

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

1. Classroom Action Research

In this research, the researcher used Classroom Action Research (CAR) as the research method. According to Mettetal (2001:7), “Classroom Action Research is a method of finding out what works best in our own classroom so that we can improve student learning”. In line with this statement, Singh (2006:261) who also states, “action research is a method for improving and modifying the working system of a classroom in school”.

Every teaching situation is unique in terms of content, level, student skills and learning styles, teacher skills and teaching styles, and many other factors. To maximize students learning, a teacher must find out what works best in a particular situation.

In classroom action research, a teacher should focuses attention on a problem or a question about his or her own classroom. The goal of classroom action research is to inform decision-making, the question or problem that should be looked under teacher control, such as teaching strategies or method, student assignments, and classroom activities. According to Ferrance (2000:26), “Action research is used for various purposes: school based curriculum development, professional development, systems planning, school restructuring, and as an evaluative tool”.

In classroom action research, a teacher focuses attention on a problem or question about his or her own classroom, (Mettetal, 2001:7). So, in this research, the researcher used classroom action research method because it can help them to find out the students problems and their solutions on learning reading comprehension in the class. It was really suitable with the purpose of this research, that was to improve the students' reading comprehension by using learning cell method.

Classroom action research containing some characteristics on applying it. According to Kemmis and McTaggart in Hien Thu (2009:3) argue that the three defining characteristics of action research are:

- a. It is carried out by practitioners (classroom teachers) rather than outside researchers;
- b. It is collaborative; and
- c. It aims at changing things.

Based on the characteristics above, it can help the teachers on designing their teaching to be better . It can affecting the students education development.

Gay and Airasian (1986) in Hien Thu (2009:99) prove benefits resulted from the application of action research to education as follows:

- a. Teachers investigate their own practice in new ways, looking deeper in what they and their students actually do and fail to do.
- b. Teachers develop a deeper understanding of students, the teacher learning process and their role in the education of both teachers and students.

- c. Teachers are viewed as equal partners in deciding what works best and what needs improvement in their classroom or classrooms.
- d. In most cases, solutions for identified problems are arrived cooperatively among teachers.
- e. Teachers are often more committed to action research because they identify the areas they view as problematical and in need of change.
- f. Action research is an ongoing process and its strategies can be widely applied.
- g. Professional development and school improvement are core aspects for any teacher who engages in action research.
- h. Teacher reflection can be conducted individually or in a school-based team composed of students, teachers and administrators.

From the explanation above, the researcher concluded that classroom action research is a method of finding out of the best way in solving the students problem in learning activities by modifying the classroom system in order to improve their learning and achievement in the class. In this research, the researcher used learning cell method to improve the students' reading comprehension.

2. Procedure of Classroom Action Research

In this research, there were four steps in process of classroom action research, they were: planning, acting, observing, and reflecting. According to Burns (2010:9), "action research typically involves four broad phases ; planning, acting, observing and reflecting in a cycle of research". Moreover

Coats (2005:5) mentioned, “action research process consists of planning, acting, observing and reflecting”. In line with this statement, Kemmis and Mc. Taggart (1988) in Juita (2013), stated there are four fundamental aspects of the action research, they are planning, acting, observing and reflecting.

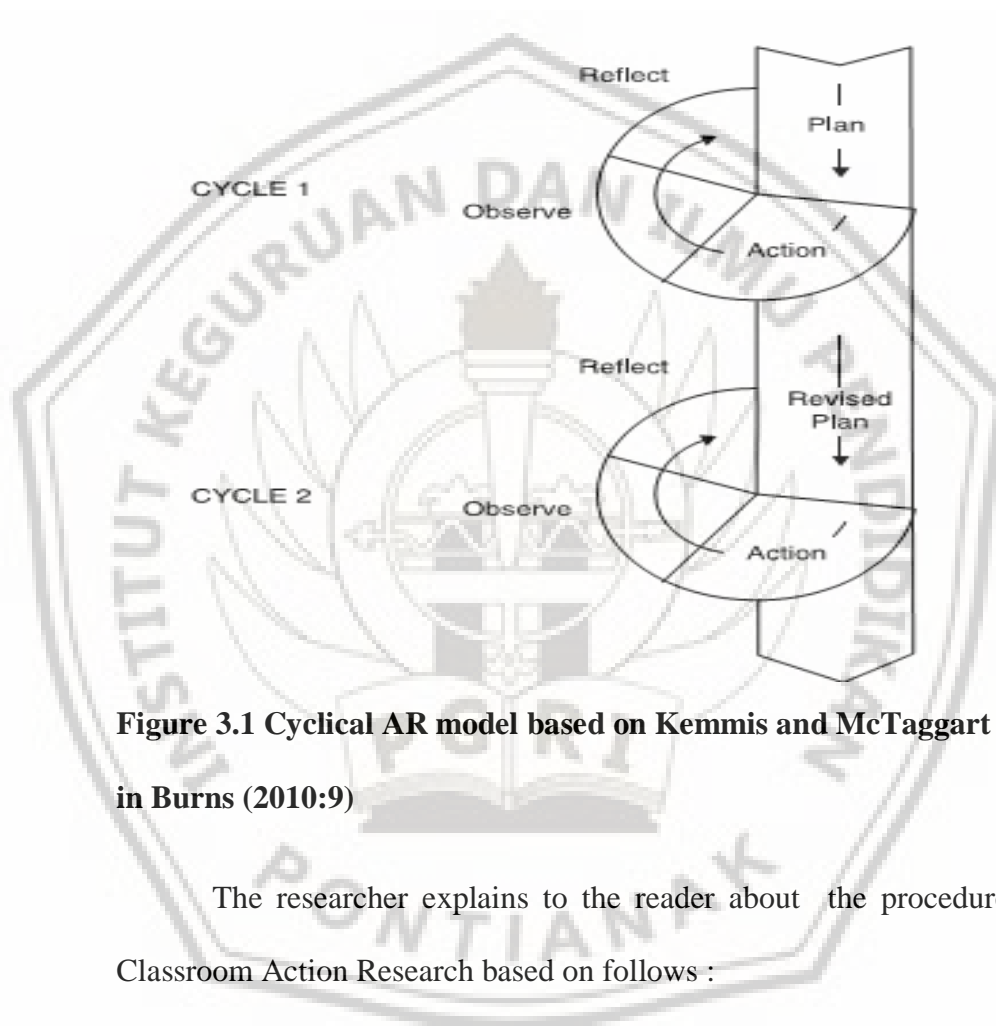


Figure 3.1 Cyclical AR model based on Kemmis and McTaggart (1988) in Burns (2010:9)

The researcher explains to the reader about the procedure of this Classroom Action Research based on follows :

1. Planning

The first step is planning. Kemmis and McTaggart (1988) in Burns (2010:9) stated , “In this phase you identify a problem or issue and develop a plan of action in order to bring about improvements in a specific area of the research context”. In this step the researcher identified the students problem

in learning activity in the class. In order to get the optimal result on solving the problems, the researcher had to make a plan in each cycle based on the students problems in reading comprehension. Planning was made by the researcher before conducting his research. Everything had been ready before the implementation of action research started, including the materials. They were:

- a. Lesson Plans
- b. Teaching materials included the method that is going to be used in teaching and learning activity
- c. Teaching equipment
- d. Field notes form
- e. Observation Checklist
- f. Assessment tool: short narrative text reading rubric
- g. Reading Comprehension Test (Multiple choice)
- h. Scoring table

2. Acting

In this step the researcher as the teacher implemented the action that had been formulated in the lesson plan. According to Kemmis and McTaggart (1988) in Burns (2010:9), “The plan is a carefully considered one which involves some deliberate interventions into your teaching situation that you put into action over an agreed period of time”. In this research, the researcher implemented the teaching and learning process by using Learning Cell Method. In this method, there were three activities that had been done

by the researcher such as; pre activity, whilst activity and post activity. These activities were based on the lesson plan that was made by the researcher as the teacher. In pre activity, the students were paired by the teacher randomly. In whilst activity, the teacher used learning cell method in the learning activity based on lesson plan that had been made before. In post activity, the teacher discussed about the materials that had been explained in each meeting. The teacher gave the feed back to students about material. The students concluded the material together in the class. After implementing two meeting of each cycle, the researcher gave the reading comprehension test as post test that was consisted of 20 questions. It was multiple choice test. It purposed to measure the students comprehension in reading narrative text in every cycle. If their score is still poor and not showing any improvement, the researcher would do the next cycle. While the researcher implement the action, the collaborator observed everything that had been happened during implementing learning cell method in the class.

3. Observing

The next step of action research was observing. According to Kemmis and McTaggart (1988) in Burns (2010:9), “this phase involves you in observing systematically the effects of action and documenting the context, actions and opinions of those involved”. In this step, the researcher was assisted by an English teacher of SMA Al-Ishlah Pontianak as the collaborator. And then, while the teacher implemented the learning cell

method, the collaborator observed the class activities by using observation checklist, field note and record the activity.

4. Reflecting

Reflecting was the activity of evaluating the progress or the change of students. Kemmis and McTaggart (1988) in Burns (2010:9) state, "At this point, you reflect on, evaluate and describe the effects of the action in order to make sense of what has happened and to understand the issue you have explored more clearly". In reflecting, the researcher described the results of research that had been done by the researcher and the collaborator. In this stage, the researcher and collaborator discussed the next act to solve the problem found in cycle 1, if the result of cycle 1 is not showing any improvement. Actually, this research was held with a purpose to improve the students reading comprehension by using learning cell method, so the researcher can do the next cycle if the results of students reading comprehension test not showing any improvement .

B. Research Subject

In order to get the data, the researcher need the sample or subject in his research. The subject was selected by using purposive sampling technique. According to Teddlie & Yu (2007:2), "Purposive sampling techniques are primarily used in qualitative studies and may be defined as selecting units (e.g., individuals, groups of individuals, institutions) based on specific purposes associated with answering a research study's questions".

The subjects of this research were the tenth grade students of SMA Al-Ishlah Pontianak. The number of subject was 20 students who were lack of reading comprehension on reading text, such as finding main idea, finding factual information, guessing vocabulary, identifying reference, and inference. It was proved by their low score on reading comprehension test and researcher's pre observation.

Table 3.1

The Number of Students in the Tenth Grade Class

No.	Student	Number of Students
1.	Male	3
2.	Female	17
Total		20

Source: Administrator of SMA Al-Ishlah Pontianak

C. Technique of Data Collecting

In order to get the data, the researcher used observation and measurement techniques. Observation technique was used to observe and analyze about what is happening in the class, the condition in the teaching and learning process. Meanwhile the use of measurement technique in this research was to measure the students' achievement in reading English text. They will be explained more based on the follows:

1. Observation Technique

The researcher used observation technique to collect the qualitative data. It was used to know the activities during the teaching and learning process, such as how the students' response concerning the use of Learning Cell Method. It was also supported by Mackey & Grass (2005:186) who state that "observation techniques are a useful meant for gathering in-depth information about such phenomena as the types of language, activities, interactions, instruction, and events that occur in second or foreign language class".

2. Measurement Technique

Measurement technique was be used by the researcher in this research. (Kothari 2004:69) states, "by measurement, the process of assigning numbers to objects or observations, the level of measurement being a function of the rules under which the numbers are assigned". So, in this research, the researcher used reading comprehension test as the tool of collecting quantitative data in measurement technique. It was multiple choice test because the researcher wanted to know about the improvement of students achievement and reading comprehension skill while the test was intended to know the students' reading comprehension.

D. Tools of Data Collecting

The appropriate tools in collecting data were very important to gain the objective results. In this research, the researcher used observation

check list, field note , reading comprehension test and video recorder as the tools of data collecting.

1. Observation Checklist

Observation checklist was used by the researcher as the tool of collecting data. According to Koshy (2005 :98) , “observation is a natural process that is observing people and incidents all time and based on the observations, making the judgements”. Therefore observation checklist was used to observe the atmosphere teacher and students’ behavior and any impact in the class room during implementing Learning Cell method in teaching reading comprehension. It was used by the researcher as the tool of observing the condition while teaching and learning process in the classroom. Observation Checklist was a form of observation paper that had been used by researcher in this research. The observation checklist was filled by the English teacher of SMA Al Ishlah Pontianak as the collaborator.

2. Field Note

Field Note was used by the researcher to write notes based on the steps of the classroom action research during teaching and learning process started. It is used for keeping a record of what happens, of why and where your ideas evolved and of the research process itself” (Koshy, 2005:9 7). In this research, a collaborator helped the researcher on writing the field notes. The results of

collaborator's writing can be formed as a description of people, object place, event, activity, and conversation. "These are field notes; the written account of what the researcher hears, sees, experiences, and think in the course of collecting and reflecting on the data in qualitative study" (Bogdan & Biklen, 1982:74). It was aimed for monitoring the students' activity and behavior during teaching and learning process.

3. Video Recorder

According to Jewitt (2012: 2), video recorder provides a fine grained multimodal record of an event detailing gaze, expression, body posture, and gesture. Video recorder was used by the researcher to record and to document the learning process during implementing learning cell method in the class. In this research, the researcher used camera as the video recorder.

4. Reading Comprehension Test

Reading comprehension test was also used by the researcher to measure the students' improvement from cycle to cycle. According to Fraenkel et al (2012:127) who state that achievement , or ability, tests measure an individual's knowledge or skill in a given area or subject which are mostly used in schools to measure learning or the effectiveness of instruction. By reading test, the researcher would know about the whether there was an improvement or not. It was multiple choices test.

E. Technique of Data Analysis

In this research, the researcher focused on the computation of mean score as it was the best indicator of the combined performance of an entire group of participants for quantitative data and analyzed the record from observation check list table, field note and video recording for qualitative data.

1. Qualitative Data Analysis

In this research, the qualitative data was derived from observation technique in this research. According to Miles & Huberman (1994:10) “there are some steps in analyzing qualitative data, they are ; data reduction, data display, conclusion drawing and verification”. They will be explained by the researcher based on follows:

1) Data Reduction

In data reduction, the researcher selected proper information that the researcher needs in conducting the research from the observation checklist and field notes report. According to Miles & Huberman (1994:10), “data reduction refers to the process of selecting, focusing, simplifying, abstracting, and transforming the data that appear in written-up field note or transcription”.

2) Data Display

After finishing data reduction, the researcher continued to the next step, that was data display. Data display organizes, and

compresses the information or the data. Data display showed what stage the analysis had reached and it is the basis for further analysis. Generically, a display is an organized, compressed assembly of information that permits conclusion drawing and action (Miles & Huberman, 1994:11).

3) Conclusion Drawing and Verification

The reason for reducing and displaying the data is to assist in drawing conclusion. This is the last step in analyzing qualitative data. These step starts from the point where ordering and integrating of the previous analysis has been required. The purpose of this stage is to intergrate what would be done into meaningful and coherent picture of the data. Miles & Huberman (1994:11) state, "Conclusion is also verified as the analyst proceed".

2. Quantitative Data Analysis

In this research, the quantitative data was derived from measurement technique by using reading comprehension test as the tool of data collecting. Quantitative data is a numerical record that results from a process of measurement and on which basic mathematical operations can be done (Singh, 2007:123). In this research, the researcher analyzed the students individual score and mean score as the quantitative data.

1) Reading Comprehension Test

a) Individual Score

To find out the students individual score, the researcher applied the following formula:

$$S = \frac{R}{N} \times 100$$

Note:

S = The individual's score

R = Number of correct answer

N = Number of question

Adopted from Sianturi and Sumarsih (2012) in Rosalia, (2015:68)

To find out the students level in reading comprehension in order to determine the criteria of this research goal. The researcher used the table of students' score classification.

Table 3.2
The table of students' score classification

Number	Score	Classification
1	81 - 100	Excellent
2	61 - 80	Good
3	41 - 60	Average
4	21 - 40	Poor
5	0 - 20	Very Poor

Adopted from Harris, (1986) in Juita, (2013)

b) Mean Score

To find out the students mean score, the researcher applied the following formula bellow:

$$\bar{X} = \frac{\sum x}{n}$$

Where :

\bar{X} : the students' average score

$\sum x$: the total of students' score

n : the number of students

Adopted from Singh (2006:286)

After getting the students individual score, the researcher classified their score in order to know the students level in reading comprehension. After that, the researcher counted their average or mean score in order to know that there was improvement or not in students reading comprehension test. This research would be called success if the students learning activity showing the improvement from cycle to cycle and got the satisfying result in the class. The students score should pass the poor level.