

CHAPTER III

RESEARCH METHOD

This chapter presents the description of the research used in classroom action research. It presents the research design, arrangements and research subjects, research procedure, reflection.

A. Research Design

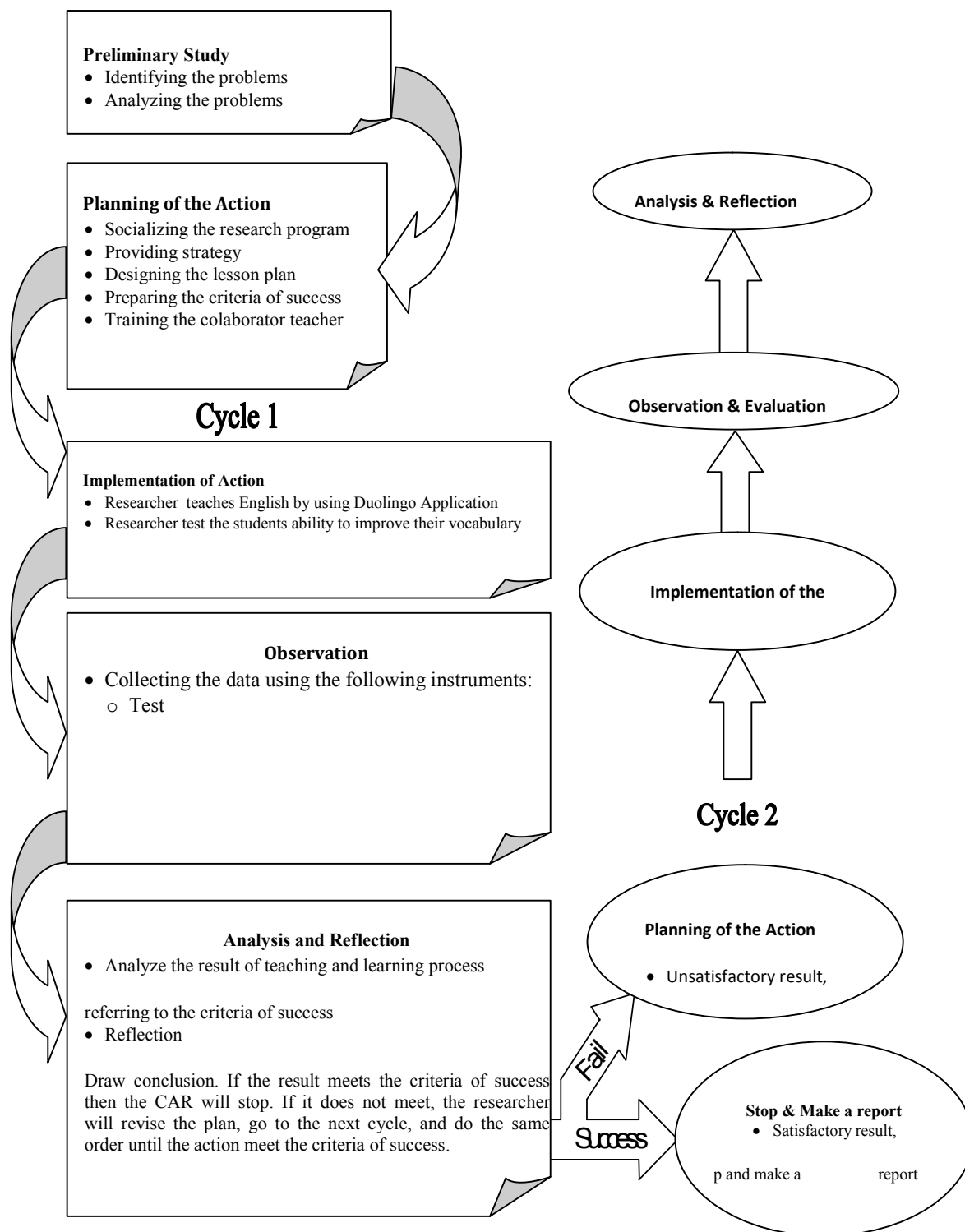
The research design of this study was used a Classroom Action Research (CAR). Classroom Action Research was chosen because the problem comes from the teaching and learning process in the classroom. The researcher conducted research on how far students understood with vocabulary and how much students were able to understand and have a lot of vocabulary. The technique was used to determine student understanding is an learning media that is Duolingo Application. Because the Duolingo application was very easy to apply as an learning media and can help to improve student vocabulary. Nunan in McKay (2006:29) said that action research has three major characteristics: it is carried out by practitioners (i.e., classroom teachers), it is collaborative, and it is aimed at changing things. It means that action research can be done by a teacher in a classroom with the help of other teachers to discuss what and how to improve the classroom activities so that the students' achievement will be better.

This research was a collaborative classroom action research. This means that the researcher collaborated with one of the English teachers in the

school where the research was conducted. The teacher as a collaborator helped researcher to carry out student activities during the teaching and learning processed. In this study, research act as a practitioner. Thus, the used of the Duolingo application to improve vocabulary was conducted by the researcher.

The researcher conducted this research adapted cycle models on the model of Kemmis and Taggart (Herawati 2008: 12), which in each cycle consists of four steps, planning, implementing, observing, and reflecting. The four main steps are preceded by reconnaissance (preliminary study), analysis, and identification of the problem.

Table 3.1 Adapted from Kemmis and McTaggart



B. Arrangements and Research Subjects

This classroom action research was carried out at MA AT- THOHIRIYAH Ngantru. The subject of this study was in First grade at MA AT – Thohiriyah Ngantru. The researcher chooses grade X-A which consist 17 students, 7 (male) and 10 (female). The researcher choosed this class because it had several considerations as follows:

1. This class has the lowest vocabulary score based on student scores.
2. Students get a lack of interest in learning English.
3. The learning process tends to be directly asked to do the exercises. The material provided without involving active students.

C. Research Procedure

The CAR procedure was adapted from the Kemmis and McTaggart models (Herawati 2008: 12). The procedure for retrieving data used by the researcher in this study is presented in each phase as follows:

1. Preliminary Study

Preliminary studies are conducted in first grade MA At – Thohiriyah. Preliminary studies are very important to obtain information about the real conditions of the class including the teaching techniques used in the teaching and learning process. The researcher found several problems faced by students when the researcher observed at the school. The problem is the teacher used conventional methods, most students have the lowest vocabulary, and their motivation in memorizing English vocabulary is without media so they were feel difficult in learning. Before the study, the

researcher gave preliminary test of vocabulary to measured their abilities. From them, there were still a lot of mistakes in the test that the researcher gave. Actually, they seemed to understand, but they were not really serious when worked on it. The problem was that they didn't had much vocabulary anymore, so they were a little difficult to interpret a sentence and also seem to still has difficulty in pronunciation of words.

2. Planning

Based on the findings of the preliminary study, the researcher proposed a solution to solve the problem. The researcher discussed the used of the Duolingo application as a learning media for students to improve their vocabulary. In this step, the researcher sets out some preparations in conducting research, such as designing teaching techniques, lesson plans, and determining the criteria of success.

a. Socializing the Strategy

The researcher then socialized the Duolingo Application to students. The researcher introduced and explained what the Duolingo application to students and showed students how to used Duolingo application. Then the researcher also introduced the Duolingo application to the teacher as a medium for teaching vocabulary. Because the Duolingo application can helped students' to improve vocabulary and can be applied while studying in the classroom or outside of the classroom. With guidance from the teacher, students will got instructions to applied the Duolingo

Application. In the Duolingo application students will found a variety of questions about vocabulary, and the questions were easier to understand and suitable for the first grade at MA At-Thohiriyah Ngantru.

b. Providing a Suitable Strategy

Because the problems that occur in the classroom are related to student achievement in vocabulary and student participation in teaching and learning activities, the solution proposed by a researcher is applied to improve vocabulary using the Duolingo Application to stimulate active participation of students in English classes, so that the students were not easily bored.

c. Design lesson plans

In designing lesson plans a number of considerations are made such as general learning goals, specific teaching goals, improving vocabulary procedures using Duolingo application that must be performed by both the teacher and students during the teaching and learning process, the material to be taught, and assignments given to students as an evaluation of technique using Duolingo application can be applied in the class.

Teaching and learning using the Duolingo Application can be seen as follows:

1) Opening Activities (students prepare material)

- a. Greetings and prayers
- b. Check student attendance list
- c. The teacher explains the objectives and methods that will be used in the teaching and learning process

2) Main Activities (students study material)

- a. The teacher started the learning with questions to help students found the subject matter.
- b. Students answer questions with several alternative answers
- c. Students are divided into many groups to solve problems
- d. Students observed, search, and record the resulted of vocabulary studies that they do not understand
- e. Students discuss the learning outcomes in front of class
- f. Students make conclusions about the material with their groups
- g. Gather learning outcomes.

3) Closing activities

- a. The teacher asked students for difficulties in the teaching and learning process
- b. Concluding material with students
- c. The teacher given assignments to students
- d. The teacher closed the lesson with greetings.

d. Preparing Criteria for Success

The criteria of success of the research included criteria of success for the learning process using the Duolingo application to

teach vocabulary and criteria of success for improve student vocabulary. To determine the success of the research, the researcher had established criteria of success to indicate whether the research was successful or not. The criteria of success include two aspects, they are: first, there are 80% of students who have a good grade equal to (≥ 70) on a vocabulary test. In this research, the researcher used the scoring guidance that covers the same aspects: meaning, spelling, word order.

a. Implementing the Plan

This step the researcher acts as a English teacher who applied the proposed technique by referring to activities carried out in class. In conducting research, the researcher begins lessons with questions to stimulate students.

This research was conducted in two meetings. The first meeting focused on introducing the Duolingo application. The second meeting focused on improve the vocabulary that learned from the Duolingo Application and the vocabulary test. In this step, the researcher made several steps to applied the Duolingo application, the researcher asked the students to worked on the questions in the Duolingo application individually and in groups to find out more about the improve in students' vocabulary.

a. Data Analysis of Test

The data were collected from the students' vocabulary test in the cycle are computed quantitatively by using a percentage formula. The formula used to find the mean score was as follow:

$$\% X = \frac{X_1}{N} \times 100\%$$

% X : percentage of success

X_1 : number of the students who passed the test

N : a total of students

Then, the results of the data analysis above are classified qualitatively to answer the research problem based on the classification of the score below:

Percentage	Category
80 – 100	Excellent
70 – 79	Good
60 – 69	Fair
26 – 59	Poor

Table 3.2 Percentage and Category

Adapted from Agustina (1999: 32) (in Kurniawati, 2011)

3. Observing

Observing activities are carried out simultaneously with the implementation of actions. At this stage, data about the implementation of the action plan has been made. The researcher gave a preliminary test for students, before started to applied the Duolingo Application. At the end of the meeting, the researcher held a vocabulary test to find out whether there was an improve students' vocabulary after learning using the Duolingo Application or not. The researcher compared the results of the pre-test and post vocabulary test.

4. Reflecting

Reflection is a stage process the data or input that was obtained at the time of observation. Using the Duolingo application to improve vocabulary, the researcher got data. The researcher tried criticizing the strength and weakness of the procedure in implementing the research plan. After analyzing the data, the researcher made the reflection of the action in cycle one to decide and plan the next cycle's steps.

When the result appropriates with the criteria of success, the action was finished. However, if it was not successful so the researcher does another cycle to revise the plan. The reflecting of activity and all information gathered in the first cycle can be used to rearrange in the next cycle. Then the researcher made some new steps to overcome the problem in the next cycle.

In this phase, the collected data from every were analyzed as the reflection of the conducted cycle. The reflection of each cycle was intended to evaluate and know whether there was an improve students' vocabulary using the Duolingo Application or not.