

## **CHAPTER IV**

### **RESULT AND DISCUSSIONS**

This chapter discusses the finding of this research and the discussion. The results of this study were analyzed and presented. Dealing with analyzing the data, the researcher used t-test to calculate the significant difference between two variables. To answer the research question, this chapter is divided into two sub-headings: result and discussion.

#### **4.1 Result of the Research**

This research uses experimental research, this method aims to compare between a treatment groups and non –treatment group (Fraenkel and Wallen, 1932:267). The objective of this research is to find out whether there is significant effect on the speaking ability between students who taught using comic strips and those who are taught without comic strips or not. Additionally, it is to find out how far comic strips improve students' speaking ability. In this chapter, the researcher gets the data from the result of the test that will be analyzed in this chapter. Based on the result of the test, the researcher tries to assure that this research is experimental research because it gives achievement change in the result of the test. The instrument is in the form of speaking test in a subjective types that has been given in the pretest and post test. The researcher conducted a test to measure the validity of the test and to find time allotted.

#### 4.1.1 Procedure of Try Out

Before pre-test and pos-test is administered, the test's reliability and validity should be checked at the first place. It's called try out. Therefore the researcher should conduct try out of the test before the researcher conducting pre-test. The result of analyzing the validity of the test is presented in following table.

**Table 4.1 The result of Analyzing Validity**

Test item	Standard Competency	Basic Competency	Sub Basic Competence	Indicators	Validity
Tell a story about “ where can an elephant hide?”	Reveal the mean of functional spoken text and short monologue in the form of <i>recount</i> and <i>narrative</i> to interact with around environment.	Reveal the mean of short monologue by using variety of spoken language accurately, fluency and acceptable to interact with around environment in the form of <i>recount</i> and <i>narrative</i> text.	Reveal the mean of short monologue by using variety of spoken language accurately, fluency and acceptable to interact with around environment in the form of <i>narrative</i> text.	Doing a short monologue in the form of <i>narrative</i> and <i>recount</i> .	Valid

To analyze the validity of the test, the researcher uses content validity. In this case, Test must correlate with the content of standard competence. Based on the table

above, it showed that the test item suites with the standard competence. Therefore, the test item is considered as valid.

Then, the researcher measures the reliability of the test in which inter-rater reliability is applied. The formula which is used is Pearson Product Moment (see appendix 3)

#### 4.2 The result of Analyzing Reliability

	X (Rater 1)	Y (Rater 2)
<b>Mean</b>	53.13	53.4
<b>Standard Deviation (s)</b>	4.36	2
<b>Pearson product moment (r)</b>	.9	
<b>Explanation</b>	The reliability is very high	

Based on the table above, the result of calculation is .9 which means the try out is reliable with the criteria 'very high reliability'.

After calculating the try out, then the researcher did the pretest and post test. to measures the reliability of the pretest in which inter-rater reliability is applied. The formula used in this test is Pearson Product Moment (see appendix 4 and 5). The results of the calculations are presented below.

### 4.3 The Result of Calculating Reliability of Pretest

	X Rater 1	Y Rater2
<b>Mean</b>	53.4	52.7
<b>Standard Deviation (s)</b>	2	6.3
<b>Pearson product moment (r)</b>	.87	
<b>Explanation</b>	The reliability is very high	

Based on the table above, the result of calculation is .87 which means the pretest is reliable with the criteria 'very high reliability'.

### 4.4 The Result of Calculating Reliability of Post test

	X Rater 1	Y Rater2
<b>Mean</b>	74.7	74.6
<b>Standard Deviation (s)</b>	6	5.8
<b>Pearson product moment (r)</b>	.67	
<b>Explanation</b>	The reliability is strong	

Based on the table above, the result of calculation is .67 which means the post test is reliable with the criteria 'strong reliability'.

Considering that the test is valid and reliable, the researcher administered a pretest for the experimental and control group to ensure that they have the same ability. The researcher administers the pretest for both groups; experimental and control group. It is aimed to know whether they have the equal ability to speak or not. Then the researcher calculates the score of the pretest of two groups using *oral proficiency scoring categories* (see appendix 1). After calculating the total score of students' speaking test, the researcher finds the means. Then, she computes the standard deviation and the standard error of differences, as in addition, t-test is used to know the significant difference by comparing the *t-value* with the *t* from the table. If the *t value* is higher than *t table* ( $t .05$ ), it means that the result is significant, but if the *t value* is lower than *t- table* ( $t .05$ ), the result is not significant. Furthermore, the calculation can be seen in Appendix 6.

#### 4.1.1.1 The test variance of homogeneity

To test the variance of homogeneity, the researcher uses spss 16.0. This test is conducting before the researcher doing the post test. This test is done to know whether the experimental and control group is homogeneous or not, homogeneous means that both of them have the same ability. The result is as seen below:

**Test of Homogeneity of Variances**

VAR00001

Levene Statistic	df1	df2	Sig.
1.047	1	58	.311

Based on the result above, the test of the variance homogeneity is considering homogeneous, because the p value ( $0.311 > \alpha$  ( $0.05$ )). It means that the data is considering homogeneous, because as the researcher elaborated before in the chapter III, if the p value is higher than  $\alpha$ , it means that the result is homogeneous, but if the p value is lower than  $\alpha$ , it means that the result is not homogeneous.

#### 4.1.3 The Result of pretest of the experimental and control groups

The table below presented the brief data of the pretest of the experimental and control groups.

**Table 4.5 The Result of the Pretest**

<b>Calculation</b>	<b>Experimental</b>	<b>Control group</b>
<b>N</b>	30	30
<b>Score</b>	1603	1596
<b>Means</b>	53.4	53.2
<b>Standard Deviation</b>	2	4.8
<b>Standard Error of Difference</b>	7.5	
<b>T-value (t .05 = .245)</b>	.02	
<b>Explanation</b>	Not Significant	

The table above shows the pretest score of the experimental group is 1603 while the number of the students is 30. It is found that the mean is 53.4. While the pretest score of control group is 1596 while number of the students is 30, whereas the mean is 53.2. Moreover the standard deviation of the experimental group is calculated as 2 while the control group is 4.8. So it can be concluded that the score of the

experimental group is more heterogeneous than the control group. Furthermore, the significance can be seen after calculating the standard error of difference to find out the *t-value* by using *t-test*. After computing the t-test, the t-value is .02 assuming the t-table is using level of significance .05 in 58 degree of freedom (df) is .245. It shows that the t-value is lower than the  $t_{.05}$ , which means that the difference is not significant.

#### **4.1.4 The Result of the post test of the Experimental and control Groups**

After administering the pretest, the researcher investigates the effectiveness of using comic strips in teaching speaking by comparing the post test scores between both of groups. Therefore the researcher gives the treatment to the experimental group and the control group is taught as usual.

When the treatment is completely done, the researcher gives the post-test to both of groups; experimental and control groups. It is aimed to know their speaking ability, especially in telling story after the treatment given to experimental group. Same with pretest, the researcher calculates the score of post test of both two groups by using *oral proficiency scoring categories* (see appendix 1). After calculating the total score of the students' speaking test, she finds the mean. After that she computes the standard deviation and the standard error of differences as well in addition, t-test is used to know the significant difference by comparing the *t-value* with the *t* from the table. If the *t value* is higher than *t table* ( $t_{.05}$ ), the result is significant. But, if the *t-*

*value* is lower than t-table ( $t_{.05}$ ), the result is not significant. Furthermore, the calculation can be seen in Appendix 7.

The table below presented the result of the post-test of the experimental and control group.

**Table 4.6 The Result of the Post-Test**

<b>Calculation</b>	<b>Experimental</b>	<b>Control group</b>
<b>N</b>	<b>30</b>	<b>30</b>
<b>Score</b>	2242	1741
<b>Means</b>	<b>74.7</b>	<b>53.03</b>
<b>Standard Deviation</b>	<b>6</b>	<b>7</b>
<b>Standard Error of Difference</b>	<b>1.7</b>	
<b>T-value</b> ( $t_{.05} = .245$ )	<b>9.8</b>	
<b>Explanation</b>	<b>Significant</b>	

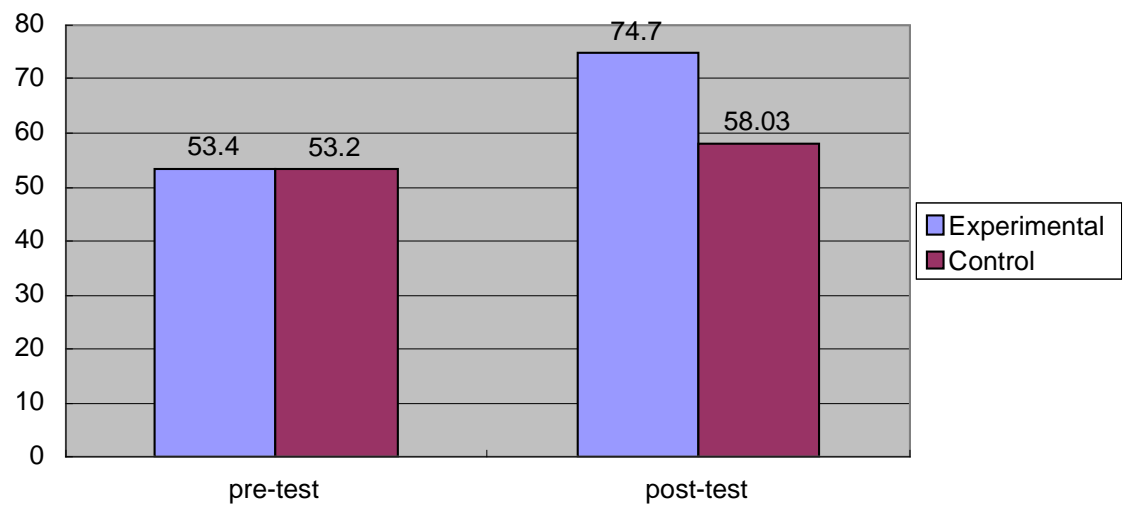
From the table above, the post-test score of experimental group is 2242, whose number of the students are 30, whereas the mean is 74.7. Besides, the control group score is 1741 whose number of the students are 30. So the mean of control group is 53.03. Thus, the difference between the two groups is 21.67 point. It means that the achievement of the experimental group is higher than control group. meanwhile, the standard deviation of the control group which is 7 is higher than the experimental group which is 6. It means that the control group is more heterogeneous than the experimental group.



To check whether the effect of the comic strips is significant or not, the researcher uses t-test. Before that, the standard error of difference was calculated which was 1.7. Based on the t-test calculation of the post-test score, the t-value is 9.8, while the t-table with the level of significant .05 in 58 degree of freedom (df) is .245. It shows that the t-value is higher than  $t_{.05}$ , which means that the difference is significant. The chart below shows the comparison score of the two groups.

**Chart 4.1**

**The mean score comparison of the experimental and control groups**



Based on the chart above, it can be seen that there is higher improvement on the experimental group than control group. In conclusion, it is proved that the different mean of the experimental and control group is significant.

In order to find the more specific result, the data are investigated into 6 criteria which are fluency, pronunciation, accuracy, vocabulary, comprehensibility, and performance skill that are explained as follows.

#### 4.1. 5 The Result of the Experimental and Control Group in Each Term

In this following table the result of the post-test between experimental and control groups is presented in term of fluency.

**Table 4.7**  
**The Significance of the Post-test in Term of Fluency**

Calculation	Experimental	Control group
N	30	30
Score	407	292
Means	13.56	9.7
Standard Deviation	2.34	2.95
Standard Error of Difference	0.7	
T-value (t .05 = .245)	5.42	
Explanation	Significant	

Based on the table above the mean score of experimental group in term of fluency is higher than the mean score of control group. While the t-value of the experimental and control group which are 5.42 is higher than t-table which is .245 with the level of significance .05 and the degree of freedom (df) 58. It shows that the achievement of the experimental group is higher than the control group. Besides, it

can be concluded that there is a significance different between experimental group and control group in term of fluency. It means that the use of comic strips is effective in teaching speaking because it can increase students' speaking ability in term of fluency. The detail calculation can be seen in Appendix12.

The second term is pronunciation. The table below presents about the result of the post-test in term of pronunciation between experimental and control group.

**Table 4.8**

**The Significance Difference of the post-test in Term of Pronunciation**

<b>Calculation</b>	<b>Experimental</b>	<b>Control group</b>
<b>N</b>	<b>30</b>	<b>30</b>
<b>Score</b>	<b>297</b>	<b>277</b>
<b>Means</b>	<b>9.9</b>	<b>9.23</b>
<b>Standard Deviation</b>	<b>2.9</b>	<b>3.2</b>
<b>Standard Error of Difference</b>	<b>0.81</b>	
<b>T-value</b> (t .05 = .245)	<b>.08</b>	
<b>Explanation</b>	<b>Not Significance</b>	

Those data tells about the mean score of experimental group is higher than the mean score of control group. Whereas the t-value of the experimental group and control group which is .08 is lower than the t-table which is .245 with level of significance .05 and degree of freedom (df) 58.

So that, it can be concluded that there is no significant difference between experimental group and control group in term of pronunciation. It means that using comic strips to teach speaking is not effective because students can not increase their speaking ability in term of pronunciation. The detail calculation can be seen in Appendix 13.

The next term is accuracy. The table below illustrates the result of the post-test between experimental and control groups in term of accuracy.

**Table 4.9**

**The Significant Difference of the Post-Test in Term of Accuracy.**

<b>Calculation</b>	<b>Experimental</b>	<b>Control group</b>
<b>N</b>	30	30
<b>Score</b>	272	267
<b>Means</b>	9.06	8.9
<b>Standard Deviation</b>	2.6	2.46
<b>Standard Error of Difference</b>	0.68	
<b>T-value</b> (t .05 = .245)	.23	
<b>Explanation</b>	Not Significant	

Based on the table above, it shows that the mean score of the experimental group is higher than the mean score of control group. In addition, the t-value of the experimental and control groups which is .23 is lower than the t-table which is .245 with level of significance .05 and degree of freedom (df) 58.

Hence, it is clear that there is no significant difference between the experimental and control groups in term of accuracy. It means that the use of comic

strips is not effective to teach speaking because it can increase students' speaking ability in term of accuracy. The detail calculation can be seen in Appendix 14.

The fourth term is the use vocabulary. The table below illustrates the result of the post-test between experimental and control group in term of vocabulary.

**Table 4.10**

**The significance different of Post-test in term of vocabulary.**

<b>Calculation</b>	<b>Experimental</b>	<b>Control group</b>
<b>N</b>	30	30
<b>Score</b>	390	293
<b>Means</b>	13	9.7
<b>Standard Deviation</b>	2.4	3.06
<b>Standard Error of Difference</b>	0.72	
<b>T-value</b> (t .05 = .245)	4.5	
<b>Explanation</b>	Significant	

Based on the table above the mean score of experimental group in term of vocabulary is higher than the mean score of the control group. While the t-value of the experimental and control group which is 4.5 is higher than t-table which is .245 with the level of significance .05 and the degree of freedom (df) 58. It shows that the achievement of the experimental group is higher than the control group. Besides, it can be concluded that there is a significance different between experimental group

and control group in term of vocabulary. It means that the use of comic strips is effective in teaching speaking because it can increase students' speaking ability in term of vocabulary. The detail calculation can be seen in Appendix15.

The fifth term is comprehensibility. The following table presents the result of post-test between experimental group and control group in term of comprehensibility.

**Table 4.11**

**The Significant Difference of the Post-test in Term of comprehensibility**

<b>Calculation</b>	<b>Experimental</b>	<b>Control group</b>
<b>N</b>	30	30
<b>Score</b>	369	273
<b>Means</b>	13.2	9.1
<b>Standard Deviation</b>	1.9	4.34
<b>Standard Error of Difference</b>	0.87	
<b>T-value (t .05 = .245)</b>	4.7	
<b>Explanation</b>	Significant	

Based on the table above, it shows that the mean score of the experimental group is higher than the mean score of control group. Additionally, the t-value of the experimental and control groups which is 4.7 is higher than the t-table which is .245 with level of significance .05 and degree of freedom (df) 58.

Hence, it is clear that there is a significant difference between the experimental and control groups in term of comprehensibility. It means that the use of comic strips is effective to teach speaking because it can increase students' speaking

ability in term of comprehensibility. The detail calculation can be seen in Appendix 16.

The last term is performance. The table below presents about the result of the post-test in term of performance between experimental and control group.

**Table 4.12**  
**The Significance Difference of the post-test in Term of Performance**

<b>Calculation</b>	<b>Experimental</b>	<b>Control group</b>
<b>N</b>	<b>30</b>	<b>30</b>
<b>Score</b>	<b>412</b>	<b>310</b>
<b>Means</b>	<b>13.7</b>	<b>10.3</b>
<b>Standard Deviation</b>	<b>2.51</b>	<b>3.1</b>
<b>Standard Error of Difference</b>	<b>.47</b>	
<b>T-value</b> <b>(t .05 = .245)</b>	<b>4.6</b>	
<b>Explanation</b>	<b>Significance</b>	

Those data tells about the mean score of experimental group is higher than the mean score of control group. Whereas the t-value of the experimental group and control group which is 4.6 is higher than the t-table which is .245 with level of significance .05 and degree of freedom (df) 58. It shows that the achievement of experimental group is higher than the control group.

So that, it can be concluded that there is a significant difference between experimental group and control group especially in term of performance. It means

that using comic strips to teach speaking is effective because students can increase their speaking ability in term of performance. The detail calculation can be seen in Appendix 17.

## **4.2 Discussion**

Some research finding mention that teaching using comic strips give many benefits when it is applied in teaching and learning process. Especially in teaching English, the use of media such as comic strips contribute positively toward the students' achievement in speaking. In a speaking, the use of comic strips can be an alternative media to help the students speaking especially tell a story. Oller (1983:44), the use of less episodically organized material is not easy to recall and to store than the text which is more episodically organized. In the other words, the students will be easy to speak while they present their materials by using comic strips because it has the more episodically organized than the other.

Therefore, in order to prove the theory, the researcher conducts a study about the effectiveness of comic strips in teaching speaking when it is applied to the eighth graders. The researcher uses speaking test in a subjective test type as an instrument. At the beginning of the study, the researcher conducted a pretest to measure the validity and reliability of the test. Based on the analysis, the test was considered valid and reliable. Then the researcher administered a pretest for both groups; experimental and control groups. Based on the calculation of the pretest score, it shows that the t-



value is lower than  $t .05$  (see Appendix 6). It means there is no significant difference in the students' speaking ability between the experimental group and the control group.

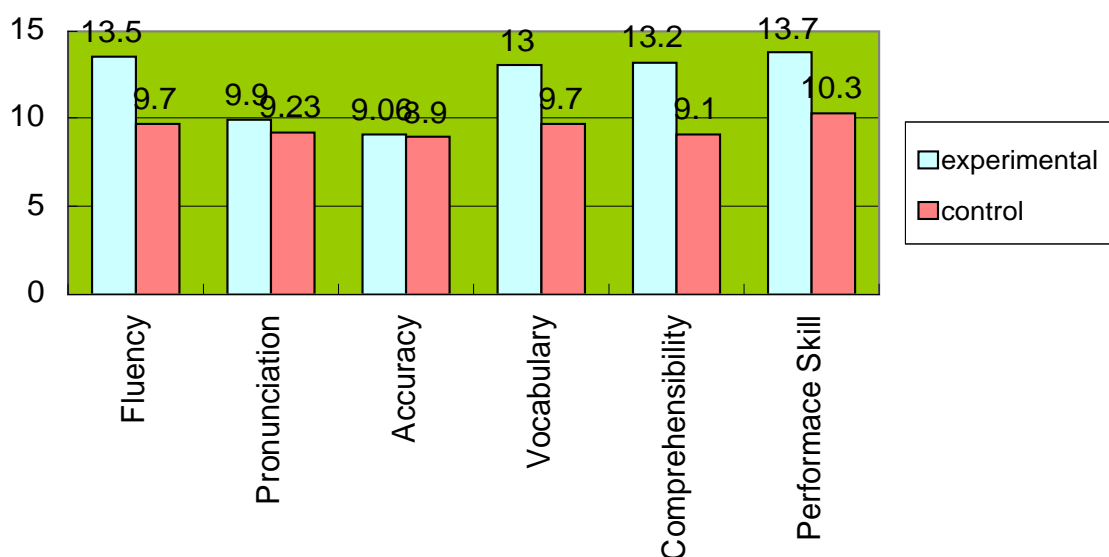
The treatment was given in the experimental group only. The experimental group is taught using comic strips to help students to speak in which the procedure was applied. While the control group was taught as usual without using comic strips.

At the end of this study, the researcher administers the post-test to both of groups; the experimental and control groups. In order to know whether there is a significant difference on the students' speaking ability or not. Based on the t-test calculation of the post-test score, it shows that the t-value is higher than  $t .05$  (see Appendix 7). It means that there is a significant difference in the speaking ability between the experimental group and the control group. Although, the use of comic strips can not be able to improve all components of speaking. It is only able to increase the students' speaking ability in terms of fluency, accuracy, vocabulary, comprehensibility and performance. The t-value in those terms is higher than  $t .05$  (see Appendix 12, 15, 16 and 17). It means that there is a significant difference in the speaking ability between the experimental group and the control group in term of fluency, vocabulary, comprehensibility and performance. Nevertheless, the t value in term of pronunciation is lower than the  $t .05$  (see Appendix 13 and 14). It means that there is no significant difference in the speaking ability between the experimental group and the control group in term of pronunciation and accuracy. In this case, both

groups have the same knowledge of how to phone words and the grammatical, so they still find some problems to phone words in good pronunciation and arrange sentence in good sentences. Meanwhile, the minor problems are still often.

**Chart 4.2**

**The significance difference in each term**



The chart above shows that there are some terms which are significantly improve. However the use of comic strips are considered as an effective media to increase the students' speaking ability.