CHAPTER IV

RESULT and DISCUSSION

This chapter describe the result and discuss the data that the researcher collected from the research done in Yapita Senior High School Surabaya.

4.1 Result

This purpose of this research is to find out whether Diary Writing is effective in teaching grammar for senior high school students or not. This research uses experimental design method to get the data. The data were collected through conducting pretest and posttest. The scores of pretest is used to know whether both experimental and control group are aqual or not in grammar ability. The scores of posttest is used to know whether this method is effective in teaching grammar or not.

4.1.1 The Pretest score of both classes

The researcher listed the name of both experimental and control group students and the result of pretest as can be seen in the table bellows.

Table 4

The pretest score of both classes

Students' Numbers	Passing Grade	Score of pretest	
		Experimental	Control
1	75	68	75
2	75	60	75
3	75	65	80
4	75	65	75
5	75	55	85
6	75	71	75
7	75	78	78
8	75	70	75
9	75	75	75

10	75	70	73
11	75	72	72
12	75	60	93
13	75	70	80
14	75	75	73
15	75	65	80
16	75	72	72
Average Score		68,1875	77,25

The table above shows that the passing grade of this research is 75, it is based on the passing grade of English lesson in Yapita Senior High School Surabaya. The score results which is got in pretest, shows that the minimum score of experimental group is 55 and the maximum score is 75. Meanwhile, in control group the minimum score is 72 and the maximum score is 93, whereas, the maximum score in that test must reach 100 score.

4.1.2 The Posttest score of both classes

After conducting the treatment in the experimental group, the students of both experimental and conrol group was given posttest to measure how effective this method in teaching grammar. The posttest score is in the table below.

Table 5

The posttest score of both classes

Students' Numbers	Passing Grade	Score of posttest	
		Experimental	Control
1	75	88	75
2	75	80	75
3	75	85	80
4	75	78	75
5	75	75	85
6	75	85	75
7	75	82	80
8	75	85	78
9	75	85	75
10	75	85	75

11	75	82	80
12	75	77	93
13	75	83	80
14	75	90	78
15	75	82	72
16	75	85	70
Average Score		82,9375	77,875

The table shows that the minimum score of experimental group after got the treatment namely writing diary in six days before did posttest is 75 and the maximum score is 90. Meanwhile, in control group which is not given any treatment the minimum score is 70 and the maximum score is 93, whereas, the maximum score in that test must reach 100 score.

4.1.3 The percentage both classes of pretest and posttest score

4.1.3.1 The percentage of pretest and posttest score of Experimental Class

The percentage of pretest and posttest score of Experimental Class can be seen in the table below.

Table 6

The percentage of pretest and posttest score of Experimental Class

Passing Grade	Students of experimental class		Percentage of test	
	Pre-test	Post-test	Pre-test	Post-test
Complete (grade ≥75)	3	16	18.75%	100%

Based on the presentage in the table above, the result of the comparison of pre-test and post-test of experimental group shows that the students' precentage which exceed the passing grade of pretest is 18.75% and posttest is 100% so the increasing is 81.25%.

4.1.3.2 The percentage of pretest and posttest score of Control Class

The percentage of pretest and posttest score of Control Class can be seen in the table below:

Table 7

The percentage of pretest and posttest score of Control Class

Passing Grade	Students of control class		Percentage of test	
	Pre-test	Post-test	Pre-test	Post-test
Complete (grade ≥75)	12	14	75%	87.5%

Based on the presentage in the table above, the result of the comparison of pre-test and post-test of control group shows that the students' precentage which exceed the passing grade of pretest is 75% and posttest is 87.5% so the increasing is 12%.

4.1.3.3 The comparison percentage of posttest score for Experimental and Control class

The comparison percentage of posttest score for Experimental and Control class as seen in the table below.

Table 8

The comparison percentage of posttest score for Experimental and Control class

Passing Grade	Both of clases		Percentage of test	
	Control	Experimental	Post-test	Post-test
Complete (grade ≥75)	14	16	87.5%	100%

Based on the presentage in the Table above, the result of the comparison of post-test score shows that the students' precentage which exceed the passing grade of control class is 87.5% and experimental class is 100% so the comparison of both classes is 12.5%.

4.2 Discussion

4.2.1 Test of normality distribution

4.2.1.1 Test of normality distribution of both classes (pre-test**)**

The researcher gave pre-test to both students of Experimental and Control group to measure whether there is significant difference or not of both classes. Test of normality distribution of both classes in pre-test is used statistics with hypothesis formulate as below:

H_0 : the data is normality distribution

H_1 : the data is not normality distribution

To test the data distribution is normal or not, the researcher uses software SPSS 16.0 of Kolmogorov-Smirnov test. It is used terminology P-value that means significant (sig.) the standard of significant is called alpha (α) 0.05. In the other hand, H_0 push away if P-value <α. That means this research is not normality distribution. The result as below.

Table 9

Test of normality distribution of both classes (pre-test)

One-Sample Kolmogorov-Smirnov Test

		expre	Conpre
N		16	16
Normal Parameters[a]	Mean	68.1875	77.2500
	Std. Deviation	6.18836	5.49545
Most Extreme	Absolute	0.178	0.284

Differences	Positive	0.095	0.284
	Negative	-0.178	-0.170
Kolmogorov-Smirnov Z		0.711	1.136
Asymp. Sig. (2-tailed)		0.693	0.152
a. Test distribution is Normal.			

Based on the table above, it can be seen that the result of Kolmogorov-Smirnovof is significant because the P-value of experimental and controlled class are 0,693 and 0,152. The significance of both classes is more than the significant value (0,05). So, H_0 is accepted and the data is normality distribution.

4.2.1.2 Test of normality distribution of both classes (post-test)

After conducting post-test to both classes, the researcher tested the post-test score using Kolmogorov Smirnov to know whether there is difference of normality distribution or not with the standard is 0,05. The hypothesis formulate as below:

H_0 : the data is normality distribution

H_1 : the data is not normality distribution

Table 10

Test of normality distribution of both classes (post-test)

One-Sample Kolmogorov-Smirnov Test

		expost	Conpost
N		16	16
Normal Parameters[a]	Mean	82.9375	77.8750
	Std. Deviation	3.95759	5.43906
Most Extreme Differences	Absolute	0.199	0.223
	Positive	0.176	0.223
	Negative	-0.199	-0.174
Kolmogorov-Smirnov Z		0.795	0.892
Asymp. Sig. (2-tailed)		0.552	0.404
a. Test distribution is Normal.			

Based on the table above, it can be seen that the result of Kolmogorov-Smirnovof is significant because the P-value of experimental and controlled class are 0,552 and 0,404. The significance of both classes is more than the significant value (0,05). So, H_0 is accepted and the data is normality distribution.

4.2.2 T- Test

To know the effectiveness of writing diary in teaching grammar, the researcher measure it uses T-test with SPSS 16.0 software. The hypothesis are:

H_0 : Writing diary is not effective in teaching grammar

H_1 : Writing diary is effective in teaching grammar

Table 11

Independent sample test (T-test)

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
VAR00003	Equal variances assumed	2.998	0.044	-8.032	30	0.000	-14.75000	1.83641	-18.50045	-10.99955
	Equal variances not assumed			-8.032	25.511	0.000	-14.75000	1.83641	-18.52831	-10.97169

If the significant standard in T-test which is done use SPSS 16.0 < α (0.05) then H_0 is pushed away that means writing diary is effective in teching grammar. Based on the table above, the significant (sig.2 tailed) uses T-test for Equality of Means got the same significant is 0.000, the value significant less than 0,05 or *P-value* <*α*, so H_0 is pushed away. so the researcher can conclude that

writing diary method is more effective than without using the method in teaching grammar because there are differences in result.

4.2.3 Eta Squared

To measure the effect size of treatment given, a calculation of eta squared was done by the researcher. According to Pallant (2010:243) there are three scales of this calculation, 0.01 is small effect, 0.06 is moderate effect, and 0.14 or above is large effect. The calculation of this research as seen below:

$$eta\ squared = \frac{t^2}{t^2 + (N_1 + N_2 - 2)}$$
$$= \frac{8.032^2}{8.032^2 + (16 + 16 - 2)}$$
$$= \frac{64.51}{64.51 + 30}$$
$$= 0.68$$

From the calculation above, the eta squared value of this research is 0.68 which is higher than 0.14. It means the difference between the mean scores of post-test of experimental and control group is large. So the researcher can conclude that the hypothesis of this research namely writing diary is effective in teaching grammar is confirmed while the null hypothesis is rejected.

4.3 The effectiveness of Writing Diary in Teaching Grammar

The result of the counting above answered the research question namely whether writing diary is effective in teaching grammar or not. If there is different score between experimental and control group after conducting the treatment, so

the substitute hypothesis is confirmed and the null hypothesis is rejected. But, if the posttest score shows there is no difference, the null hypothesis is confirmed and the subtitute one is rejected.

Based on some calculations uses SPSS 16.0 software, the researcher gets some results. The first is homogenity test, the researcher uses this test to know whether the students ability of both experimental and control group are equal or not. To check the homogenity of both group, the researcher counted the pretest score from both goup and the result is homogen, so the students abilty of both group are equal. The second is to test the data distribution is normal or not, the researcher uses Kolmogorov-Smirnov test with the P-value or alpha (α) 0.05 to check the pretest and posttest score. In the other hand, H_0 is pushed away if P-value <α. That means this research is not normality distribution. The calculation shows that the result of pretest score from both classes are significant because the P-value of experimental and controlled class are 0,693 and 0,152. So, H_0 is accepted and the data is normality distribution. And for the posttest score, the result of both experimental and control groups are 0,552 and 0,404. So the pretest and posttest score are normality distribution.

The third is to know the effectiveness of writing diary in teaching grammar, the researcher measure it uses T-test. The hypothesis are:

H_0 : Writing diary is not effective in teaching grammar

H_1 : Writing diary is effective in teaching grammar

The significant standard in T-test which is done use SPSS 16.0 < α (0.05) then H_0 is pushed away that means writing diary is effective in teching grammar. Based on the calculation, the significant (sig.2 tailed) uses T-test for Equality of

Means got the same significant is 0.000, the value significant less than 0,05 or *P-value* $<\alpha$, so H_0 is pushed away. so the researcher can conclude that writing diary method is more effective than without using this method in teaching grammar.

And the last is the researcher uses Eta Square to measure how effective the writing diary method in teaching grammar. According to Pallant (2010:243) there are three scales of this calculation, 0.01 is small effect, 0.06 is moderate effect, and 0.14 or above is large effect. From the calculation, the eta squared value of this research is 0.68 which is higher than 0.14. It means the difference between the mean scores of post-test of experimental and control group is large. So the researcher can conclude that this writing diary method is effective in teaching grammar because it has a big effect in helping students study and excercise their grammar.