## CHAPTER III

## THE METHOD OF THE RESEARCH

## A. The Research Design

The type of this research was experimental research which was intended to find out the effectiveness of using Puppet Show strategy on reading comprehension of narrative texts. According to Creswell (2008, p.295) "experiment is you test an idea (or practice or procedure) to determine whether or not it influences an outcome or dependent variable". According to Cohen et al., (2005, p.211) "an experiment involves making a change in the value of one variable-called the independent variable-and observing the effect of that change on another variable-called the dependent variable".
"The purpose of experimentation is to derive verified functional relationships among phenomena under controlled conditions or more simply, to identify the conditions underlying the occurrence of a given phenomenon" (Singh, 2006, p.134). Hence, the experimental research referred to identification of the conditions of variables whether it influences an outcome or makes a change of its value.

The design of this research was a quasi-experimental design. According to Anderson and Arsenault (1998) quasi-experimental design is examining differences between research's classes based on some natural characteristic using treatments or interventions. In accordance with the statement above, Lodico et al. (2006) they stated that the quasi-experimental design involves random assignment of whole classes rather than individuals
to treatments, thus, the quasi-experimental design is choosing the samples randomly in term of all classes with same characteristics and allowing the school's teaching and learning procedures. There were two variables used in this research; they were independent variable $(\mathrm{X})$ and dependent variable $(\mathrm{Y})$. In this research, the independent variable ( X ) was Puppet Show strategy and dependent variable ( Y ) was students' reading comprehension of narrative texts. In conducting this research, two classes of the eighth grade students at Islamic Junior High School Al-Muttaqin Pekanbaru were participated.

The writer assigned the experimental and control classes, administered a pretest for both classes, conducted experimental treatment activities with the experimental class only and then administered a post-test for assessing the differences of the two classes. The research design can be illustrated as follows (Creswell, 2008):

Table III. 1
Research Design

| Class | Pre-test | Treatment | Post-test |
| :--- | :---: | :---: | :---: |
| Experimental | $\mathrm{O}_{1}$ | X | $\mathrm{O}_{3}$ |
| Control | $\mathrm{O}_{2}$ | - | $\mathrm{O}_{4}$ |

Where: O : Observation
X : Receiving particular treatment

- : Without treatment


## B. The Location and Time of the research

This research was conducted at Islamic Junior High School AlMuttaqin Pekanbaru, Riau. It was located on Jalan H.R Soebrantas Pekanbaru. This research was conducted on September 2016.

## C. The Subject and Object of the Research

The subject of this research was the eighth grade students of Islamic Junior High School Al-Muttaqin Pekanbaru. The object of this research was the effect of using Puppet Show strategy on students' reading comprehension of narrative texts.

## D. The Population and Sample

The population of this research was the eighth grade students of Islamic Junior High School Al-Muttaqin Pekanbaru in 2016/2017 academic year. The total of population was 123 students. They consisted of four classes. The number of population can be seen as follows:

Table III. 2
The Total Population of the Second Year Students of Islamic Junior High School Al-Muttaqin Pekanbaru in 2016/2017

| No | Class | Number of Students |
| :---: | :---: | :---: |
| $\mathbf{1}$ | VIII A | 32 |
| $\mathbf{2}$ | VIII B | 32 |
| $\mathbf{3}$ | VIII C | 35 |
| $\mathbf{4}$ | VIII D | 24 |
| Total Population |  | $\mathbf{1 2 3}$ |

Based on the population above, thus, the writer took two classes as the samples by using cluster random sampling. Pertaining to the statement above, Lodico et al. (2006) they stated that cluster random sampling is a procedure of selecting classes randomly and it is not allowed by selecting individually. Furthermore, according to Fraenkel and Wallen (2009) the cluster random sampling can be seen as the selection of classes, or clusters, of subjects rather than individuals, so that cluster sampling randomly selects class, not individuals. In this research, the writer took the classes by using
lottery. The writer made the paper rolls, and then selected it randomly. The classes involved were VIII A for experimental class and VIII B for the control class. The experimental class consisted of 32 students while the control class consisted of 32 students. Hence, the total of the samples were 64 students. It can be drawn as follows:

Table III. 3
The Total Sample of the Second Year Students of Islamic Junior High School Al-Muttaqin Pekanbaru in 2016/2017

| No | Class | Number of Students |
| :---: | :---: | :---: |
| $\mathbf{1}$ | VIII A | 32 |
| $\mathbf{2}$ | VIII B | 32 |
| Total Sample |  | $\mathbf{6 4}$ |

## E. The Technique of Collecting Data

In completing the data, the writer used techniques of collecting data, namely observation and test for measuring the students' reading comprehension of narrative texts.

1. Observation

In this research, the writer observed the classroom activities during the teaching and learning process. As pointed by Burton and Bartlett (2005) the observation is a very useful means of gathering data on what is happening in classrooms.

The observation was done by getting the data about the implementation of the Puppet Show Strategy on students' comprehension in narrative texts whereas the tests were used for collecting the data on the implementation of Puppet Show strategy on students' reading
comprehension of narrative texts. To make the data clearer, the observational list can be seen in the table below:

Table III. 4
The Observational List of Using Puppet Show in Reading Comprehension

| No. | Indicators of Using Puppet Show Strategy | Alternative Answers |  |
| :--- | :--- | :--- | :--- |
|  |  | Yes | No |
| 1. | The teacher divides the students into groups <br> consisting of 4 students. |  |  |
| 2. | The teacher distributes the reading text and <br> the puppets. Then, she asks the students to <br> discuss and read the text. |  |  |
| 3. | After getting the puppets, the students have <br> some questions and ask the teacher about it. <br> Then the teacher allows and appreciates it. |  |  |
| 4. | The teacher tells a story based on the text <br> given by using puppet. |  |  |
| 5. | The teacher tells the students the purposes of <br> puppet show performances. |  |  |
| 6. | The teacher asks the students about the text <br> given. |  |  |
| 7. | Then the students tell the text by using their <br> own words and puppets in front of the <br> classroom. |  |  |
|  | Total |  |  |

Therefore, the English teacher observed the writer for six meetings in experimental class. It can be described in the tables presenting frequency distribution of each observation. Furthermore, the writer used the following formula to get the percentage of the observation (Sudijono, 2007, p.43):

$$
\mathbf{P}=\frac{\mathbf{F}}{\mathbf{N}} \mathbf{X} 100 \%
$$

Where: P : Percentage
F : Frequency of the score

N : Number of Case

## 2. Test

The collections of the data were collected by using reading test. According to Brown (2003) a test refers to a method of measuring a person' ability, knowledge, or performance to perform the language. In order to obtain the students' reading comprehension by using Puppet Show Strategy, the writer gave the test. 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 Puppet Show strategy in teaching narrative to the students in experimental and control classes while the post-test was used for measuring students' comprehension after using Puppet Show strategy in experimental class.

Furthermore, the type of test was multiple-choices. According to Brown (2003) the most popular method of assessing the reading comprehension is multiple-choice format, so that its purpose is to make it easier to administer and score quickly.

There were twenty five questions given to the students. The questions were based on the indicators of reading narrative texts comprehension. The indicators consisted of five indicators and each of indicators had five questions. It can be seen from the blue print of the test below:

## Table III. 5

The Blue Print of the Tests

| No | Question Indicators | Number <br> of Items | Question <br> Number in <br> Try Out | Question <br> Number in <br> Pre-test | Question <br> Number in <br> Post-tests |
| :---: | :--- | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | Identify the specific <br> information of the narrative <br> texts. | 5 | $1,6,11,16,21$ | $1,6,11,16,21$ | $2,7,12,17,22$ |
| 2 | Identify the generic structure <br> in narrative texts. | 5 | $2,7,12,17,22$ | $2,7,12,17,22$ | $1,6,11,16,21$ |
| 3 | Identify the language featur <br> narrative texts. | 5 | $3,8,13,18,23$ | $3,8,13,18,23$ | $4,9,14,19,24$ |
| 4 | Identify the communicative <br> purposes in narrative texts. | 5 | $4,9,14,19,24$ | $4,9,14,19,24$ | $3,8,13,18,23$ |
| 5 | Identify the references from <br> the narrative texts. | 5 | $5,10,15,20,25$ | $5,10,15,20,25$ | $5,10,15,20,25$ |

Then, the writer took the total score from the result of the reading comprehension test. The minimum students passing grade (KKM) for English subject is 75 at Islamic Junior High School Al-Muttaqin Pekanbaru. According to Arikunto (2009) the classification of the students score can be shown below:

Table III. 6
The Classification of Students' Score

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

## F. The Validity and Reliability of the Test

## 1. The Validity

Validity is a crucial part of any test. Before carrying out a test, it is necessary to know the validity of instruments. According to Brown (2003) validity is measuring exactly what it is proposed to be measured. Pertaining
to the statement above, Ary et al. (2010) mentioned that the validity is defined as the extent to which the instrument measured what it is claimed to be measured, thus, the test is said valid if it measures accurately what it is intended to be measured.

Furthermore, Brwon (2003) also mentioned that there are five types of validity, they are content-related evidence, criterion-related evidence, construct-related evidence, consequential validity and face validity. Among all kinds of validity, the content validity was the most appropriate to measure the instrument used in this research.

In term of content validity, Brown (2003) stated that it refers to the content of the test provide samples about the subject matter are being measured. It means that we have to design the tests based on the material that they had learned, thus, the writer concluded that this research belonged to the content validity in consideration of the tests reflected to what the students had learned the content of the curriculum. In order words, the tests were given based on the material that they had learned and concerned with five components as follows:
a) The students' ability to identify the specific information of the narrative texts.
b) The students' ability to identify the generic structures of the narrative texts.
c) The students' ability to identify the language features of the narrative texts.
d) The students' ability to identify the communicative purposes of the narrative texts.
e) The students' ability to identify the references from the narrative texts.

Before the tests were given to the samples, the tests were tried out in order to obtain validity and reliability of the tests. It was determined by 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
The formula above was used in order to know the easy or difficult tests those were given to the respondents. As mentioned by Arikunto (2009) the standard value of the proportion of correct can be seen in the table bellow:

## Table III. 7

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 below 0.30 (difficult) and over 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. 8

The students are able to identify the specific information of the narrative texts.

| Variable | Identify the Information to Locate Meaning of <br> the Narrative texts. |  |  |  |  | $\mathbf{N}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item No | $\mathbf{1}$ | $\mathbf{6}$ | $\mathbf{1 1}$ | $\mathbf{1 6}$ | $\mathbf{2 1}$ |  |
| Correct item | 22 | 21 | 21 | 20 | 12 | $\mathbf{3 2}$ |
| $\mathbf{P}$ | 0.68 | 0.65 | 0.65 | 0.62 | 0.68 |  |
| $\mathbf{Q}$ | 0.32 | 0.35 | 0.35 | 0.38 | 0.32 |  |

Referring to the table III. 8 above, the item numbers of question for identifying the specific information of the narrative texts were $1,6,11,16$ and 21 showing the the portion of correct answers. In term of the item number 1 , it obtained the proportion of correct 0.68 , the item number 6 obtained the proportion of correct 0.65 , the item number 11 obtained the proportion of correct 0.65 , the item number 16 obtained the proportion of correct 0.62 and the item number 21 obtained the proportion of correct 0.68 , 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. 9

The students are able to identify the generic structures of the narrative texts.

| Variable | Identify the Generic Structures of the Narrative |  |  |  | N |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Itexts. |  |  |  |  |  |  |
| Correct item | $\mathbf{2}$ | $\mathbf{7}$ | $\mathbf{1 2}$ | $\mathbf{1 7}$ | $\mathbf{2 2}$ |  |
| $\mathbf{P}$ | 0.60 | 21 | 22 | 18 | 22 | $\mathbf{3 2}$ |
| $\mathbf{Q}$ | 0.40 | 0.65 | 0.68 | 0.56 | 0.68 |  |

Referring to the table III. 9 presented above, the item numbers of question for identifying the generic structures of the narrative texts were 2,7 ,

12,17 and 22 showing the the portion of correct answers. The item number 2 obtained the proportion of correct 0.60 , the item number 7 obtained the proportion of correct 0.65 , the item number 12 obtained the proportion of correct 0.68 , the item number 17 obtained the proportion of correct 0,56 and the item number 22 obtained the proportion of correct 0.68 . 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. 10

The students are able to identify the language features of the narrative texts.

| Variable | Identify the language features of the narrative |  |  |  |  | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | texts. |  |  |  |  |  |
| Item No | $\mathbf{3}$ | $\mathbf{8}$ | $\mathbf{1 3}$ | $\mathbf{1 8}$ | $\mathbf{2 3}$ |  |
| Correct item | 19 | 22 | 22 | 19 | 19 | $\mathbf{3 2}$ |
| $\mathbf{P}$ | 0.6 | 0.68 | 0.68 | 0.6 | 0.6 |  |
| $\mathbf{Q}$ | 0.40 | 0.32 | 0.32 | 0.4 | 0.4 |  |

From the table III. 10 illustrated above, the item numbers of question for identifying the language features of the narrative texts were $3,8,13,18$ and 23 showing the the portion of correct answers. In term of item number 3, it obtained the proportion of correct 0.6 , item number 8 obtained the proportion of correct 0.68 , item number 13 obtained the proportion of correct 0.68 , item number 18 obtained the proportion of correct 0.6 and item number 23 obtained the proportion of correct 0.6 . 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 language features of the narrative texts were accepted.

Table III. 11
The students are able to identify the communicative purposes of the
narrative texts.

| Variable | Identify the Communicative Purposes of the |  |  |  |  | Narrative texts. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item No | $\mathbf{4}$ | $\mathbf{9}$ | $\mathbf{1 4}$ | $\mathbf{1 9}$ | $\mathbf{2 4}$ |  |
| Correct item | 22 | 22 | 19 | 20 | 19 | $\mathbf{3 2}$ |
| $\mathbf{P}$ | 0.68 | 0.68 | 0.60 | 0.62 | 0.6 |  |
| $\mathbf{Q}$ | 0.32 | 0.32 | 0.40 | 0.38 | 0.4 |  |

Referring to the table III. 11 above, the item numbers of question for identifying the communicative purposes of the narrative texts were 4 , $9,14,19$ and 24 showing the the portion of correct answers. For the item number 4 , it obtained the proportion of correct 0.68 , the item number 9 obtained the proportion of correct 0.68 , the item number 16 obtained the proportion of correct 0.60 , the item number 19 obtained the proportion of correct 0.62 and the item number 24 obtained the proportion of correct 0.6 , thus, based on the standard level of the difficulty "p" $<0.30$ and $>0.70$, it was clearly stated that the items for identifying the communicative purposes of the narrative texts were accepted.

Table III. 12
The students are able to identify the references from the narrative texts.

| Variable | Identify the References from the |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Narrative texts. | $\mathbf{N}$ |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Item No | $\mathbf{5}$ | $\mathbf{1 0}$ | $\mathbf{1 5}$ | $\mathbf{2 0}$ | $\mathbf{2 5}$ |  |
| Correct item | 19 | 20 | 22 | 21 | 21 | $\mathbf{3 2}$ |
| $\mathbf{P}$ | 0.60 | 0.62 | 0.68 | 0.65 | 0.65 |  |
| $\mathbf{Q}$ | 0.40 | 0.38 | 0.32 | 0.35 | 0.35 |  |

Referring to the table III. 12 presented above, he item numbers of question for identifying the references from the narrative texts were $5,10,15$, 20 and 25 showing the the portion of correct answers. For the item number 5, it the proportion of correct 0.60 , the item number 10 obtained the proportion
of correct 0.62 , the item number 15 obtained the proportion of correct 0.68 , the item number 20 obtained the proportion of correct 0.65 and the item number 25 obtained the proportion of correct 0.65 . 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 references from the narrative texts were accepted.

## 2. The Reliability

Reliability refers to a situation when giving the same tests for the same students in different occasions. Yet, the scores are same or consistent. According to Brown (2003) the reliable test is the consistent and dependable test. The consistent thing refers 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.

Furthermore, Ary et al. (2010) mentioned that the reliability of a measuring instrument is the consistency degree measuring whatever it is can be measured. Furthermore, in order to obtain the reliability of the test given, the writer 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). 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 Product and Service Solution) 17 Version, it can be seen in the following table:

Table III. 13
The Reliability of the Test

| Case Processing Summary |  |  |  |
| :--- | :--- | :---: | :---: |
|  |  | $\mathbf{N}$ | $\mathbf{\%}$ |
| Cases | Valid | 32 | 100.0 |
|  | Excluded $^{\mathrm{a}}$ | 0 | .0 |
|  | Total | 32 | 100.0 |


| Reliability Statistics |  |  |
| :---: | :---: | :---: |
| Cronbach's <br> Alpha | Cronbach's <br> Alpha Based <br> on | N of Items |
| Standardized |  |  |
| Items |  |  |$\quad$.

Based on at the table III. 13 illustrated above, it can be seen that the total number of the students consisted of 32 students. The score of Cronbach's Alpha was 1.000 . As mentioned by Arikunto (2009) 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 (1.000) was categorized into excellent level.

## G. The Technique of Analyzing Data

## 1. The Homogeneity and Normality of the Test

Before doing independent sample t-test analysis, the writer needed to analyze and test the hypotheses pre-requisite test as the first analysis containing normality and homogeneity tests making sure the experimental and control classes were homogenous and normally distributed.

Furthermore, in order to know whether the objects researched had the same variance or not, the writer needed to describe the homogeneity analysis. The SPPS result of the homogeneity of the data can be interpreted as follows:

## Testing Criteria:

If the probability $(\mathrm{sig})>0.05$, the data were homogenous.
If the probability (sig) $<0.05$, the data were not homogenous.
In term of the normality test of the data, it was analyzed by using Kolmogorov-Smirnove technique with SPSS 22 version. The SPSS result of Kolmogorov-Smirnove test can be interpreted as follows:

## Hypothesis:

$H_{0} \quad$ : The data are normally distributed
$\mathrm{H}_{\mathrm{a}} \quad$ : The data are abnormally distributed

## Testing Criteria:

If the probability $(\mathrm{sig})>0.05 \mathrm{H}_{\mathrm{o}}$ is accepted
If the probability (sig) $<0.05 \mathrm{H}_{0}$ is rejected

After knowing that the data were normally distributed and having the homogenous variance, the writer needed to use Independent Sample T-test analysis in order to know whether or not there is significant difference between using and without using the Puppet Show strategy on students' reading comprehension of narrative texts. Furthermore, the SPSS result of Independent Sample T-test can be interpreted as follows:

## Hypothesis:

## $\mathrm{H}_{\mathrm{o}} \quad$ : Variance population was identical

$\mathrm{H}_{\mathrm{a}} \quad$ : Variance population was not identical

## Testing Criteria:

If the value in Sig. (2-tailed) $\leq 0.05$, then $\mathrm{H}_{\mathrm{a}}$ is accepted.
If the value in Sig. (2-tailed) $\geq 0.05$, then $\mathrm{H}_{0}$ is accepted.
Furthermore, in order to find out whether or not there is significant effect of using the Puppet Show strategy on the students' reading comprehension of narrative texts, the writer needed to provide the effect size or (Eta squared) by using SPSS 22 software. Then, the SPSS result of effect size (Eta squared) can be interpreted as the following criteria (Cohen et atl., 2007, p.521):

0-0.20 : weak effect
0.21-0.50 : modest effect
0.51-1.00 : moderate effect
$>1.00 \quad$ : strong effect

