# CHAPTER IV RESEARCH FINDING AND DISCUSSION

This chapter presents the description of research finding, data analysis and hypothesis test, discussion and limitation of the research.

## A. Description of Research Finding

This study was divided in two classes, class X G as the experimental group and X E as the control group. Before the analysis is done, the first test given before and after the students follow the learning process that was provided by the researcher (pre-test and post-test). After the data were collected, the researcher was scored the result of data from the test have been given to the students. The researcher gave score for each items of element of writing.

To analyze the data of test result, the first known the beginning of data from experimental group and control group that taken from the pre-test value, and after the experimental and control group conducted the learning process, then both of classes were given a post-test to obtain the data that will be analyzed.

### **B.** Data Analysis and Hypothesis Test

1. Phase First of Data Analysis

The experimental group (class X G) and control group (class X E) were given a pre-test on February  $3^{rd}$ , 2016. They were asked to make a narrative text with the theme of fairy tale.

a. Normality Test

Normality test was used to find out whether data of experimental group and control group which had been collected from normal distribution or not.

The researcher used Liliefors to find out the distribution data in normality test. The initial data used to normality test in pre-test. Criteria of test which used to significant level  $\alpha = 5\%$ , approachment value was 0,886 and DF = 36 and 36. If  $L_{count} \leq L_{table}$  so data was normal distributed, if  $L_{count} > L_{table}$  so data was not normal distributed.

Table 4The Initial Result of Normality Test

Group	L <sub>count</sub>	DF	L <sub>table</sub>	Criteria
Experimental	0.083	36	0.150	Normal
Control	0.089	36	0,148	Normal

On the table above, the normality test of initial data in experimental group (X G) for significant level  $\alpha = 5\%$  with DF = 36, obtained  $L_{count} = 0,083$  and  $L_{table} = 0,150$ . Because  $L_{count} \leq L_{table}$ , so the conclusion, the data was normal distributed.

Mean while normality test in control group (X E) for significant level  $\alpha = 5\%$  with DF = 36, obtained  $L_{count} = 0,089$  and  $L_{table} = 0,148$ . Because  $L_{count} \leq L_{table}$ , so the conclusion, the data was normal distributed.

b. Homogeneity Test

Homogeneity test was done to know whether sample in the research come from population that had same variance or not. In this research, the homogeneity of the test was measured by comparing the obtained score ( $F_{count}$ ) with ( $F_{table}$ ). Thus, if the obtained score ( $F_{count}$ ) was lower than the ( $F_{table}$ ) or equal, it could be said that the H $\sigma$  was accepted. It meant that the variance was homogeneous.

 $H\sigma:\sigma_1^2 = \sigma_2^2$  $H_a:\sigma_1^2 \neq \sigma_2^2$ 

According to the formula above, obtained that:

$$F = \frac{Vb}{Vk}$$
$$F = \frac{110.04}{102,76}$$
$$= 1,07$$

The initial Result of Homogeneity Test							
Group	Variance $(S^2)$	N	Df	F <sub>count</sub>	F <sub>table</sub>	Criteria	
Experimental	110,04	36	35	1.07	1 72	Homogonoous	
Control	102,76	36	35	1.07	1.72	Homogeneous	

 Table 5

 The Initial Result of Homogeneity Test

Based on the computation above, it was obtained that  $F_{count}$  was lower than  $F_{table}$  so H $\sigma$  accepted. It could be concluded that data of pre-test from experimental group and control group was homogeneous. c. Testing the Similarity of Average of the Initial Data between Experimental Group and Control Group

The researcher used t-test to test the difference of average.

 $H\sigma : \! \mu_1 \! = \! \mu_2$ 

 $H_a$  : $\mu_1 \neq \mu_2$ 

Where:

- $\mu_1$ : average data of experimental group
- $\mu_2$ : average data of control group

 Table 6

 The Similarity of Average Result Initial Data between

 Experimental Group and Control Group

Group	N	Average (X)	Variance (S <sup>2</sup> )	Standard of deviation (S)	t <sub>table</sub>	t <sub>count</sub>	Criteria
Experimental	36	58,778	96,983	9,848	1.00	2 1 4 4 4	Ησ
Control	36	53,333	135,210	11,628	1.99	2,1444	rejected

$$S^{2} = \frac{(n_{1} - 1)s_{1}^{2} + (n_{2} - 1)s_{2}^{2}}{n_{1} + n_{2} - 2}$$

$$(36-1) \quad 96,983 + (36-1) \quad 135,210$$

$$36 + 36 - 2$$

$$= \sqrt{118,963}$$

$$= 10,907$$

$$t_{count} = \frac{58,778 - 53,333}{10,907\sqrt{\frac{1}{36} + \frac{1}{36}}}$$

$$= 2.1444$$

With a = 5% and df = 36 + 36 - 2 = 70, obtained  $t_{table}$  1.99. Because  $t_{count}$  was higher than  $t_{table}$  (2.1444 > 1.99), so H $\sigma$  was rejected.

2. Phase End of Data Analysis

The experimental group was given post-test on February 19, 2016 and control group was given a post test on February 17, 2016. Post-test was conducted after all treatments were done. Movie was used as aid in narrative text writing to students in experimental group.

Meanwhile, students in control group were given treatment without movie. Post-test was aimed to measure students' ability after they got treatments. They were asked to make a narrative text after they read the text (for students in control group) and they watched the movie (for students in experimental group).

Analysis of phase end was done to answer hypothesis of this research. The end analysis presents the result of pretest and post-test that was done both in experimental and control group. This analysis will answer the research question "Is Fairy Tale English Movie Frozen effective in teaching students' narrative text writing?" We can conclude that Fairy Tale English Movie "Frozen" is effective when the result of post-test of the experimental group (using movie) and control group (without using movie) had significant differences or the assumption that those classes was equal.

#### a. Normality Test

The initial data used to normality test in post-test. Criteria of test which used to significant level  $\alpha = 5$  %, Liliefors value was 0,886 and DF =36 and 36. If  $L_{count} \leq L_{table}$  so data was normal distributed dan if  $L_{count} > L_{table}$  so data was not normal distributed.

### Table 7

### The Final Result of Normality Test

Group	L <sub>count</sub>	DF	L <sub>table</sub>	Criteria
Experimental	0,091	36	0,148	Normal
Control	0,123	36	0,148	Normal

On the table above, the normality test of initial data in experimental group (X G) for significant level  $\alpha$  = 5% with DF = 36, obtained L<sub>count</sub> = 0,091 dan L<sub>table</sub> = 0,148. Because  $L_{count} \leq L_{table}$ , so the conclusion, the data was normal distributed.

Mean while normality test in control group (X E) for significant level  $\alpha = 5\%$  with DF = 36, obtained  $L_{count} = 0,123$  dan  $L_{table} = 0,148$ . Because  $L_{count} \leq L_{table}$ , so the conclusion, the data was normal distributed.

## b. Homogeneity Test

Homogeneity test was used to know whether the group sample that was taken from population was homogeneous or not.

$$\begin{split} H\sigma:&\sigma_1{}^2=~\sigma_2{}^2\\ H_a:&\sigma_1{}^2\neq~\sigma_2{}^2 \end{split}$$

According to the formula above, obtained that:

$$F = \frac{Vb}{Vk}$$

$$F = \frac{29,58}{49,74}$$

$$= 0,59$$

# Table 8

## The Final Result of Homogeneity Test

Group	Variance (S <sup>2</sup> )	N	Df	F <sub>count</sub>	F <sub>table</sub>	Criteria
Experimental	29,58	36	35	0,59	1,72	Homogeneous
Control	49,74	36	35		,	5

Based on the computation above, it was obtained that  $F_{count}$  was lower than  $F_{table}$  so H $\sigma$  accepted. It could be concluded that data of pre-test from experimental group and control group was homogeneous.

c. Hypothesis Test

Hypothesis test was used to know whether there was a difference on post-test of experimental group and control group. The data which used to test the hypothesis was post test score both of group. To test the difference of average used t-test.

Ho:  $\mu_1 \le \mu_2 \rightarrow$  It meant there was no significant difference between the narrative text

writing improvement of students who were taught by using Fairy Tale English Movie "Frozen" and who were taught without using Fairy Tale English Movie "Frozen"

Formula:

$$S^{2} = \frac{(n_{1} - 1)s_{1}^{2} + (n_{2} - 1)s_{2}^{2}}{n_{1} + n_{2} - 2}$$

$$\frac{(36-1) \quad 29.583 + (36-1) \quad 49.745}{36 + 36 - 2}$$

$$= \sqrt{39.168}$$

$$= 6.258$$

$$t_{count} = \frac{76.889 - 65.287}{6.258\sqrt{\frac{1}{36} + \frac{1}{36}}}$$

$$= 7.822$$

With a = 5% and df = 36 + 36 - 2 = 70, obtained  $t_{table}$  1.66.

#### Table 9

Group	N	Average (X)	Variance (S <sup>2</sup> )	Standard of deviation (S)	t <sub>table</sub>	t <sub>count</sub>	Criteria
Experiment	36	76.889	29.583	5.439	1 66	7 822	Ha
Control	36	65.278	49.745	7.053	1.00	1.022	accepted

### The Final Result of Homogeneity Analysis

Based on the computation above, it was obtained that the average  $(\overline{X})$  of post-test of the experimental group who were taught by using Fairy Tale English Movie 'Frozen"was76.889 and standard deviation (S) was5.439. While the average  $(\overline{X})$  of post-test of the control group who were taught without using Fairy Tale English Movie 'Frozen''was65.278 and standard deviation (S) was7.053, with df = 36 + 36 - 2 = 70 by  $\alpha = 5\%$ , so obtained  $t_{table} =$ 1.66. From the result of calculation t-test  $t_{count} = 7.822$ . If compared between  $t_{count}$  and  $t_{table}$ ,  $t_{count} > t_{table}$ . It meant, H $\sigma$ was rejected and H<sub>a</sub> was accepted. There was significance difference of average score from pre-test and post-test of control group. From the calculation of interaction G and E, there was significance different between students who were taught by using Fairy Tale English Movie "Frozen" and students who were taught without using Fairy Tale English Movie 'Frozen".

# C. Discussion

1. Students Average Scores in Pre-test and Post-test

The average score for control group was 53.333 in pre-test and 65.278 in post-test. The average score for experimental group was 58.778 in pre-test and 76.889 in posttest. The following was the simple tables of students' average score of each writing components.

Table 10
The Pre-test and Post-test of Students' Average
Scores of Each Writing Component

No	Component of Writing	Group	The Average Score of Pre-test	The Average Score of Post-test
1	Contont	Experimental	17.8	22.4
1	Content	Control	16.9	18.6
2	Organization	Experimental	13.3	16.1
2	Organization	Control	11.6	12.5
2	Vaaabulanu	Experimental	12.8	15.8
3	v ocabulal y	Control	11.6	14.1
4	Crommon	Experimental	11.4	18.5
4	Grainmar	Control	10.4	16.4
5	Machania	Experimental	3.26	4
3	wiechanic	Control	3.1	3.8

# 2. Students' Condition in Control Group

In the control group, there was not a new treatment in the teaching learning process. They were given a usual treatment. They were taught narrative writing using text. By just using text as an aid in the teaching learning process, teacher had used a monotonous medium that could not improve students' understanding on narrative text writing which makes students cannot write the narrative text correctly. It was proved by the control group's average in the post-test (65.278) which was lower than the experimental group (76.889).

- 3. Students' Condition in Experimental Group
  - a. Analysis of Students' Writing before Treatment (Pre-test)

Pre-test was conducted before the treatment. From the result of pre-test, it was known that students faced many difficulties in narrative text writing. Students' ability was in low level when they had to arrange sentences to be a good paragraph by considering main idea. It meant that the idea was not clearly stated and the sentences were not well-organized to support the main idea. Not only the sequence of sentences which were made by students was not complete but also there were many difficulties in vocabulary, grammar and mechanic. To minimize the number of students' mistakes in their writing, the researcher gave correction to them. From the correction of their mistakes, students' were supposed to learn more and supposed to improve their understanding and their ability on narrative text writing. b. Analysis of Students' Writing after Treatment (Post-test)

Based on the analysis of experimental group in the post test, it was found that students' understanding on narrative text writing after getting treatment improved. In the treatment, the students were given movie that was in line with the function of narrative text, generic structure, and linguistic features. The content was complete and relevance to the topic and the ideas were easy to understand. The sentences were well organized to support the main idea and in accordance with the sequence of event in the movie. However, there were mistakes in vocabulary and grammar.

Based on the result of t-test analysis, it was found that  $t_{count} = 7.822$ , and  $t_{table} = 1.66$  for a = 5% with  $df = (n_1 + n_2 - 2)$ , because  $t_{count} > t_{table}$ , so H<sub>a</sub> was accepted and H $\sigma$ was rejected. It meant that there was a significant difference between the improvement of students' ability on narrative text writing that was given a new treatment using Fairy Tale English Movie "Frozen" and the improvement of students' ability on narrative text writing that was not given a treatment. So, the using of Fairy Tale English Movie "Frozen" is effective to improve students' ability on narrative text writing. 4. The Positive Influences of Using Fairy Tale English Movie "Frozen" in Teaching Narrative Text Writing

After conducting the research, there were some positive influences of using fairy tale English movie "Frozen" in teaching narrative text writing:

- a. The use of movie gave students the real data of a chronological event. It helped students express their ideas not only based on their imagination but also reality based on the movie. The use of movie was actually meant to help them catch and express their ideas easily.
- b. Students' boredom in learning narrative could be minimized. The treatment gave students different nuances in the teaching and learning process, so they were interested in the lesson. Movie that contained motion picture could attract students' attention to interpret it and express their ideas on narrative text writing based on the movie.

# D. Limitation of the Research

The researcher realizes that this research had not been optimally. There were constrains and obstacles faced during the research process. Some limitations of this research were:

 The research was limited at SMA N 8 SEMARANG and just used class X E and X G as sample. So, when the same research was conducted in another school it was still possible that different result will be gained. 2. Relative lack of experience and knowledge from the researcher, so the implementation process of this research was less smooth. But the researcher tried as good as possible to done this study accordance with guidance from advisor.

Considering all those limitations, there was a need to do more research about teaching narrative text writing using the same or different medium. So, the more optimal result will be gained.