#### **CHAPTER III**

### **RESEARCH METHODOLOGY**

This chapter describes the methodology of this study that incorporates the research approach, model of the study, procedure of the study, location and subjects, time allocation of the study, research instruments. Data analysis, validity and reliability are also presented.

## 3.1 Research Problem

Regarding the mounting concern towards reading instruction, problem faced by either teacher or students related to teaching and reading comprehension inevitably needs solution. Therefore, in this study the problem is further formulated in the following questions:

1. Can the interactive read-aloud improve the reading comprehension ability of year-two students of SMPN Bandar Mataram?

- 2. What problems does the teacher face in teaching reading through interactive read-aloud?
- 3. What problems do the year-two students of SMPN Bandar Mataram face in reading comprehension through interactive read-aloud?

#### **3.2 Research Design**

This study employed an action research as its basic design. This strategy basically is a way of reflecting on teaching. It is done by systematically collecting data on everyday practice and analyzing it in order to come to some decisions about what future practice should be (Wallace, 1998:4). An action research aims to improve practical judgment in concrete situations and in helping people to function more intelligently and skillfully (Burns, 1994:294). Action research as one of qualitative studies is chosen by the researcher here with the reason that qualitative approach has strength in revealing phenomena in more detailed way so that enlightenment is gained (Alwasilah, 2002).

The main characteristic of action research is the spiral cycles consisting of planning, acting, observing, and reflecting (Suyanto, 2002). The spiral cycle consists of problem identification, systematic data collection, analysis, and finally, problem redefinition. In short, the cycle consists of diagnostic and therapeutic stages.

According to Elliot (1991) there are two reasons using an action research in this study. First, action research is a method and process to bridge between theory and practice. Second, it can analyse problems practically, situationally, contextually and aims at determining right solutions to overcome the problems. In addition Wiriaatmadja (2005) states that action research aims at changing image and improving teachers' professionalism. As well the main characteristic of an action research is collaboration between the researcher and the teachers. The cycles of action research could be illustrated as a set of activities as depicted in figure 3.1.

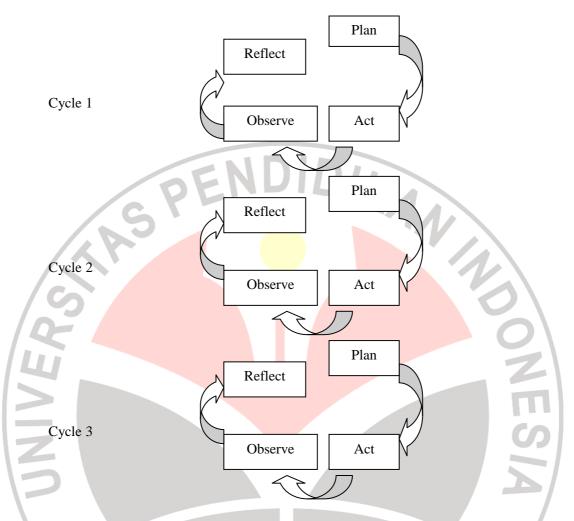
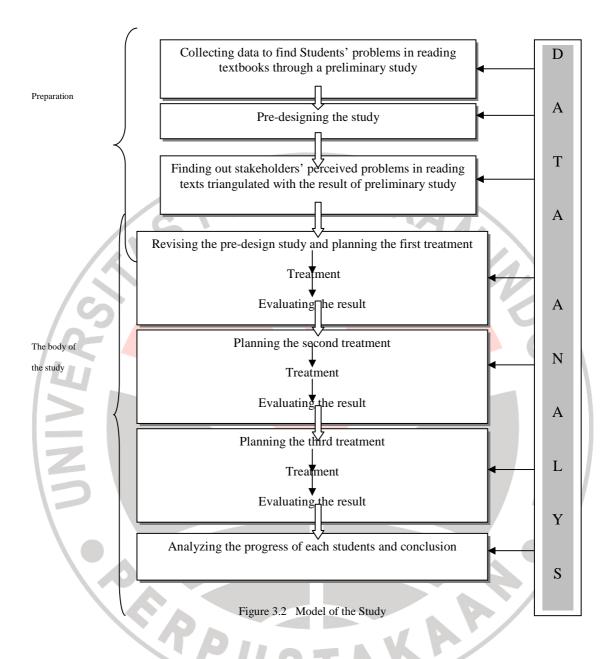


Figure 3.1 Cycles of Action Research

Each cycle consisted of four steps namely planning, acting, observing, and reflecting. The cycles illustrated above can be done repeatedly until the researcher gets the real picture of the study.

For the sake of clarity and fuller description about the study, the framework of the research is displayed in figure 3.2.



Tentative plan was constructed by collecting data from a preliminary study. The preliminary study was aimed at identifying problems found in classroom practices with respect to students' problems in reading comprehension. The data of the preliminary study was gained through observation and interview. A test was also tried out to see its validity. The data from the preliminary study were analyzed. The result then was of great importance to plan and design the treatment of cycle 1.

Before the cycle 1 was conducted, a pre test was administered to see students' reading proficiency. After the first cycle had been done, the teacher, the researcher and the collaborators discussed what would be done for the next cycle. The last cycle would be decided if the solution had already been satisfactory. However, it is very possible for the researcher to add or change the treatment if the treatment is considered not effective. The researcher, therefore, administered a post-test to see, if any, improvement occurred in students' reading proficiency. The results of pre test and post-test were compared to find out whether the chosen treatment was effective.

# 3.3 Data Collection

### 3.3.1 Location and Participants

The subjects of this study were the students of the eighth grade (grade B) of SMPN I Bandar Mataram. The reason of choosing those subjects was that they had already passed the transitional period of moving from elementary school level. Thus, the students are already at the stable stage to be taken as subjects. In addition, the teacher was a curriculum implementer.

The study was carried out at SMPN I Bandar Mataram, in central Lampung. This school was chosen as the place of the study mainly because according to preliminary study both teacher and students faced problems in teaching and learning reading. The problems were mainly related to reading comprehension.

### 3.3.2 Time Allocation

This study was started from the first semester of new academic year, on the third week of January 2006. The more detail description of time allocation of the study can be seen in table 3.1.

Table 3.1 Research Agenda																					
No	Activity	December					January					February					March				
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	Permission to the stakeholders																				
2	Preliminary study																				
3	Pre test																				
4	Cycle 1																		Ň		
5	Cycle 2																		- \		
6	Cycle 3																				
7	Cycle 4																				
8	Post test																				

## 3.3.3 Procedures

3.3.3.1 Observation

The observation was done in order to see the ongoing process in the classrooms. The researcher utilized structured observation and unstructured observation. The verbal communication was audio-recorded while non-verbal communications were jotted down in the field notes.

#### 3.3.3.2 Interviews

The researcher employed unstructured interview, open-ended questions. The interviews were addressed to both teacher and students. The interviews were audio-recorded and then transcribed.

#### 3.3.3.3 Documents

In his study, the teachers' lesson plans and the teaching materials used by the teachers were regarded as the documents.

3.3.3. 4 Teachers conference

Discussion among teachers involved in this study to find solution towards problems found in each cycle was regarded as data collection as well.

3.3.3.5 Developing teaching Aids

Authentic reading materials were retyped in a computer, the pictures were scanned using a scanner. Then hands-on containing the reading texts and pictures were distributed to the students.

3.3.3.6 Pretest, each -cycle test, and Posttest

Pretest was done in the beginning of this study in order to find the students' prior skill in reading comprehension. Each-cycle test was done at the end of each cycle to see the students' reading comprehension right after the treatment. Posttest was administered in the end of this study to see the students' improvement of their reading comprehension skill after the whole treatment.

#### **3.4 Data Analysis**

## 1. Developing Categories

The data in this study was obtained from audio-tape recordings, field notes, and interviews. Then the verbal interaction in the audio recording was transcribed with the help of the field notes. After that, the data were organized and classified.

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## 2. Analysis after data collection

Besides the analysis conducted during the data collection phase, an overall analysis was conducted after the data were considered to be exhaustive. This analysis involved revision and expansion of whatever was noted down during the data collection phase.

3. Pretest and posttest data analysis

To see whether the treatment did have an effect on performance in these data, and to see whether students' score differed significantly from pretest to posttest, the following paired *t*-test formula was used:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{s_{\overline{D}}}$$

The formula for  $s_{\overline{D}}$  was as follows:

$$s_{\overline{D}} = \frac{s_D}{\sqrt{n}}$$

To find  $s_D$  the following formula was used:

$$s_{D} = \frac{\sqrt{\sum D^{2} - (1:n)(\sum D)^{2}}}{n-1}$$

Then, the standard error of differences between the two means were calculated using the following formula:

$$s_{\overline{D}} = \frac{s_D}{\sqrt{n}}$$

To check the difference between the two means in order to find our observed t value, the following formula was used:

$$t_{obs} = \frac{\overline{X}_1 - \overline{X}_2}{s_{\overline{D}}}$$

Then the result of  $t_{obs}$  calculation was compared with t distribution table (see in appendix) at level .05 (Lazaraton and Hatch, 1991:288). As well the SPSS program was used in order to gain an accurate calculation.

## 3.5 Validity and Reliability

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In order to contribute knowledge that was believable and trustworthy, triangulation, member checks, and long-term observation were carried out to ensure the internal validity. Besides triangulating the data by using multiple methods of data collection and analysis, a description about the phenomenon under study was carried out to maintain the external validity of the findings.

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