

CHAPTER III

RESEARCH METHOD

This chapter presents about the research method that used in conducting the research. It covers research design, population and sample, research procedure, instruments, data collection and data analysis.

A. Research Design

Quasi-experimental is used in this research design. According to Ary & Saronse (2010), quasi- experimental design used when the investigator cannot randomly assign subject to treatments or cannot manipulate the sample. Quasi-experimental design is similar to randomized experimental design in that they involve manipulation of an independent variable but different in that subject are not randomly assigned to treatment groups.

Quasi-experimental design that study the effect of treatment on a single subject have proven useful in bahavioral research. Single-subject experimental designs use one or a few participant to investigate the effect of a new procedure or treatment. The basic characteristic is that measure of the dependent variable are repeated before and after an intervention or treatment is implemented. It is used to know the comparison between control group and experimental group. Control group is the sample research that teaching writing recount text with QRST strategy, whereas experimental group is the sample research that use KWL (Know – Want – Learn) strategy. In this research, the researcher got two classes. Two classes are divided into one class for control group and one class again for experimental group.

Table 3.1
Research Design

Group	Pre-Test	Treatment Teaching reading using KWL strategy	Post-Test
Experimental Group	√	√	√
Control Group	√	-	√

The researcher gave two kinds of test both groups and after giving treatments. The test is called pre-test and post-test. Pre-test is conducted to know the students' ability before they get the treatments. While post-test is conducted to know the progress of students' ability after they get the treatments by using KWL strategy.

B. Population and Sample

The population of this study is the first grade students of MA AL-MANAR Prambon in academic year 2020-2021. There are five classes at the first grade. Moreover, there are only two classes are chosen as the sample to conduct this study. The class became the sample of the research. The first classes X-IPS 2 became experimental group. The second classes X-IPS 1 became the control one.

C. Research Procedure

After the both group got the pre-test to know their ability before the treatment. The procedure of the treatment can be seen as follow

The procedures of the treatment is describe the following table :

Table 3.2 The Procedures of treatments

Number	Experimental Group	Control Group
1	Giving a pre-test	Giving a pre-test
2	<p>Applying KWL strategy</p> <p>a. Pre-teaching This process includes activities like greeting, checking the students' attendance.</p> <p>b. Whilst-teaching</p> <p>b.1 Observing.</p> <p>b.2 Questioning</p> <p>b.3 Experimenting</p> <ol style="list-style-type: none"> 1. The students are asked to draw a table with three columns. Then, at the "K" for the first column. 2. The second column is for "W", it means Want. 3. The third column is for "L", it means Learnt. <p>b.4 Associating</p> <p>b.5 Communicating</p> <p>a. Post-teaching In the post teaching teachers may get confirmation and clarification from the students whether KWL strategy can help them because they feel easier in reading descriptive text</p>	<p>Applying PQRST strategy</p> <p>a. Pre-teaching This process includes activities like greeting, checking the students' attendance.</p> <p>b. Whilst-teaching</p> <p>b.1 Observing</p> <p>b.2 Questioning</p> <p>b.3 Experimenting</p> <ol style="list-style-type: none"> 1. Students must read the text that given by teacher first for Previewing or P 2. Next step is Q means question. 3. After that, R is for Read. 4. Next, S is for State means that students should summarize the text with their own language. 5. And the last is T for Test <p>b.4 Associating</p> <p>b.5 Communicating</p> <p>b. Post-teaching In the post teaching teachers may get confirmation and clarification from the students whether PQRST strategy in teaching reading.</p>
3	Giving a post-test	Giving a post-test

The schedule of the activity done in this study can be seen in table 3.3

Table 3.3 The Activity Schedule

Activity	Experimental class	Control class
Pre-test	28 th April 2021	28 th March 2021
Treatment 1	30 th April 2021	30 th April 2021
Treatment 2	1 st May 2021	1 st May 2021
Treatment 3	3 rd May 2021	3 rd May 2021
Post-test	5 th May 2021	5 th May 2021

D. Research Instruments

In this study researcher used only a test. The topic of the test is descriptive text. The test was taken from some sources. The test are pre-test and post-test. But before the pre-test was conducted, the researcher should conduct the try out first.

3 Measuring the validity on reliability of the test. Try out was conducted to make sure that the test is good or not. Try out is conducted to another class except class experimental and control. That is class X-IPA 1. The test of try out consists of 40 students, and there are 40 numbers in multiple choices. To know whether the test is valid and reliable, the researcher checked the try out through SPSS 25. Below is the result of the Validity Test, and Reliability.

a. Validity

According to Bambang (2006), if a measurement is as the representative of the ideas or the appropriate material that would be measured is called content validity. It means that the test had fulfilled the content validity of the test. Therefore, the researcher used indicators to determine whether the questions of test are valid or not.

Table 3.4
TOS of Reading Descriptive Text

Skill	Indicators	Number	Total Items	Test Type
R E A D I N G	1. Identifying general point of the topic	1, 4, 6, 8, 37	4	Multiple Choice
	2. Identifying main idea	2, 3, 5, 9	4	
	3. identifying particular information/factual	7, 11, 36, 40	2	
	4. Identifying explicit information of the text	10, 13, 38,	2	
	5. Identifying implicit information of the text	15, 16, 18, 34, 35	3	
	6. identifying references	20, 21, 23, 29, 31, 33	3	
	7. identifying word's meaning	12, 14, 17, 19, 26, 30, 32	4	
	8. identifying purpose of the text	22, 24, 25, 27, 28	3	
	Total			

b. Reliability

The researcher used SPSS to analyzed the data in finding out the reliable of the score test. The interpretation of cofficient value based on sugiyono (2013) as cited in Dahliani, Rahmatan, & Djufri (2019) as follows :

Table 3.5 Interpretation of Coefficients Values

Coefficient Interval	Correlation Level
0.00 – 0.199	Very Low
0.20 – 0.399	Low
0.40 – 0.599	Middle
0.60 – 0.799	Strong
0.80 – 1.000	Very Strong

The result of reliability that was analyzed by SPSS 25

Table 3.6
Reliability Statistics Coefficient Alpha

Reliability Statistics	
Cronbach's Alpha	N of Items
0,860	40

Based on Cronbach's Alpha in the reliability statistics table. It can be seen that the result is 0.860. It means that the reliability of the test is very strong.

- a. Pre-test is used to get the data how far students' reading ability before given treatment. The pre-test consist of 25 questions were obtained after the validity process which previously amounted 40 questions. As we know after got 27 valid results, but 25 is taken to make it easier to calculate. Both of the control and experimental group are given pre-test.. For instrument pre-test can be seen in appendix 1.
- b. Post-test is used to get the data how far students' reading ability after given treatment. It would be given to both of the control and experimental group. This test to know the progression of students' reading ability in descriptive text. This test is to know the result of the treatment that it is significant or not. As we know, the pre-test and post-test questions are same except for the order of the questions. 25 in the pre-test are different from the order in post-test. For instrument post-test can be seen in appendix II.

E. Data Collection

Data collection is the process of gathering and measuring information on targeted variables. The data in this study is collected by the result Test. This test

is way to measure students' ability in reading descriptive text before and after given treatment.

The first step is given pre-test, because to know the students' reading ability before the treatment. Second step is the students are given treatment. Treatment is needed in this study because to know the differences score between before and after given the treatment. Students are given different treatment for both of experimental and control group. For experimental group, students are given KWL (Know – Want – Learn) strategy, whereas for control group is given QRST (Question – Read – State - Test) strategy as the treatment in teaching reading descriptive text.

The last is given post-test. This step is to know whether there was significant difference or not between KWL (Know – Want – Learn) and QRST (Question – Read – State – Test) strategy in teaching reading descriptive text. Students would be given test that consist of 25 multiple choices.

F. Data Analysis

Data analysis is one of important ways to know whether teaching learning process is successful or not. The data is collected from the test. The score would be analyzed statically by using procedure of ANCOVA (Analysis of Covariance) those are;

- a) Normality Test
- b) Test homogeneity of variances
- c) Assumption of homogeneity regression (slope)

d) Assumption of linear relationship between covariate and dependent variable.

e) Last, ANCOVA

because the instruments of this research are taken by pre-test and post-test and the sample of this experiment is not taken randomly. The researcher used SPSS program to count the result. The researcher want to know the effectiveness of using KWL (Know – Want – Learn) strategy in teaching reading of descriptive text to the first grade students of MA Al- Manar Prambon.