

CHAPTER IV

RESULT AND DISCCUSION

This chapter presents the research findings and the discussion based on the analysis of the data collected from the using Launchora Application in writing descriptive text at SMP PGRI Wringinanom Gresik. Related to the research findings, it can be seen from score between control group and experimental group that has differences in pre-test and post-test. The data were analyzed using SPSS 16.0 for window.

A. Research Findings

There were two classes which were used as the subjects in this study. The first class was 8A as the experimental group and the second class was 8B as the control group. The experimental group was taught using Launchora application and control group was taught a regular technique as the teacher used, writing in a paper media.

Before and after giving the treatments for both classes, the researcher conduct test to get the score of students' writing descriptive writing scores. Both classes were given two types of tests. Those tests were pre-test, the test before giving the treatment, and post-test, the test after conducting the treatment. After obtaining the pre-test and post-test scores from both experimental class and control class, researcher found the mean from the data.

Mean is the average score of the students' scores. It can be found by calculating the scores all together and divide them by the number of the students, in this research, the researcher using Ms. Excel to done the calculation average score for both experimental class and control class.

This chapter presents the data result from data analysis using *Mann Whitney U* test. The data will be compared between pre-test and post-test of experimental class and control class.

In analyzing the data obtained, the researcher firstly tries to find the Mean Score, Normality Test, Homogeneity Test, Test of Hypothesis, and the last one is Mann Whitney U Test. After getting the data and through those steps the last activity was data interpretation and drawing conclusion. Figure 4.1 displays the data analysis steps.

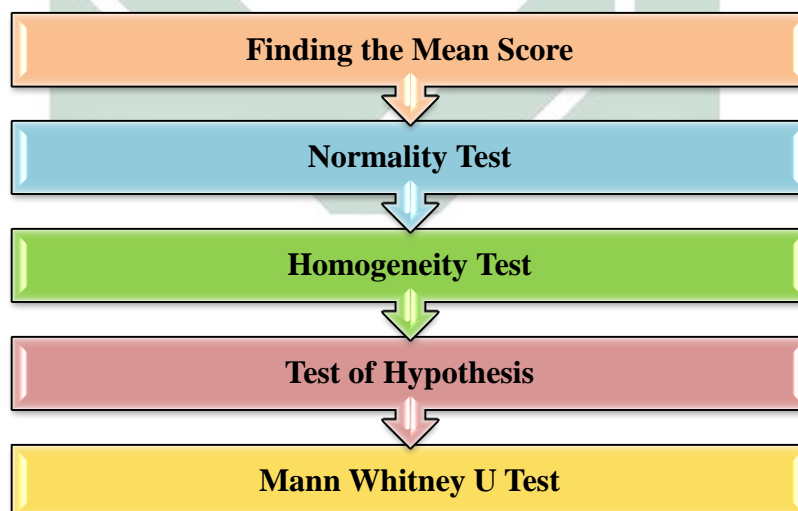


Figure 4.1 Data analysis Steps

Based on the objective of the research which has been stated by the researcher in previous chapter, this research was aim to answer the question “what is the using of Launchora application in teaching writing descriptive text?” Therefore, in this research the researcher wanted to measure the significant difference between the two groups by conducting test and analyze the data result of the test.

After conducting pre-test and post-test, researcher shows the result of data pre-test and post-test in 8A (experimental class) and 8B (control class) as mentioned below :

1. The Significant Different of Learning Score of Experimental Class and Control Class

a. Finding the Mean Score

Before finding the mean score, there are several steps to analyze the data such as finding Data Description of Pre Test and Post Test.

Data Description of Pre-test and Post-test of 8A and 8B

1) Data Pre-test of Experimental class

To break down the pre-test score result of 8A or experimental class, (see the table below), and see (table 4.2 in appendix) for further descriptions:

Table 4.2 Students' Pre-test Score of Experimental Class

No	Student	Score
1.	Student 1	75
2.	Student 2	55
3.	Student 3	55
4.	Student 4	60
5.	Student 5	75

There are several scores from the students Pre-Test Score. This score was the samples scores from Experimental Class before the students getting the treatment. Researcher also outlined with frequency distribution of pre-test score. (See the table 4.3 below).

Table 4.3 Frequency Distribution Experimental class Pre-test Score

No	Score	Frequency	Percentage
1.	40	0	0%
2.	45	1	4%
3.	50	2	8%
4.	55	5	20%
5.	60	8	32%
6.	65	3	12%
7.	70	1	4%

8.	75	5	20%
9.	80	0	0%
Total		25	100%
Min : 45			
Max : 75			
Mean : 61,6			

From the frequency distribution of Experimental class Pre-Test Score, we can found how many students that getting the score based on the minimum score until the maximum score. From the table we can get the percentages both of students score and the total frequency from the students. The minimum score is 45 and the maximum score is 75. From the table (See table 4.3) we can get the mean score is 61.6 from the Pre-Test in Experimental Class.

2) *Data Pre-test of Control Group*

To break down the pre-test score result of 8B or control, (see the table below) for the excerpt, and see (table 4.4 in appendix) for the further description.

Table 4.4 Students' Pre-test Scores of Control Class

No.	Student	Score
1	Student 1	55
2	Student 2	45
3	Student 3	75
4	Student 4	70
5	Student 5	50

There are several scores from the students Pre-Test Score. This score was the samples scores from Control Class. Researcher also outlined with frequency distribution of pre-test score. (See the table 4.5 below).

Table 4.5 Frequency Distribution Control Class Pre-test Score

No.	Score	Frequency	Percentage
1.	40	1	4%
2.	45	4	16%
3.	50	1	4%
4.	55	1	4%
5.	60	0	0%
6.	65	0	0%
7.	70	12	48%
8.	75	2	8%
9.	80	4	16%
	Total	25	100%
Min : 40			
Max : 80			
Mean : 65,4			

From the frequency distribution of Control class Pre-Test Score, we can found how many students that getting the score based on the minimum score until the maximum score. From the table we can get the percentages both of students score and the total frequency from the students. The minimum score is

40 and the maximum score is 80. From the table (See table 4.5) we can get the mean score is 65.4 from the Pre-Test in Control Class.

3) *Data Post-test of Experimental Class*

To break down the result of post-test of 8A class or experimental class, (see the table below), see (table 4.6 in appendix) for further descriptions:

Table 4.6 Students' Post-test Score of Experimental Score

No.	Student	Score
1	Student 1	90
2	Student 2	75
3	Student 3	85
4	Student 4	85
5	Student 5	90

There are several scores from the students Post-Test Score. This score was the samples scores from Experimental Class after the students getting the treatment. Researcher also outlined with frequency distribution of pre-test score. (See the table 4.7 below).

Table 4.7 Frequency Distribution Experimental Class Score

No	Score	Frequency	Percentage
1.	65	0	0%
2.	70	0	0%
3.	75	2	8%
4.	80	4	16%
5.	85	11	44%
6.	90	8	32%
7.	95	0	0%
Total		25	100%
Min : 75			
Max : 90			
Mean : 85			

From the frequency distribution of Experimental class Post-Test Score, we can find how many students that getting the score based on the minimum score until the maximum score. From the table we can get the percentages both of students score and the total frequency from the students. The minimum score is 75 and the

maximum score is 90. From the table (See table 4.7) we can get the mean score is 85 from the Post-Test in Experimental Class.

4) *Data Post-test of Control Class*

To break down the post-test score result of 8B class or control class, (see the table 4.8 below) and see (table 4.8 in the appendix) for the further descriptions.

Table 4.8 Students' Post-test Score of Control Class

No.	Student	Post-test
1	Student 1	80
2	Student 2	75
3	Student 3	70
4	Student 4	75
5	Student 5	75

There are several scores from the students Post-Test Score.

This score was the samples scores from Control Class. Researcher also outlined with frequency distribution of pre-test score. (See the table 4.9 below).

Table 4.9 Frequency Distribution Control Class Score

No	Score	F	Percentage
1.	65	0	0%
2.	70	3	12%
3.	75	8	32%
4.	80	13	52%
5.	85	1	4%
6.	90	0	0%
7.	95	0	0%
Total		25	100%
Min : 70			
Max : 85			
Mean : 77,4			

From the frequency distribution of control class Post-Test Score, we can found how many students that getting the score based on the minimum score until the maximum score. From the table we can get the percentages both of students score and the total frequency from the students. The minimum score is 70 and the maximum score is 85. From the table (See table 4.9) we can get the mean score is 77.4 from the Post-Test in Control Class.

5) *Data Difference of Pre-test and Post-test Score Result of Experimental Class and Control Class*

The following table was presented to facilitate in comparing the maximum score, minimum score and mean of pre-test and post-test of experimental class and control class.

Table 4.10 Frequency Distribution Pre-test Post-test of Experimental Class and Control Class

Data	N	Min	Max	Mean
Pre-test 8A (Experimental Class)	25	45	75	61.6
Pre-test 8B (Control Class)	25	40	80	65.4
Post-test 8A (Experimental Class)	25	75	90	85
Post-test 8B (Control Class)	25	70	85	77.4

Based on the table above, the minimum score got by the experimental class in pre-test is 45, whereas the maximum score is 75, and the minimum score of experimental class in post-test is 75, the maximum score is 90.

The minimum score got by the control class in pre-test is 40 and the maximum score is 80. Besides, the post-test of control class provides 70 for the minimum score and 85 for the maximum score.

Mean result of pre-test and post-test in control class based on the table above, shows that there is an increasing score of the group, it seems from the mean of pre-test is 65.4 and the mean of post-test is 77.4. The increasing number does not very significant. Then, the result of pre-test and post-test in experimental class is increasing significantly, it seems on the table above where the mean of pre-test is 61.6 and the mean of post-test is 85.

6) Test Difference of Learning Score Result for Experimental Class and Control Class

a) Test Difference of Pre-test

1) Distribution Average Score Pre-test of Experimental Class and Control Class

Data distribution average score is shown the mean compare between the score pre-test of both experimental class and control class. The data was calculated using Ms. Excel 2010. The result of distribution average is presented in the following table.

Table 4.11 Distribution Average Pre-test Score

Class	Mean	N
8A (Experimental Class)	61.6	25
8B (Control Class)	65.4	25
Total	63.5	50

Based on average table above, it can be stated that average score of 8A as the experimental class is 61.6 and the average score of 8B as the control class is 65.4. There is a difference of average score in pre-test between both experimental class and control class, where the average score of control class is higher than control class as the data shown on the table above.

To know whether the difference is significant or not, it was conducted a test of *Independent Sample T-test* with assumption must be qualified. Those are normality and homogeneity, when the assumption are not qualified, test of independent sample t test cannot be continued and replace with *Mann Whitney U* test.

b) Test Difference of Post-test

- 2) Distribution average score post-test of 8A class as experimental class and 8B class as control class

Data distribution average score is shown the mean compare between the score post-test of both experimental class and control class. The data was calculated using Ms. Excel 2010. The result of distribution average is presented in the table below.

Table 4.12 Distribution Average Post-test Score

Class	Mean	N
A class (Launchora group)	84.8	25
B class (Paper Media group)	77.4	25
Total	81.1	50

Based on the table above, the average post-test score can be assumed that average score of experimental is 84.8 and the average of control class is 77.4. There is a difference in pot-test average score between both experimental class and control class. Which is the average score of experimental class is higher than control class.

To know whether the difference is significant or not, the independent sample t test assumption must be qualified, those are including normality and

homogeneity. When the assumptions are not qualified, the independent sample t test cannot be continued and replaced by *Mann Whitney U* test.

b. Normality Test

1) Normality of Pre-Test Score

In calculating normal distribution of the pre-test score from 8A as experiment class and 8B as control class, the researcher was used *Shapiro-Wilk* test with the level of significance (Sig.) $\alpha = 0.05$. The researcher use *Shapiro-Wilk* because of the sample (N) is less than 50. The result of normality distribution test is presented in the following table.

Table 4.13 Test of Normality Pre-Test

Tests of Normality						
CLASS	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Score A Class	.214	25	.005	.914	25	.037
B Class	.360	25	.000	.802	25	.000

a. Lilliefors Significance Correction

Based on the normality test above the result with *Shapiro-Wilk*, it can be found that significance value of experimental class is $0.037 < 0.05$ whereas significance value of control class is $0.000 < 0.05$, because all the

classes do not have significance value > 0.05 so the data is not normal distribution.

2) Normality of Post-Test Score

In calculating normal distribution of post-test score from both classes, the researcher was used *Shapiro-Wilk* test with the limit of significance (Sig.) $\alpha = 0.05$ was used. The researcher use *Shapiro-Wilk* because of the sample (N) is less than 50. The result of normality distribution test is presented in the table below.

Table 4.14 Test of Normality Post-test

Tests of Normality						
CLASS	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Score A Class	.260	25	.000	.842	25	.001
B Class	.310	25	.000	.824	25	.001

a. Lilliefors Significance Correction

Based on the table above, the normality test result using *Shapiro-Wilk*, it can be found that the significance value of all classes is $0.001 < 0.005$. So the data is not normal distribution.

c. Homogeneity Test

1) Homogeneity Test of Pre Test Score

In calculating the homogeneity of variance, the researcher using the Levene Statistic test and was used the level of significance (Sig.) $\alpha = 0.05$. The result of variance homogeneity test is shown in the following table.

Table 4. 15 Test of Homogeneity Pre-Test

Test of Homogeneity of Variances			
Score			
Levene Statistic	df1	df2	Sig.
4.923	1	48	.031

Based on SPSS test result above, It can be found that significance value based on Mean is $0.031 < 0.05$. It is lower than the level of significance ($\alpha = 0.05$), so variance data is not homogeny. Because of normality and homogeneity assumptions are not qualified, the independent sample t test cannot be continued, but it was replaced by *Mann Whitney U* test.

2) Homogeneity Test of Post test Score

In calculating the homogeneity of variance of experimental class and control class post-test score, the researcher using the *Levene Statistic* test and

was used the limit of significance (Sig.) $\alpha = 0.05$. The result of variance homogeneity test is shown in the following table.

Table 4.16 Test of Homogeneity Post-Test

Test of Homogeneity of Variances

Score

Levene Statistic	df1	df2	Sig.
.023	1	48	.880

Based on the table above which was calculated using SPSS, it can be found that significance value Based on Mean is 0.880, so the data variance is homogeneity. Because the normality assumptions are not qualified though homogeneity assumptions are qualified, therefore, independent sample t test cannot be continued, but replaced by *Mann Whitney U* test.

d. Mann Whitney U Test

1) Mann Whitney U Test Pre-Test

The researcher using *Mann Whitney U* test rather than independent sample t test because the data distribution is not normal which the term of the use of independent sample t-test is the data must be normal distribution. In this test, the pre-test scores from both classes, 8A and 8B was compared. The level of significance (Sig.) $\alpha = 0.05$ was used. The result of statistical calculation is presented in the table below.

Table 4.17 Test of Mann Whitney U Pre-test

Mann-Whitney Test

Ranks			
Class	N	Mean Rank	Sum of Ranks
Score A Class	25	22.46	561.50
B Class	25	28.54	713.50
Total	50		

Test Statistics ^a	
	NILAI
Mann-Whitney U	236.500
Wilcoxon W	561.500
Z	-1.495
Asymp. Sig. (2-tailed)	.135

a. Grouping Variable: CLASS

Based on test result of *Mann Whitney U* is to know if there is the difference of pre-test average score or not between 8A as the experimental class and 8B as the control class. The result of significance value based on the table above is $0.135 > 0.05$, therefore researcher concludes that there is no difference of pre-test average score between experimental class and control class.

2) Mann Whitney U Test Post-Test

Comparing the post-test scores from experimental class to the control class the researcher was used *Mann Whitney U* test because the data distribution is not normal. In this test, the post-test scores from both classes, A class and B class was compared. The limit of significance (Sig.) $\alpha = 0.05$ was used. The result of statistical calculation is presented in the table below.

Table 4.18 Test of Mann Whitney U Post-test

Mann-Whitney Test

Ranks				
	CLASS	N	Mean Rank	Sum of Ranks
Score	A Class	25	35.14	878.50
	B Class	25	15.86	396.50
	Total	50		

Test Statistics^a

	NILAI
Mann-Whitney U	71.500
Wilcoxon W	396.500
Z	-4.836
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: CLASS

Based on the test result of *Mann Whitney U* above, the result of significance value between experimental class and control class is $0.000 < 0.05$. It means there is a significant difference in post-test average score between experimental class and control class.

2. Launchora Application is Effective Media for Teaching Descriptive Text Writing at SMP PGRI Wringinanom Gresik.

This research study was conducted the research study in SMP PGRI Wringinanom, Gresik. Based on the data presented above, the researcher analyzed the data hypothesis with *Mann Whitney U* test by using SPSS 16.0 to test the difference between the experimental class which was taught using Launchora application media and the control class which was taught using conventional teaching media.

Based on *Mann Whitney U* test, the result of pre-test score shows that the result of significance value (Sig.) is 0.135. It is higher than the level of post-test scores in significance (Sig.) $\alpha = 0.05$ ($0.135 > 0.05$). Based on this result, researcher concluded that there was no difference of pre-test average score between 8A as experimental class and 8B as control class.

In post-test score result, based on *Mann Whitney U* test, researcher found that the result of significance value (Sig.) is 0.000. It is lower than the significance limit (Sig.) $\alpha = 0.05$ ($0.000 < 0.05$). It means there was

significant difference in post-test average score between 8A as experimental class and 8B as control class.

Based on SPSS result, researcher can conclude that using Launchora application media more effective than using paper media in students descriptive writing scores.

As description above, it can be concluded that the result of hypothesis test is:

1. H_a : Using Launchora application in writing descriptive text is effective to students writing descriptive scores to the eight grade students in SMP PGRI Wringinanom, Gresik is *accepted* as the result of the hypothesis test is $0.000 < 0.05$

3. Students Enthusiasm in Teaching and Learning Process using Launchora Application at SMP PGRI Wringinanom Gresik.

Based on researcher observation during the treatment, researcher was found some evidences in the using Launchora application:

a. Knowledge studied by the students

Based on the researcher observation, it can be seen that almost all of the students were complete the task that the researcher has given in the previous meeting. This activity was done at home. But there were also some students who did not complete their task. The task were to find the things in

the picture and describe the picture based on the things, situations and the topic are there. Then, students can express their mind and their idea after see the picture.

b. Students do something to understand the subject

Based on the researcher observation, most of students were active in this learning activity. It can be seen when they worked in group discussion. The students underlined the word in the handouts that the researcher has given. The students tried to answer the task by their basic knowledge. While the student made a mistake in answering the task, another student gave their suggestion about the task by their knowledge. When they found difficulties, the students asked to their friend to explain their difficulties. Mostly, the students asked the meaning of the word that they did not know. So, the learning process at the class and at home can run well.

c. Students communicate their own results of their thinking

For this aspect, 80% students were active in group discussion. When they did the task from the researcher in group, the students discussed their task with their friends in group during the class activity. It also can be seen when the researcher asked the students to write their answer on the white board, most of them could present what they have learned about the lesson.

They are very active to share their ideas and present their work in front of the class and to tell to their friends about the pictures.

d. Students think reflectively

In this aspect, students were able to conclude what they have learned in the end of the study. It can be seen when the researcher asked them about the definition of descriptive text, the generic structure of descriptive text and the function of the text, the students could explain it using their own words. They can explain very well based on the picture and the things that researcher has given to the student.

Depend on the explanation above the researcher can conclude that the using Launchora application gave the students more time to do activity during the class time. This means that the students have more time to get a deep understanding about the lesson. This evidence is also support the quantitative data which was the mean pre-test score of the experimental group (61.6) was lower than the mean pre-test score of the control group (65.4). After the treatment, the mean score of experimental group (post-test score) was 85 and the mean score of control group (post-score) was 77.4. The score of experimental group was higher than the control class. This mean result support the observation by the researcher which was the students had more time to do more class activity and get a deep understanding so the

student can improve their writing comprehension and get a higher score than the class which was not taught using Launchora application media.

There were also some problems happened in the implementation of Launchora application.

a. Factor from the student

Most of the students have their own internet connection at home but some of them are not. So some of them did not download and did not login to the Launchora application. The solution for these students was the researcher asked the students who did not download and login to make the same instruction clearly and guide them to download and login to the application. After they already download and login to the Launchora application, they can continue to the next stage of learning process to do their work and publish it at Launchora application.

b. Limited time

This learning media was new for the students and Launchora application includes to teaching media. So the students need to adapted with this new media and change their old behavior, conventional teaching media where they are sit in their chair and watch the teacher explain the today's topic, to self-learning strategy where they are should write and understand the material by themselves at home. In fact, the using of Launchora

application need more time because they were still many students who did not common using new media like a Launchora application.

c. Environment Factor and Unfavorable Situation

In addition the factors from students' problem that disrupt the learning process were a class situation. Because of the learning process is using new media sometimes they are really enthusiasm and make the class so crowded because they will learn about new media. So, the researcher more challenges to handle the class because they are still at the eighth grade of junior high school. They are really interested in learning new media so, they like make the condition of class become noisy.

B. Discussion

This research study was conducted the research study in SMP PGRI Wringinanom Gresik, then, the researcher analyzed the data by using SPSS 16.0 to test the difference between the experimental class which was taught using Launchora application media and the control class which was taught using conventional teaching media. After conducting the research, the researcher found that there were several evidences which proved theories that support the hypothesis that the researcher has formulated. The evidences were in the form of numerical data based on the analyzing

process. The data were collected before (pre-test) and after (post-test) conducting the experiment in SMP PGRI Wringinanom, Gresik.

Before the further analysis about the using of Launchora application in writing descriptive text, firstly, the researcher conducted the test. Validity test was used to test whether the instrument was appropriate to measure the student's writing ability or not. After getting the students' pre-test and post-test score, the researcher found out the mean from the score of both classes. The mean from the data was use to found out the average score from each classes. The next test to calculating the pre-test and post-test was normality test and homogeneity test. The normality test was used to test whether the distribution of the research data consistent with the normal distribution. The homogeneity test was used to test whether the variance of the data were homogeneous or not.

The mean scores of the students who have been taught using Launchora application (experimental class) was lower than the students who have been taught using conventional strategy (control class). It can be seen from the mean result from both classes (see table 4.3) and table 4.4 above). Before getting the treatment, pre-test mean score for experimental class was 61.6 and pre-test mean score for control class was 65.4.

After getting different treatment both classes got different progress. It can be seen from the mean score from both classes. The post-test mean score

for experimental class was 85 and the post-test mean score for control class is 77.4. There was an improvement from both classes. But the experimental class score which taught using Launchora application was higher than the control class score which was taught using conventional media.

Related to this, students learn the material in their own comfort and they are able to understand and can be practice about their writing using Launchora application. Using combination of different sources and media (texts, images, audio, video, recording, Internet). Wider diversity of activities. Tools for the creation of individual and group projects. Learning comes out of the classroom and teaching acquires a ubiquitous dimension. A friendlier environment of learning is provided, where there are fewer risks of failing and learners can develop self-confidence with greater freedom to experiment and repeat as many times as needed. The students can publish their writings with an authentic audience. They can share their learning and knowledge with students from other countries and become part of the global web community by improving their digital literacy¹.

The students has much time to understand the material and looking for another resources which is related to the topic at home. They can do it individually or with friends to share their idea and understanding about the topic in Launchora application.

¹ K. Beatty, *English Teaching Lab*, (November 13, 2006).
<http://englishteachinglab.blogspot.com/2006/11/does-language-lab-improve-learning.html>

Based on the research findings, the result of this study shows that there is a significant difference in the descriptive writing scores between the eighth grade students of junior high school who were taught by using Launchora application and those who were not. It can be seen by the post-test score result, based on *Mann Whitney U* test, researcher found that the result of significance value (Sig.) is 0.000. It is smaller than the significance limit (Sig.) $\alpha = 0.05$ ($0.000 < 0.05$). This fact simply rejected the null hypothesis (H_0) which said “Using Launchora application in writing descriptive text is not effective to improve students’ writing comprehension to the eighth grade students of junior high school” and accepted the alternative hypothesis (H_a) which said “Using Launchora application in writing descriptive text is effective to improve students’ writing comprehension to the eighth grade students”.