The fourth scoring is the language use. From that table, the mean of language use of is 19.03 that is rounded into 19. That score is categorized in level of 21-18 with criteria good to average. The construction of their writing is effective but simple. There are several errors of agreement, tense, number, word order/function, articles, pronouns, prepositions but meaning seldom obscured.

The last criterion is mechanics. The mean of mechanic is 4.27 which is rounded to 4. That score is categorized in good to average criteria. It indicates that the students' writing has some occasional errors of spelling, punctuation, capitalization, paragraphing but meaning not obscured. It means that even they have some mistakes but their writing was still understandable.

To know the result of this research, data analysis is needed. The procedures start from comparing the mean scores between the control and the experimental group and then finding the t-test.

B. Data analysis

1) Comparing Mean

In order to answer the research question of the study, it needs to compare the mean scores between the experimental and the control group. The result of the test scores and means scores of the experimental and the control group are presented in following table 4.5.

Table 4.5**The Result of Test of the Experimental and the Control Group**

GROUPS	NUMBER OF STUDENTS	TOTAL	MEAN
Experimental Group	30	2584	86.13
Control Group	30	2481	82.7

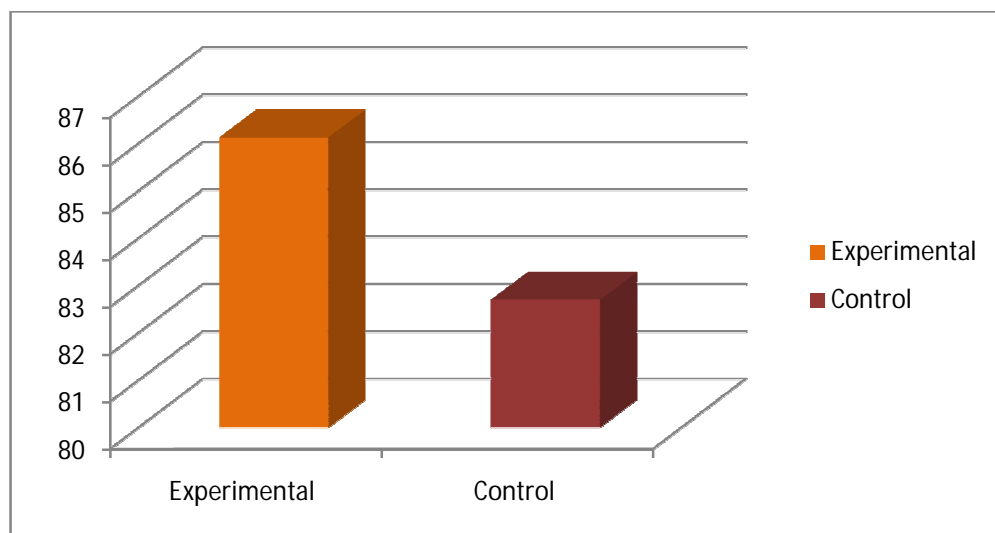
**Chart 4.3**

Chart of Comparing Mean between the Experimental and the Control Group

From the table above it can be seen that the mean score of the experimental group is 86,13 and the mean score of the control group is 82,7. The results of the test show that there are differences in mean scores between the experimental group and the control group. It means that the

students of the two groups have different improvement. Students' score in experimental group is higher than control group.

2. T- test

T-test was utilized to “..assesses whether the means of two groups are statistically different from each other.”¹ It means that t-test is used to know the mean of the final test both of the control group and the experimental group was significantly different or not. Before calculating the t-test, the alternative hypothesis (H_a) and null Hypothesis (H_0) should be put.

H_a : There is significant difference in score of students' English writing achievement who were taught by video podcast and who were taught by traditional technique at the eleventh graders at SMA Antartika.

H_0 : There is no significant difference in score of students' English writing achievement who were taught by video podcast and who were taught by traditional technique at the eleventh graders at SMA Antartika.

The result of test of the experimental and the control group was analyzed by t-test formula. The first step was calculating the standard deviation and variant of both by Microsoft-Excel program. Table 4.6 shows the result of the calculation.

¹ William M. K. Trochim, *The Research Methods Knowledge Base, 2nd edition*, (Ithaca, N. Y.: Cornell University:1999)

Tabel 4.6
The Result Calculation of Standard Deviation (Sd) And Variance (V) in Experimental and Control Class

Groups	Experimental	Control
Total	2584	2481
Mean	86.13	82.7
Standard Deviation	6.63	6.59
Variance	43.98	43.52

Next, the students' score of final test was calculated using the formula bellow:

a) To test the result of final between experimental and control group.

The formula is:

$$t = \frac{x_1 - x_2}{\sqrt{S_p^2 \frac{1}{n_1} + \frac{1}{n_2}}}$$

$$= \frac{x_1 - x_2}{\sqrt{\left\{ \frac{(n_1 - 1)S_1^2 + ((n_1 - 1)S_2^2)}{n_1 + n_2 - 2} \right\} \frac{1}{n_1} + \frac{1}{n_2}}}$$

Explanation:

X_1 : Mean experimental class

X_2 : Mean control class

n_1 : The total number of students in experimental class

n_2 : The total number of students in control class

S_1^2 : The variance of experimental class

S_2^2 : The variance of control class

$$\begin{aligned}
 &= \frac{x_1 - x_2}{\sqrt{\left\{ \frac{(n_1 - 1)S_1^2 + ((n_1 - 1)S_2^2)}{n_1 + n_2 - 2} \right\} \frac{1}{n_1} + \frac{1}{n_2}}} \\
 &= \frac{86.13 - 82.7}{\sqrt{\left\{ \frac{(30 - 1)43.98 + ((30 - 1)43.52)}{30 + 30 - 2} \right\} \frac{1}{30} + \frac{1}{30}}} \\
 &= \frac{86,13 - 82,7}{\sqrt{\left\{ \frac{(29)43.98 + ((29)43.52)}{58} \right\} \frac{2}{30}}} \\
 &= \frac{3.43}{\sqrt{\left\{ \frac{1275.42 + 1262.08}{58} \right\} \frac{2}{30}}} \\
 &= \frac{3,43}{1.7078} \\
 &= 2.0084
 \end{aligned}$$

b) Determining alpha (α) = 0.05

c) Afterward, the number of degree of freedom was calculated. The formulas used is

$$df = (n_1 + n_2) - 2$$

$$= (30 + 30) - 2$$

$$= 60 - 2 = 58 \text{ (} t_{\text{tabel}} = 2.000 \text{)}$$

From the calculation of the t-test above, it was found that standard deviation of the experimental group is 6.63 while the control group is 6.59. T-value comparing with t-table distribution with significant 0.05 and degree of freedom (df) is 58. It was found that t-table is 2.000 and the result of t-value is 2.0084.

It clearly shows that there is a significant difference between students who were taught English writing by video podcast and who were not taught by video podcast in English writing. In other words, the use of video podcast as media in teaching writing of the eleventh graders of SMA Antartika is effective to improve students skill in English writing.

C. Discussion

This section is intended to discuss the research findings. All data collected from the research instrument provides information about the object in this research. This research was about the effectiveness of video podcast in teaching English writing.

Video podcast is one of technology which can be utilized to improve learning process.² Video podcast is also able to stimulate the students in learning process because it contains motivating information, such as the video

² Robin H. Kay, Journal: Exploring The Use of Video Podcast In Education: A Comprehensive Review of The Literature (Canada: University of Ontario Institute Of Technology, 2012), 825

about cultural sides of Indonesia (Bali Island and Yogyakarta). While teaching through video podcast, the teacher let students to watch the video podcast then write the important information they have got in watching video podcast. This video podcast helps students to brainstorm their ideas then poured the ideas into their own writing. Video podcast is useful in helping students to write report text.

This research was quasi experimental research which compared two teaching techniques in teaching English writing. Teaching using video podcast was a new teaching media in the school while the traditional media is the usual teaching way used by the English teacher in teaching report text in both classes. The XI IPA Effective 1 as experimental group has been taught by video podcast and XI IPA Effective 2 as control group has been taught by traditional technique.

The result of test both groups show different achievement. The mean score of experimental group is 86.13 and the mean score of control group is 82.7. The experimental group achieved higher enhancement than the control group. It means that video podcast is more effective than traditional technique. By the using of video podcast as media in teaching English writing, the students were motivated to be more active in learning English writing. The students can write the report text well both the topics of *The Exotic Bali Island* or *The Cultural Sides of Yogyakarta, Central Java* because

they have a lot of knowledge of those topic based on video podcast they watched in advance.

The result of this research proves that video podcast can help the English teacher in teaching English writing. Video podcast is also useful as a proper media in teaching writing for all functional texts to all graders. It also can help the students to brainstorm their ideas before writing an essay by showing them the necessary information. Students' good writing was also assessed by rubric of writing scoring by Jacob et al.

Furthermore, it can be concluded that teaching English writing by using traditional technique is boring and not interesting for students in the learning process. A good teacher is teacher that not only explains the lesson seriously but also the teacher should teach in enjoyable atmosphere in order make the students motivated and eager to learn English. In addition, writing is compulsory subject that will be difficult when students are unmotivated and cannot brainstorm their ideas into good English writing. So, the teacher needs a new media a new strategy which can help students engage and develop their ideas and the suggested media is video podcast.