CHAPTER III

RESEARCH METHOD

Research method helped the researcher to collect, analyze, and interpret data and answer research question (Creswell, 2012; Johnson & Christensen, 2008). It misrelated to the context, this chapter was going to tell about research design, population and sample of the study, data collection, instrument of the research, and data analysis.

3.1 Research Design

The design of this study was classroom of action research. It was used because this research was going to aim in developing a certain instructional strategy to solve problem in classroom.

According to Arikunto (2009), CAR is conducted by teacher collaboratively by reflecting on and analyzing his/her teaching and learning process to improve the quality of teaching learning ability in physical classroom. According to Kember, there are seven essential components in action research. They are: (1) concerned with social practice, (2) aimed toward improvement, (3) a cyclical process (4) pursued by systematic enquiry, (5) a reflective process, (6) participative, and (7) determined by practitioner. While, Kurt Lewis also said that “action research is a sequence steps contain four phases: Planning, Acting, Observing, and Reflecting.”

In addition, there are three elements in CAR:

1. Research is an activity to improve an object by using an appropriate methodology rules for getting data and information and then analyze to solve problem
2. Acting is activity that is done for certain purpose, in cycle sequence form activity.

3. Class is group of student when at the same time, receive some lesson from their teacher. *(ref: kunandar, lankahmudah ... p.39)*

In this classroom action research (CAR), the researcher used the CAR principle that proposed by Kurt Lewin to collect the data. This action research consists of two cycles and each cycle consists of four steps, which are planning, acting, observing, and reflecting. The cycles design describe through the scheme design that designed by Kurt Lewins as follows:

**KURT LEWINS ACTION RESEARCH DESIGN**

![Diagram of Kurt Lewin's Action Research Design](image)

**CYCLE 1**
- Acting → Observing
- Planning ↔ Reflecting

**CYCLE 2**
- Acting ← Planning
- Observing → Reflecting
Based on the Kurt Lewin’s design above, the researcher would describe the steps of the plan for Classroom Action Research (CAR) as follows:

1. Planning

Planning can be the most complicated phase. In action research, it characterized by collaboration among the researcher, English teachers, and headmaster. They had dialogs to find the problems. To make it more precise, a pre-test of writing was administered which involves the use of interviews and observation. Having collected the problems, a selection was made with considering the level of importance and practicality, the time and effort needed, and the benefits to the researcher, students and collaborators. To overcome the problems identified, it needs solutions. The solutions or the strategies should be practical meaning that this can be applied within constrains of teaching situations. Finding the strategies were not the final task for this phase, the researcher was took it into account when making syllabus and lesson plans. After that, an appropriate timeline for what this action trying to accomplish was scheduled.

2. Acting

In this section, the plan was put into action. Students were taught by using lesson plans made in the previous phase. It was the time when the researcher taught students in the classroom, when an interaction between students-teacher and student-student were made. In other word, it was the period when the teaching of writing was different because the researcher applied a new insight that enables students to be active learners. During this acting, the data were gathered. “The data refers to the actions and phenomena that are recorded, gathered, and stored in artifacts such as computer files, notes and video recordings” (Whitehead and
Mckniff, 2006). The purpose of this data was to get the evidence whether the strategies made an improvement or not.

3. Observation

As it was stated, that during the action the observation also was done. Observation was not easy to be done, therefore collaboration between the researcher and English teacher was very helpful. One of them gathered the data carefully when the other was teaching listening. In this case, the data gatherer gathered the right data because it influenced the validity of findings. The data should relate to students’ writing skill and how they made an improvement.

4. Reflection

In this phase, data gathered were interpreted and then evidences were generated in relation to living critical standards of judgment. This phase included several activities such as: sorting and categorizing the data, analyzing the data for meaning, identifying standard and criteria for judgment, generating evidence, and making conclusion.

Based on the brief explanations, CAR was a reflective study which done by the teacher in classroom by mean for getting solution about the problem that face in the classroom. In addition, CAR was help teacher to solve the problem by applying a new method that found by teacher who had been done a research of CAR. It was giving innovation and an alternative in teaching learning in classroom.

3.2 Population and Sample

The population of this study was the students of seventh grade at Junior High School 17 Jambi City. The amounts of the students were 282 students. It has
been separated into eight classes, they are class 7A, 7B, 7C, 7D, 7E, 7F, 7G, and 7H. Each class contains 32 to 37 students. The researcher chose the 7B class in SMPN 17 Jambi City as the source of collecting the data. It was because the students of 7B have writing problems. It was also based on discussions with the English teacher who teaches this class.

### 3.3 Data Collection

To get an answer to the research question of this study, the researcher collected the research data. It used quantitative and qualitative data collection techniques. Qualitative data were obtained through observation. On the other hand, quantitative data were in the form of scores collected from pretests and posttests. In this research, the researcher used two stages in collecting data. They were:

1. **Observation**

   It was done during the teaching and learning process to observe students. It contains student data behavior and motivation. In these stages, there was an observation whether the students enjoy the process by using picture activities.

2. **Test**

   The researcher did pretests and posttests. Pretest was done in the first meeting. It was done to know the writing student’s ability in the first. And posttest was done to know about the result of students writing ability after they get treatment by using picture series activities. In this research, the researcher planned to conduct two post-tests. The first posttest was held on the end of the first cycle and the second posttest was held on the end of the second cycle.
3.4 Instrument of the Study

There were two types of collecting the data: Quantitative data and Qualitative data. The instruments that used in this study were observation and test to the student which dealing with Quantitative data. The researcher used observation in this research to get the data and final student’s writing from pretest and posttest as the main component of this study.

Observation, in this case the researcher observed the student directly in classroom and gets the description about student activity in learning process. The data took based on student’s participations during the teaching and learning activity. The information obtained of this activity was used as the basis to determine the planning action for the following cycle.

For the test, the researcher used the test into two main parts. The first part, the researcher gave a pre-test to know student ability before the implementation of teaching writing using picture series. Meanwhile, the post test was given after giving treatment in each cycle in the classroom.

3.5 Technique of Data Analysis

In this research, the researcher used two ways in analyzing the data. They were:

1. Qualitative Analysis

Qualitative research data was used from the activities of student and teacher in learning and teaching process data that used to analyze the qualitative data. The qualitative data that used was in form of researcher field notes toward students’ behavior and motivation in teaching and learning process. The observation was
hoped to support the data from the test that proved the students has passed the lesson appropriately with their motivation and behavior in teaching and learning process.

2. Quantitative analysis

Quantitative data in this research was used students’ writing score as the main data to measure students’ improvement. To analyze quantitative data, the researcher was measured the average of student’s achievement in writing procedure test in each cycle to compare whether student’s writing skills were improved. It was used the formula as below:

\[ \bar{X} = \frac{\sum x}{n} \]

\( \bar{X} \): Mean
\( \sum x \): Total of student’s score
\( n \): Number of students

Then, the researcher tried to get the percentage of class which pass the minimal mastery level criterion (KKM) in English subject gained 7o at SMP N 17 Jambi city. The formula was use:

\[ P = \frac{F}{n} \times 100\% \]

\( P \): The class percentage
\( F \): Total percentage score
\( N \): number of Students

The next step after getting the mean score of student’s test, the researcher was identified whether the students’ improvement of their understanding in procedure text from pre-test to post-test in cycle one, and post-test in cycle two. The researcher was used formula below to analyze the data.
\[ P = \frac{y_1 - y}{y} \times 100\% \]

\[ P : \text{Percentage of Students’ improvement} \]
\[ y : \text{Pre-test result} \]
\[ y_1 : \text{Post-test 1} \]

\[ P = \frac{y_2 - y}{y} \times 100\% \]

\[ P : \text{Percentage of Students’ improvement} \]
\[ y : \text{Pre-test result} \]
\[ y_2 : \text{Post-test 2} \]

3.6 The validity of data

Validity is a measurement instrument which shows whether the instruments are valid or not. Validity is one of the crucial points in implementing research including Classroom Action Research. By using validity, there should be no irrelevant or misleading in reflecting the data. To get the validity of the data, the researcher used triangulation which collecting the result from different sources such as the test and observation then the researcher will compare them.

In this research, researcher also used the criterion of data validity which adopt by Anderson, Herr, and Nihlen’s criteria than mention the validity of research including demographic validity, outcome validity, process validity, catalytic validity, and dialogic validity. This research was only used outcome validity and dialogic validity. As Anderson said that outcome validity requires that the action emerging from particular study leads to the successful resolution of the problem that was being studied, that was, your study can considered valid if you learn something that can be applied to the subsequent research cycle.
By the explanation, the outcome validity can be seen from the result of the test. If the result of cycle 2 better than cycle 1, it means that the research was successful. Then, the dialogic validity is “it involves having a critical conversation with peers about research findings and practices.” To get the dialogic validity data, the researcher discussed and assessed the result of the research in each cycle together with teachers.

3.7 The Criterion of Success

This research was able to categorize as success if it could be the criteria in which determined. In this research, the research could say succeed when there was 75% of students could pass the assessment score (70) based on Minimum Mastery Score of target school. The score supported by success in using of picture series to improve students’ motivation in teaching and learning writing procedure text. It could be seen from their behavior in studying and their participation in teaching and learning process. If the criterion of this research successfully achieved, so the next action plan of this Classroom Action Research was stopped, but if the criterion was not achieved yet, so the next action plan would continue until the criterion was achieved.

The raters of this action research were the teachers of this school whom already been certificated. The raters helped researcher to assess students writing score and helped researcher in classroom of action research to decide the research was success or not.