#### **CHAPTER III**

#### RESEARCH METHODELOGY

## A. Research Design

#### 1. Classroom Action Research

The research design used in this research was Classroom Action Research. Hopkins (2008: 1) states that classroom action research is an act undertaken by teachers, to enhance their own teaching to test the assumptions of educational theory in practice, or as a means of evaluating and implementing whole school priorities. Then, according to Mettetal (2001: 2), classroom action research is a method of finding out what works best in your own classroom so that you can improve student learning. From those explanations, it can be concluded that the classroom action research is a research which is done by the teacher in the class to improve practice and students' learning.

In conducting this study, researcher used a classroom action research because this research design is suitable with the purpose of this research, which is the purpose of this research, was to improve the students' vocabulary mastery through spelling bee game.

## 2. Procedures of Action Research

The procedure in doing a research is very important to guide the researcher about what need to be done and how to do it. Related to the

procedure of action research, Kemmis & McTaggart in Alderman (2006: 1) state that:

There are four moments within an action research. For the first is to develop a plan of critically informed action to improve what is already happening. The second is to act to implement the plan. The third is to observe the effects of the critically informed action in the context in which it occurs. And the last is to reflect on these actions as a basis for further planning, subsequent critically informed action and so on, through a succession of cycles.

It means that, in an action research, the researcher needs to follow several phases which is very important. The researcher needs to prepare everything needed before implementing the treatment. Then, the researcher implements the action and observes the teaching and learning process when the action is implemented. The last, the researcher as the teacher need to do the reflection. Generally, the four steps explained above, can be described by the figure below:

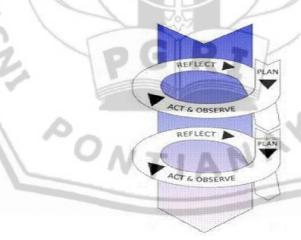


Figure 3.1

Cycling process of classroom action research

Kemmis & McTaggart in Alderman (2006: 1)

## a. Planning

In this planning step, the researcher prepared everything that was needed before the acting stage such as lesson plan, teaching media, observation checklist and field note, etc.

## b. Acting

In the acting stage, the researcher acted in the classroom as a teacher to teach the students and then treats the students with the technique which the purpose is to improve teaching learning process and students' vocabulary mastery. And then, while the teacher was teaching, the collaborator observed by using observation checklist, field note the activities.

# c. Observing

The observation was done by the collaborator when the researcher teaches in the class. Then, in this stage, the data of students' score, observation checklist and field note were analyzed by the researcher and collaborator, whether the results are satisfied or not.

## d. Reflecting

In this stage, the researcher and collaborator discussed the next act to solve the problem find in first cycle, if the results of first cycle are not satisfied.

## 3. Research Subject

Based on the data gathered and the class observe, so the subject of research was the class VIII E of SMP Negeri 21 Pontianak which consists of 40 students with the detail 19 male and 21 female. This class became the subject of research because the students in this class have problem in vocabulary mastery.

# B. Technique of Collecting Data

In this research, the researcher used observation and measurement techniques. Measurement is way to measure the student's achievement in performance form that measure in numbered scale. According to Louis Cohen, Lawrence Manion and Keith Morrison (2007: 396); "the distinctive feature of observation as a research process is that it offers an investigator the opportunity to gather data from naturally occurring social situations".

In this research, the researcher collected the data by used observation and measurement techniques.

## C. Tools of Data Collection

## Observation Checklist

The observation guidance or the table checklist used in the observation technique. According to Ary et al (2010: 217), checklist presents a list of the behaviors that are to be observed and the observer then checks whether each behavior is present or absent. Items on the checklist help the observer remain focused on key points by asking for the frequency, absence, or presence of specific events. The researcher

used the observation guidance to observe the students' learning and behavior in the class. The data that had be gotten through this observation checklist would not be prosessed statistically, but would be analyzed qualitatively.

#### 2. Field Note

Field note is one of the tools of data collection that would be need. According to Mellon in Westbrook (1994: 246) field notes are a data collection tool that contains everything the investigator saw, experienced, and remembered as well as notes on emotions and analytic comments. In this research, this tool was the perception of the researcher towards the applying of Spelling Bee in the classroom. The perception could be about the lack of students' interest, activeness, and unusual something happen in the class and the mistaken done by the teacher during the learning process and others.

#### 3. Test

In tests, researcher has a powerful method of data collection, the ranks of tests for gathering data of a numerical rather than verbal kind (Cohen et al, 2007: 414). In this research, test was used the tool to get data of students' result study. Because of this research use classroom action research design, the test that had been used in this research is only post test. The meaning is the test would be given after the Spelling Bee game was applied in the class. And the test that was given is an objective test in form of multiple choices test

# D. Technique of Data Analysis

# 1. Qualitative Data Analysis

In this research, to analyze the data which was conducted from observation checklist and field note, the researcher used descriptive qualitative analysis technique. By using this technique, the researcher described and explained what happened with the vocabulary learning process of the students during the spelling bee game is applied in the class. The researcher used technique of analyzing the qualitative data from Miles and Huberman in Hopkins (2008: 138) as follow:

## a. Data reduction

Data reduction refers to the process of selecting, focusing, simplifying, abstracting and transforming the 'raw' data that appear in written up field notes. As data collection proceeds, there are further episodes of data reduction (doing summaries, coding, teasing out themes, making clusters, making partitions, writing memos). And the data reduction/transforming process continues after fieldwork, until a final report is complete.

## b. Data display

The second major flow of analysis activity is data display. The researcher defines a 'display' as an organized assembly of information that permits conclusion drawing and action taking. Looking at displays helps researcher to understand what is

happening and to do something – further analysis or action – based on that understanding.

# c. Conclusion drawing/verification

The third stream of analytic activity is conclusion drawing and verification. From the beginning of data collection, the [classroom researcher] is beginning to decide what things mean, is noting regularities, patterns, explanations, possible configurations, causal flows and propositions. The competent researcher holds these conclusions lightly, maintaining openness and skepticism, but the conclusions are still there is not yet complete and it is not clear at first, then increasingly explicit and grounded.

# 2. Quantitative Data Analysis

In this research, to analyze the data that was conducted from the test result, the researcher used statistic descriptive with the steps as follow:

- a. Analyzing the students' work sheet which was done by the students, to determine how many correct answers of the question items answer by the students.
- b. Determine the total score that was gotten by students.
- c. The score that had been conducted is converted to the value by formula:

Value = 
$$\frac{Total\ score\ gotten\ by\ student}{Maxsimum\ Score} \times 100$$

Modifed from Sudijono (2011: 318)

d. After the individual score of each students had been collected and known by the researcher, then the researcher counted the mean score by using the formula as follow:

$$\overline{x} = \frac{\sum xi}{N}$$

Note:

$$\overline{x}$$
 = Mear

$$\sum xi$$
 = Total score

N = Number of student

Modifed from Weiss (2012:905)

e. After the average value (mean) has been gotten, then it is matched with the criteria of result as follow:

Table 3.1 Score Qualification of the Vocabulary Test

Criteria	Level of Mastery
90 – 100	Excellent
80 – 89	Good
65 – 79	Sufficient
55 – 64	Insufficient
less than 55	Poor

Modifed from Heaton (1988: 96)

After getting students mean score and students' qualification, the researcher made the conclusion about the improvement the students' vocabulary mastery through spelling bee game.

