

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter describe about normality and homogeneity testing. Research finding that include data of research finding, data analysis, hypothesis testing and discussion.

A. Research Findings

In this chapter, this researcher presented the data on students' writing narrative text before and after being taught by using animation movie as medium in teaching writing narrative text process. Besides that, this research is presented and analysed the data which had been collected through two kinds of test, they are pre-test and post-test. It was conducted for thirty six students.

As mentioned before, the researcher used test as the instrument in collecting data. It was given to X-IPS 1 students of MAN Rejotangan. There were 36 students as respondent or subject in this research. The data result of the research will be explained as follow.

1. Description of Students' writing narrative text in the score before and after being taught by using animation movie.

In this section, the researcher presented the result of the pre-test and post-test that had been done before and after treatment. Pre-test as held on Thursday, April 20th, 2017 at 11.20 until 13.00 am. And post-test was administered on Thursday, April 27th 2017 at 11.20 until 13.00 am.

The list of student's score of writing narrative text can be seen in the table below:

Table 4.1 students score before and after being taught using animation movie.

No.	Subject	Pre-test score (X)	Post-test score (Y)	Gain/Point differences (D)	D ²
1	ANM	16	18	2	4
2	AGA	17	18	1	1
3	AAS	13	16	3	9
4	ASA	14	17	3	9
5	AAS	15	19	4	16
6	AF	15	18	3	9
7	AR	13	15	2	4
8	CDS	14	18	4	16
9	DSL	16	16	0	0
10	DPW	15	18	3	9
11	ELA	15	20	5	25
12	FR	18	19	1	1
13	FNA	17	17	0	0
14	IZF	17	19	2	4
15	IFR	16	19	3	9
16	MAA	13	16	3	9
17	MB	12	15	3	9
18	MLK	16	18	3	9
19	MRA	12	16	4	16
20	MRH	17	19	2	4
21	MS	17	19	2	4
22	NDA	12	16	4	16
23	NL	16	20	4	16
24	NR	16	18	2	4
25	RNK	15	18	3	9
26	RAP	11	15	4	16
27	RFR	14	16	2	4
28	RW	15	18	3	9
29	SSP	15	19	4	16
30	SKP	17	19	2	4
31	SFZ	16	19	3	9
32	SUK	16	16	0	0
33	SBA	17	20	3	9
34	TWN	14	18	4	16
35	UWA	17	19	2	4
36	WWS	18	21	3	9
Total		$\sum X=547$	$\sum Y=642$	$\sum D=96$	$\sum D^2=308$

From the data pre-test and post-test above, it can be concluded that from 36 students there are significant different mean score in students' X IPS 1 class toward before and after giving treatment.

1. Result of pre-test.

Pre-test was to know the students writing ability before the students given a treatment. The researcher arrange the frequency and percentage using SPSS 16.0. The descriptive statistic of pre-test score consist of mean, frequency of pre-test. For detail it can be seen on the table below:

Table 4.2 descriptive statistic of pre-test

Statistics		
pretest		
N	Valid	36
	Missing	0
Mean		15.19
Median		15.50
Mode		16 ^a
Std. Deviation		1.818
Variance		3.304
Range		7
Minimum		11
Maximum		18
Sum		547

a. Multiple modes exist. The smallest value is shown

From the table above, the sample consist of 36 students we can conclude that the mean used to measure of central tendency or commonly called the average is 15.19, median or the splits distribution such that half of all values are above this value and half are below is 15.19, mode or the

values that occurs most often is 16, std. Deviation or the square root of the variance to measure the spread of a set of observation is 1.818, variance or the sum of the squared distances of data value from the mean divided by the variance division is 3.304, range is 7, the minimum score is 11 and the maximum score is 18, the sum or the result of arithmetically adding numbers or quantities is 547.

2. Result of post test

Post-test was to know the students writing ability after the students given a treatment about narrative text. The test was same with pre-test. The descriptive statistic of post-test score consist of mean, frequency of post-test. For detail it can be seen on the table below:

Table 4.3 descriptive statistic of post-test

Statistics		
posttest		
N	Valid	36
	Missing	0
Mean		17.83
Median		18.00
Mode		18 ^a
Std. Deviation		1.577
Variance		2.486
Range		6
Minimum		15
Maximum		21
Sum		642

a. Multiple modes exist. The smallest value is shown

From the table above, the sample consist of 36 students we can conclude that the means used to measure of central tendency or commonly

called the average of students score is 17.83, the median or the splits distribution such that half of all values are above this value and half are below is 18.00, mode or the values that occurs most often is 18, std deviation or the square root of the variance to measure the spreath of a set of observation is 1.577, variance or the sum of the squared distances of data value from the mean divided by the variance division is 2.486, range is , the minimum score was 15,the maximum score was 21 and the sum is 642.

From the result of frequency data in pre-test and post-test above, we can see that mean score in pre-test and post-test increased.

B. Data Analysis

Data analysis was done to know the different score of the students' achievement in writing narrative text before and after being taught using animation movie as medium. To investigate the effectiveness of animation movie as medium in this research, the data were analysed from students' score in pre-test and post-test, next those data will analysing by computing using T-test. If the result of significant value lower than level of significance level 0.05, the null hypothesis rejected alternative hypothesis accepted indicating that animation movie was effective to increase students' writing skill in narrative text. By contrast, if significant value higher than level of significance level 0.05, the alternative hypothesis rejected null hypothesis accepted indicating that animation movie was not effective to increase students' writing skill in narrative text.

Table 4.4 paired sample statistic**Paired Samples Statistics**

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 pre_test	15.19	36	1.818	.303
post_test	17.83	36	1.577	.263

Based on the table 4.7 above, shows *Mean* of pre-test score (15.19) and post-test score (17.83), while *N* for cell there are 36. *Standard Deviation* for pre-test (1.818) and post-test (1.577). *Standard Error Mean* for pre-test (0.303) and post-test (0.263).

Table 4.5 paired sample correlation**Paired Samples Correlations**

	N	Correlation	Sig.
Pair 1 pre_test & post_test	36	.749	.000

Based on the table above, *output correlations* shows the large correlation between both samples, where can be seen numeral both correlation is (0.749) and numeral significance (0.000). For interpretation of decision based on the result of probability achievement, that is:

1. If the sig >0.05 H_0 accepted.
2. If the sig <0.05 H_a rejected.

It shows that sig= 0.000 is lower than 0.05 means that H_0 is rejected and H_a is accepted. So, it is concluded that there is significant correlation between pre-test and post-test score.

Table 4.6 paired sample T-test

Paired Samples Test								
	Paired Differences					T	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 pre_test post_test	-2.639	1.222	.204	-3.053	-2.225	-12.952	35	.000

Based on the table 4.9, *output paired samples test* shows the result of compare analysis with using T test. *Output shows mean* pre-test and post-test (-2.639), standard deviation (1.222), mean standard error (0.204). The lower different (-3.053), while upper different (-2.225). The result $t = (12.952)$ with $df=35$ and significance (0.000).

From the result above, it can be concluded that H_0 is rejected and H_a is accepted. Therefore, it is concluded that there is the significant differences of the students' mean scores between pre-test and post-test score where the mean scores of post-test (17.83) higher than mean of pre-test (15.19) means that teaching writing narrative text using animation movie as medium is effective.

C. The Result of Normality and Homogeneity Testing

1. The Result of Normality Testing

In this research, normality test is done from student's score of pre-test and post-test in writing narrative text. To know the normality, the

researcher uses *Kolmogorov-smirnov* formula by using SPSS 16.0 with the formula of One Sample Kolmogorov-smirnov test with significance value $\alpha = 0.05$. The result of the data is presented as below:

- a) If $\text{sig} > 0.05$, it means that the distribution of data is normal
- b) If $\text{sig} < 0.05$, it means that the distribution of data is not normal

Based on the computation the result of normality testing by using *inter-rater reliability* with SPSS 16.0 version. For detailed of computation can be seen on the table:

Table 4.7 Normality testing

One-Sample Kolmogorov-Smirnov Test

		pre_test	post_test
N		36	36
Normal Parameters ^a	Mean	15.19	17.83
	Std. Deviation	1.818	1.577
Most Extreme Differences	Absolute	.171	.209
	Positive	.105	.155
	Negative	-.171	-.209
Kolmogorov-Smirnov Z		1.027	1.253
Asymp. Sig. (2-tailed)		.242	.087

a. Test distribution is Normal.

- a. H_0 : data is in normal distribution.
- b. H_1 : data is not in normal distribution.

The standard significant of education is 0.05 ($\alpha = 5\%$). To determine data is normal distribution or not it can be seen from the result of data normality testing. Based on the output from SPSS above is known that the significance score from pre-test was 1.027 and from post-test was 1.253. Both score from pre-test and post-test are bigger than 0.05. The significant score on pre-test was 1.027 and it is lower 0.05 ($1.027 >$

0.05). It means that H_0 is accepted and H_1 is rejected and the data is in normal distribution. So, it can be interpreted that both of data (pre-test and post-test score are in normal distribution.

2. The Result of Homogeneity Testing

To know homogeneity, the researcher uses *Test of Homogeneity of variances* with SPSS. 16.0 by the sig value ($\alpha=0.05$). The result can be seen on the table below:

Table 4.8 Result of Homogeneity Testing

Test of Homogeneity of Variances

pre_test

Levene Statistic	df1	df2	Sig.
1.786	5	29	.147

- a. H_0 : data is homogeny
- b. H_a : data is not homogeny

Based on table above, the *Levene statistic* value shows 1.786 with the significant value 0.147. The standard significant of education is 0.05 ($\alpha=5\%$). Based on the output data from SPSS above is known that the test called homogeny if the significant score more than 0.05. Based on the table above, the test is not homogeneous, because $0.147 > 0.05$ it means that H_0 is accaepeted and H_1 is rejected. So, it can be conclude that students X-IPS 1 has homogeneity of variances.

D. Hypothesis Testing

From the data analysis it could be identify that:

1. When the significant level is less than 0.05 ($\alpha < 0.05$). the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected. It means that there is significant different of students mean score before and after being taught of using animation movie as the medium in writing narrative text. The difference is significant.
2. When the significant level is more than 0.05 ($\alpha > 0.05$). The null Hypothesis (H_0) is accepted and the alternative hypothesis (H_a) is rejected. It means that there is no significant different of students mean score before and after being taught of using animation movie as the medium in writing narrative text. The mean of students writing narrative text score was (15.19). And after getting treatment, the means of students writing narrative score was (17.83) it means that the students' score was improved.

The sig. (2-tailed) is $0.000 > 0.05$, null hypothesis (H_0) is accepted. Then, sig. (2-tailed) < 0.05 alternative hypothesis (H_a) is accepted. Based on statistical calculation using T-test, the researcher give interpretation, the sig.(2-tailed) is 0.000. it means that the significant level is less than 0.05 ($0.000 < 0.05$). Therefore, alternative hypothesis (H_a) that states there is significant different in writing achievement between students before and after being taught by using animation movie is accepted. While, the null hypothesis that states

there is no significant different in writing achievement before and after being taught by using animation movie is rejected.

It was also supported by the mean of total students writing achievement score of 36 students before being taught using animation movie is (15.19). After getting treatment, the means students writing achievement is (17.83). It means that there is significant different score of students writing narrative text of first grade students of MAN Rejotangan before and after being taught by animation movie as medium.

E. DISCUSSION

The output data is paired statistics showed that the mean of pre-test is 15.19 and the post-test is 17.83, it means that from pre-test and post-test has increased. It can be seen from the gain or differences the mean score between pre-test and post-test is 2.64. Therefore, it can conclude that there is significant different before and after using animation movie as medium in teaching writing narrative text.

The standard deviation is to measure how much the variance of the sample. The standard deviation of pre-test is $1.818 < 15.19$ and post-test is $1.577 < 17.83$ where if the standard deviation is getting higher than the mean it means that the mean is not homogeneity and if the standard deviation is getting smaller than the mean it means that the mean is homogeneity. So, it can be concluded that standard deviation of

pre-test and post-test was homogeneity means that the sample of this research almost has the same mean.

The standard error mean is to measure the accuracy with which a sample represents a population. The standard error mean of pre-test is $0.303 < 15.19$ and post-test is $0.263 < 17.83$ where if the standard error mean is getting higher than the mean it means that the sample is not representative and if the standard error mean is getting smaller than the mean it means that the sample is representative. So, it can be concluded that the sample of this research indicated good sample or representative from population.

Based on the output data of paired sample test it is known the Significance value (2-tailed) is 0.000. It means that the significance level is less than 0.05 ($0.000 < 0.05$). It means the alternative hypothesis (H_a) is accepted, while the null hypothesis (H_0) is rejected. It can be concluded that there is significant different mean score of the students' achievement of narrative text by using animation movie as medium at first grade in MAN Rejotangan before and after being given treatment.

Based on the finding of the research, it can be revealed that teaching animation movie can improve students' narrative writing. It is supported by Wriqth's statement (1976) that animation movie contain some elements of narrative such as characters, dialogues, plots and climax. Therefore students could understand easier in learning writing aspect (content, grammar, vocabulary, organization, and mechanic) and

write narrative text because animation movie provide some elements of generic structure and language feature of narrative text. Harmer (2001) state that movie is one of the visual aids that can be used in writing class. It can be used to create situation for writing class more clearly, students can learn aspect of writing through animation movie because it show the real situation and simple story and provide the dialogue that can be used to learn writing aspect.

It also proved by Vukoja (2005) by using animation videos or movie in pre writing activity, the students can explore the structural devices of the story (plotlines, character development, setting, and theme). From the statement above we can say that animation film is good media in teaching writing in order to improve student's narrative writing ability. Meanwhile, when the researcher applied animation movie as medium in writing narrative text, the researcher proved that animation movie is good media in teaching writing in order to improve student's narrative writing ability had strengths as Vukoja said. Through animation movie as the medium in teaching writing narrative text, the students were able to improve their ideas and the story easily.

Based on Fadila (2015) state that teaching using animation film can improve students' narrative writing ability in narrative text. It proved from the result of her research that there are improving student' writing process in every cycle by using animation movie.

From discussion above, the researcher can be concluded that using animation movie can increase the students' writing narrative text achievement it also supported by some theories and another research. The effect of using animation movie is good from student since it can prove there is a significant different mean score before and after being taught using animation movie. Therefore teaching narrative writing using animation film could be said that is a suitable technique or media in improving students' narrative writing ability