

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

In this research, the researcher used Classroom Action Research (CAR). Researcher conducted classroom action research to understand and study phenomena that occur during the teaching and learning process, with the aim of offering solutions to problems that occur. According to Koshy (2005) & Bassey (1998) action research is an enquiry which is carried out in order to understand, evaluate and then modify educational program in order to improve educational practice. The researcher uses a mix of qualitative and quantitative research in this classroom action research. The researcher gathered qualitative data that was then quantitatively examined. The preceding statement serves as a foundation for researchers to understand how significant study design is while doing research. This is due to the fact that Classroom Action Research is referred to as "unique research." Classroom action research, according to the plan's description, is action research conducted by instructors who are looking for answers to problems in the teaching and learning process in order to increase student accomplishment.

The researcher conducted Classroom Action Research as a real teaching and learning process. The researcher used Kemmis & Mc Taggart cycling. According to Kemmis & Mc Taggart as cited in Burn (2010: p.9), "Action research typically involves four broad phases in cycle of research. The first cycle may become a continuing, or iterative, spiral of cycles which recur until the action research has achieved a satisfactory outcome and feels it is time to stop". The Kemmis's & Mc Taggart's cycling have four phases, namely planning, acting, observing and reflecting.

B. The Subject of Research

The participants of this study were seventh grade students of SMP Negeri 1 Boyan Tanjung, Kapuas Hulu, in the academic year of 2021/2022, this seventh class consists of 28 students. The researcher chose class VII B which had visible problems compared to other classes. The students' main problems was vocabulary mastery, they have difficulty remembering English vocabulary, according to the results of interviews with English teachers. The number of students taken from class VII B is in Table 3.1

Table 3.1 The Number of Students Grade VII in SMP Negeri 1 Boyan Tanjung, Kapuas Hulu

No.	Level	Number of Students		
		Boys	Girls	Total
1.	VII B	14	14	28

The researcher chooses class VII B, this class consists of 28 students. This class was chosen because the students still have problem in vocabulary mastery, This apparent from their English test score, most of them scored below standard. Most of them scored below 70 (KKM standard), which is below standard. Therefore, the researcher focuses at the implementation of Hangman Game to improve students' mastery of English vocabulary.

C. Location and the Time of the Research

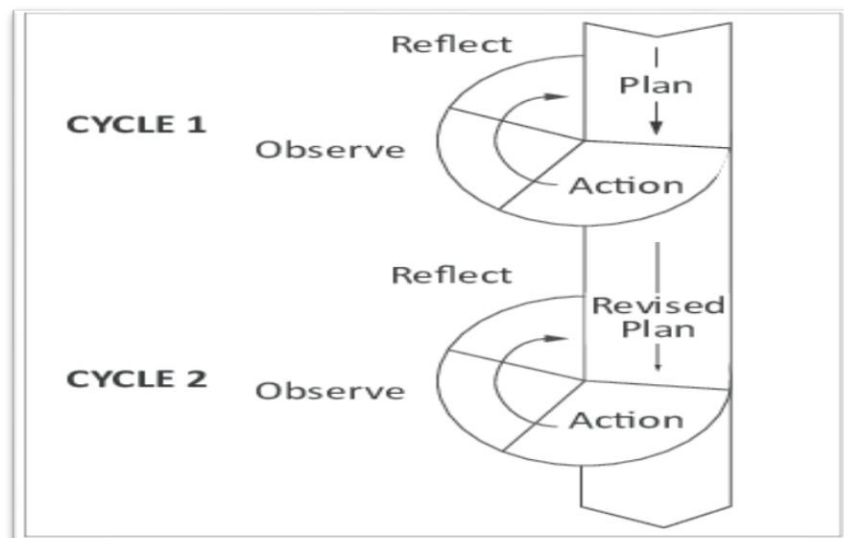
This research was conducted in SMP Negeri 1 Kec. Boyan Tanjung Kab. Kapuas Hulu from May 23, 2022, to June 11, 2022. The researcher chose this school for several reasons: First, the researcher conducted interviews with on-site English teachers. Second, the researcher conducted a preliminary investigation there to better understand the school's condition. Third, since the school has allowed academics to conduct

studies on the problem of improving students' vocabulary knowledge, researchers have a lot of data to collect. Finally, the researcher found a problem with the language knowledge of school students.

D. The Research Procedure

These indicators determine the classroom action research cycle. Is it possible to complete the cycle in one cycle or the researcher needs to proceed to the next cycle. Cycle I centered on students' difficulties in memorizing language. (1) planning, (2) action, (3) observation and interpretation, and (4) reflection and analysis form a cycle.

In classroom action research, the circle never ends. If the research indicators are not met during the second cycle, the third cycle will be carried out to improve the situation. According to Kemmis & McTaggart's model, this research is conducted by constructing a downward spiral that begins with sensing the problem, planning, implementing action, observing and and then reflect and make new plans, and so on. The explanation of the four steps above can be illustrated by the image below:



Cyclical action research model (Burns, 2010, p. 9)

Figure 1

Table 3.2 CAR Procedures

1. Plan

Cycle 1	Cycle 2
<p>Monday, on May 23th 2022. In this planning stage, the researcher acts as a teacher, and the English teacher as a collaborator makes preparations before teaching in class. Researchers identify problems from initial observations and analyze the curriculum to determine students' initial competency standards. Then the researchers and collaborators compiled the lesson plans used in the teaching and learning process. The lesson plan is written based on the syllabus in the second semester of seventh grade. Researchers and collaborators prepare learning materials in accordance with vocabulary mastery that is conveyed to students. After preparing the material, the researcher prepares the learning techniques needed in the teaching and learning process such as the Hangman game. Then, researchers and collaborators also prepared field notes as a tool used to observe the teaching and learning process. After preparing the field notes, the researchers and collaborators prepared a vocabulary test to measure the student's achievement in</p>	<p>Thursday, on May 26th 2022. In this phase the researchers and observers changed the methodology of the teaching and learning process, in this cycle, the writer revised the lesson plans to improve students' vocabulary mastery by using the hangman game. Researchers and collaborators also discussed the shortcomings in cycle 1 and corrected them in cycle 2. also carried out teaching preparations such as lesson plans, teaching materials, and field notes.</p>

<p>vocabulary mastery.</p> <p>Based on the summary at this stage, it can be said that researchers and collaborators prepared everything needed to conduct this research in order to improve the students' vocabulary mastery using the hangman game.</p>	
--	--

2. Action

Cycle 1	Cycle 2
<p>The acting cycle I started on 24th May 2022. Two meetings were used to use the Hangman game and one meeting to give vocabulary tests. The researcher's activities were group discussions, explaining how to understand vocabulary using the hangman game, doing exercises, discussing students' work, and then reflecting on what they had done in the meeting. Before starting the lesson, students were welcomed and asked to pray together. Next, the researcher checked the students' attendance. After that, the researcher asked about some common vocabularies to determine the students' initial abilities before the researcher gave an explanation of the subject matter. After that, the researcher explained the vocabulary based on the</p>	<p>The acting of cycle 2 was begin on 27th May 2022. In this phase, esearchers as teachers implement the new lesson plans. Before the researcher explained the new vocabulary material, the researcher first asked about the students' understanding of learning in cycle I. Some students answered that they still did not understand the material used and had difficulty understanding the procedures for the hangman game. Next, the teacher explained again how to use the hangman game in vocabulary learning. Next, the teacher gives questions to students that must be answered based on the group at the previous meeting. Students are asked to look up the vocabulary of Things in the house by then completing the lines in the Hangman game with the correct</p>

<p>material in the lesson plans related to Things in the house. After explaining the vocabulary, the researcher explained the hangman game and how to use it. hangman game in vocabulary learning. After explaining the material, students were asked to form groups of five to six students, so that there were five groups in the activity. Next, the teacher prepares some vocabulary which is answered by each group, in turn, using the hangman game procedure. Each group discusses together to complete the vocabulary correctly. Then, the researcher showed the correct answer and the students corrected the answer.</p> <p>Researchers provide a little reflection. At the second meeting, the researcher applied the hangman game to the students.</p>	<p>vocabulary. Due to insufficient time, only three groups discussed the results and the other two groups discussed the results at the next meeting. Furthermore, the second meeting was completed on June 9, 2022. The teacher-reviewed and continued the activities. Next, students discuss the results of the correct answers to fill in the lines in the hangman game with the correct vocabulary. After that ask students to collect the results. The teacher shows the correct answers and the students pay attention to their answers.</p>
--	---

3. Observe

Cycle 1	Cycle 2
<p>In this phase, researchers and collaborators observe every activity that occurs in the classroom during the teaching and learning process. The results of the observations are discussed in the field notes.</p>	<p>In this phase, observations are made on activities in the learning process, in order to obtain the data needed for this research. Here the English teacher as a collaborator helps researchers to observe the learning process in the classroom. To collect data, researchers used field notes</p>

	<p>as a data collection tool.</p> <p>The observation time is stated from the beginning to the end of the learning process and is not known by the students if their actions are observed by the collaborator, when the researcher gives the treatment, the collaborator sits behind the students to observe the students and also fill in the field notes.</p>
--	--

4. Reflect

Cycle 1	Cycle 2
<p>In the reflection step, based on the results of the data that has been observed by researchers and collaborators, students lack vocabulary mastery. Students cannot use the hangman game in learning vocabulary so the score on the vocabulary test is still low. Then, the researcher concluded that the next meeting should be held to improve students' vocabulary mastery. At the next meeting, the teacher must ensure that all students' attention is only focused on the explanation. The teacher also gives students more time to prepare before the lesson begins. So, students do not find it difficult in learning vocabulary.</p>	<p>After the planning, actions, and observations have been completed, researchers and collaborators carry out reflection activities. Based on the discussion between the researcher and the collaborator, the students showed satisfactory progress in the vocabulary test and showed better attitudes during the teaching and learning process after using the hangman game, the class condition became more active, and the students were more enthusiastic in learning. learning. teaching and learning process and students also work well together as in-group members.</p> <p>In this reflection, the researcher concluded that cycle II was successful. The teaching and learning process in</p>

	cycle II was better than in cycle I. Finally, researchers and collaborators decided to stop the cycle.
--	--

E. Technique of Collecting Data

In this study, researchers used two types to collect data. The first measurement technique for collecting quantitative data, the researcher used multiple-choice questions to test vocabulary. The second technique is observation to collect qualitative data. Researchers used field notes in collecting qualitative data. Because qualitative data can be collected based on the ongoing learning and teaching process.

1. Observations Technique

Observation is a complex research approach because it requires the researcher to take on multiple roles and apply a variety of procedures in order to collect data. According to Narbuko & Achmadi (2010: 70), observation is a tool to collect data by observing and systematically recording the phenomena in question. In other words, researchers collect data from facts discovered in the field or during the classroom teaching and learning process. During the teaching and learning process, the researcher observes and notes every piece of information that enters in.

2. Measurement Technique

According to Sinha and Dhiman (2005: p.204), "Measurement is an adequate formulation of the research question and an explicit definition of the concepts used during the study". The purpose of this measurement technique is to track students' progress in learning vocabulary using the Hangman game activity. For students' vocabulary understanding, vocabulary test is used as a measurement technique tool. This test was created using the English curriculum for junior high school students as a guide.

F. The Technique of Analyzing Data

In this study, the researcher used two data analysis techniques, the data were evaluated using qualitative and quantitative techniques. Both results of this analysis are coordinated to validate the accuracy of each analysis (Hafis, 2021). field notes to analyze qualitative data. The field note consists of three components, namely: data reduction, data display, conclusions, and verification. This qualitative data analysis is based on data that has been collected during the research process. Quantitative data analysis was obtained from the results of the vocabulary test which was carried out in two cycles. And the second cycle as the final result is to measure students' abilities after the actions in the classroom are carried out.

1. Field Note

For the qualitative data analysis the researcher used the technique of analysing the qualitative data form Miles and Huberman (1994) cited in Alexander (2004: 47) The stages are :

a. Data Reduction

The first stage of qualitative data analysis is data reduction. The process of choosing, simplifying and extracting themes and patterns from written field notes, transcripts, and other accessible materials is referred to as data reduction. The themes that were discovered were given code names, and they were then sorted into categories of similar subjects, patterns, thoughts, and ideas that emerged from the viewpoints of the participants. It indicates that data reduction is the process of choosing, simplifying, and extracting themes and patterns from field notes and transcripts that have been written down.

b. Data Display

The second stage of data analysis is data display, which is a tool to present data reduction findings. Views are used to organize data into easily digestible summaries, making it easier to draw

conclusions. Matrices and networks are examples of display strategies. Rows and matrices are created, and the data extracted from the coding transcript is sorted into columns. That is, the data props show the results of data reduction and summaries to make it easier to draw conclusions afterward.

c. Conclusion and Verification

Drawing the first findings based on the cross-case presentation of data and then applying these initial conclusions to the verification method is the final phase of data analysis. Before these processes are recognized as conclusive results, they must be appropriate. It refers to the decisions reached about data reduction and presentation. Prior to conclusive results, techniques were used to validate the findings.

2. Vocabulary Test

A vocabulary test is a test with quantitative data analysis. The data was obtained from the results of the multiple-choice exam which was carried out in two cycles. Students are given an exam at the end of the cycle. A vocabulary test is a type of assessment used to determine how well students understand learning vocabulary. An impressive array of the test for gathering data of numerical rather than verbal kind (Cohen *et al* 2007: 414). Vocabulary tests were analyzed using numerical data, the researcher determined the students' average score for each activity in one cycle. The formulation of individual score as follow:

a. Individual Score

Students' individual scores were used to assess vocabulary skills. After the vocabulary test, the researcher then proceeded to assess the students' individual scores after getting the number of correct answers.

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

Note :

X : the students' individual score

A : the right answer

N : the total number of the questions

(Adopted from Cohen et al. (2007: 423)

b. Mean Score

The following is the acceptance of individual scores for each student. To find out the progress of all students in one class in terms of vocabulary knowledge, the researcher used the following formula:

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

Note :

M : the students avarange score

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

N : the number of student

(Adopted from Heaton (1988:p.178)

G. Tools of Collecting Data

1. Field Note

Field notes are used to record all student activities in class during the teaching and learning process. In the researcher's notes, the researcher expresses his personal assessment of what happened in the classroom, whether there was progress or if new items were discovered during the study. The researcher recorded all new findings in the field notes after each meeting.

2. Vocabulary Test

The goal of this test was to assess students' vocabulary mastery as well as collect quantitative data. After receiving action, pupils were given a test in this study. The test's outcome was used to determine the students' vocabulary after they took action in learning by playing the

Hangman game. The test was administered in a multiple choice format with 20 items in this study. This study used a variety of tests, all of which were multiple choice and elaborated on word definitions. To ensure that the terms were incorporated, the researcher provided participants with training time in which they would discuss the meaning of words in a group without writing them down.

