

### **III. RESEARCH METHODS**

This chapter describes the method used in conducting the study. Details on the method of study covers setting of the research, general description of the research, research procedure, indicators of the research, instrument of the research, and data analysis.

#### **3.1 Setting of the Research**

This classroom action research was conducted in the second quarter of the third year students of SD BPK Penabur Bandar Lampung. Based on the problem identified by the researcher, she examined the cause of the problem and tried to find the solution. Based on the researcher's experience in teaching them for two months, the performance of the third grade students of that school is far from expectation of the curriculum from the students' final test result. It was found that the results were still far from the target that is KKM (Kriteria Ketuntasan Minimal) of the class of that school was 55. There were only 12 students (54.54%) who passed the final test. Obviously it could be seen that the English score was very low, globally almost all the English skills were still far from the target. From the researcher's experience, it was found that most of students could

not answer the researcher's question, they kept asking the teacher to translate the question into their mother tongue language (Indonesian) and they could not answer it in English.

Then, the researcher found solution that was using cartoon video as an alternative media in teaching vocabulary. Researcher made lesson plan and the teacher taught the students based on the lesson plan. Then, the researcher observed student's activities in teaching and learning process.

Furthermore, the researcher and teacher analyzed and discussed the observation result during teaching and learning process (the strength and weaknesses which were done by the teacher and students during using Cartoon Video) and learning result (the vocabulary (verb-ing) test) in each cycle of Cycle I and Cycle II.

### **3.2 General Description of the Research**

This research was done by researcher with the English teacher of SD BPK Penabur Bandar Lampung. In this classroom action research, the observer was the researcher and the teacher was from the school. The researcher made the lesson plan based on the procedures of the technique that would be implemented, and the teacher taught her students based on the lesson plan. While teaching, the teacher also functioned as an observer; she taught and focused on observing students' learning activity. Meanwhile, the researcher observed everything occurred in the classroom during the teaching and learning process. While the teacher was implementing the cartoon video in the class, the researcher observed the student's activities. Besides, the researcher observed on the weaknesses of the first cycle in

order to make improvement on the next cycle. At the end of the cycle, the teacher held vocabulary test. The test, therefore, was scored by both teacher and researcher. The result of the test and observation data are discussed together to decide whether the next cycles needs to be done.

### **3.3 Research Procedures**

In conducting the research, the researcher used the procedures of classroom action research designed by Kemmis and McTaggart. According to them, the research procedure in a classroom action research consists of planning, implementing, observing and reflecting (2006:16). Therefore, this research followed the design as follows:

#### **1. Planning**

Based on the research problem, the researcher prepared lesson plan, selected the material from the text book, prepared the vocabulary test for the students and also filled out the observation sheets when the researcher was observing the students' activities and the teacher's performance while the teacher was teaching. The research would be conducted if the minimum score of the vocabulary test, that was 60, was achieved by 70% of the students. In order to get the data, the researcher teach the students, get the collaborator observe, and asks students do vocabulary test.

#### **2. Implementing**

In this step, the researcher implemented the cartoon video as teaching media in the class with the lesson plan and the materials prepared while the teacher was

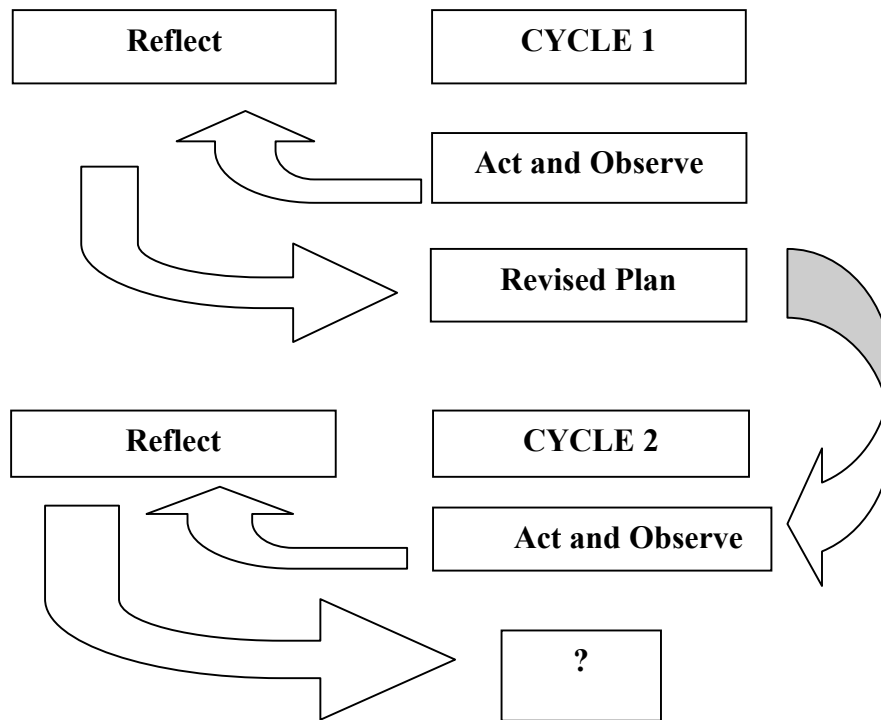
teaching. The teacher here was an English teacher from the school. The teacher taught the material about verb of action. In teaching, the teacher involved the students' participation, so that the students would become more active in teaching learning process. It would be done in order to make the students familiar with what they would do. Next, the researcher let the students to practiced doing it in pair. The researcher observed the situation in the class, the teacher's teaching performance and made some necessary notes.

### 3. Observing

Observation was done by researcher and the teacher during the teaching and learning process. The researcher and the teacher observed students' activities and teacher's performance, then the result of the observation is filled out in the observation sheet.

### 4. Reflecting

Here, the researcher and the teacher discussed about the strengths and the weakness of a cycle to determine what to do in the next cycle and to determine whether the result of the cycle was fulfilled the indicators.



The Cycle of Classroom Action Research ( Kemmis and McTaggart, 1985: 14 )

### 3.4. Indicators of the Research

There were two indicators used in this research: learning product and learning process. Learning product was in form of students' vocabulary test score while learning process was in form of the observation report of researcher. Then, the detail indicators were explained as follows:

#### a. Learning product

The use of cartoon video was able to develop students' verb of action if 80% of the students reached the target score of the vocabulary test, 60. Thus, it means that students should at least answered 70% of the vocabulary test correctly.

## b. Learning process

The observation of the process of teaching was based on the lesson plan made by researcher and the real process in the classroom. It covered pre-activity, while activity and post activity. In pre-activity the aspect observed were the students interested to follow the class and respond to the topic, while, in while activity, the aspects observed were students' attention to the teacher explanation, and their understanding to the content of the movie. The indicator determined by the researcher concerning the students' activities is 80%. The researcher decided to set 80% as the target since according to Arikunto (1993:210), if more than 75% of students were actively involved in teaching and learning activities, it could be categorized as a good level. To set the target of the success of this CAR, the researcher also did a discussion with the English teacher of that school.

## 1.5 Instrument of the Research

There were two instruments of the research that was employed in this classroom action research. They were as follows:

### a. Vocabulary (Verb-ing) Test

The first instrument used in getting the data was vocabulary test. Vocabulary test was chosen as the instrument because it required students to measure their vocabulary achievement. Vocabulary test could also motivate the students to develop their English. The researcher used vocabulary test proposed by Heaton (1991). The test assessed the students' understanding and the students' verb mastery by choosing the correct answer related to the material taught. The

vocabulary test consisted of 30 items in the form of multiple choice. The test is valid and reliable since it had been tried out and it was a good reflection of what had been taught and of the knowledge which the teacher wanted the students to know, the researcher compared it with a table of specification. If the table represented the materials that the researcher wanted to test, then it was considered to be a valid test. A table of specification is an instrument that helps the test constructor plans the test.

Table 1 The Table of Vocabulary (Verb-ing) taught to the Students by Using Cartoon Video.

<b>Vocabulary</b>	
<b>Verb</b>	Sleeping, eating, reading, writing, doing homework, jumping, swimming, playing, throwing, hitting, running, catching, coming, clapping, rubbing, scratching, jumping up&down, singing, yawning, brushing, drawing, walking, sweeping, cooking, dancing, eating, studying, writing, laughing, driving, running, mopping, riding, smoking, teaching, travelling, chasing, posting, making, planning, flying, coming back, testing, burning, spinning, falling, fighting, waiting, dusting, flushing, dish washing, shaking hands, begging, praying, taking a bath, watching

The material of verb of action in the form of verb-ing was based from the Curriculum of SD BPK Penabur Bandar Lampung. Therefore, the researcher prepared the cartoon video that containing of verb of action in the form of verb-ing.

#### b. Observation sheet

The observation sheet was filled out by researcher and teacher during the process of teaching and learning. The researcher and teacher gave check mark on observation sheet of students' activity and the process of teaching and learning in the classroom reflected on pre-activity, while activity, and post activity. The observation sheet was used to determine whether or not.

#### **Try Out Test**

Try out has been needed to be done to prove whether the vocabulary (verb-ing) test had good quality or not. The test was said to have a good quality if it has a good validity, reliability, level of difficulty and discrimination power. The try out was held to different class from the experiment class. There have been some elements that have been tested as follows:

##### 1. Validity

The test can be said valid if the test measured the objective to be measured and suitable with the criteria (Hatch and Farhady, 1982: 250). To measure where the test has good validity, the researcher analyses the test from content validity to construct validity.

##### a. Content Validity

Content validity examines whether the test is a good representation of the material that needs to be tested. This means, the item of the test should represent the material being discussed. In the content validity, the material given was suitable with the 2006 English Curriculum for the third grade of



Elementary students. Furthermore in the research, the writer reported the tests are valid because they are arranged based on the school curriculum.

#### b. Construct Validity

Construct validity focused on the kind of test that was used to measure the ability. It was used to the research that has many indicators. According to Setiyadi (2006: 26), if the instrument just measure one aspect, for example vocabulary, the construct validity can be measured by evaluating all items in the test.

### 2. Reliability

Hatch and Farhady (1982: 243) says that reliability of a test can be defined as the extent to which a test produces consistent result when administered under similar conditions. To avoid the subjectivity, the researcher asked the teacher as a rater. The first and second raters used scoring criteria devised by Harris. To measure the coefficient of the reliability between odd and even group, this research used the Pearson Product Moment Formula as follows:

$$r_{xy} = \frac{\sum XY}{\sqrt{(\sum X^2)(\sum Y^2)}}$$

Where:

$r_{xy}$  : coefficient reliability between odd and even numbers

$x$  : odd number

$y$  : even number

$\sum X^2$  : total square of odd numbers

$\sum Y^2$  : total square of even numbers

$\Sigma XY$  : total number of odd and even number

(Lado: 1961 in Hughes, 1991: 32)

Then, to compute the coefficient correlation of the whole items, the researcher will use Spearman Brown Prophecy Formula.

$$r_k = \frac{2rl}{1+rl}$$

$r_k$  : reliability of full test

$rl$  : reliability of half test

In this case the writer also used the standard of reliability (Arikunto, 1998: 260)

below:

0.81-1.00 = very high

0.61-0.80 = high

0.41-0.60 = sufficient

0.21-0.40 = low

0.00-0.20 = very low

### 3. Level of Difficulty

A good test is the one which is not too easy or too difficult. In order to find out the difficulty level, this research will use the following formula:

$$LD = \frac{R}{-N}$$

Where:

L : level of difficulty

R : number of students who answer correctly

N : total number of students who answer correctly

The criteria are:

<0.30 : difficult

0,30 - 0,70 : average

>0.70 : easy

(Shohamy, 1985: 79)

- Based on the first try out to those criteria there were 15 easy items (3., 6., 8., 9., 10., 23., 24., 25., 26., 27., 30., 31., 36., 37., 38.), 18 average items (1., 5., 7., 12., 13., 14., 15., 17., 18., 21., 22., 28., 32., 33., 34., 35., 37., 40.), and 7 difficult items (2., 4., 11., 16., 19., 20., and 39.). Some items which were easy and difficult were dropped, meanwhile for the items which were average in difficulty level used in vocabulary (verb-ing) test in Cycle I. The result of try out test difficulty level is shown in Appendix 5.
- Based on the second try out to those criteria there were 16 easy items (1., 3., 5., 17., 21., 22., 24., 25., 28., 29., 30., 34., 36., 37., 39., 40.), 19 average items (2., 6., 7., 8., 10., 12., 13., 14., 18., 19., 20., 21., 22., 23., 26., 32., 33., 37., 38.), and 5 difficult items (4., 9., 11., 15., 16.). Some items which were easy and difficult were dropped, meanwhile for the items which were average in difficulty level used in vocabulary (verb-ing) test in Cycle II. The result of try out test difficulty level is shown in Appendix 7.

#### 4. Discrimination Power

Discrimination power is used to indicate the discrimination of the fail and the success of the students. To find out the discrimination power, this research will use the following formula:

$$DP = \frac{U-L}{\frac{1}{2}N}$$

Where:

DP	: Discrimination Power
U	: The number of upper groups students
L	: The number of lower groups students
N	: total number of students

The criteria are:

0.00 – 0.20	: poor
0.21 – 0.40	: satisfactory
0.41 – 0.70	: good
0.71 – 1.00	: excellent

(Arikunto, 2006: 81)

- Based on the first try out to those criteria there were 9 items were poor (2., 7., 11., 22., 29., 31., 33., 37., 38.), 9 items were satisfactory (8., 9., 15., 16., 23., 27., 30., 39., 40.), 10 items were good (3., 6., 10., 12., 19., 25., 26., 28., 32., 36.), 6 items were excellent (1., 13., 17., 18., 20., 35.), 5 items were have negative discrimination power (5., 14., 21., 24., 34.), and 1 item (4.) didn't have discrimination power. Negative and no discrimination items were

dropped, meanwhile for the items satisfactory, good, and excellent were administered. Some of items, which have poor discrimination power, were revised and used in vocabulary (verb-ing) test in Cycle I. The total items that were administered for vocabulary (verb-ing) test were 30 items (1., 3., 6., 7., 8., 9., 10., 12., 13., 15., 16., 17., 18., 19., 20., 22., 23., 25., 26., 27., 28., 29., 30., 32., 33., 35., 36., 38., 39., 40.).

- Based on the second try out to those criteria there were 13 items were poor (4., 12., 15., 17., 22., 23., 26., 27., 31., 35., 37., 38., 39.), 8 items were satisfactory (1., 5., 9., 21., 28., 34., 36., 40.), 8 items were good (3., 8., 18., 19., 24., 29., 30., 39.), 5 items were excellent (2., 7., 10., 14., 20.), 3 items were have negative discrimination power (6., 13., 33.), and 3 items didn't have discrimination power (11., 16., 32.). Negative and no discrimination items were dropped, meanwhile for the items satisfactory, good, and excellent were administered. Some of items, which have poor discrimination power, were revised and used in vocabulary (verb-ing) test in Cycle II. The total items that were administered for vocabulary (verb-ing) test were 30 items (1., 2., 3., 4., 5., 7., 8., 9., 10., 12., 14., 15., 18., 19., 20., 21., 22., 23., 24., 25., 26., 28., 29., 30., 34., 36., 37., 38., 39., 40.).

Based from the explanation above, there are several items in try out test is dropped because the items are categorized as the bad items based from the level of difficulty and the discrimination power. It becomes the bad items because the question is too easy and too difficult or the multiple choice is not arrange well in a various items (there are similar choices).

### **3.6 Data Analysis**

In analyzed the data, the researcher classified the data into two categories; the data of the learning product and the data of the learning process. The data of the learning products was the result of the vocabulary test and the data of the learning process was the result of the observation.

The data analysis was done after the data were collected from every cycle I. After got the data, the researcher together with the teacher analyzed the data and did reflection based on them. From the analysis and reflection, the researcher knew what should be improved on the next cycle.

#### **1. Learning product**

To know the learning product, the researcher used vocabulary test in form of multiple choice to collect the data. There were some steps used to analyze the data get from the test:

##### **1.1. Giving the vocabulary scores to the students' vocabulary test**

After giving the test, the researcher checked the result of students' test to give the score. Besides that, the researcher analyzed the result to know the scores mostly made by the students. This was very useful for betterment in the next cycle.

##### **1.2. Calculating the number and the percentage of the students who got 60 or more.**

To know the percentage of students who get  $\geq 60$ , the following formula would be used:

$$\frac{\text{Number of students who get } \geq 60}{\text{Total number of students}} \times 100\%$$

## 2. Learning process

To get the data from the learning process, the researcher used observation sheets. The result of the observation sheet would be analyzed after every cycle is conducted. If the observation was done for observing the students' activities, the researcher analyzes the result of the observation separately.

### 2.1. Students' Learning Activities

In analyzing the data get from observing the students' learning activities, the following steps would be done:

2.1.1 Counting the number of activities done by the students based on observation sheet.

2.1.2 Calculating the percentage of the students' activities.

For calculating the percentage of the students' activities, the following formula would use:

$$\% A = \frac{A}{n} \times 100\%$$

Note:

$\% A$  : percentage of students' activities

$A$  : number of students' activities observed

$n$  : number of students

2.1.3 Making a description of the data that had been analyzed.

## 2.2. Teacher's Teaching Performance

Meanwhile, in analyzing the data get from observing the teacher's performance (researcher's performance), the English teacher did the following steps:

### 2.2.1 Counting the total score

In this step, the researcher counted the sum of scores from all aspects. The aspect that was scored covers the teacher's activities in pre-activity, while-activity, and post-activity. See appendix 14 and 15.

### 2.2.2 Counting the Average Score of Teacher's Performance

The average score would be important to decide in order to decide if the teacher reached the indicator or not. To find out the average score the following formula will be used:

$$\text{Average score} = \frac{\text{Total Score}}{25}$$

Noted: 25 was used since there were 25 aspects to be scored (see appendix 14 and 15)