CHAPTER III
METHODOLOGY OF RESEARCH

A. Research Design

The type of this research was an expremential research. Gay (2000), states that experimental research is the type of research that can test hypothesis to establish cause and effects relationship. In this research the researcher used quasi experimental design. Cresswell (2008) states that quasi-experiment was experimental situation in which the researcher assigns participants to groups, but not randomly.

The type of quasi experimental design of this research was the non equivalent control group design. In the non-equivalent control group design, the experimental and control classes were given pre-test and post-test. According to Creswell (200:301), a pretest provides a measure on some attribute of characteristics that will be assessed for participants in an experiment before they receive a treatment. Meanwhile, a posttest is a measure on some attribute or characteristics that will be assessed for participant in an experiment after a treatment. And only the experimental class was treated by using SQ3R strategy.

There were two variables in this research. The first was independent variable and the second was dependent variable. The use of SQ3R strategy was an independent variable symbolized ''X'' and the students' reading comprehension was a dependent variable symbolized ''Y''. in this research, the writer used two groups

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that were control group treated by using conventional strategy and experimental group treated by using SQ3R strategy.

B. The Time and Location of the research

The research was conducted at the eighth grade students of Junior High School As-Shofa Pekanbaru. this research was conducted from April 05th 2017.

C. The Subject and Object of the research

Based on the tittle of the research, the subject of the research was the eighth grade students of Junior High School As-ShofaPekanbaru. Then, the object of the research was using Survey, Question, Read, Recite, Review (SQ3R) Strategy and reading comprehension.

1. Pre-test was used to determine students' reading comprehension before getting treatment.

2. Post-test was used to determine students' reading comprehension after getting the treatment. Post-test was carried out once, after treatment, to get the maximum result.

Hughes (2003), there are many techniques that can assess the students' reading comprehension; one of them is multiple choice techniques. Then, the writer used multiple choice techniques consisting of 20 items. Multiple choice techniques was a technique designed by using four choices and the participants chose one correct answer. This technique could assess the students' reading comprehension.

The researcher look the total score from the result of the reading comprehension test. The classification of the students' score can be seen below.

Table III.1

Classification of Students' Score

Score	Categories
80 – 100	Very good
66 – 79	Good
56 – 65	Enough
40 – 55	Less
30 – 39	Fail

Hughes (2003)

D. The Population and Sample

The population of this research was the eighth grade students of Junior High School Pekanbaru. They consisted of two classes : VIII.1, and VIII.2, all of them were 50 students. In terms of finding the sample for this research, the researcher oriented to Arikunto who states that :

In this research, the researcher used total sampling technique, all of the population would be taken to be sample. It can be seen in the following table:

Table III.2

Description of Population and Sampel

No	Class	Population	Sample
1	VIII. 1	25	25
2	VIII .2	25	25
Total		50	50

Based on total above, the researcher took 2 classes. In this research, the researcher used quasi experimental research design. It was done by using total sampling technique. The similar characteristic intended for the both of class were taught by the same teacher of English, having the same students' level, and they had the same material about learning of reading. The first class was as an experimental class and the second class was a control class.

E. The Technique of Data Collection

The researcher used test in order to find out wheter there is or no significant difference of the use of SQ3R (Survey, Question, Read, Recite, Review) strategy to increase students' reading comprehension. The test consisted of pre-test and post-test. The test was done by giving students a passage to answer the questions. The number of item was 20, The test item was based on the indicators of reading comprehension achievement as stated in operational concept. The blue print of SQ3R Strategy and reading comprehension :

Table III.3

The Blue Print of SQ3R

Indicators	Number of Items
1) Teacher reviews the text to gain initial meaning from the headings, bolded text, and charts. (Survey)	1, 6, 11
2) Teacher begins to generate questions about their reading from previewing it. (Question)	2, 7, 12
3) Teacher needs to look for answers to the questions they formulated during their preview of the text. These questions, based on the structure of the text, help focus students' reading. (Read)	3, 8, 13
4) Teacher moves through the text they should recite or rehearse the answers to their questions and make notes about their answer for later studying. (Recite)	4, 9, 14

5) After reading, teacher should review the text to answer lingering questions and recite the questions they previously answered. (Review)	5, 10

Table III.4

The Blue Print of Reading Comprehension

Indicators	Number of Items
1) The students are able to identify the main idea of descriptive text.	1, 6, 11
2) The students are able to identify information of the text.	2, 7, 12
3) The students are able to identify structure of descriptive text.	3, 8, 13
4) The students are able to identify language features of the descriptive text	17, 16
5) The students are able to identify the related vocabulary usages of the descriptive text.	4, 9, 14

1). Observation

in this research, the researcher observed the classroom activities during the teaching and learning process. As pointed by Burton and Barlett (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 SQ3R Strategy on students' comprehension of descriptive texts whereas the tests were used for collecting the data on the implementation of SQ3R Strategy on students' reading comprehension of descriptive texts. To make the data clearer, the observational list can be seen in the table below:

Table III.3
The Observational List of Using SQ3R in Reading Comprehension

No.	Indicators of using SQ3R Strategy	Alternative Answers	
		Yes	No
1.	The teacher divides the students into groups consisting of 4 students		
2.	The teacher distributes the reading text. Then, he asks the students to discuss and read the text		
3.	The students have some questions and ask the teacher about it. Then the teacher allows and appreciates it.		
4.	The teacher tells a story based on the texts given by using SQ3R		
5.	The teacher tells the students the purposes of SQ3R performance		
6.	The teacher asks the students about the text given		
7	Then the students tell the text by using SQ3R in front of the classroom		
	Total		

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

$$P = \frac{F}{N}\text{x } 100\%$$

Where : P   : percentage

F   ; frequency of the score

F. The Item Difficulties, Validity, and Reliability

1. The Item Difficulties

Before getting the data, the researcher used all of items in try out. The test was tried out to 20 students of the eighth grade on the other class out of the samples. Try out was intended to know the value of the test. The value itself was used to find out the level of difficulties of each item. The standard of value use> 0.30 and < 0.70. the items that could not fulfill the standard value were replaced. The facility value under 0.30 is considered "difficult" and above 0.70 is considered "easy". The level of difficulty was used to show how "easy" or "difficult" an item was. It was calculated by using the formula :

$$P = \frac{B}{JS}$$

P = Difficulty

B = The number of correct answer

JS = Students taking test

Then, the proportion correct was represented by "p", whereas the proportion incorrect was represented by "q"

Table III.4

The students are able to identify the main idea

Variable	Identfying the main idea				N
Item No.	1	6	11	16	20
Correct	14	14	14	13	
P	0.70	0.70	0.70	0.65	
Q	0.30	0.30	0.30	0.35	

2.Validity

Every test, wether it is a short, informl classroom test, or a public examination should be as valid as the test constructor that can make it. The instrument of the test must aim at providing a true measure. Groulund in Brown states that validity is the extent to which inference made from assessments result areapporiate, meaningful and useful in term of the purpose of the assessments.

The purpose of try out was to obtain validity and reliability to the test. It was determined by finding the difficulty level of each item. To find validity the test, researcher used correlation product moment as follows.

$$r_{xy} = \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}}$$

Where :

r_{xy} : Correlation product moment x and y

$\sum xy$: Total x and y

x^2 : X quandrant

y^2 :Y quandrant

3. Reliability

Arikunto states that it is possible for the test which is reliable but is not valid. Where as the test is valid automatically, it is reliable. To obtain the reliability of the test given, the researcher used Spearman – Brown formula as follows :

$$r_{11} = \frac{2r\,\frac{11}{22}}{1 + r\,\frac{11}{22}}$$

Where :

r_{11} : Instrument of reliability

$r\frac{1}{2}\frac{1}{2}$: r_{xy} that mean as correlation of index.

G. The technique of Analyzing Data

In order to get students' score, the researcher analyzed the data by using T-test formula in form of dependent Sample T-Test. According to Gay (2000:488), Paired or dependent sample T-test is used to compare a single group's performance on a pre-test and post test in experimental class. Meanwhile, the researcher had analyzed thecollected data by using statistic software SPSS Version 16. The result of the test analysis could be seen in SPSS output.