

CHAPTER IV

FINDING RESEARCH AND DISCUSSIONS

In this chapter, the data of this research were results of the data analysis were presented. The findings of the research were obtained through, the process of collecting the subject data in writing narrative text. In collecting the data, the researcher findings of the research focusing on pre-test and post-test scores analysis of both experimental and control class to show the effectiveness of Project-Based Learning method in teaching writing narrative text.

4.1 Data Analysis

4.1.1 Test

The test was conducted for both experimental and control groups. The purpose of the test was to know the differences before and after the researcher taught the students' by using Project-Based Learning and conventional method. The test consists of pre-test and post-test which was done after treatments.

a. Pre-test

This research was followed by two classes, the first is by 25 students of class XI Textile as the experimental class and the second from 25 students of class XI Animasi as the control class. Students' are given topics to make stories about narrative text.

b. Treatment

After conducting pre-test, both of two class got treatment. Researcher was given twice treatment for experimental and control class. In experimental group, the researcher used Project-Based Learning method and control class using conventional class.

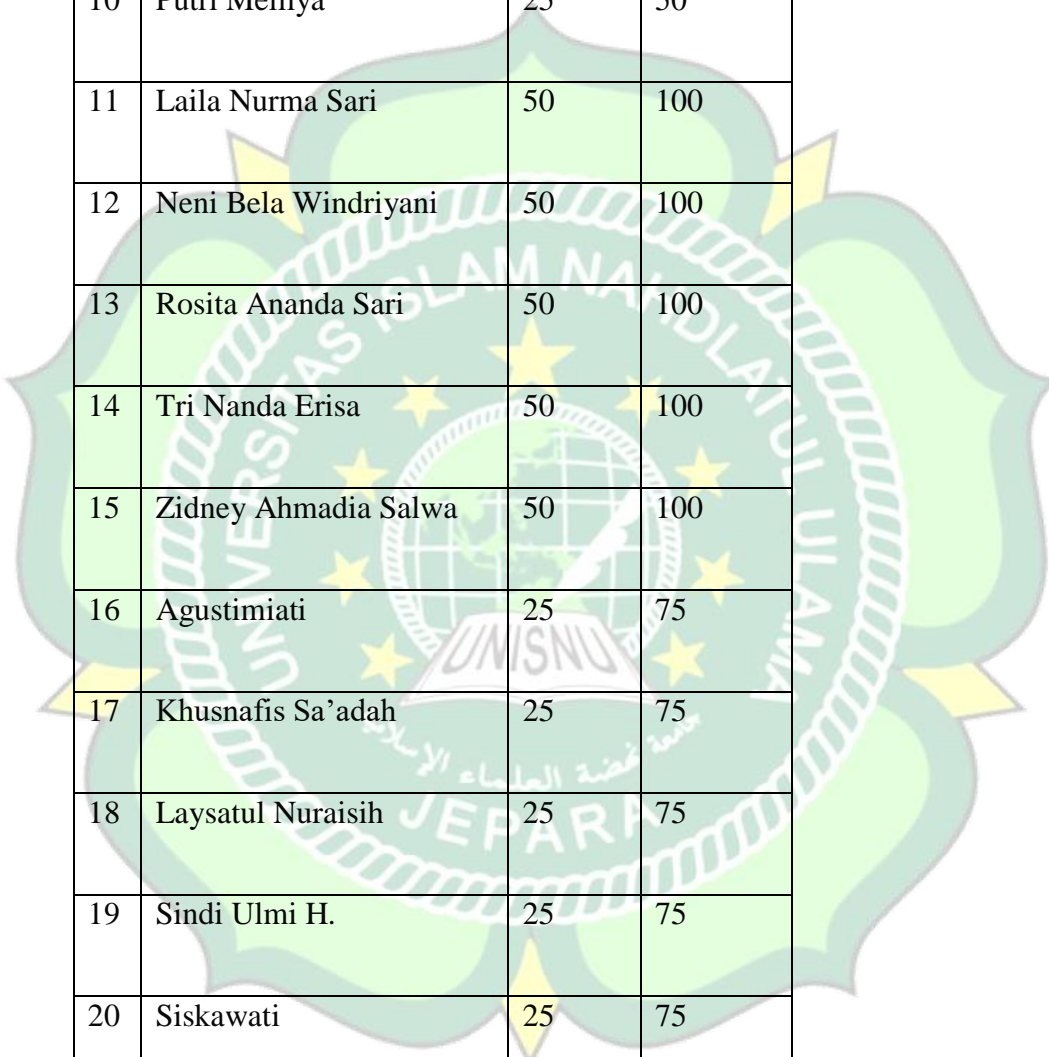
c. Post-test

Post-test was conducted after the students got treatment. Two classes divide into 2 groups, the first is by 25 students of class XI Textile as the experimental class and the second from 25 students of class XI Animasi as the control class. Students' are given topics to make stories about narrative text.

4.2 Arithmetical Calculation

4.2.1 The score of experimental group (XI- Textile)

No	Name	Pre-test Score	Post-test Score
1	Desika Stevianiken	50	75
2	Disti	50	75
3	Fitriyatul Maulida	50	75
4	Minarni Astuti	50	75
5	Ruli Nur Azizah	50	75
6	Dian Ardianti	25	50

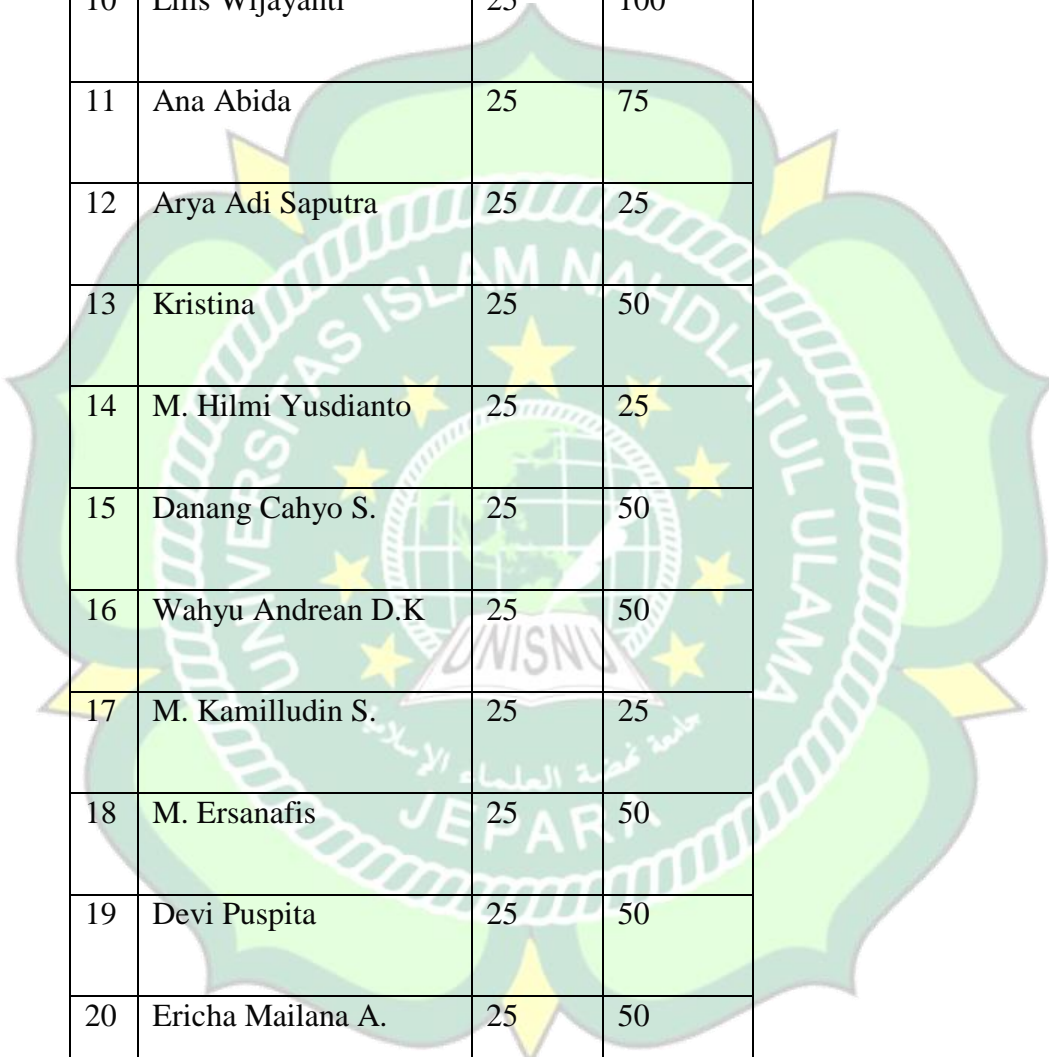


7	Fadya Nur Indah	25	50
8	Mutiara N.R	25	50
9	Pramesti A.W	25	50
10	Putri Meiliya	25	50
11	Laila Nurma Sari	50	100
12	Neni Bela Windriyani	50	100
13	Rosita Ananda Sari	50	100
14	Tri Nanda Erisa	50	100
15	Zidney Ahmadia Salwa	50	100
16	Agustimiati	25	75
17	Khusnafis Sa'adah	25	75
18	Laysatul Nuraisih	25	75
19	Sindi Ulmi H.	25	75
20	Siskawati	25	75
21	Apriliana Fatika S.	25	75
22	Dian Indah S.	25	75

23	Mustiati	25	75
24	Nurokhmah	25	75
25	Nur Azizah	25	75
	Total	875	1875
	Mean	35	75

4.2.2 The score of Control group (XI- Animasi)

No	Name	Pre-test Score	Post-test Score
1	Wahyu Eko D.	25	50
2	Kharisma Diena K.	25	75
3	Umi Alfrida	25	75
4	Aji Nurulyanto	25	25
5	M. Eka Saputra	25	25
6	Hilda Ardian W.	25	25



7	Noviyanti noor R.	25	75
8	Sekar Arum	25	50
9	Anjab Bahy A.	25	25
10	Lilis Wijayanti	25	100
11	Ana Abida	25	75
12	Arya Adi Saputra	25	25
13	Kristina	25	50
14	M. Hilmi Yusdianto	25	25
15	Danang Cahyo S.	25	50
16	Wahyu Andrean D.K	25	50
17	M. Kamilludin S.	25	25
18	M. Ersanafis	25	50
19	Devi Puspita	25	50
20	Ericha Mailana A.	25	50
21	Sultan Alif A.	25	50
22	Bandi Solihin	25	50

23	M. Bayu Laksono	25	25
24	Gaiang Putra R	25	75
25	M. Risky S	25	25
	Total	625	1200
	Mean	25	48

4.2.3 Analysis of Data

After get the score data of pre-test and post-test, the data can be analyzed the data to find out mean, deviation standard, and T-test calculation. Below are the results:

No	Post-test Experimental	Post-test Control	X-MX	Y-MY	(X-MX) ²	(X-MY) ²
1	75	50	0	2	0	4
2	75	75	0	27	0	729
3	75	75	0	27	0	729
4	75	25	0	-23	0	529
5	75	25	0	-23	0	529
6	50	25	-25	-23	625	529
7	50	75	-25	27	625	729
8	50	50	-25	2	625	4
9	50	25	-25	-23	625	529
10	50	100	-25	52	625	2704
11	100	75	25	27	625	729
12	100	25	25	-23	625	529
13	100	50	25	2	625	4
14	100	25	25	-23	625	529

15	100	50	25	2	625	4
16	75	50	0	2	0	4
17	75	25	0	-23	0	529
18	75	50	0	2	0	4
19	75	50	0	2	0	4
20	75	50	0	2	0	4
21	75	50	0	2	0	4
22	75	50	0	2	0	4
23	75	25	0	-23	0	529
24	75	75	0	27	0	729
25	75	25	0	-23	0	529
Σ	1875	1200	0	0	6250	11150
Mean	75	48	0	0	250	446

a. Mean

1. Experimental Class

a) Post-test

$$M_1 = \frac{1875}{25} = 75$$

2. Control Class

a) Post-test

$$M_2 = \frac{1200}{25} = 48$$

b. Deviation Standard

1. Experimental Class

$$SD_1 = \sqrt{\frac{\Sigma X^2}{N}}$$

$$SD_1 = \sqrt{\frac{6250}{25}}$$

$$SD_1 = \sqrt{250}$$

$$SD_1 = 15,81$$

2. Control Class

$$SD_2 = \sqrt{\frac{\Sigma Y^2}{N}}$$

$$SD_2 = \sqrt{\frac{11150}{25}}$$

$$SD_2 = \sqrt{446}$$

$$SD_2 = 21,11$$

c. Determining Standard Error Mean of variable X

$$SE_{M1} = \frac{SD1}{\sqrt{N_1 - 1}}$$

$$SE_{M1} = \frac{15,81}{\sqrt{24}}$$

$$SE_{M1} = \frac{15,81}{4,89}$$

$$SE_{M1} = 3,23$$

d. Determining Standart Error Mean of variable Y

$$SE_{M2} = \frac{SD1}{\sqrt{N_1 - 1}}$$

$$SE_{M2} = \frac{21,11}{\sqrt{24}}$$

$$SE_{M2} = \frac{21,11}{4,89}$$

$$SE_{M_2} = 4,31$$

e. Determining Standart Error of different Mean of Variable X
and Mean of Variable Y

$$SE_{M_1-M_2} = \sqrt{SE_{M_1}^2 + SE_{M_2}^2}$$

$$SE_{M_1-M_2} = \sqrt{3,23^2 + 4,31^2}$$

$$SE_{M_1-M_2} = \sqrt{10,43 + 18,57}$$

$$SE_{M_1-M_2} = \sqrt{29}$$

$$SE_{M_1-M_2} = 5,38$$

f. Determining To

$$T_o = \frac{M_1 - M_2}{SE_{M_1-M_2}}$$

$$T_o = \frac{75 - 48}{5,38}$$

$$T_o = \frac{27}{5,38}$$

$$T_o = 5,018$$

d. Calculation of df

$$Df = n-2$$

$$Df = 50-2$$

$$Df = 48$$

With df = 48 the value with level of significant 5% is 2,011.

4.3 Discussions

After getting the data which had been collected, the research analyzed data and got the result. In the first meeting, the researcher gave a pre-test before students' got the material about narrative text. Most of students' have difficulty to write and do get the idea.

In the second and third meeting, researcher conducted the learning process. The researcher taught experimental class by using Project-Based Learning, the students' was interested and enthusiasm to follow the learning process. The control class is different with experimental class, control class without using Project-Based Learning the students' got bored and they don't care about the material.

In fourth meeting or last meeting, the researcher gave post-test of both classes. The students' of experimental class to make a narrative text were easy more than control group. It happened because experimental class can be discussion with their friends to get the idea and developed idea in order to deliver produces the paper. So that, experimental class got higher score than control group in post-test. The result of the research can be seen as follow:

No	Results	Experimental Class	Control Class
1	Means of:		

	a. Post-test	75,00	48,00
2	Standard Deviation	15,81	21,11
3	T-test	5,018	

Based on the table above, there have significant difference in pre-test score of both groups. After the researcher give treatment twice to experimental and control class, it can be seen that there have high significant improvement from post-test experimental class to post-test control class, mean of experimental class is 75,00 and control class is 48,00. It can prove, that using Project-Based Learning to improve students' to write narrative text. On the other hand, control class there is no significant to improve students to write narrative text. It can prove that using conventional method in learning process have not good results.

From the T-test result, that reseacher has been the calculation to get score is 5,018. It means that there is significant difference between two classes. The degree of freedom (df) is 48 and the critical value used the significant 5% is 2,011 and the t_o is 5,018. Result of the comparison between $t_o > t$ table is 5,018 $>$ 2,011. Therefore, the null hypothesis (H_o) is rejected. Then, the alternative hypothesis (H_a) is accepted that by using Project-Based Learning is effective in teaching writing narrative text.

Based on the explanation above, researcher got the result from the table. The research implemented for eleventh grade in SMKN 2 Jepara, it can be concluded that teaching writing narrative text by using Project-Based Learning is more effective to teaching class than without Project-Based Learning.