

## CHAPTER IV

### RESEARCH FINDING AND DISCUSSION

#### 4.1 Finding

##### 4.1.1 Try-out Analysis

The try-out was meant to examine the validity and the reliability of the instrument before it was used as the pre-test and post-test. This test was conducted on August 26, 2018. Try-out test was conducted for XI-A class. There were twenty one students as a respondent. The try-out test is available in Appendix 2.

##### 1. Validity

The researcher used fifty item numbers in reading test. From the try-out test that was conducted, it was obtained that item numbers were valid and invalid. The item test is said to be valid if the result  $r_{xy}$  is greater than  $r_{table}$ . The data was calculated by using product moment and the result showed that the index validity of item number 2 was 0,529. Then the writer consulted the table of r with  $N = 21$  and the significance level 5% in which then  $r_{table}$  is 0,433. The item number 2 of the tryout test was valid since it is  $r_{xy}$  was higher than  $r_{table}$ . The analysis of the other items was presented in the following table:

**Table 4.4**

The Validity of the Try-out Test

<b>Criteria</b>	<b>Number of items</b>	<b>The Total Number</b>
Valid	1, 2, 3, 4, 6, 11, 12, 14, 15, 17, 18, 19, 20, 26, 27, 29, 30, 42, 43, 44, 45, 46, 47, 50	24
Invalid	5, 7, 8, 9, 10, 13, 16, 21, 22, 23, 24, 25, 28, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 48, 49	26

According to the text above, it can be seen that the try-out instrument had 24 valid and 26 invalid items. The complete result of the try-out analysis can be seen in Appendix 3.

## 2. Reliability

After examining the validity of the item instrument, the next analysis was to test the reliability of the instrument. The test is reliable if the result of  $r_{11}$  is greater than  $r_{table}$ . In this computation, the result showed that the  $r_{11}$  was 0,691 for  $\alpha = 5\%$ ,  $N = 21$ , and the  $r_{table}$  was 0,433. The computation of reliability can be seen in Appendix 5.

### 4.1.2 Pre-test Analysis

The pre-test was conducted on August 30, 2018 for the control class and the experimental class. This pre-test was held in the first meeting and was conducted to measure the capacity of their

knowledge of comprehend in reading test before receive a treatment. The students were asked to answer 25 questions of multiple choice test in 40 minutes. The instrument can be seen in Appendix 8.

**1. The Data Pre-test of Students Who Taught Using Think-Pair-Share Technique and Who Taught without Using Think-Pair-Share Technique**

**Table 4.5**

Pre-test Score of Experimental and Control Class

No	Code	Pre-test Result	No	Code	Pre-test Result
1	E-01	68	1	C-01	36
2	E-02	56	2	C-02	52
3	E-03	76	3	C-03	40
4	E-04	80	4	C-04	54
5	E-05	32	5	C-05	36
6	E-06	56	6	C-06	48
7	E-07	64	7	C-07	60
8	E-08	56	8	C-08	52
9	E-09	32	9	C-09	30
10	E-10	64	10	C-10	64
<b>SUM</b>		584	<b>SUM</b>		470
<b>MEAN</b>		58.4	<b>MEAN</b>		47

**4.1.3 Treatment Activities**

Treatment was held after giving a pre-test to the control and experimental class. Each class was given the treatment in two meetings. In the experimental class, the treatment was given by

using think-pair-share technique. For the control class, the treatment was given by using traditional method. The schedule of the research can be seen in the table:

**Table 4.6**

The Schedule of the Research

<b>Date</b>	<b>Experimental Class (XI A)</b>	<b>Date</b>	<b>Control Class (XI B)</b>
August 30, 2018	Pre-test for experimental class	August 30, 2018	Pre-test for control class
September 2, 2018	First treatment by using think-pair-share technique	September 1, 2018	First treatment by using traditional method
September 6, 2018	Second treatment by using think-pair-share technique	September 5, 2018	Second treatment by using traditional method
September 9, 2018	Post-test for experimental class	September 8, 2018	Post-test for control class

During doing the research, the writer gave different treatments to the experimental class and the control class.

**Table 4.7**

## The Activity of the Research

Activities	Experimental Class	Control Class
<b>Pre-test</b>	Teacher gave the reading test that consist of 25 questions	Teacher gave the reading test that consist of 25 questions
<b>First Treatment</b>	<ul style="list-style-type: none"> <li>▪ Teacher showed a picture of Giraffe.</li> <li>▪ Teacher explained about the report text.</li> <li>▪ The students read the report text.</li> <li>▪ The students discuss with their pair (think-pair-share technique).</li> <li>▪ The students share their ideas to the other pairs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Teacher showed a picture of Giraffe.</li> <li>▪ The students read the report text.</li> <li>▪ The students analyze the text by themselves.</li> </ul>
<b>Second Treatment</b>	<ul style="list-style-type: none"> <li>▪ Teacher reviewed</li> </ul>	<ul style="list-style-type: none"> <li>▪ Teacher reviewed</li> </ul>

	<p>the material.</p> <ul style="list-style-type: none"> <li>▪ Teacher showed a picture of Dolphin.</li> <li>▪ The students comprehend the report text.</li> <li>▪ The students discuss with their pair (think-pair-share technique).</li> <li>▪ The students share their ideas in front of the class.</li> </ul>	<p>the material.</p> <ul style="list-style-type: none"> <li>▪ Teacher showed a picture of Dolphin.</li> <li>▪ The students comprehend the report text.</li> <li>▪ The students analyze the text by themselves.</li> <li>▪ Answer the question based on the text.</li> </ul>
<b>Post-test</b>	<p>The teacher gave the reading comprehension test that consist of 25 questions. The questions are same with the pre-test's question.</p>	<p>The teacher gave the reading comprehension test that consist of 25 questions. The questions are same with the pre-test's question.</p>

#### 4.1.4 Post-test Analysis

The post-test was held after giving the treatments. The post-test for experimental class was held on September 9, 2018 and the post-test for control class was on September 8, 2018. The post-

test was consist of 25 questions in multiple choice. The writer used the same question as the pre-test. The instrument can be seen in Appendix 8.

**1. The Data Post-test of Students Who Taught Using Think-Pair-Share Technique and Who Taught without Using Think-Pair-Share Technique**

**Table 4.8**

Post-test Score of Experimental and Control Class

No	Code	Post-test Result	No	Code	Post-test Result
1	E-01	76	1	C-01	64
2	E-02	84	2	C-02	56
3	E-03	96	3	C-03	52
4	E-04	84	4	C-04	60
5	E-05	96	5	C-05	52
6	E-06	64	6	C-06	48
7	E-07	68	7	C-07	36
8	E-08	80	8	C-08	56
9	E-09	84	9	C-09	40
10	E-10	92	10	C-10	50
<b>SUM</b>		824	<b>SUM</b>		514
<b>MEAN</b>		82.4	<b>MEAN</b>		51.4

**4.1.5 Description of Data**

The writer finished the research about the effect of using think-pair-share technique in improving students' reading comprehension. The writer took scores from the students from

both of experimental class and control class randomly. The report of students' score in pre-test and post-test can be seen in the table below:

**Table 4.9**

The Students' Score of Experimental Class

(Using Think-Pair-Share Technique)

<b>Students</b>	<b>Pre-test Score</b>	<b>Post-test Score</b>
1	68	76
2	56	84
3	76	96
4	80	84
5	32	96
6	56	64
7	64	68
8	56	80
9	32	84
10	64	92
<b>SUM</b>	<b>584</b>	<b>824</b>
<b>MEAN</b>	<b>58.4</b>	<b>82.4</b>

**Table 4.10**

The Students' Score of Control Class  
(Using Traditional Technique)

<b>Students</b>	<b>Pre-test Score</b>	<b>Post-test Score</b>
1	36	64
2	52	56
3	40	52
4	52	60
5	36	52
6	48	48
7	60	36
8	52	56
9	30	40
10	64	50
<b>SUM</b>	<b>470</b>	<b>514</b>
<b>MEAN</b>	<b>47</b>	<b>51.4</b>

#### 4.1.6 Analysis of Data

In analyzing the data, the writer used the comparative technique where the writer compared the experiment and control class. In order to know whether any significant difference between two variables, the writer used t-test. The first step was calculating the mean of each group. Then, found the standard deviation of each group and standard error of the mean from each group. Next, the writer calculated the standard error of difference between the means. The table was also used to analyze t-test formula.

**Table 4.11**

The Comparison of Students' Result in Post-test of Experimental  
and Control Class

Students X	Students Y	X	Y	X	y	x.x	y.y
1	1	76	64	-6.4	12.6	40.96	158.76
2	2	84	56	84	56	7056	3136
3	3	96	52	96	52	9216	2704
4	4	84	60	84	60	7056	3600
5	5	96	52	96	52	9216	2704
6	6	64	48	64	48	4096	2304
7	7	68	36	68	36	4624	1296
8	8	80	56	80	56	6400	3136
9	9	84	40	84	40	7056	1600
10	10	92	50	92	50	8464	2500
<b>N1=10</b>	<b>N2=10</b>	824	514	741.6	462.6	63225	23138.8
<b>Mean</b>		<b>82.4</b>	<b>51.4</b>	<b>74.16</b>	<b>46.26</b>	<b>6322.5</b>	<b>2313.88</b>

From the table above, it was known the difference result between pre-test and post-test of each group. After that, the writer calculated the result of t-test. The steps to calculate the test are:

- a. Determining the average score of experimental class.

$$\begin{aligned}
 X_1 &= \frac{\sum X_1}{n_1} \\
 &= \frac{824}{10} \\
 &= 82.4
 \end{aligned}$$

- b. Determining the average score of control class.

$$\begin{aligned} X_2 &= \frac{\sum X_2}{n_2} \\ &= \frac{514}{10} \\ &= 51.4 \end{aligned}$$

- c. Determining the standard deviation of experimental class.

$$\begin{aligned} SS_1 &= \sum X_1^2 - \frac{(\sum X_1)^2}{n_1} \\ &= \sum 63225 - \frac{(824)^2}{10} \\ &= -4672.6 \end{aligned}$$

- d. Determining the standard deviation of control class.

$$\begin{aligned} SS_2 &= \sum X_2^2 - \frac{(\sum X_2)^2}{n_2} \\ &= \sum 23138.8 - \frac{(514)^2}{10} \\ &= -3280.8 \end{aligned}$$

- e. Finding the t-value using t-test

$$\begin{aligned} t &= \frac{X_1 - X_2}{\sqrt{\left(\frac{SS_1 + SS_2}{n_1 + n_2 - 2}\right) \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}} \\ &= \frac{82.4 - 51.4}{\sqrt{\left(\frac{-4672.6 + (-3280.8)}{10 + 10 - 2}\right) \left(\frac{1}{10} + \frac{1}{10}\right)}} \\ &= \frac{31}{\sqrt{\left(\frac{-1391.8}{18}\right) (0.2)}} \\ &= \frac{31}{\sqrt{-15.4644}} \end{aligned}$$

$$= \frac{31}{3.932}$$

$$= 7.094$$

#### 4.1.7 T-test Statistical Analysis

The result of t-test became proof that there was significant difference of pre-test and post-test mean in each class. The computation is as follow:

Students	N	Mean	Std. Deviation	Std. Error Mean
Post-test Experimental Class	10	82.4000	10.86483	3.43576
Control Class	10	51.4000	8.54010	2.70062

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Post-test Equal variances assumed	.574	.458	7.094	18	.000	31.00000	4.37010	21.81876	40.18124
Post-test Equal variances not assumed			7.094	17.049	.000	31.00000	4.37010	21.78190	40.21810

After got t-value result, then the writer would be conducted to the critical score of  $t_{table}$  to check the significant difference. The value of significance level was 1.734(5%) and 2.552 (1%). The result showed that t-value (7.094) was higher than t-table. It could be concluded that there

was significant difference between the experimental class and the control class. It showed that experimental class was better than control class after getting treatments by using think-pair-share technique. According to the result, the writer concludes that  $H_a$  is accepted.

#### **4.2 Discussion of the Research Findings**

This study is meant to answer the problem of the research. It was to examine the effectiveness of think-pair-share technique in improving reading comprehension at eleventh grade students of MA Al-faizin Guyangan in the academic year of 2018/2019. The writer took two classes as an experimental class and control class. The experimental class was XI-A class that consists of 21 students. While the control class was XI-B class, it consists of 24 students. The writer gave a different treatment in both classes. The writer gave treatment in experimental class by using think-pair-share in teaching learning process. Meanwhile, in control class the students were taught without think-pair-share technique. The average score for experimental class was 58.4 (pre-test) and 82.4 (post-test). The average score for control class was 47 (pre-test) and 51.4 (post-test). The following table shows the pre-test and post-test of the students' average score.

**Table 4.12**

The Pre-test and Post-test Students' Average Score of the Experimental and Control Class

No	Class	The Average Percentage of Pre-test	The Average Percentage of Post-test
1	Experimental	58.4	82.4
2	Control	47	51.4

Based on the result above, the mean score of experimental class was higher than the control class after getting the treatment. The post-test mean score of experimental class was 82.4 and the control class was 51.4. It can be concluded that students in experimental class have higher score in reading comprehension after getting treatment by using think-pair-share technique than the control class who taught without using think-pair-share technique.

Another result of the computation showed that the result of t-test is 7.094, then the writer uses degree of significant 5% and 1%, the value of the significant are 1.734 and 2.552. It means that the  $t\text{-test} > t\text{-table}$ . Then the writer conclude that there is significant difference between the students in reading comprehension. Therefore, the hypothesis stating that "Think-Pair-Share technique is effective in improving students' reading comprehension at the eleventh grade students of MA Al-Faizin Guyangan in the academic year of 2018/2019" is accepted.