# CHAPTER III RESEARCH METHODOLOGY

# A. Settings

### 1. Place

SMAN 1 Pemangkat is an high school level education unit located at Jalan Pangsuma, Kec. Pemangkat, Kab. Sambas which is under the auspices of the Ministry of Education and Culture. This school is one of the public schools in Sambas district.

#### 2. Time

From 15 until 23 May in the Academic Year of 2022-2023. Details of the research schedule are presented as follows:

**Table 3.1 Details of the Research Schedule** 

Cycle	Day/Date	Meeting
Cycle I	Monday, 15 May 2023	Meeting 1
		Meeting 2
	Tuesday, 16 May 2023	Test1
Cycle II	Monday, 22 May 2023	Meeting 1
	Tuesday, 23 May 2023	Meeting 2
		Test 2

# **B.** Research Methodology

Research methodology is an important thing that is used by the researcher to achieve the desired purpose. By using research methodology, the researcher would conduct this research appropriately, accurately, and quickly. This research conducted as classroom action research. Action research is a

reflective process that aims to solve a particular teaching and learning problem that has been identified. Classroom action research, considering the problem of the research. It is an action done by the teacher in the classroom. According to Mcniff and Whitehand (2006: 22), action research is being turned into a process that aims for technical expertise through the implementation of prescribed action plans and defines itself in terms of targets and outcomes. In addition, cohen *et al.* (2007: 226) state that classroom action research may be used in any setting where problems involving people, tasks, and procedures are carried out for solution or where some change in result in a desirable outcome.

It can be concluded that classroom action research is a required action as a study methodology that is conducted systematically by the teacher or researcher in the teaching and learning environment to solve the problem or find a new technique to change things related to educational implementation to be better. It is designed for the researcher, teacher, and students as participants. The object of the teaching technique is the student. While the teacher and the researcher conduct the research.

# C. Research Procedure

The procedure in doing classroom action research is very important because it guides the researcher about what to conduct. Related to the teacher procedure in classroom action research, Burns (2010:9) states that there are four components in one cycle in conducting classroom action research. It consists of plan, action observation, and reflection describes as follow:

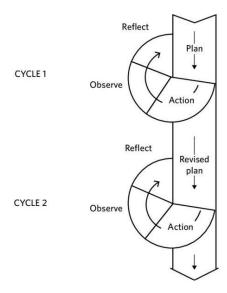


Figure 3.2: Taken From Action Research Protocol

#### a. Plan

According to Burns (2010:22) states the plan stage in CAR the researcher must be clear at this stage what it is what want to focus on even though it feels keen on the idea of looking into the practices and behaviors in your classroom in more detail. At this stage the researcher planned the steps takes accordance to the problem which had been recognized. The planning here covered making determining the problem solution, the strategy used, lesson plans, media, materials and preparing the tools of data collection.

#### b. Action

In action stage, the rescuer applied the plans that have been planned in planning stage. That was teaching in the real field with components have been arranged in planning stage. It would an act to implement the plan. In this step, the researcher would teach the students based on the lesson plan she had made. The researcher also would implement the technique already chose to solve the problem deal by the students when the teacher are observing the teaching learning process in the class.

#### c. Observe

Observe the effects of the critically informed action in the context in which it occurs. According to Burns (2010: 24) "the stage of observing included thinking deeply about what the data are saying by reflecting beyond the immediate surface details ". In this step, the teacher observes the researcher in teaching learning in the class. Here, the teacher observes the researcher in teaching learning in the class. Here, the teacher of the school was the observer to observe during the teaching learning process. At this stage, the researcher planned the steps taken accordance to the problem which has been recognized. The planning here covers making determining the problem solution, the technique used, lesson plans, media, materials and preparing the tools of data collection.

#### d. Reflect

It is a step to reflect these effects as the basic for further planning, subsequent critically informed action and so on, through a succession on stages. According to Burns (2010) claims that educators who were involved in doing action research with pre-service and in-service teachers found that teachers became more reflective, critical and analytic about their own teaching behaviors in the classroom. Deep reflecting served to build knowledge about curriculum development in the widest meanings of that term. In this stage, the researcher had the collaborator made a reflection based on the observation and make a planning for the next cycle.

# D. Subject of Research

This research was conducted at SMAN 1 Pemangkat in class X IPA 2 students in the academic year of 2022/2023. The subjects of this study were 35 students of class X IPA 2. Based on initial observations and teaching practices, the researcher found that students had problems in reading comprehension. Problems faced by students in understanding reading texts, especially in

identifying main ideas, detailed information from texts such as explicit and implicit information, and text inferences. Students lack vocabulary.

# E. The Technique of Data Collection

Data collection techniques that would used by researchers in the form of qualitative and quantitative data. Qualitative data is collected based on the situation of the teaching and learning process. While quantitative data is collected based on student scores after being given a test. In obtaining data, data collection techniques use observation techniques as qualitative data and measurements as quantitative data.

## 1. Observation Technique

Observation technique as the main technique in collecting the data in classroom action research, according to Burns (1999: 80) observation is a mainstay of action research. Observational technique is an investigation of phenomena in which naturally occurring settings, Observation is the researcher record behaviors, interactions or events that are occurring. The qualitative data of the researcher would be taken from the information in terms of what happen the Round Robin technique is applying in teaching process. This activity was the process of recording and collecting data. The collaborator did the observation during the implementation of Round Robin technique. The main points which would be observed in this steps were students and teachers activities.

#### 2. Measurement Technique

In this research, the researcher used measurement technique to collect quantitative data. According Koshy (2005: 86) said that quantitative data can be measured and represent by numbers. By this measurement technique the researcher used it know about the students reading comprehension by giving the test to determine how well the improvement of students reading comprehension The quantitative data was the achievement of 35 students

as subject of the research in improving their reading comprehension. The achievement is stated in scores, ranging from 0 to 100. The achievement of the students in their English reading comprehension was collected by giving them test.

#### F. Tools of Data Collection

The tools used in this study are:

# a) Non-Measurement

### a. Observation checklist

Observation checklist is a tool to observe teaching and learning process before, during and after implementing Round Robin technique. According Tomal (2010: 42) stated that checklist can serve as a valuable tool for ensuring that the researcher record timely and accurate observation. The setting of situation was normal as usual, cannot modified by researcher. In this case observation checklist filled by the English teacher as collaborator to observe the students activity and performance during implementing Round Robin in the class.

#### b. Field note

Field note is one of the tools for collecting data that needed by the researcher to investigate all of the activity happens in the class during the learning process. This tool contains the record of fact related to the implementation of Round Robin technique during the teaching and learning reading comprehension. According to Creswell (2012: 216) field notes are text (words) recorded by the researcher during an observation in qualitative study. This tool used as a means of recording fact which cannot be put in the observation forms. Besides the information obtain from this instrument was used both checking the accomplishment of the selected criteria and identifying the elements of Round Robin Technique which needed to be revised in the second plan.

The function of field notes is to back up all the events that do not state in observation checklist table. in this step, the teacher as collaborator made some notes on field note record the teacher performance, student's performance and the class situation during teaching learning process, especially when the teacher implementing Round Robin Technique.

#### b) Measurement

# a. Reading test

After the teacher distributes teaching material and apply Round Robin Technique in the classroom, the researcher give a test to measure the student's achievement in their learning, especially in reading comprehension. In these tests, the researcher has a strong data collection method, an impressive set of tests to collect numerical rather than verbal data (Cohen, *et al.* 2007: 414).

The researcher give the reading test for students to get students reading score. The kind of reading test is multiple choices. In the test, the researcher asked students to read the text and the answer the question in form multiple choices. The researchers used 25 test items each cycle.

# G. Technique of Data Analysis

In analyzing the quantitative data, the researcher would use qualitative technique as suggested by Burns (1999: 156). He says that there are various techniques developed from qualitative research approaches which can be used for the data analysis, such as identifying patterns, categories or themes that are repeated across the data and making connections between these categories.

#### a) Non-Measurement

#### a. Observation checklist

The researcher used the observation checklist to know the students behavior in the class. In this case observation checklist filled by the English teacher as collaborator to observe the students activity and performance. The researcher analyzed observation checklist by using descriptive analysis. After the observer filled out the checklist the researcher took the average of the data by seeing the result of observation checklist that showed many observation got tick mark ( $\sqrt{\ }$ ) in column statement. Then make a conclusion in form short description. Based on that description, the researcher would know which the behavior or attitude of the teacher and the students that would be enhanced in the next cycle.

#### b. Field note

Furthermore, the researcher also used field note to collect the data. This instrument used by the researcher to record all things happened inside of classroom and out of classroom which were not mention in the observation checklist. Moreover, the researcher would assisted by observer to fill the field note to record whole activity during teaching learning on written from in order to have detailed data of research. Field note that suggest by Huberman and Miles (1994:10) as follows:

# 1) Data reduction

Reducing data is meaningful summarize, choose the main things, focus on the things that important, look for themes and patterns. In this stage the researcher reduced the data. It refers to the process of selecting, focusing, simplifying, abstracting, and transforming the data that appear in written up field note. Then data was summarized, sorted, and organizes data in such as way that final conclusion can be drawn and verified.

# 2) Data display

The data is already reduced, the next step is to present the data. Data exposure as a set of structured information, and gives the possibility of existence drawing conclusions and taking action Presentation of data used to further enhance the understanding of the case and as a reference take action based on understanding and analysis of data presentation. After finishing data reduction, the next steps was data display. It is display in a table or a chart. Looking at display helps the researcher to understand what is happening and to do something either analyze further or take action based on understanding. Generally, a display is an organized, compressed assembly of information that permits conclusion drawing and action.

# 3) Conclusion Drawing and Verification

This is the last step in analyzing qualitative data. In this activity the researcher made a drawing/verification conclusion based on data reduction and data display.

#### b) Measurement

# a. Reading test

In this research, the researcher use reading test in order to measure student's achievement. According Koshy (2005: 86) said that quantitative data can be measured and represented by numbers.

# 1) The students individual score

To analyze the quantitative data the researcher calculated the student's individual score and students mean score in reading test by using the following formula:

$$X = \frac{A}{N} \times 100$$

Where:

X = Individual Score

A = the students right answer

N =the number of test items

Taken from Cohen et al. (2007:423)

# 2) Mean score

$$\mathbf{M} = \frac{\sum \mathbf{X}}{N}$$

Where:

M = The mean score

 $\sum X = \text{Total score of students}$ 

N = The number of students

*Taken from Heaton (1988: 176)* 

The researcher provided the criteria of the students mean score in showing the category into excellent, good excellent, good average, poor and very poor. The criteria the level of the students mean score can be seen in following table:

Table 3.3
Classification of Score

Score	Qualification
80-100	Excellent
70-79	Good
50-69	Average
0-49	Poor

*Taken from Brown (2004: 287)* 

The mean score would be used to calculate the students average score after they were taught by using Round Robin Technique and the researcher would use mean score to know the improvement of the students in reading general.