III   RESEARCH METHOD

This chapter discusses about research method, research setting and subject, population and sample, research procedure, indicators of the research, data collecting technique, and data analysis.

3.1 Research Method

This research is an Action Research. In this research, the researcher acted as a real teacher, and the English teacher as the observer, who observeed what the researcher did when conducting the research. This study was directed to develop the teaching strategy in order to find out the solution to the classroom problem in the teaching of vocabulary.

There are four steps of classroom action research:

1. Planning the action
2. Implementing the action
3. Observing the action
4. Reflection

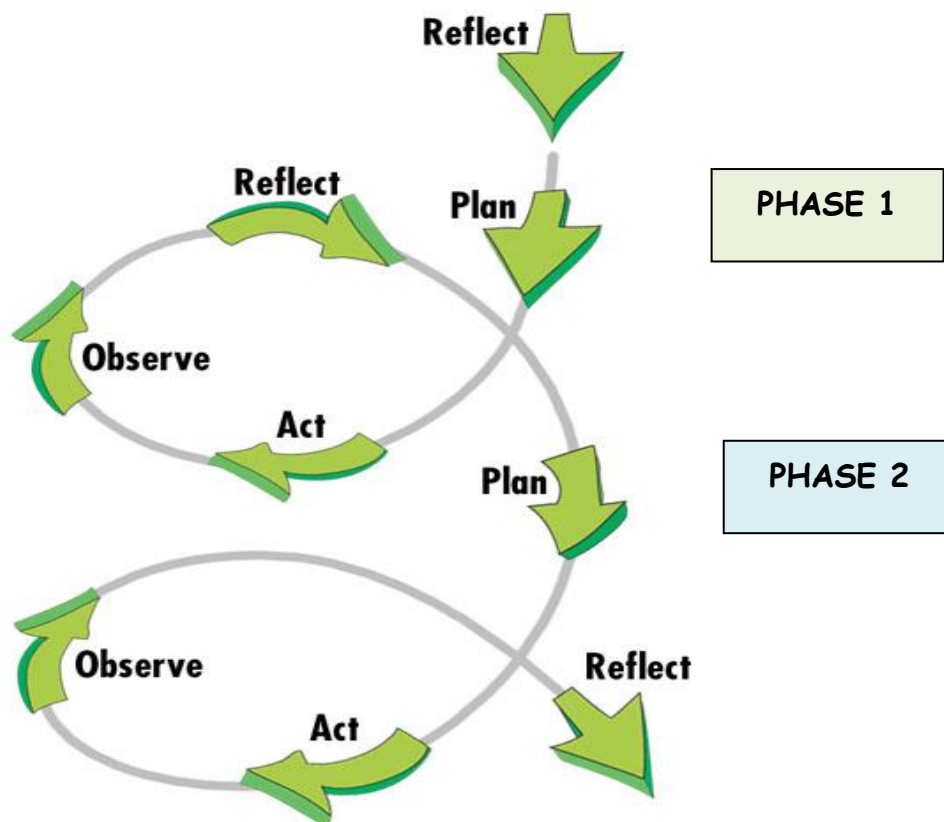Here is the concept of action research according to Carr & Kemmis (1986).

Figure 3.1 Carr and Kemmis's Action Research Model (1986)

The research was begun with the planning. In this step, there were several things to plan such as the lesson plan, material and technique, instruments and the criteria of successful. After planning those things, then the researcher continued to the acting step. This was the implementation of the things which had been made in the planning step. While the teaching learning process was conducted in acting step, the researcher also did the observation step. This step was used to observe the students activity during the teaching learning process. The next step was reflecting. The researcher reflected the successful of research by looking the data which had been collected in the acting and observing step. If the result was not satisfying yet, then the researcher conducted the next cycle which was begun with the planning step again.

Here is the cycle of Action Research according to Setiyadi (2013).
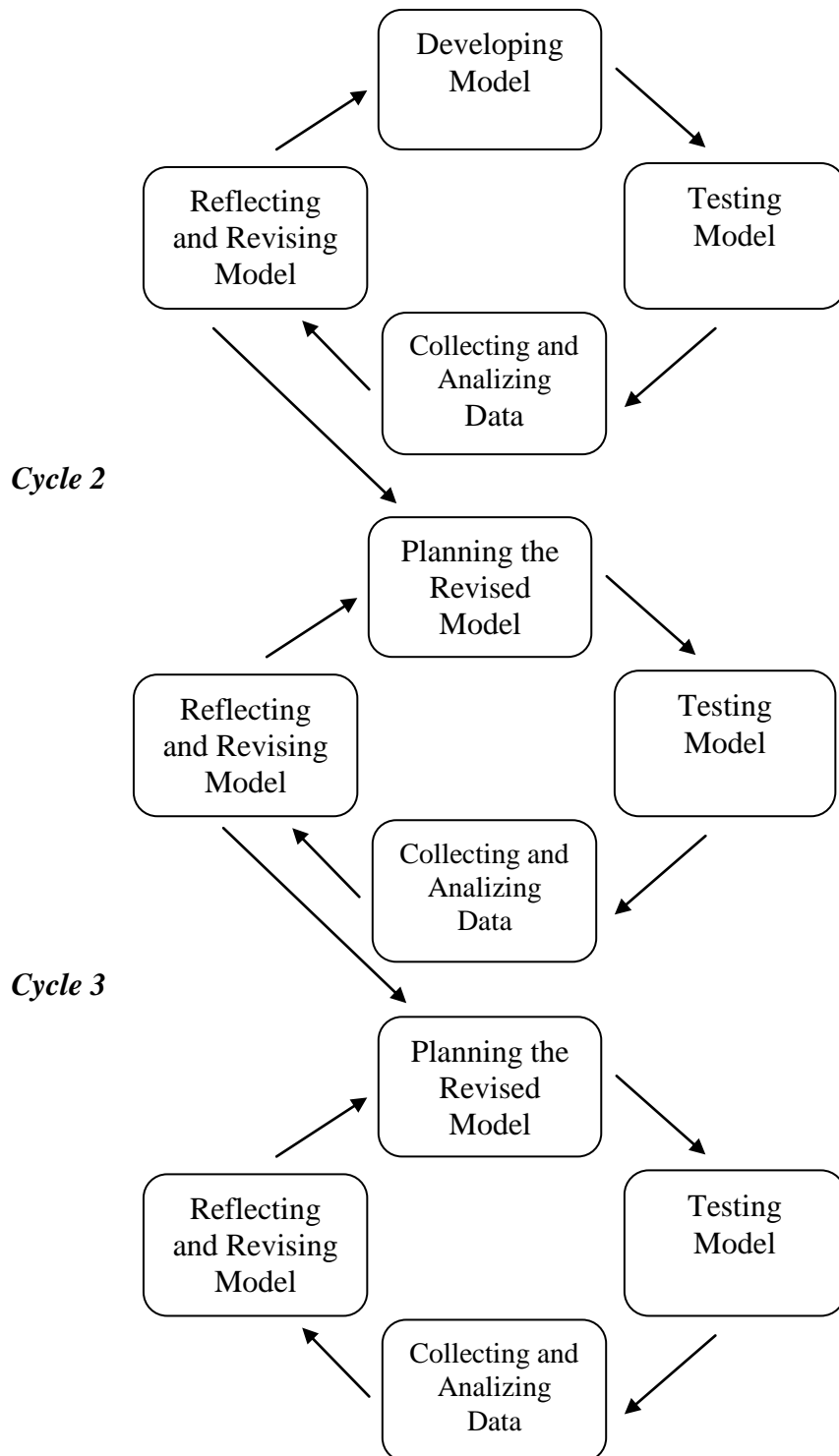
Cycle 1 (Pre – Experiment)

Cycle 2

Cycle 3

Figure 3.2 Cycle of Action Research according to Setiyadi (2013)

According to the figure above, the first cycle of the research was a pre –

experiment and then the next cycle was the second cycle and so on. From the pre-

experiment it was already found a model which was developed based on some aspects that were suitable for teaching. After having a revised model, the researcher made preparation to teach the students using the model (in Action Research, it was included into Planning). Then the model that had been revised was being tested for its effectiveness in learning process. Model testing here also means the action in the class (Acting/Implementing). The next step was data collecting and analysis (Observing). It was done by observing what was going on and what problems that occured in the teaching learning process while the model was being applied. The last step was reflection and revised the model (Reflecting). The researcher did the reflection to fix the model based on the problems occurred and after being fixed, the model was applied in the next cycle. This process was repeated from one cycle to the next cycle until the researcher got a model which had been modified through some improvements. (Santi, 2013)

3.2 Research setting and subject

This research was conducted in SMP N 2 Abung Selatan. The subject of this research was the students of second grade of SMP N 2 Abung Selatan. The researcher acted as the real teacher, while the real teacher acted as the observer. The problem of this class was the students were not active in teaching learning process, and also they had lowest average score than the other class.

3.3 Population and Sample

Koenjaraningrat defines population as the entire object of research (1997: 115). In addition, Mardalis explains that population is all of the sources from which the

sample are taken (1989: 53). In this research, the population were students of SMPN 2 Abung Selatan. There are fourteen classes in this school, five classes of the first grade, five classes of the second grade, and four classes of the third grade. Sample is part of population which researched. The researcher took the second grade as the sample in VIII E because as the result of pre observation, the researcher found that students in VIII E have lower ability than the other class.

3.4 Research Procedure

The procedures of this study were: preliminary study, planning, action, observation, and reflection.

a. Preliminary study

Preliminary study was done to get information about the teaching learning process in the SMP N 2 Abung Selatan. The researcher met the principal of the school to talk about the research, and the English teacher to get the information about the problem which is faced by the teacher in teaching the students, and also to get the information about the ability of the students in learning English. After conducting the interview with the English teacher, the analysis was carried out. From the analysis, the researcher found out the student's vocabulary competence. The data obtained from the analysis was used to set up an action plan.

b. Planning

In this case, the researcher prepared suitable model of using riddle game to improve students vocabulary mastery, designed a lesson plan, prepared instructional material, and technique.

1. Lesson plan

   The lesson plan was made by considering the standard competence, basic competence, indicators, material, teaching methods, activity and assessment.

2. Instructional material

   The material of this research was taken from the textbook which were relevant to the topic or other resource which has been selected by the researcher.

3. Technique

   The technique of this research was using riddle game. The riddle was also the media in teaching learning process.

c. Action

   After arranging the planning, the researcher continued to the next step that was action. The researcher as the teacher taught the students by using the riddle game as a technique and media. She was helped by the teacher who acted as the observer to observe the students activity. The teaching learning activity took about 2x45 minutes. Then after the teaching learning process, the students were given questionnaires.

d. Observation

   Observation was done when the teaching learning process. This was done by the English teacher as the observer. It took the same time with the action of the research.

e. Reflection

The researcher was helped by the teacher to do the reflection of the result of the first cycle and made the plan for conducting the second cycle if the result of first cycle was not satisfying enough.

3.5 Indicators of the Research

In order to see whether riddle could be used to improve student's vocabulary in this Action Research, the researcher determined the indicators dealing with learning process. The indicators were:

1. Learning Process

For the learning process, there was one aspect which became the focus of this research, it was, the student's learning. The observation of student's learning activities was done to know the activity of the students whether they were active or not in teaching learning process. It was divided into three activities: pre – activity, while – activity, and post – activity. In the pre – activity, the researcher observed the student's interest in following the class and responding to the topic. In the while – activity, the researcher observed the student's attention to the explanation of the teacher and their focus to the vocabulary which were taught, and also their participation while doing the group works. In the post – activity, the researcher observed the students understanding about the vocabulary which were being taught by the teacher. If the students' activity involved in the learning process were not improved and the teaching performance was not good, the researcher would find out the problems and try to find the solution by revising the model so the learning process would be more effective.

2. Learning Product

The learning product of this research was not based on the KKM because as mentioned by Setiyadi (2013) KKM which are used to be indicator of successful is not always relevant with the Action Research which was conducted by students of university. The student's research is not always referred to objectives of teaching which are exist in curriculum, so the researcher here just observed whether there was any improvement of students vocabulary in every cycle by comparing the result of the test at the end of every cycle. If there was no improvement of student's score, there would be some problems and it was used as a reflection to revise the model for next cycle.

3.6 **Data Collecting Technique**

In getting the data, the researcher employed the observation, the questionnaires and vocabulary test.

1. Observation

Observation is a method of data collection in which the situation of interest is watched and the relevant facts, actions and behaviors are recorded. According to Setiyadi (2006) the purpose of observation is to explain the situation being investigated, the activities, and people or involved in an activity and the relationship among them.

The observation here was to observe student's participation during the teaching learning activity. (See Appendix)

2. Questionnaire

Questionnaire is a document that is used to guide what questions are to be asked respondents and in what order, sometimes lists the alternative responses that are acceptable. In this research, the questionnaires were given to the students after teaching learning process. The purpose was to know about the student's opinion about their experiences after being taught using riddle. (See Appendix)

3. Vocabulary Test

In assessing students vocabulary mastery, the researcher used the multiple choices questions which consisted of a, b, c, and d. There were 30 items of question in the vocabulary test. The questions were given at the end of each cycle. This test was used to know how far students understand the material being taught.

There are some criteria of a good test. The test should have the reliability and validity. For reliability of the test, the researcher used two raters or called inter-rater reliability. And for the validity, the researcher used the content and construct validity to measure the validity of the test. To fulfill the content validity, the researcher should look at the questions and analyzed whether the test had represented the whole material which would be measured. If the test had represented all the idea of the material which would be measured, the test had fulfilled the content validity (Setiyadi, 2006). The researcher had made the vocabulary test based on the curriculum, so the researcher assumed that this test has fulfilled the content validity. While the construct validity is needed to the test

which has some indicators in one aspect, for example, if the test was made to measure vocabulary mastery, the construct validity could be measured by evaluating the questions. If the questions have measured the vocabulary mastery, the test has fulfilled the construct validity. In this test, the researcher used the theory from Nation (2001) who said that knowing a word involves knowing its 'form', 'meaning' and 'use'. There are three main parts of 'form', they are spoken, written, and word parts. While there are three main parts of 'meaning', they are form and meaning, concept and references, and associations. And the last, there are four main points of 'use', they are grammatical, collocations, constrait on use, register and fluency.

To test the students whether they know how the selected words are written and spelled, can be tested by a 'dictation'; To test the students about the usage of the selected words, the students can be asked to identify the words with the closest meanings in a multiple-choice vocabulary test; To test the students whether they know the grammatical functions, the collocations and the constraints on the use of the selected words, can be tested by a cloze test, or a guided writing test to elicit the relevant lexical knowledge from the students.

Table specification of vocabulary test

	Form	Meaning	Use
Test 1	1,7,9,10,11,13,18,19, 21, 23	2,3,4,12, 17,20, 22, 26, 28, 30	5, 6, 8, 14, 15, 16, 24, 25, 27, 29
Test 2	3, 5, 6, 8, 11, 13, 18,	1, 7, 9, 10, 12, 15,	2,4,14,16,17,21,24,2

	22, 27, 28	19, 20, 23, 30	5,26,29
Test 3	1, 5, 7, 12, 15,20, 23, 25, 27, 29	2, 4, 8, 9, 14,18, 19, 22, 24, 28	3, 6, 10, 11, 13, 16, 17, 21, 26, 30

3.6   Data Analysis

Data analysis was the process of organizing the data in order to gain regularly of the pattern and form of the research. The term interpretation could be defined as a procedure of giving meaning on the result of analytic process. Data analysis was done to create understanding of the data and after following the certain procedure, result of the study could be presented by the researcher to the readers (Setiyadi, 2006).

In analyzing the data the researcher classified the data into two categories that were the data of learning process and learning product. Analyzing the data was done during and after collecting the data from every cycle.

1. Learning Process

In the learning process, observation was done to the students by the observer during the teaching learning process by observing the whole activities in the class and filling the observation sheets.

2. Learning product

To know the learning product, the researcher used the multiple choice items to measure the students understanding about the material. The results of the test were

compared in every cycle whether there was any improvement or not. If there was no improvement, the researcher would analyze the problem that were faced by the students and find the solution to solve the problems. And the solution would be applied in the next cycle.

2.1. Student's Learning Activities

In analyzing the data from observing student's learning activities, the researcher did the following steps:

a. Identify the problems that occurred in learning process

The researcher identified the problem which occur while the learning process in every cycle. The problem about students learning activities were identified in this step.

b. Making a description from the data that had been analyzed.

In analyzing the students' activities, the researcher made a description from the collected data which could enrich and support the result of the analysis.