

## **Chapter Four**

### **Result and Discussion**

This chapter discusses the result of the research. The content in this chapter consist of result and discussion. In result section, the researcher will explain the data result. In discussion, the researcher explains the differences of students' writing before and after using picture series.

#### **Result**

After conducting the data, the researcher is measuring the normality, homogeneity, and hypothesis. The last is answering the research questions and resume those result in discussion section.

*Normality.* After finding scores from pre and post test of control and experimental group, the researcher continued checking a normality of the test. The normality test function was to know that the test was normal or not. In measuring the normality, the researcher used a pre and post-test score from each group. The result of normality test was as follow:

Figure 4

*The normality of experimental group output from SPSS*

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		30
Normal Parameters <sup>a</sup>	Mean	.0000000
	Std. Deviation	5.98358367
Most Extreme Differences	Absolute	.184
	Positive	.152
	Negative	-.184
Kolmogorov-Smirnov Z		1.008
Asymp. Sig. (2-tailed)		.262

Figure 5

*The normality of control group output from SPSS*

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		30
Normal Parameters <sup>a</sup>	Mean	.0000000
	Std. Deviation	4.60913372
Most Extreme Differences	Absolute	.159
	Positive	.159
	Negative	-.134
Kolmogorov-Smirnov Z		.873
Asymp. Sig. (2-tailed)		.431

a. Test distribution is Normal.

Based on the figure 4 and 5 above, there are the results of Kolmogorov-Smirnov test. The result showed that the significance score of two groups was higher than 0.05 (Sig > 0.05). In experimental group the result was 0.262 (Kolmogorov-Smirnov table) or (0.262 > 0.05), meaning that the experimental

group was normal. On the other side, the control group result of Kolmogorov-Smirnov table was 0.431 or ( $0.431 > 0.05$ ). Hence, both of the group were normal.

**Homogeneity.** After checking the normality, the gain score result also measured the homogeneity. The homogeneity checking was to know the variance of two or more distribution (Cohen, et al, 2011). It meant that the homogeneity test was to know the sample of this research came from the same variance and characteristic. Thus, below was the homogeneity result from experimental and control group.

Figure 6

*The homogeneity output from SPSS*

	<i>Sum of Squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<i>Between Groups</i>	249.423	3	83.141	1.679	.196
<i>Within Groups</i>	1287.244	26	49.509		
<i>Total</i>	1536.667	29			

**The figure shows the result of homogeneity test in experimental group.**

Figure 7

*The homogeneity output from SPSS*

	<i>Sum of Squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<i>Between Groups</i>	409.583	4	102.396	1.553	.218
<i>Within Groups</i>	1647.917	25	65.917		
<i>Total</i>	2057.500	29			

**The figure shows the result of homogeneity test in control group.**

The figure 6 and 7 showed the result of homogeneity test. In checking the homogeneity, the researcher did a review of number of significant. The number of significant was higher than 0.05 ( $\text{Sig} > 0.05$ ) means that the result was

homogenous. Based on the figure 6 above, the number of significant in experimental group was 0.196 ( $0.196 > 0.05$ ). The other figure of figure 7 was showed the result of homogeneity in control group. The significant result was 0.218 or ( $0.218 > 0.05$ ) It meant that the result of homogeneity of experimental and control groups were homogenous or the variance of the students had same characteristics.

**Hypothesis.** In measuring the hypothesis, the researcher used a gain score of control and experimental group (the score was based on the total of criteria in writing). In hypothesis testing, there was ( $H_0$ ) which meant there were no differences between control and experimental group, ( $H_a$ ) there were differences between control and experimental group. In deciding a hypothesis result, when the significance score was smaller than 0.05 ( $Sig < 0.05$ ) it meant that the null hypothesis ( $H_0$ ) was rejected. Based on the table below, hypothesis test of data by using ANOVA was shown on the result.

Figure 8

*ANOVA*

Group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Control	14.667	1.129	12.407	16.926
Experimental	21.000	1.129	18.741	23.259

**The figure shows the mean result of control and experimental groups.**

The figure 8 indicated the differences between control and experimental group. The students of control and experimental group were 30 students and the mean score 14.66 (control group) and 21.00 (experimental group). It meant that

the experimental mean score was higher than control group means score (21.00 > 14.66). Therefore, the impact of using picture series was to improve students' narrative writing skill had a significant difference in two groups. Furthermore, the result of the ANOVA between control and experimental group was below.

Figure 9

*T-test using ANOVA*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	601.667 <sup>a</sup>	1	601.667	15.743	.000	.213	15.743	.974
Intercept	19081.667	1	19081.667	499.280	.000	.896	499.280	1.000
Group	601.667	1	601.667	15.743	.000	.213	15.743	.974
Error	2216.667	58	38.218					
Total	21900.000	60						
Corrected Total	2818.333	59						

a. R Squared = .213 (Adjusted R Squared = .200)

b. Computed using alpha = .05

**The figure shows the result of t-test testing.**

The figure 9 showed the hypothesis result by ANOVA. The significance value was 0.000. The significant value was less than 0.05 ( $0.000 < 0.05$ ). It meant that the students of experimental group had a significant difference from the students in control group. In experimental group, there was an improvement in writing skill. In other words, a picture series could help the experimental students to have an improvement in writing.

## Result I

In previous discussion, the researcher explained about validity, reliability, normality, homogeneity, and hypothesis testing. Then, in result one the researcher answered the first question “How is the students’ narrative writing skill in before and after in experimental group”. The researcher presented the result in following the table below.

Name	Pre-test	Post-test	Gained Score
EX1	60	80	20
EX2	50	60	10
EX3	60	80	20
EX4	50	60	10
EX5	60	75	15
EX6	60	80	20
EX7	55	80	25
EX8	55	70	15
EX9	60	80	20
EX10	55	70	15
EX11	55	75	20
EX12	50	80	30
EX13	60	75	15
EX14	55	80	25

EX15	40	75	35
EX16	50	75	25
EX17	60	80	20
EX18	40	80	40
EX19	60	70	10
EX20	55	75	20
EX21	55	80	25
EX22	55	80	25
EX23	55	70	15
EX24	70	75	25
EX25	55	75	20
EX26	60	80	20
EX27	50	80	30
EX28	60	75	15
EX29	60	80	20
EX30	55	80	25
	Total	Total	
	1665	2275	
Mean	55.50	75.83	

From the table 6 above, the result of pre-test and post-test of experimental group showed the highest and the lowest score in writing narrative. The highest score of pre-test is 60 and the lowest is 40. The highest score of post-test is

80 and the lowest is 60. Furthermore, the result of mean score was formulated below.

### Determining Mean of Experimental Group

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	30	40	70	55.50	6.067
Posttest	30	60	80	75.83	5.584
Valid N (listwise)	30				

Based on the result of mean score in experimental group (pre-test), the result was 55.50. It meant that the score of pre-test was low. Furthermore, the result of post-test in experimental group is 75.83. The category of the score was very good. Therefore, both of the score indicated that the post-test score was higher than pre-test. It meant that the students' narrative skill in experimental group was improved.

### Result II

In result two, the researcher answered the second question "How is the student's narrative writing skill in before and after in control group". The result was presented as follow.

Name	Pre-test	Post-test	Gained Score
CT1	50	70	20
CT2	60	70	10
CT3	60	80	20



CT4	50	70	20
CT5	50	75	25
CT6	55	70	25
CT7	70	75	5
CT8	55	75	15
CT9	55	70	15
CT10	60	75	15
CT11	50	70	20
CT12	60	75	15
CT13	40	60	20
CT14	60	70	10
CT15	55	60	5
CT16	55	70	15
CT17	60	80	20
CT18	60	75	15
CT19	40	55	15
CT20	60	75	15
CT21	55	60	5
CT22	50	60	10
CT23	55	70	10
CT24	60	75	15
CT25	60	75	15

CT26	40	55	15
CT27	60	70	10
CT28	60	75	15
CT29	60	75	15
CT30	60	70	10
	Total pre	Total post	
	1665	2105	
Mean	55.50	70.17	

From the table 7 above, the result of pre-test and post-test of experimental group showed the highest and the lowest score in writing narrative. The highest score of pre-test was 70 and the lowest was 50. The highest score of post-test was 80 and the lowest is 60. Furthermore, the result of mean score was formulated below.

#### **Determining Mean of Control group**

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	30	40	70	55.50	6.867
Posttest	30	55	80	70.17	6.757
Valid N (listwise)	30				

Based on the result of mean score in control group (pre-test), the result was 55.50. It showed that the students' skill in writing narrative was low. Furthermore, the result of post-test was 70.17. The category of the score was very

good. Hence, both of the score indicated that the post-test score was higher than pre-test. It meant that students' narrative skill in control group was improved.

### Result III

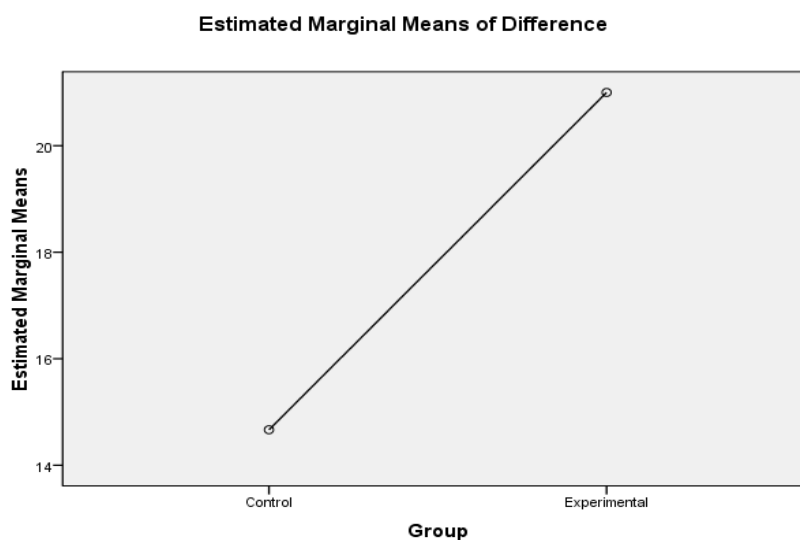
In result three, the researcher answered the third question "Is there any significant differences of students' narrative writing skill between experimental and control group". In measuring the result, the researcher used ANOVA in SPSS.

Here was the following result.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	601.667 <sup>a</sup>	1	601.667	15.743	.000	.213	15.743	.974
Intercept	19081.667	1	19081.667	499.280	.000	.896	499.280	1.000
Group	601.667	1	601.667	15.743	.000	.213	15.743	.974
Error	2216.667	58	38.218					
Total	21900.000	60						
Corrected Total	2818.333	59						

a. R Squared = .213 (Adjusted R Squared = .200)

b. Computed using alpha = .05



From the result above, the significant was 0.000. It meant that the result was lower than 0.05 (Sig < 0.05). The result meant that the students' in experimental group had a significant difference from the students' in control group. The experimental group had a significant difference in writing in using picture series than the students of control whodid not use picture series in doing narrative writing. Hence, based on those explanations, the picture series could help the students in doing a writing narrative text.

### **Discussion**

The implementation of using picture series in improving students' narrative writing skill brought some improvement of students' narrative wrting. Picture series provide some exercises for experimental group during teaching and learning narrative text writing to help the students' improving their writing. It could help them in organizing idea and improving their grammar used. They could write a paragraph story better than before using picture series. This result is in line

with Miller (2007) stating that picture can help the students to make a word and concept concrete. Furthermore, in using picture series, the students can organize their ideas in sequence. They arranged the story based on the generic structure of the narrative text. The writing became well written and read. Arsyad (2006) stated that picture series is a number of picture that show activity or story in sequence.

After conducting the data, the researcher is measuring the normality. The normality is helping the researcher to know that the data of this research is normal or not. In this research, the result of the normality was 0.262 (experimental group) and 0.431 (control group). According to Kolmogorov-Smirnov test when the result of significance score is higher than 0.05 means that the test of the data in experimental and control group was taken by normal group population.

Then continuing in measuring the homogeneity. Homogeneity is checking the variance of two or more distribution (Cohen, Manion and Morrisson, 2011). It means that the homogeneity test is coming from a same variance and characteristic. In this research, the result of homogeneity was 0.196 (experimental group) and 0.218 (control group). Cohen, Manion and Morrisson (2011) claimed that the groups was homogeneous if the significant result is higher than 0.05. It means that both of the groups are homogenous. Homogenous means that the groups were coming from a same variance and characteristic. The characteristic of this groups are the students who has a low score in English.

The last testing is hypothesis testing. In hypothesis testing the researcher used ANOVA. The result was 0.000. It means that the students of experimental

group have a significant difference from control group. In other word, a picture series help the experimental group students have an improvement in writing skill.

After checking those testing, the researcher is answering a first question. The first question is “How is the students’ narrative writing skill before and after using treatment in experimental group?”. The highest score of pre-test is 60 and the lowest score is 40. The highest score of post-test is 80 and lowest score is 60. Those score was based on the standard of the English score from the school. After scoring the students’ writing the researcher is measurig a mean score. A mean score of the pre-test is 55.50 and posts-test is 75.83. Based on the standard of English score from the school, this result is very good. Both of the groups are indicated that post-test is higher than pre-test. In conclusion, there was a signficance improvement of students writing in experimental group.

Second question is “How is the student’s narrative writing skill before and after using treatment in control group?”. The highest score of pre-test is 70 and the lowest score is 50. The highest score of post-test is 80 and the lowest score is 60. Those score was based on the standard of the English score from the school. After scoring the students’ writing the researcher is measurig a mean score. A mean score of the pre-test is 55.50 and posts-test is 70.17. Based on the standard of English score from the school, this result is very good. Both of the groups are indicated that post-test is higher than pre-test. In conclusion, there was a signficance improvement of students writing in control group.

Third question is “Is there any significant differences of students’ narrative writing skill after using treatment between experimental and control group?”. The

result of significance score was 0.000. There was a significant difference between control and experimental groups when the significant score is lowest than 0.05. Based on the result above, the researcher concluded that there was a significance difference between control and experimental groups.

In conclusion, a picture series help the students' improvement in narrative writing skill at SMP Muhammadiyah 2 Yogyakarta.