CHAPTER III

METHOD OF THE RESEARCH

A. The Design of The Research

This research would use quantitative approach. It was designed as an experimental research for drawing conclusions about cause and effect. The design of the research was a quasi experimental research non equivalent control group design. This research consisted of two variables, they were: independent variable (variable X) that referred to PQRS strategy, and dependent variable (variable Y) referred to reading comprehension of narrative text. In conducting the research, the writer used two classes. The first class was used for experimental group which was taught by using PQRS strategy. The second class was used for control group which was taught without using PQRS strategy. Before performing the treatment, the writer gave some pretest to both classes. At the end of treatment, the reseacher gave post test to both classes. According to McMillan (2006:273), the writer used intact, already established groups of subjects, gave a pretest, administered the treatment condition to one group, and gave the posttest

The research design is simply schematized as follows:

Table III. 1
Research Design

Nonequivalent Groups Pretest-Posttest Control Group Design

Group	Pre-Test	Treatment	Post-Test
A	O1	X	O2
B	O1	-	O2

Where :

A : Experimental group

B : Control group

O : Students' reading comprehension

X : Teaching reading by using PQRS strategy

B. Location and Time of the Research

The research was conducted at the eight grade of SMPN 30 Pekanbaru. The collecting data started from February, 29th, 2017 to April, 20th,2017.

C. The Subject and Object of the Research

Subject of the research was the eight grade students of SMPN 30 Pekanbaru. The object of this research was the use of PQRS strategy on reading comprehension of narrative text.

D. The Population and Sample of the Research

1. Population

The population of this research was the eight grade students of SMPN 30 Pekanbaru. The total number of the eight grade students of SMPN 30 Pekanbaru was 245. They consisted of seven classes.

2. Sample

There were two classes as the sample in this research. The researcher used cluster sampling to determine the sample. According to Gay (2000:122), Cluster sampling randomly selects groups, not individuals. The similar characteristic intended for both of classes were: the students who were taught by same English teacher, the students had the same level, and the students had the same material about learning of reading in narrative text. Thus,the writer chose students of VIII 1 as the experimental class, and students of VIII 7 was as control class.

E. The Technique of Collecting the Data

In order to get the data needed to support this research, the writer used multiple choice technique consisting of 20 items. The writer used multiple choice to obtain the students' reading comprehension. Multiple choice often required less time to administer for given amount of material than tests requiring reponses. This result in a more comprehensive evaluation of the candidate's extent of knowledge.

The researcher used pre-test and post-test for experimental and control classes. The test consisted of 20 items and each item was given score 5. There were some procedure of multiple choice. First, pre-test, the writer gave the students pre-test for two classes before the lesson began to know in which level the background knowledge of the material students was. The pre-test consisted of 20 questions of multiple choice test related to the material in narrative text. Second, treatment, it was conducted for experimental class only.

The treatment was using PQRS strategy in teaching English of reading comprehension. The length of the time to apply the strategy was about six meetings and every meeting was about 80 minutes. Last, post-test, the writer gave the post-test to both classess after the lesson finished, the items of the post-test were similar to pre-test. This test was held in order to know if there is a progress before and after teaching and learning activity by using PQRS strategy or without using PQRS strategy.

The description of the test used in this research can be seen from the blue print below:

Table III.2

Blue Print of Test

No.	Indicators	Item Number
1.	Identify Main Idea	1,8,12,18,19
2.	Find the Information	2,6,10,13,16

3.	Identify Language Features	3,7,11,14,20
4.	Identify Generic Structure	4,5,9,15,17
Total		20

Before the pre and post tests were given to the sample, both of the tests were tried out to 32 students at the elevent grade to obtain validity of the test. It was determined by finding the difficulty level of each item. Item difficulty was determined as proportion of correct responses. The formula of item difficulty is as follows:

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

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 standard level of the difficulty used was >0.30 and <0.70, it means that the level of difficulty is between 0.30 and 0.70 A test must be also reliable as measuring instrument. Reliability is a necessary characteristic of any good test. According to Brown (2003:20), reliability test is consistent and dependable. There are some factors affecting the reliability of a test, they are:

1. The extent of the sample of material selecting for testing
2. The administration of the test, clearly this in an important factor in deciding reliability

K-R.20 Formula:

$$r11 = \left(\frac{n}{n-1}\right)\left(\frac{s^2 - \sum pq}{s^2}\right)$$

r11 : reliability of the test
p : proportion of subjects who answered the item correctly.
q : the proportion of subjects who answered the item with wrong

∑pq : number of the multiplication of p and q.
n : number of items.
s : standard diviation of the test

F. The Technique of Data Analysis

To analize the students' reading comprehension taught by using PQRS strategy and conventional strategy, the writer analyzed them by using effect size formula

$$d = \frac{M_1 - M_2}{\sqrt{\frac{(SD_B^2 + SD_I^2)}{2}}}$$

Where :

d : Effect Size
M_1 : Mean Post-test
M_B : Mean Pre-test
SD_B : Standard Deviation of Pre-test
SD_I : Standard Deviation of Post-test

The writer also used t-table to see whether there is a significant difference between the mean score both experiment and control group. Ha is accepted if to > t – table or there is a significant difference between using and without using PQRS strategy on students' reading comprehension of narrative text. Ho is accepted if to < t – table or there is no significant difference between using and without using PQRS strategy on students' reading comprehension of narrative text. To apply this technique analysis, the writer used SPSS.