#### **CHAPTER IV**

### FINDING AND DISCUSSION

This chapter presented four topics related to research finding that were the description of data, time implementation, hypothesis testing, and discussion.

## A. The Description of Data

This research was conducted at MAN 1 Trenggalek with population were all of the first grade students of MAN 1 Trenggalek which consist of seven classes for IPA (X MIPA 1, X MIPA 2, X MIPA 3, X MIPA 4, X MIPA 5, X MIPA 6, X MIPA 7), three classes for IPS (X IPS 1, X IPS 2, X IPS 3), and two classes for Agama (X IIK 1, X IIK 2). The total population are 389 students. The sample of this research was X MIPA 5 class which consisted of 35 students, 5 male and 30 female students as experiment and control class because the researcher was conducted pre-experimental study. This research used Question Answer Relationship Strategy to teach narrative text. This research was conducted on March 23<sup>rd</sup>, 2019 until April 23<sup>rd</sup>, 2019. The researcher used test to get the data, those were pre-test and post-test.

### 1. The Data Before Using Question Answer Relationship Strategy

In this study, the researcher presented the data of students' score in reading narrative text test, pretest and posttest. Here, the researcher wanted to know the effectiveness of using Question Answer Relationship Strategy toward students' reading comprehension of narrative text. The effectiveness could be seen from the significant different score of students' score in narrative text test before and after being taught by using Question Answer Relationship Strategy. Here, the

Question Answer Relationship Strategy and post-test. Before and after giving treatments the researcher did pre-test and post-test. Pre-test and post-test were done to obtain students' score narrative text test.

The scores were divided into five criterions. They were excellent, very good, good, low, and failed. Here the table below:

**Table 4.1 The Score's Criteria** 

No	Interval Class	Criteria
1.	85-100	Excellent
2.	71-84	Very Good
3.	60-70	Good
4.	40-59	Low
5.	0-39	Failed

The students were categorized into excellent score if they got 85-100 score which meant that they were able to do test very well. The students categorized into good score if they got 71-84 score which meant that they had a little doubt. In this category, they were able to do test well. The students categorized into average score if they got 60-70 score which meant that they were able to do test pretty well. The students categorized into poor score if they got 0-59 score which meant that they just did the test. The last criteria were the students categorized into very poor score if they got 0-39 score which meant that they could not do the test well.

# 2. The Data of Pre-test

After conducting pretest, the researcher obtained the data. The data were as follows:

**Table 4.2 Students' score of Pre Test** 

No	Name	Pre-test
1	A.E.P	75
2	A.P.W	75
3	A.N.A	70
4	A.B.M	60
5	A.R.N	70
6	B.N.N	75
7	B.T.N	75
8	B.M	50
9	D.E.F	60
10	D.N	65
11	H.R.S	65
12	I.L.Z	70
13	I.U.A	75
14	J.K	65
15	K.N.A	60
16	L.O	55
17	L.I.P	65
18	L.S.A	75
19	L.A.A	70
20	M.M	55
21	M.M	65
22	M.N.L	55
23	M.M.R	75
24	N.S	55
25	N.Y.S	65
26	N.U.N	75
27	R.D.A.P	55
28	R.E.R.T.R	60
29	S.A.D	70
30	S.W.L	65
31	S.N	60
32	W	65
33	Y.P	65
34	Y.K.W	70
35	Z.R	70

The researcher used SPSS 18.0 version to know the descriptive statistic and the percentage of students' score of pre-test. The percentage was divided into five criterions: excellent, good, average, poor, and very poor (see table 4.1) the result of the calculation as follows:

**Table 4.3 Descriptive Statistic of Pre-test** 

#### **Statistics**

Pretest

N	Valid	35
	Missing	0
Mean		65,71
Median		65,00
Mode		65
Std. De	viation	7,290

Based on the table 4.3 above, it showed that the mode was 65, the median 65.00, standard deviation 7.290, and the mean was 65.71.

Then, the number of score appeared in pre-test was presented in the frequency distribution as below:

Table 4.4 The Frequency of Students' Score of Pre Test

Pretest

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	50	1	2,9	2,9	2,9
	55	5	14,3	14,3	17,1
	60	5	14,3	14,3	31,4
	65	9	25,7	25,7	57,1
	70	7	20,0	20,0	77,1
	75	8	22,9	22,9	100,0
	Total	35	100,0	100,0	

From the table 4.4, the frequency of pretest after being distributed there were no students who got score between 0-39 which meant that the students' score in narrative text was failed, there were 6 students who got score between 40-59 which meant that the students' score in narrative text was low, there were 21 students who got score between 60-70 which meant that the students' score in narrative text was good, there were 8 students who got score between 71- 84 which meant that the students' score in narrative text was very good, there were no students who got score between 85-100 which meant that on the students' score in narrative text was excellent.

# 3. The Data of Post-test

After conducting post-test, the researcher obtained the data. The data were as follows:

**Table 4.5 Students' Score of Post Tes** 

No	Name	Post-test
1	A.E.P	75
2	A.P.W	80
3	A.N.A	75
4	A.B.M	65
5	A.R.N	70
6	B.N.N	80
7	B.T.N	75
8	B.M	60
9	D.E.F	70
10	D.N	75
11	H.R.S	75
12	I.L.Z	85
13	I.U.A	75
14	J.K	70
15	K.N.A	75
16	L.O	65
17	L.I.P	75
18	L.S.A	80
19	L.A.A	75
20	M.M	65
21	M.M	80
22	M.N.L	70
23	M.M.R	80
24	N.S	70
25	N.Y.S	75
26	N.U.N	75
27	R.D.A.P	70
28	R.E.R.T.R	70
29	S.A.D	70
30	S.W.L	75
31	S.N	65
32	W	80
33	Y.P	70
34	Y.K.W	75
35	Z.R	70

The researcher used SPSS 18.0 version to know he descriptive statistic and the percentage of students' score of post-test. The percentage was divided into five criterions: excellent, good, average, poor, and very poor (see table 4.1) the result of the calculation as follows:

Table 4.6 Descriptive Statistic of Post-test

Statistics

Posttest

N '	Valid	35
ı	Missing	0
Mean		73,14
Median		75,00
Mode		75
Std. Devi	ation	5,435

Based on the table 4.6 above, it showed that the mode was 75, the median 75.00, standard deviation 5.435, and the mean was 73.14.

While the number of score appeared in post-test was presented in the frequency distribution as below:

**Table 4.7 The Frequency of Students' Score of Post Test** 

#### **Posttest**

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	60	1	2,9	2,9	2,9
	65	4	11,4	11,4	14,3
	70	10	28,6	28,6	42,9
	75	13	37,1	37,1	80,0
	80	6	17,1	17,1	97,1
	85	1	2,9	2,9	100,0
	Total	35	100,0	100,0	

From the table 4.7, the frequency of pretest after being distributed there were no students who got score between 0-39 which meant that the students' score in narrative text was failed, there were no students who got score between 40-59 which meant that the students' score in narrative text was low, there were 15 students who got score between 60-70 which meant that the students' score in narrative text was good, there were 19 students who got score between 71-84 which meant that the students' score in narrative text was very good, there were 1 students who got score between 85-100 which meant that the students' score in narrative text was excellent.

**Table 4.8 Descriptive Statistic of Pre Test and Post Test** 

Statistics			
Pre-test			
N	Valid	35	
	Missing	0	
Mean	Mean		
Median		65.00	
Mode		65	
Std. De	viation	7.290	

	Statistics			
Post-tes	st			
N	Valid	35		
	Missing	0		
Mean	Mean			
Median		75.00		
Mode		75		
Std. De	viation	5.435		

The table above describe the central tendency of students' in pretest score. There were 35 students as participant in pre test group. In column mean it shows 65.71 it means that average of score from total amount students was 65.71. The median score was 65, median is the halfway point of total amount students scores. There was 65 for mode, it means the most frequent score from total students was 68. The standart deviation of score wass 7.290. the standart deviation is the deviation of total score it show how the score were spread.

Moreover, table above describe the central tendency of students' in posttest score. There were 35 students as participant in posttest group. In column mean it shows 73.14 it means that average of score from total amount students was 73.14. The median score wass 75, median is the halfway point of total amount students scores. There was 75 for mode, it means the most frequent score from total students was 75. The standart

deviation of score is 5.435. the standart deviation is the deviation of total score it show how the score were spread.

Two tables above are describing about pre-test and post-test result. The central tendency of pretest are low and the spread are large. Moreover, the central tendency of posttest are high and the spread large. So, central tendency of post-test higher than pre-test and the spread also large.

### **B.** Time Implementation

This research was conducted on March 23<sup>rd</sup>, 2019 until 23 April 2019. On March 23<sup>rd</sup>, 2019, the researcher had an interview with one of English teacher and two students of MAN 1 Trenggalek to know and identify the problems faced by them in teaching and learning English. One week later on March 28th, 2019 the researcher conducted try out in X MIPA 6 class that consisted of 34 students. After that the researcher computed the result of try out to calculate the validity of the test. When the test were valid, the researcher conducted pre-test at X MIPA 5 class on March 30th, 2019. The researcher conducted research while four meetings. The first meeting was doing pretest. The second meeting was conducted to give the first treatment on April 6<sup>th</sup>, 2019 to X MIPA 5 class, the researcher explained about using Question Answer Relationship strategy in reading narrative text. The third meeting was used to give the second treatment on April 13<sup>th</sup>, 2019, the researcher given the reading test and the students were asked to answer the test using Question Answer Relationship Strategy. After all the treatments were done, the researcher conducted post-test on March 20<sup>th,</sup> 2019 to see the score of students is there any differences between pre-test's score and post-test's score. If the posttest's score was higher than pre-test's score so the Question Answer Strategy was effective to teach narrative text to the first grade students of senior high school. After the researcher computed the posttest's score, it was higher than pre-test's score. So this strategy was effective to teach narrative text.

## C. Analysis Inferential Statistic

After the data were collected, the hypothesis testing was needed. Before being tested, a requirement test was conducted to find out whether the strategy it could be used or not, while the requirements were:

### 1. Instrument Testing

### a. Validity Testing

In validity testing the researcher used the expert validity to see whether the test were valid or not. The expert validity was the English teacher of MAN 1 Trenggalek, Mrs. Deti Sulaibah, S.Pd. According to the expert validity, the test was feasible to use but the question still has to be revised in the multiple-choice letter section to use capital letters.

Table 4.9 The Data of Pre-tests' Try out

No	Name	Try out's Score
1	A.W.K.N	15
2	A.P.S	90
3	A.S	80
4	A.E.P	95
5	A.Z.R	85
6	A.R.S	10
7	A.N.I	80
8	A.R.A	90
9	В	75

		1
10	D.Y.R	85
11	D.K.W	80
12	D.A.K	65
13	E.N	70
14	L.D.N	75
15	M.N.A.S	70
16	M.S	25
17	N.N.K	60
18	N.N.S	50
19	N.A.W	40
20	N.P.K	75
21	N.M	35
22	N.L.R	90
23	O.R.F.C	95
24	P.N.H	65
25	R.W	65
26	R.D.H	15
27	R.S.A	20
28	S.S	15
29	T.K	15
30	T.D.A	70
31	V.A.O	70
32	W.P.J	65
33	Y.S	70
34	Y.W	70

From the table 4.9 above, it showed that the minimum score of try out was 10, and the maximum score of try out was 95. The respondent of try out's class was X MIPA 6 which consisted of 34 students.

The following were the results of calculation of validity of the test that could be seen in table 4.9 below:

Table 4.10 The Result of Validity Testing of Pre-tests' Try Out

No	Test	Pearson	$r_{\text{table}}$ (N=28)	Explanation
	items	Correlation	significance	
			level 5%	
1	Item 1	0.462	0.374	Valid
2	Item 2	0.466	0.374	Valid
3	Item 3	0.681	0.374	Valid
4	Item 4	0.615	0.374	Valid
5	Item 5	0.361	0.374	Valid
6	Item 6	0.416	0.374	Valid
7	Item 7	0.392	0.374	Valid
8	Item 8	0.341	0.374	Valid
9	Item 9	0.794	0.374	Valid
10	Item 10	0.774	0.374	Valid
11	Item 11	0.713	0.374	Valid
12	Item 12	0.578	0.374	Valid
13	Item 13	0.641	0.374	Valid
14	Item 14	0.407	0.374	Valid
15	Item 15	0.709	0.374	Valid
16	Item 16	0.556	0.374	Valid
17	Item 17	0.677	0.374	Valid
18	Item 18	0.709	0.374	Valid
19	Item 19	0.655	0.374	Valid
20	Item 20	0.511	0.374	Valid

From table 4.10 showed that 20 test were valid, with compare the  $r_{\text{count}}$  (Pearson Correlation) was higher than  $r_{table}$  with the number of respondents 34 students and the significance level 5% was 0.374. So, all of the items were valid.

## b. Reliability Testing

Reliability test was used to find out whether the items tested were reliable in giving the results of students learning measurement or not. To test the reliability of instrument, the researcher used the *Alpha Cronbach* Method.

Table 4. 11 The Result Reliability Testing of Pre-test

#### **Case Processing Summary**

		N	%
Cases	Valid	34	100,0
	Excluded <sup>a</sup>	0	,0
	Total	34	100,0

a. Listwise deletion based on all variables in the procedure.

#### **Reliability Statistics**

Cronbach's	
Alpha	N of Items
,748	21

Based on table 4.11 *reliability Statisctics*, the result of *Cronbach's Alpha* of pre-test was 0.748. So, all of the items of test was reliable.

## 2. Requirement Testing

## a. Homogeneity Testing

Homogeneity testing was used to test whether the group used in the research had the same variance or not. Here, the researcher used one class because the researcher used pre experimental study. So the researcher used pre-test's and post-test's score to see the homogeneity. To test the homogeneity the researcher used *SPSS Statisctic 18*.

**Table 4.12 The Result of Homogeneity Testing** 

#### **Test of Homogeneity of Variances**

Nilai

Levene Statistic	df1	df2	Sig.	
3,222	1	68	,077	

From to table 4.12 above the result of homogeneity testing, the significance was 0.077 and it was higher than 0.05, so it could be concluded that the data distribution was homogeneous.

# b. Normality Testing

In normality testing, the researcher used pre-test and post-test score.

**Table 4.13 The Student's Score** 

No	Nama Siswa	Pre-Test	Post-Test		
		Score	Score		
1	A.E.P	75	75		
2	A.P.W	75	80		
3	A.N.A	70	75		
4	A.B.M	60	65		
5	A.R.N	70	70		
6	B.N.N	75	80		
7	B.T.N	75	75		
8	B.M	50	60		
9	D.E.F	60	70		
10	D.N	65	75		
11	H.R.S	65	75		
12	I.L.Z	70	85		
13	I.U.A	75	75		
14	J.K	65	70		
15	K.N.A	60	75		
16	L.O	55	65		
17	L.I.P	65	75		
18	L.S.A	75	80		
19	L.A.A	70	75		
20	M.M	55	65		
21	M.M	65	80		

22	M.N.L	55	70		
23	M.M.R	75	80		
24	N.S	55	70		
25	N.Y.S	65	75		
26	N.U.N	75	75		
27	R.D.A.P	55	70		
28	R.E.R.T.R	60	70		
29	S.A.D	70	70		
30	S.W.L	65	75		
31	S.N	60	65		
32	W	65	80		
33	Y.P	65	70		
34	Y.K.W	70	75		
35	Z.R	70	70		
	Total Score	2.300	2.560		
	Mean	65.71	73.14		

From the table 4.13 it showed that the total score of pre-test was 2.300 and the mean of students' score of pretest was 65.71. The total score of post-test was 2.560 and the mean of students' score of post-test was 73.14.

Table 4.14 The Result of Normality Testing

One-Sample Kolmogorov-Smirnov Test

		Pretest	posttest
N		35	35
Normal Parameters <sup>a,b</sup>	Mean	65,71	73,14
	Std. Deviation	7,290	5,435
Most Extreme Differences	Absolute	,150	,205
	Positive	,110	,166
	Negative	-,150	-,205
Kolmogorov-Smirnov Z		,889	1,214
Asymp. Sig. (2-tailed)		,408	,105

a. Test distribution is Normal.

From the table above, the significance of pre-test in *Kolmogorov-Smirnov* was 0.408 and it was higher than 0.05. The result of post-test in *Kolmogorov-Smirnov* was 0.105 and it was higher than 0.05, so it could be concluded that the data was normal.

## 3. Hypothesis Testing

a.  $H_o = \mu_1 \le \mu_2$  or the mean of the pre-test was smaller than or equal to the mean of the post-test.

Null Hypothesis of this research was the score of the students in narrative text test after being taught by using Question Answer Relationship strategy was less than or equal to their scores before being taught using Question Answer Relationship strategy to the first grade students of MAN 1 Trenggalek.

b. Calculated from data.

b.  $H_1 = \mu_1 > \mu_2$  or the mean of post-test was higher than the mean of pretest.

Alternative Hypothesis (H<sub>a</sub>) of this research was the score of the students in narrative text test tense after being taught by using Question Answer Relationship strategy was higher than their score before being taught using Question Answer Relationship strategy to the first grade students of MAN 1 Trenggalek.

To know whether the post-test's score was higher than pre-test score before and after using Question Answer Relationship strategy, the researcher computed *paired-sample test* by using SPSS 18.0 Version. The output was as follows:

Table 4.15 The Result of Paired Sample Test

Paired Samples Test

	Paired Differences							
				95% Confidence				
				Interval of the				
		Std.	Std. Error	Diffe	erence			Sig. (2-
	Mean	Deviation	Mean	Lower	Upper	Т	df	tailed)
Pair 1 posttest – pretest	7,429	5,198	,879	9,214	5,643	8,455	34	,000

Based on table 4.15, the t was 8.455 with the df = 34, and the p-value (two-tailed) was 0.000. Given that the present test was one-tailed test, so the p-value (0.000) was divided into: 0.000 /2= 0.000. The

significance level was 0.05. For interpretation of decision based on the result of probability, it was:

- 1) If the probability value (sig) > 0.05 then the null hypothesis was not rejected.
- 2) If the probability value (sig) < 0.05 then the null hypothesis was rejected.

Since 0.000 was smaller than significance level ( $\alpha$ ) 5% or 0.05, so the null hypothesis was rejected. In other words, the hypothesis said that the mean of the pre-test was smaller than or equal to the mean of the post-test was rejected. It automatically accepted the alternative hypothesis saying that the mean of post-test was higher than the mean of pre-test. It meant that there was significant differences before and after being taught using Question Answer Relationship Strategy.

### D. Discussion

As discussed of research method in the teaching and learning process was divided into three steps. The first step was given a pre-test. The researcher wanted to know the students' score in narrative text before being taught using Question Answer Relationship Strategy by conducting Pre-test. The pre-test contained 20 questions in form of multiple choice. The second step the researcher give treatments to the student in four meetings. The first treatment the researcher explained about reading narrative text. The second treatment the researcher explained Question Answer Relationship Strategy. In the third treatment, the researcher given the reading test and guided the students to answer the test using

Question Answer Relationship Strategy. Then the last treatment the researcher given the students narrative text test and asked them to answer the question by using Question Answer Relationship Strategy. After all the treatments were done, the researcher conducted the third step that was post-test contain 20 questions of multiple choice. The post-test was conducted to see the score of students whether there were any differences between pretest's score and posttest's score.

From the research findings, the students' score before being taught by using Question Answer Relationship Strategy was lower than the students' score of post-test. It was proved by the calculation of the mean score on pre-test 65.71 and the mean score on post-test 73.14. From the research finding, the students' score of post-test was higher than students' score of pretest. In addition, based on table 4.15, the t was 8.455, with the df = 35, and the p-value (two-tailed) was 0.000. Given that the present test was one-tailed test, so the p-value (0.000) was divided into: 0.000 /2= 0.000. The significance level was 0.05. Since 0.000 was smaller than significance level ( $\alpha$ ) 5% or 0.05, so the null hypothesis was rejected. In other words, the hypothesis said that the mean of the pre-test was smaller than or equal to the mean of the post-test was rejected. It accepted the alternative hypothesis which said that the mean of post-test was higher than the mean of pretest. It meant that there was significant differences before and after being taught using Question Answer Relationship Strategy. In other word, Question Answer Relationship Strategy is effective to make the students more active and understand about narrative text.

The finding of this research stated that Question Answer Relationship Strategy was considered as an effective strategy for the students' reading comprehension of narrative text. It could be seen in the treatment process, the students were more interested when the researcher applied this strategy. The teacher could help the students to memorize the main idea of the text by their control and it makes the teacher could correct any mistakes that students make and encourage them to concrete on difficulties at the sometime.

Regarding on the result of data analysis above, it was in line with Raphael (1986) that QAR strategy is to help students and teachers start a shared language for creating the relationship visible and for talking about subject how questions are designed to function. The researcher could see the advantages of Question Answer Relationship Strategy for the students during the research. This strategy motivated the students to be an active reader. The students ask the teacher to explain the word or sentence they dont understand. It can build a good relationship between students and teacher.

McKnight (2010) defines that Question-Answer Relationship strategy provides a basis for teaching three comprehension strategies: locating information, showing text structures and how the information is organized, and determining when an inference or reading between the lines is required. The students work in pair to find and share the important information of the text. Working in pair trained the students to learn about coorperation. It can be a solution for those who have less motivation in learning English, especially in reading comprehension.

Based on the fingdings above, it was strongly the same with the previous study as stating that Question Answer Strategy was considered as an effective strategy toward students' reading comprehension of narrative text. The first previous study related to the design was conducted by Hutabarat (2012). His study was conducted by using classroom action research. The subject of this study was class VIII-1 of SMP Swasta HKBP Sidorame Medan. Based on the analysis, it was found that the students' achievement improved from the orientation test, the basic knowledge of students' achievement, the first cycle and the second cycle test. It can be concluded that teaching reading comprehension through Question Answer Relationship strategy can improve the students' achievement in reading comprehension.

Further research reveals that QAR strategy can improve students' reading comprehension (Aristyanti, 2015). Based on her research which aims to improve students' reading comprehension by using Question Answer Relationship, the improvement of students' reading comprehension might because the students became more strategic or more metacognitive in their reading after being introduced with QAR as a reading strategy. QAR gives a framework for thinking about these questions and provide students with the tools and language for identifying the relationships between text and questions. QAR cannot only guide classroom reading discussion but also assist students in becoming more strategic and creative in their reading. From the explanation above, it could be concluded that Question Answer Relationship Strategy was effective in this research. Then

the strategy above was accepted by the researcher, especially it could be used to teach narrative text to the first grade students of MAN 1 Trenggalek.