CHAPTER III
RESEARCH METHODOLOGY

A. Research Design

This study uses the Classroom Action Research (CAR) method. This method is considered very suitable because it has several advantages that focus on improvement and quality improvement in real situations. CAR allows researchers to involve students as part of the research process and pay attention to the individual needs of students (Mertler, 2017). By using CAR, researchers can make observations and make changes to the teaching practices used, monitor the progress of student learning outcomes, and evaluate the effectiveness of the changes made. In addition, CAR also focuses on active student participation and pays attention to the individual needs of students (Mertler, 2017).

Classroom Action Research (CAR) is a research methodology used to solve problems and improve learning practices. This methodology emphasizes ongoing and continuous actions carried out by teachers or researchers to increase the effectiveness of the learning process. The main function of CAR is to help teachers or researchers compare alternative practices and solve problems encountered in the learning process (Creswell, 2014). According to Leedy and Ormrod (2010), the steps involved in the CAR process are: (1) determining the problem and research objectives, (2) collecting relevant data, (3) conducting systematic data analysis and comparing different data, (4) conduct data review and evaluation, and (5) provide recommendations or solutions based on the results of the analysis and review.

CAR research is a research method used to improve and improve the quality of education. In CAR research, there are three main stages carried out, namely planning, acting, and observing. In the planning stage, the researcher makes a change plan to the teaching practices used in the class. In the acting stage, the researcher made changes to teaching practices and involved students in the learning process. At the observing stage, the researcher monitors the

development of student learning outcomes and evaluates the effectiveness of the changes made. Thus, the CAR method is very suitable for use in research that focuses on improving the quality of education, because it focuses on the active participation of students and pays attention to the individual needs of students.

B. Subject of the Study

This research was be conducted on elementary school students who take part in the English Village program in Parit Baru Village. Students involved in the research were selected as research subjects because they had a strong intention to learn English, but had not received English lessons at their primary school. This study aims to evaluate the effectiveness of the English Village program in improving these students' English skills.

Parit Baru Village was chosen as the research location because the English Village program has been actively implemented there. The number of students participating in this program is estimated to range from 30 to 65 students. By involving students from various backgrounds and ability levels, this research is expected to provide a representative picture of the success of the English Village program in helping elementary school students develop their English skills.

C. Action Procedure (Classroom Action Research)

In this study, researchers used the Classroom Action Research (PTK) approach developed by Kemmis and McTaggart. Kemmis and McTaggart (1998) explain that action research has a special research procedure. The procedure forms a spiral-like cycle consisting of planning, action, observation, and reflection. If the changes are not as expected, the cycle is repeated again into planning, action, observation, and reflection.

The research cycle was be repeated until the researcher achieves satisfactory results and feels that the purpose of implementing singing activities to increase English vocabulary is achieved.
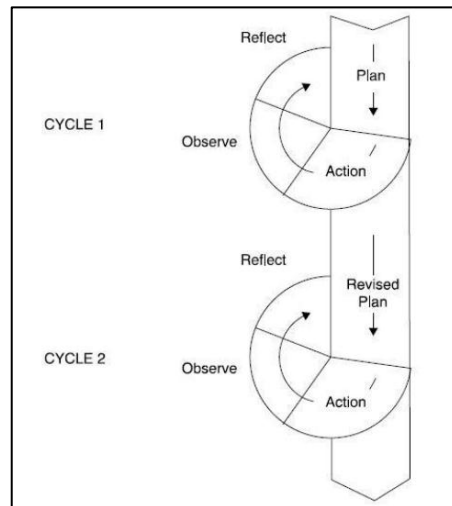

Figure 1.1 Cycle Classroom Action Research based on

(Kemmis and McTaggart, 1988)

Cycle 1:

a. Planning

At the planning stage, researchers plan and prepare the steps to be carried out in this study. This includes developing lesson plans that include the use of singing activities, preparing relevant teaching materials, and designing student worksheets as a data collection tool.

b. Action

At this stage, the researcher implemented the plans that had been prepared and introduced the students to a learning approach through singing activities. Every action taken by the researcher during the learning process was carefully and systematically recorded.

c. Observation

The researcher observed and recorded various aspects of the learning activities, including student responses, student interactions, their level of understanding, and their English vocabulary development. These observations can be made through field notes, audio or video

recordings, or the use of observation instruments that have been prepared beforehand. During the learning process, the researcher was assisted by an English tutor who observed the implementation of the singing activities as a whole. The tutor records all activities that occur in class and contributes to collecting observational data.

d. Reflection

After using singing activities and obtaining observational data from the implementation phase, the researcher analyzed the data carefully. The purpose of this analysis is to identify the problems that arise during the learning process and formulate the necessary improvements in the next cycle. Apart from that, the researcher also held discussions with the observer tutors to get input and feedback about the effectiveness of the learning media used in the previous cycle.

Cycle 2:

a. Planning

Based on the reflection results from the previous cycle, the researcher developed an updated lesson plan. This involves developing materials related to English vocabulary. In this planning phase, the researcher combines knowledge and experience from the previous cycle to increase the effectiveness of learning.

b. Action

Researchers was involve students in revising previous material and apply singing activities as learning media. After that, the researcher gave the students worksheets as a test to test their progress in developing English vocabulary during the second cycle.

c. Observation

The observation stage in the second cycle was carried out with the same approach as in the first cycle. Researchers was teach using singing activities with the help of observer tutors who record all activities that occur in class.

d. Reflection

After using singing activities and collecting observational data in the second cycle, the researcher analyzed the data carefully. The findings from this analysis was become the basis for researchers to plan further actions or the next cycle iteration as well as to understand the results of the actions taken and to make judgments about the effectiveness of singing activities in increasing students' English vocabulary. Discussions with the observing tutors were also carried out to obtain valuable input and feedback in improving the learning media used.

D. Technique of Data Collection

In collecting the data, researcher was use Participant observation and measurement test as techniques.

a. Observation

In this study, observations were made with the aim of investigating the vocabulary mastery problems experienced by students in the English Village of Parit Baru. As a data collection technique, researchers was use participant observation, which is a technique that allows researchers to be directly involved in the daily activities being observed or used as a source of research data. According to Bogdan and Biklen (1992), participant observation is a data collection technique used in qualitative research, in which the researcher is actively involved in the situation being observed with the intention of gaining a deeper understanding of the phenomenon being observed. Participant observation allows researchers to see the process of social interaction that occurs, find out how people speak and act in certain situations, and also understand the meaning and meaning behind the observed behavior. In this case, participant observation is considered the right technique to use in this study, because it allows researchers to obtain more accurate data regarding students' vocabulary mastery problems in the English Village of Parit Baru. By being directly involved in students' daily activities,

researchers can observe and obtain more detailed and complete information about the use of English vocabulary in their surroundings.

b. Measurement Technique

Measurement technique is a method used by researchers to collect data quantitatively from research subjects. In classroom action research, measurement tests are very important to find out whether there is an increase in students or not. This is also in line with the opinion of Babbie (2016), the purpose of measurement techniques is to obtain precise and accurate data so that they can be used to analyses, explain, and understand the phenomena being observed. Measurement techniques was help researchers to find out and analyses whether there is an increase in students' ability to master vocabulary.

E. Tools of Data Collection

Tools of data collection are methods or techniques used in collecting data in a study. In research, the use of data collection tools is very important because it can determine the accuracy and validity of the data obtained. According to Razaque et al. (2017), the use of data collection tools in research has the aim of collecting accurate and reliable data from research subjects. In addition, by choosing and using the right tools of data collection, researchers can also increase the validity of the research and minimize wrong data.

a. Field Notes

Field notes are field notes made by researchers during field observations. This note contains details about what the researcher observed, such as interactions between individuals, behavior, environmental conditions, and so on. In addition, field notes also allow researchers to obtain data directly without affecting the ongoing learning process. In this way, the data obtained becomes more valid and reliable in making decisions regarding improving the learning process.

b. Vocabulary Test

Vocabulary test is a test used to measure the mastery of vocabulary or words owned by individuals. This test may include several types of

questions, such as choosing the right words to fill a sentence, determining synonyms or antonyms of certain words, and linking words with precise definitions. Vocabulary tests are very suitable for classroom action research because they can help teachers and researchers to obtain relevant data about students' vocabulary mastery. This data can then be used to evaluate the effectiveness of certain teaching methods and to make necessary improvements in the learning process. In addition, vocabulary tests can provide useful information for developing more effective teaching programs. According to Kuo et al. (2018), vocabulary tests are very useful in evaluating students' vocabulary mastery. These tests can provide useful information about students' ability to use words effectively and can assist teachers in making decisions about teaching. In classroom action research, vocabulary tests can also be used to obtain relevant data on teaching effectiveness and to develop better teaching programs.

F. Technique of Data Analysis

Data analysis technique is a systematic process of collecting data to make it easier for researchers to draw conclusions. Data analysis is the process of searching and compiling systematic data obtained from interviews, field notes and documentation, with how to organize data into categories, break down into units, do synthesis, arrange into patterns, choose what is important and what was be studied, and draw conclusions so that they are easily understood by themselves and others (Sugiyono, 2018).

The researcher was use qualitative and quantitative analysis to analyze the data in this study.

a. Qualitative Analysis

The process of analysis data, in this study, was done gradually during the process of collecting data through doing observation with the use of field notes. To analyze the data qualitatively, the researcher was use the theory from Miles and Huberman as cited from Sugiyono (2011: 246), the way to analyze the data consist of three steps of analysis, as follow:

1) Data Reduction

Research conducted over a long period of time was certainly produce a lot of data, therefore researchers must reduce the data so that the excess data obtained can be sorted according to the category to be studied. Data reduction begins with an explanation, selection of the fundamental elements, and concentration on a key component of the data's field-specific information. Making choices on which data chunks to focus on first is part of the data reduction process. So, the reduced data can provide an in-depth description of the observational finding. In this study, data reduction is accomplished through summary contact, category coding, reflection note-making, and data selection. Since the researcher choose Field Note as the tools of collecting the data, it is was be more suitable to reduce the data. Field notes are a complicated, confusing, and occasionally useless form of field notes that are typically written in capital, lowercase, numbers, and symbols that are nevertheless disorganized and challenging to comprehend (Sidiq, 2019).

2) Data Display

After the researcher takes the first step, which is to reduce the data, the next step that must be taken by the researcher is to present the reduced data. In quantitative research, data display is generally in the form of diagrams, tables, graphs, and so on. However, in this study, researchers want to focus on presenting data qualitatively. In qualitative research, data display can be done in the form of a brief description, charts, relationships between categories, and the like (Sidiq, 2019).

3) Conclusion Drawing

The third step in data analysis according to Miles and Huberman is conclusion drawing and verification. Early conclusions are provisional and can be modified if compelling evidence is discovered

to support the evidence underlying the next round of data collecting. Yet if the findings proposed at an early stage are supported by data that hold up when researchers go back to the field to gather data, then the conclusions proposed are believable.

b. Quantitative Analysis

Doing the quantitative analysis, to know student's improvement in teaching learning process that got from the test, the researcher used individual score and mean score to analyze the data from the test. Individual score and mean score was be analyzed with this following formula:

Individual Score

After giving the test, the researcher was use the following formula to analyze individual scores:

Where:

X = Individual Score

A = Student's correct answer

N = Number of test questions

Adopted from (Cohen et al., 2007)

After the individual scores have been calculated, the results are categorized according to the following table:

Table 1
Score Qualification

Categories	Range Score
Excellent	90 – 100
Good	80 – 89
Average	70 – 79
Poor	-69

(Heaton, 1988)

Mean Score

After calculating individual student scores, the researcher was analyze the average score with the following formula:

$$M = \frac{\sum x}{N}$$

Note:
M : The student's mean score
∑x: The total score of students'
N : The total number of the students

(Singh, 2006)

The criteria of able point:

N > 60: Able

N < 60: Unable

To find the students' improvement the formula as follows:

$$P = \frac{X2 - x1}{X1} \text{ X } 100$$

Where:

P = the students' improving

X1 = the mean score of Cycle I

X2 = the mean score of Cycle II

(Gay,2012)