3. METHOD

In order to understand about the methods of the research used in this study, this chapter discusses the design, subjects, and data collecting technique, research procedure, data analysis, and hypothesis test.

3.1. Design

The research is a phenomenological qualitative study. In this research, the researcher used one class as experimental. The probability sampling was applied to select the experimental class and the researcher used The One-Shot Case Study. Based on the design, the students were given material vocabulary and taught by using Silent Way method, and then in the last meeting the students were given a test to measure the knowledge of the students vocabulary. The research design is as follow:

\[
X \rightarrow T
\]

Where:

\( X \) : Three times treatment (Silent Way)

\( T \) : Test (Campbell and Stanley 1963)

In doing this research, the researcher observed and collaborated with the English teacher to look at and describe the process during teaching learning and to figure out the problem when learning by silent way technique.
3.2. Subjects of the Research

The subject of this research was the students B class of TK Kembang Ibu Bandar Lampung in second semester 2013/2014 as population. The samples were 15 students, 9 girls and 6 boys. Their age ranged from 5-6 years old. There are two class in the school, and the researcher took one class as the sample of the research.

3.3. Data Collecting Technique

In collecting data the researcher used observation and test.

1. Observation

Observation is the first data collecting technique, where the researcher conducted observation directly to the object of study for a close look at the activities carried out (Riduwan, 2004: 104). The observation used to measure the ability of the students that never learned English before. The researcher observed the process of learning before and when the treatment conducted to know the respond of the student and problem when the treatment conducted. The researcher was helped by the teacher for observation.

2. Test

In this research the researcher used an achievement test to measure the students’ progress in mastering vocabulary. The researcher used 15 items of the test that consist of noun, verb, and adjective. The test was conducted after the treatments.
3.4. Research Procedures

In order to get the data, the researcher arranges the research procedure as follows:

1. Determining the population and sample

The subject of this research was the students of TK Kembang Ibu Bandar Lampung as population. The samples were 15 students, 9 girls and 6 boys. Their age ranged from 5-6 years old. They are multi-culture and different social economic status. There were two classes in the school, and the researcher took one class as the sample of the research.

2. Administering observation

The researcher did observation before, and when the technique was used in the class. In this classroom observation, the subjects of observation were teacher and students’ activities in English language teaching process. It focused on the teaching methods, learning English materials, and assessment of students’ ability in acquiring English lesson, especially the vocabulary.

3. Conducting treatments

Before conducting the treatment, the researcher prepared the material and lesson plan. The material given to the students were some texts appropriate with the students’ curriculum and their level of competence. The students were given three treatments by using Silent Way technique through pictures.
4. Administering test

The researcher administered the test in order to evaluate the result of the research after the treatment and to measure the students’ progress in memorizing vocabulary. Students answered 15 items of the test that consisted of nouns, verbs, and adjectives.

5. Scoring the students’ work

The researcher scored the learner’s work to get the data.

\[ S = \frac{R}{N} \times 100\% \]

S: Score of the test
R: Right answer
N: Number of the items

7. Analyzing the data

After scoring the students, then the researcher analyzed what vocabulary that improves better using Silent Way Method.

8. Concluding the result

After analyzing the data, the researcher found the result. From the result the researcher analyzed it and made the conclusion about the result of the research.
3.4.1. Validity

According to Heaton (1991:159), the validity of the test is the extent to which it measures what it is supposed to measure. There are four types of validity but the researcher wanted to explain only two types of validity, they are content validity and construct validity.

a. Content validity is intended to see whether the test is good reflection of what have been taught. Therefore the test will be based on school curriculum and it is about vocabulary knowledge of student. To know whether the test is based on school curriculum or not, the researcher shared with the English teacher what test that compatible with the curriculum. The composition of the test items is presented in the table of specification below:

<table>
<thead>
<tr>
<th>Test items</th>
<th>Number of test</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Noun</td>
<td>1, 2, 3, 4, 5.</td>
<td>5</td>
</tr>
<tr>
<td>2. Verb</td>
<td>6, 8, 9, 13</td>
<td>5</td>
</tr>
<tr>
<td>3. Adjective</td>
<td>7, 10, 11, 12, 14, 15</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

b. Construct validity focuses on the kind of the test that is used to measure the ability. In this research, the researcher administered a vocabulary test and the technique scoring is based their knowledge of vocabulary. Before administered
a test, the researcher has been shared with the English teacher about the test. According to Setiyadi (2006:26), if the instrument just measure one aspect, for example vocabulary, the construct validity can be measure by evaluate all items in the test.

3.4.2. Reliability

Reliability refers to the extent to which the test is consistent in its scores, and it gives an indication of how accurate the scores. Reliability is a necessary characteristic of any good test: to be valid, a test first should be reliable as a measuring instrument (Heaton, 1988:162).

To ensure the reliability of the score and to avoid the subjectively of the researcher, inter rate reliabilities applied in this research. Inter rater reliability is used when score of the test is independently estimated by two raters. To achieve such reliability and to score the students’ response, the researcher:

1. The researcher involved second rater in using the profile to give judgment for each student’s response. The second rater was the English teacher who has known their response in learning. It was done to provide the consistent and fair judgment.

2. The researcher scoring the test items whether to known their ability and a types of vocabulary that improve when taught using Silent Way.
3.5. Data Analysis

In order to know the result of the research, the researcher analyzed by these following procedures:

a. Observation

Data from observation was analyzed by researcher systematically. The researcher saw the students’ expression, behavior, activities, problems and interaction in the class when they study vocabulary before and while silent way conducted.

b. Test

The test was administered in order to evaluate the result of the research after the treatment and to measure the student progress in memorizing vocabulary. Students just answer 15 items of the test that consist of nouns, verbs, and adjectives.