CHAPTER III
METHODOLOGY

A. Research Design

A scientific approach to information collection with predetermined goals and actions is called research methodology. The tools and techniques, methodologies, and research methods that will be employed to accomplish the research objectives are all included in this research design. This research is classroom action research (CAR) Action research in the classroom is a subset of overall action research, which is itself a subset of general action research. According to Kemmis and Mc Taggart cite in (Semathong, 2023) defines action research as a form of research that is not technically different from other research but differs in methodology which the methodology is work that reflects the performance of self-reflection coils (Spiral of Self-Reflecting) starting at the planning, action, observation, and reflection which is a research that requires participants to reflect on the process of practice in order to improve work.

The research has a narrow scope, and the primary goals of action research are to modify the circumstances of the study site and bring about improvements for all participants (Wahid et al., 2022).
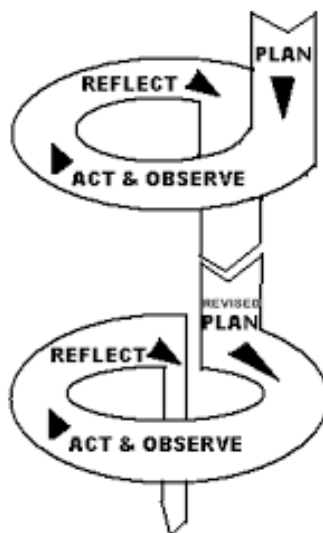
The researcher have conducted research by applying classroom action research consisting of several cycles. Each cycle has steps, namely: planning, action, action and reflection. Based on this method, the researcher will use a digital picture series, the data source is the teacher and students. for data collection, observation and tests. The results data are analyzed with individual scores of minimum completeness criteria (KKM).

B. Steps doing Classroom Action Research

According to (Irwandi et al., 2019) Professional educators are individuals who consistently enhance their skills, are creative and inventive, and evaluate the benefits and drawbacks of their methods for teaching and learning, particularly through Classroom Action Research (CAR). There are several models that can be applied in class research, but this researcher's classroom action research was carried out by applying the model developed by Kemmis and Taggart. According to Kemmis and Taggart in (Yaumi & Damopol, 2014) focus their emphasis on three primary areas of social and educational change: examining, reforming, and reconstructing spiral practice.

Accoding to (Irwandi et al., 2019) planning, acting, observing, and reflecting are the four steps of the Kemmis and McTaggart paradigm. The following image depicts the class action research cycle, following Kemmis and Taggart, for additional information about the cycle :

Picture 1

Cycle classroom action research by Kemmis and Taggart

The stages of classroom action research were carried out in 2 cycles, each cycle of two meetings each. This research was conducted with the aim of increasing the English vocabulary of students with disabilities in SLB Harapan Ibu.

1. **Cycle 1**

   a. **Planning**

   The planning cycle's first cycle specifications are as follows:

   1) Holding two meetings to complete the cycle.
   2) Carrying out the lesson plan-based vocabulary learning procedure.
   3) Taking a pre-test to determine the pupils' fundamental vocabulary mastery ability.
   4) Getting the materials ready for vocabulary learning.
   5) Using a digital picture series to administer a vocabulary mastery test.

   b. **Action**

   In this phase, digital picture series media will be used to teach the pupils how to comprehend vocabulary mastery.

c. Observing

The observation will conducting to all the process of vocabulary mastery and learning process. The researcher want to find out the overall condition occur during the instruction. The observation results obtained are used to improve the learning process in the next cycle.

d. Reflecting

Reflection is the activity of recalling, contemplating, examining and re-analyzing and activity. Reflection has an evaluative aspect to the effect of spacious issues and suggests handling it. The researcher take the feedback from this vocabulary mastery and learning process from the result of the observation, the problem that exists and the cause of the problem, if the result does not reach the goal that was determined, the researcher make the decision that the researcher needs to continue the researcher into cycle.

2. Cycle II

The same stages as in cycle one are repeated in cycle 2, but with new learning materials, cycle two gains on its predecessor.

3. Cycle III

Same of the cycle one are repeated in cycle 3, but with new learning materials, cycle three gains on its predecessor.

C. Subject of the Research

The setting of this study conduct at SLB Harapan Ibu. This school is located in Metro, Lampung. The subject of this study is the intellectual disability students at SLB Harapan Ibu. This participant of the class consists of 3 students.

D. Instrument of the Research

The instrument of collecting data is used by the researcher to get the data observation by using :

1. Test

After the topic has been taught, tests are utilized to determine the extent of the pupils' ability. The exam that was administered was a digital picture test.

2. Documentation

Documentation uses a photograph to illustrate the process of teaching and learning. The photo was taken by the researcher during their investigation. When learning and teaching processes are documented in this research, it can demonstrate if they are serious or not.

E. Data Collecting Technique

1. Test

Test can be categorized into two, namely objective and subjective. The test used in this research is a subjective test in the form of a short essay. For data collection in the form a test consisting of a pretest and post-test. The pretest will be conducted the first meeting with researcher to see how student learning. And the post test will be carried at the last meeting in the cycle. The researcher with the aim that students are more familiar with new learning methods.

2. Documentation

The documentation is a data collection technique by studying data that has been documented. From its origin, documentation, namely documents, means written items. In carrying out the documentation, researchers investigate written objects, such as books, magazines, regulations, documents, meeting minutes, diaries, etc.

F. Data Analysis Technique

The quantitative data a vocabulary exam was administered, with roughly 10 questions every cycle. It was found that the vocabulary test scores ranged from 0-100 by accounting for the right response. The correct answer was given 10 while the incorrect answer was given 0 for calculate by using formula :

$$S = \frac{R}{N} \text{ x } 100$$

Where :

S   : Score

R   : The number of correct answer

N   : The number of question

To know the mean of the students score of vocabulary, the following formula was applied :

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

Where :

X   : Mean score

∑x   : Total score

N   : Number of student

The researcher tries to get the class percentage which pass the minimal mastery level criterion (KKM) considering English subject gains score 70, the researcher used the following formula:

$$P = \frac{F}{N} \text{ x } 100\%$$

Where :

P   : Percentage

F   : Number of correct answers

N   : Number of student