## CHAPTER III

## METHOD OF THE RESEARCH

## A. The Design of The Research

$\subseteq$ This research was experimental research, which type of the research could test hypotheses to establish cause and effects relationship. The design of this research was quasi-experimental research design which used non-equivalent control design. According to Creswell (2008, p.313) that quasi-experimental situations in which the researcher designs, but not randomly participants to groups because the experimenter cannot artificially create group for the experiment. Therefore, the researcher used two classes as sample based on the cluster sampling. The first class was used as a control class which is taught by conventional technique and another was used as an experimental class which is taught by Gallery Walk strategy. Both of the classes will be given the same pretest and post-test, but without giving the same treatment with the control class and the experimental class

## B. Location and Time of The Research

This research was conducted at Madrasah Aliyah Negeri 1 Indragiri Hulu. It was located on Jalan Pematang reba, Rengat Barat. This research was conducted on September 2017.

## C. The Subject and Object of The Research

The subject of this research was the first grade students of Madrasah Aliyah Negeri 1 Indragiri Hulu. The object of this research was the effect of using Gallery Walk strategy on students' reading comprehension of narrative texts.
D. The Population and The Sample of The Research

The population of this research was the first grade students of Madrasah Aliyah Negeri 1 Indragiri Hulu in 2017/2018 academic year. The total of population was 121 students. They consisted of four classes. The number of population can be seen as follows:

Table III. 1
The Total Population of the First Grade Students of Madrasah Aliyah Negeri 1 Indragiri Hulu in 2017/2018

| No | Class | Number of Students |
| :---: | :---: | :---: |
| $\mathbf{1}$ | X IPA 1 | 30 |
| $\mathbf{2}$ | X IPA 2 | 30 |
| $\mathbf{3}$ | X IPS 1 | 31 |
| $\mathbf{4}$ | X IPS 2 | 30 |
| Total Population | $\mathbf{1 2 1}$ |  |

The classes involved were X IPA 1 for experimental class and X IPA 2 for the control class. The experimental class consisted of 30 students while the control class consisted of 30 students. Hence, the total of the samples were 60 students. It can be drawn as follows:

## Table III. 2

The Total Sample of First Grade Students of Madrasah Aliyah Negeri 1
Indragiri Hulu in 2017/2018

| No | Class | Number of Students |
| :---: | :---: | :---: |
| $\mathbf{1}$ | X IPA 1 | 30 |
| 2 | X IPA 2 | 30 |
| Total Sample |  | $\mathbf{6 0}$ |

## E. The Technique of Collecting Data

In this research, the researcher used test as the technique of collecting data. Test means that a method of measuring of a person ability. Knowledge or performance in given domain. To obtain the students reading comprehension of narrative text by using Gallery Walk strategy. The researcher had given tests to the students. The test were given to each group after and before giving the treatment.

The test was divided into two kinds, they were pre-test and post-test. The pre-test was used for measuring students' comprehension before using Gallery Walk strategy in teaching narrative text to the students in experimental and control classes while the post-test was used for measuring students' comprehension after using Gallery Walk strategy in experimental class.

Furthermore, the type of test was multiple-choices. Brown (2004, p.49) stated that the most popular method of assessing the reading comprehension is multiple-choice. Therefore, its purpose is to make it easier to administer and score quickly, which there were twenty questions given to the students. The questions were based on the indicators of reading comprehension of narrative text. The indicators consisted of five indicators and each of indicators had four questions. It can be seen from the blue print of the test below:

Table III. 3
The Blue Print of the Tests

| ? <br> $\mathbf{N}$ <br> $\mathbf{O}$ | Question Indicators | Number of Items | Question <br> Number in Try Out | Question <br> Number <br> in Pre-test | Question Number in Posttests |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\overline{+}$ $\overline{1}$ $\subset$ | Some of students are able to identify the topic of narrative text. | 4 | 5, 9, 12, 16 | 4, 7, 11, 16 | 1, 9, 11, 17 |
| $\begin{aligned} & z \\ & \infty \\ & 2 \\ & \frac{\infty}{\infty} \end{aligned}$ | Some of the students are able to identify the generic structure of narrative text. | 4 | 2, 7, 15, 18 | 2, 8, 12, 20 | 4, 8, 12, 18 |
| - | Some of the students are able to identify the word reference of narrative text. | 4 | 1,6, 11, 19 | 1, 9, 14, 17 | $\begin{gathered} 2,6,14 \\ 19 \end{gathered}$ |
| 4 | Some of the students are able to identify the inference of narrative text | 4 | $\begin{gathered} 3,8,13 \\ 17 \end{gathered}$ | 3, 6, 13, 18 | 3, 7, 13, 16 |
| 5 | Some of the students are able to identify the social function of narrative text. | 4 | $\begin{gathered} 4,10,14 \\ 20 \end{gathered}$ | $\begin{aligned} & 5,10 \\ & 15,19 \end{aligned}$ | $\begin{gathered} 5,10,15 \\ 20 \end{gathered}$ |

According to Arikunto (2009, p.35) the classification of the students score can be shown below:

Table III. 4
The Classification of Students' Score

| Score | Categories |
| :---: | :---: |
| $80-100$ | Very Good |
| $66-79$ | Good |
| $56-65$ | Enough |
| $40-55$ | Less |
| $30-39$ | Fail |

Effect size is a set of statistics that indicates the relative magnitude of the differences between means, or the amount of the total variance in the dependent variable that is predictable from knowledge of the levels of the independent variable (Pallant, 2010, p. 210). According to Field (2009, p. 56) effect size is the situation when the researcher wants to measure the size of an effect. It means that effect size happened when the researcher wants to know the strength of the effects (relationship) between variables.

Furthermore, in order to find out how large the magnitude effect of using Gallery Walk strategy on students reading comprehension of narrative texts, the researcher need to calculate the effect size by using eta squered below:
Where: :

$$
\begin{aligned}
& \omega^{2}=\frac{t^{2}}{t^{2}\left\{\left(N_{1}+N_{2}\right)-2\right\}} \\
& : \\
& \omega^{2}: \text { eta square } \\
& \mathrm{t} \quad \text { : the t-value (calculated by SPSS) } \\
& \mathrm{N}_{1} \text { : The number in the sample of group one } \\
& \mathrm{N}_{2} \text { : The number in the sample of group two }
\end{aligned}
$$

Pallant (2010, p.210) stated that to interpret the strength of eta squered values the following guidelines can be used

. 01 is small effect size<br>.06 is moderate effect size<br>.14 is large effect size

finding the difficulty level of each item. The item of difficulty was determined as the proportion of correct responses. The formula for item of difficulty can be seen as follows (Arikunto, 2009, p. 209):

$$
\mathbf{P}=\frac{\mathbf{B}}{\mathbf{J S}}
$$

Where: $P$ :index of difficulty or facility value
B : the number of correct answers
JS : the number of examines or students taking the test
Table III. 5
Index Difficulty Level of Instruments

| Proportion correct (p) | Item category |
| :---: | :---: |
| $\mathrm{P}>0.70$ | Easy |
| $0.30 \leq \mathrm{P} \leq 0.70$ | Mean |
| $\mathrm{P}<0.30$ | Difficult |

The standard level of the difficulty used was $>\mathbf{0 . 3 0}$ and $<\mathbf{0 . 7 0}$, thus, the items were accepted if the level of difficulty between $0.30-0.70$ and it was rejected if the level of difficulty low than 0.30 (difficult) and over than 0.70 (easy). Then the proportion correct was represented by " p ", whereas the incorrect was represented by " $q$ ". The calculation of the items difficulty can be seen as the following tables:

## Table III. 6

The students are able to identify the topic of narrative text.

| Variable | identify the topic of narrative text |  |  |  | $\mathbf{N}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Item No | $\mathbf{5}$ | $\mathbf{9}$ | $\mathbf{1 2}$ | $\mathbf{1 6}$ |  |
| Correct item | 17 | 19 | 18 | 17 |  |
| $\mathbf{P}$ | 0.57 | 0.63 | 0.60 | 0.57 |  |
| $\mathbf{Q}$ | 0.43 | 0.37 | 0.40 | 0.43 |  |

Referring to the table III. 6 above, the item numbers of question for identifying the topic of narrative text. were $5,9,12$, and 16 showing the the portion of correct answers. In term of the item number 5, it obtained the proportion of correct 0.57 , the item number 9 obtained the proportion of correct 0.63 , the item number 12 obtained the proportion of correct 0.60 , and the item number 16 obtained the proportion of correct 0.57 , thus, based on the standard level of the difficulty "p" $<0.30$ and $>0.70$, it was clear that the items for identifying the specific information of the narrative texts were accepted.

Table III. 7
The students are able to identify the generic structure of narrative text

| Variable | identify the generic structure of |  |  |  | $\mathbf{N}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{N}$ |  |  |  |  |
| Item No | $\mathbf{2}$ | $\mathbf{7}$ | $\mathbf{1 5}$ | $\mathbf{1 8}$ | $\mathbf{3 0}$ |
| Correct item | 20 | 17 | 18 | 13 |  |
| $\mathbf{P}$ | 0.67 | 0.57 | 0.60 | 0.43 |  |
| $\mathbf{Q}$ | 0.33 | 0.43 | 0.40 | 0.57 |  |

Referring to the table III. 7 presented above, the item numbers of question for identifying the generic structures of the narrative texts were 2,7 , 15 , and 18 showing the the portion of correct answers. The item number 2 obtained the proportion of correct 0.67 , the item number 7 obtained the proportion of correct 0.57 , the item number 15 obtained the proportion of correct 0.60 , and the item number 18 obtained the proportion of correct 0.43 . Hence, based on the standard level of the difficulty "p" $<0.30$ and $>0.70$, it was stated that the items for identifying the generic structures of the narrative texts were accepted.

## Table III. 8

The students are able to identify the word reference of narrative text

| Variable | Identify the word reference of <br> narrative text |  |  |  | $\mathbf{N}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1}$ |  |  |  |  |
| Item No | $\mathbf{1}$ | $\mathbf{6}$ | $\mathbf{1 1}$ | $\mathbf{1 9}$ | $\mathbf{3 0}$ |
| Correct item | 19 | 18 | 18 | 18 |  |
| $\mathbf{P}$ | 0.63 | 0.60 | 0.60 | 0.60 |  |
| $\mathbf{Q}$ | 0.37 | 0.40 | 0.40 | 0.40 |  |

From the table III. 8 illustrated above, the item numbers of question for identifying the word reference of narrative text were $1,6,11$ and 19 showing the the portion of correct answers. In term of item number 1, it obtained the proportion of correct 0.63 , item number 6 obtained the proportion of correct 0.60 , item number 11 obtained the proportion of correct 0.60 , and item number 19 obtained the proportion of correct 0.60 . Therefore, based on the standard level of the difficulty " p " $<0.30$ and $>0.70$, it was clearly pointed out that the items for identifying the word reference of narrative text were accepted.

Table III. 9
The Students are able to Identify the Inference of Narrative text.

| Variable | Identify the Word Reference of |  |  |  | $\mathbf{N}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Narrative text. |  |  |  |  |
| Item No | $\mathbf{3}$ | $\mathbf{8}$ | $\mathbf{1 3}$ | $\mathbf{1 7}$ | $\mathbf{3 0}$ |
| Correct item | 18 | 17 | 18 | 19 |  |
| $\mathbf{P}$ | 0.60 | 0.57 | 0.60 | 0.63 |  |
| $\mathbf{Q}$ | 0.40 | 0.43 | 0.40 | 0.37 |  |

Referring to the table III.9, the item numbers of question for identify the word inference of narrative text were $3,8,13$, and 17 showing the the portion of correct answers. For the item number 3, it obtained the
to score whereas the dependable thing refers to the condition of the students, temperature and condition. It means that when giving the same test to the same students on the different occasions, but, in fact, the results are same, so that the test is reliable. In addition, reliability is about the consistency of a score or a result which is not influenced by any condition.

In order to obtain the reliability of the test given, the researcher used Cronbach's alpha. The Cronbach's alpha comprises a number of items making up a scale designed to measure a single construct and determines the degree to which all the items are measuring the same construct. Cronk (2008, p. 100). Therefore, the cronbach's alpha refers to a measurement of internal consistency.

In this research, the reliability of the tests was processed by SPSS (Statistical Productand Service Solution) 17 version, it can be seen in the following table:

Table III. 11
The Reliability of the Test

| Case Processing Summary |  |  |  |
| :--- | :--- | ---: | ---: |
|  |  | N |  |
| Cases | Valid | 30 | 100.0 |
|  | Excluded $^{\mathrm{a}}$ | 0 | .0 |
|  | Total | 30 | 100.0 |


| Reliability Statistics |  |  |  |
| ---: | ---: | ---: | :---: |
| Cronbach's <br> Alpha | Cronbach's <br> Alpha Based on <br> Standardized <br> Items | N of Items |  |
| .500 | .492 | 20 |  |

Based on at the table III. 11 illustrated above, it can be seen that the total number of the students consisted of 30 students. The score of Cronbach's Alpha was 500. As mentioned by Arikunto (2009, p.209) the reliability for good classroom achievement tests are expected to exceed 0.0 and closed 1.00 . He stated that reliability of test is considered as follows: 0.0-0.20 : reliability is poor
0.21-0.40 : reliability is satisfactory
0.41-0.70 : reliability is good
0.71-1.0 : reliability is excellent

In short, the reliability of the tests as calculated above (500) was categorized into good level.

