CHAPTER III
RESEARCH METHODOLOGY

This chapter describes the method used in this study with the intention of finding the answers of the questions stated in Chapter I. The chapter includes research design, site and participants of the study, data collection, research procedures, and data analysis.

3.1 Research Design

This research was conducted by using classroom action research since it was going to find out how the use of Dominoes games improves students’ English vocabulary. As McNiff and Whitehead (2002:17) states that the main purpose of action research is the use of knowledge which leads to improvement of understanding that will be beneficial for society.

In conducting the classroom action research, the researcher used Kemmis and McTaggart (as cited in Burns, 2010) in which each cycle consists of four steps: plan of action, implanting of action, observing and evaluation analysis and reflection. The main steps were preceded by reconnaissance (or preliminary study), analysis and identification of problem as shown in the figure 3.1.

Based on the procedure as shown in the figure 3.1, the first step was a preliminary study. The next step was to make a plan of the action based on the basis of the findings in the preliminary study.

It also deals with preparing observation sheets, field notes and interview guide for collecting the data during the assessment process as well as designing the criteria of success used in this study.
Figure 3.1 Classroom Action Research Procedure (Adapted from Kemmis and Taggart as cited in Burns, 2010).

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It also deals with preparing observation sheets, field notes and interview guide for collecting the data during the assessment process as well as designing the criteria of success used in this study.

After the planning of the action was finished, the next step was the implementation, the research acted as the observer. The researcher observed how the implemented Dominoes game can improve students’ mastery of vocabulary.

The strategy done by the research included the activities in introducing the idea of using a Dominoes game to improve vocabulary mastery, conducting the student – teacher conference and how to analyze the students’ work. In the last step that is reflection, based on the result of the data analysis, the researcher makes reflection to judge whether this classroom action research needed to be continued or not. The researcher, in the next cycles, implemented the revised plan of the previous cycle. The observation was done in order to ensure that the undertaken properly based on the steps that have been planned.

There were two cycles taken to answer the question problems of the research. In the first cycle, the first step was planning in which plan for some aspects that would be implemented in the acting step was made. After that, the acting, implementation of planning for the teaching situation, was conducted. In terms of the observing, it was conducted by a collaborator to observe all the activities occurred during the research and the effects of the action given during the research. Then, the effects of the action were reflected; evaluated and described to improve the situation in the second cycle. The spiral of cycles recurved until a satisfactory result has been achieved and stop until the time was felt enough (Kemmis and McTaggart, 1988, as cited in Burns, 2010).

The method that was used in this study was a classroom action research. Kemmis (1983) in Hopkins (1993: 44) state that action research is a form of self-
reflective inquiry undertaken by participants in social (including education) situation in order to improve the rationality and justice of (a) their own social or educational practices; (b) their understanding of these practices, and; (c) the situations in which the practices are carried out. It is most rationally empowering when undertaken by participants collaboratively, though it is often undertaken by individuals and sometimes in cooperation with outsiders.

Meanwhile, the model of classroom action research is this study is modelled by Kemmis and Mc Taggart (in Burns, 2010: 32) who state that the model of action research is consist of four steps in a spiraling process. There are namely: a) Planning. Here the researcher prepares everything that is needed in doing the action, such as preparing a lesson plan, the material that will be used in the action, and it was also prepared the evaluation material after conducting the action to give information whether or not the speaking improves; b) Acting. After preparing the lesson plan, the material and the evaluation, the researcher were implemented the plan. In this study, Dominoes game was implemented by the researcher in teaching vocabulary. The Dominoes game was done by the students in groups. At the end of the class, the students were given the post-test; c) Observing. The researcher observes the effects of the critically informed action in the context in which it occurs. Beside that, the researcher also makes the observation sheet about the process in teaching learning process; d) Reflecting. After doing the observation, the researcher continued to the next step namely reflection. In this step the researcher reflected how the teaching learning process runs. The function of reflecting is to know the weaknesses and the strengths of the action. Other planning was also prepared if only the action was not improved the students’ speaking skill.
Based on the explanation above, classroom action research is a systematic study and it is a form of self-reflective inquiry undertaken or carried out by participants in an educational situation rather than outside researches to solve the students’ problem in terms of their lack of vocabulary mastery. In this research, methodology was used to identify whether or not the students’ vocabulary mastery were better or higher than before implementing the Dominoes game.

3.2. Research Site and Participants

The research was undertaken at one of junior high schools in Cipanas-Cianjur. This school was chosen because the writer has access to the research site that enhanced the researcher to easily access the class during the research. It was also chosen for the reason that the researcher can quickly and easily obtain permission for the research so that the assignment could be able to finish on time.

The participants involved in this study were the researcher who acted as the teacher when the study was held and a collaborator, the teacher of the class who acted as the observer. The teacher was chosen as the observer since he understood clearly about the situation of her class. It was expected that the reliability of the research would be attained by relating the teacher’s observation data and the researcher’s notes.

Participants of this study were the students of VIII-9. The total of the students was 42 students comprising 17 male students and 26 female students. Most of them come from Sundanese ethnics. It can be assumed that most of the students spoke two languages in their regular interaction which were *Bahasa Indonesia* and *Bahasa Sunda*; and they treated English as a foreign language which was uncommon to use in the daily life. This class was chosen based on the recommendation from the teacher of the class. The teacher explained that the capability of students in that class was still very poor.
3.3. Data Collection

In this study, the data collection was composed of four instruments, namely interview, vocabulary test, observation sheet, and questionnaire.

3.3.1 Interview

The open interview was conducted to find out more aspects about the problems of research and add the data from observation and videotaping. Some conditions which cannot be captured by other instruments were observed during the interview (Alwasilah, 2009).

As suggested by Stake (2010: 95, as cited in Creswell, 2013), the purposes of the interview for qualitative researcher are: (1) to obtain unique information held by the person interviewed, (2) to collect a numerical unit of information from many persons, and (3) to find out about a thing that the researchers were unable to observe themselves.

The interview consisted of some questions related to the activities, media, and assessment process conducted by the teacher. Moreover, the interview was intended to reveal the teachers’ point of view about using the activities, media, and assessment in teaching English pronunciation in their classroom. The interview is a verbal interaction between two persons which are the interviewer and interviewee with the purpose of gathering relevant information for the research (Cannell and Kahn, 1968, cited in Cohen, Mannion, Morrison, 2000:268). Besides, the interview facilitates the participants to describe their interpretation about the situation from the participants’ point of view (Cohen, Mannion, Morrison, 2000:267).

The type of interview used was semi-structured interview with open-ended questions (see Appendix B). Semi-structured interview was chosen because the interviewer could expound the topics by modifying the questions so that the
interviewee could catch the meaning easier; moreover, the interviewer could ask the participants to elaborate the answers. The elaboration of the answers would add the richness, depth of the response, comprehensiveness, and honesty (Patton, 1980:238 as cited in Cohen, Mannion, Morrison, 2000:278). In addition, the open-ended questions were selected for giving the interviewee a determination to answer the question in their own way.

3.3.2 Observation

Considering that reflection in teaching process was needed, the teacher was accompanied by an observer to make it objective. The observer filled an observation sheet in every meeting. The observation sheet enriches data analysis since it is designed to understand the context when the situation took place (Cohen, Mannion, Morrison, 2000:305).

The observation-sheet used in this study was structured observation (Cohen, Mannion, Morrison, 2000:306) with rating scales in judging the observable behavior (see Appendix B). The observation-sheet was created by focusing on students’ act in the class and how they responded to their teacher. In observation sheet, there was a note column for the observer to conclude the overall learning process and a reflection column in which the observer gave comments to the weakness of the learning process.

These comments would be discussed together between the teacher and the observer, so that some reflections would be made. The reflection was developed into the form for the next cycle so that the next cycle is expected to run better.

3.3.3 Tests
There were two kinds of tests given, namely pre-test and post-test (see Appendix B). Pre-test was given in Cycle 1 before the teaching process began while post-tests were conducted at the end of every cycle from Cycle 1 to Cycle 2. The tests were consisted of 30 multiple choice items (See Appendix 6a).

The vocabulary tests were administered to know the students’ ability in mastering vocabulary. To see the improvement in students’ vocabulary achievement, the pre-test score and the post-test score were compared. It is expected that by comparing students’ results, it can give a clear description whether or not the use of Dominoes game can help the students to improve their vocabulary mastery.

### 3.3.4 Questionnaire

The questionnaire was administered in order to examine the students’ responses towards the teaching and learning. It was administered after finishing the cycle 2 on November 2013. Before administering the questionnaire, the students were given some explanation about the questionnaire (why it was given and how to answer it).

Type of the questionnaire used in this study was structured questionnaire (Cohen, Mannion, Morrison, 2000:247) with yes/ no questions (see Appendix B). The attitudes scale was used as a measurement for the students for 5 statements given.

The structured questionnaire chosen because it was easier to be coded based on the frequency of the answers that the students gave. Here are the steps in processing the questionnaire:

1) Clarifying the general purposes of the questionnaire, and then translating it into specific aims;
2) Creating the questions that covered the purpose of the study;
3) Administering the questionnaire to the lecture for checking its validity;
4) Administering the questionnaire to the students;
5) Processing the questionnaire by coding it;
6) Analyzing the data, then generalizing the data.

3.4 Data Analysis

The data that would be analyzed were students’ test result, observation sheet, questionnaire, and interview results. These data were processed from the beginning until the end of the cycle.

There are two methods of presenting the data; they are based on research questions and data instruments (Rudestam & Newton, 1992; Thomas, 2000; Paltridge & Stairfield, 2007, cited in Emilia, 2009: 245). In this case, the researcher presents the data based on the instruments.

The students’ test result was administered to answer first research question. On the other hand, the questionnaire, observation sheet and interview were administered to support both of the research questions. The data analysis was processed and presented through descriptive study. Descriptive study is “a study that tries to reveal patterns associated with a specific disease without an emphasis on pre-specified hypothesis” (Simon, 2002, as cited in Handayani, 2013).

It can be noted that descriptive study is not emphasized on exploring the hypothesis, but it tends to explain informal information about a condition that happened during the study.

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Below were the procedures in analyzing data:

1. **Analyzing interview**

   After conducting the interview, the researcher transcribed the interview result. Then, it was coded into several themes. Those themes would lead into a description of teacher’s opinion related to teaching learning process in the class.

   Interview enriched the description since it gave more detail preliminary information of students’ attitude toward the learning process.

2. **Analyzing students’ pre-test and post-test**

   Test data obtained from this research are pre-test, post-test 1 and post-test 2. To see the improvement in students’ vocabulary achievement, the pre-test score and the post-test score were compared. Before comparing the results, it is necessary to test the normality of the data. It is aimed at investigating whether the data spread from normal data. Normality test was conducted by means of Kolmogorov-Smirnov technique with 5% signification level in the SPSS 20.0.

   When both of data were distributed normally, then the data processing continued to paired t-test. However, when the data were not normally distributed, the data processing can be continued by using non parametric statistic i.e. Wilcoxon test.

   Compare mean test was done to determine whether both test results have the same mean score or not. By doing so, it can be obtained a clear description whether the use of Dominoes game can help the students to improve their vocabulary mastery or not.

3. **Analyzing observation sheet**
Observation sheet focused on the teaching learning process, especially on observing whether students could understand the text in the learning process and how they responded to their teacher during the learning process.

4. Analyzing questionnaire

This questionnaire was used to detect responses of students, the students’ attitude, and the students’ motivation. The students’ answers “yes” is given a score 1. The students’ answers “no” is given a score 0.

The mean score of each expression is reached from score total divided by the total of the students. It uses criteria to consult with the scores as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Very positive</td>
<td>76 % - 100 %</td>
</tr>
<tr>
<td>Positive</td>
<td>56 % - 75 %</td>
</tr>
<tr>
<td>Negative</td>
<td>40 % - 55 %</td>
</tr>
<tr>
<td>Very negative</td>
<td>Less than 40 %</td>
</tr>
</tbody>
</table>

Arikunto (1998:246)

3.4 Criterion of Success

Classroom Action Research (CAR) is able to be called successful if it can exceed the criteria which have been determined, and fail if it cannot exceed the criterion which has been detained. In this research, the research will succeed when there are 75% numbers of students could achieve some improvement scores from the pre-test until the second post-test in cycle two or they could pass the target
score of the minimal mastery criterion (MMC) level. The MMC that must be attained considering reading subject which is adapted from the school agreement is seventy five (75). If the criterion of the action success achieved, it means that the next action of the Classroom Action Research (CAR) would be stopped, but if this condition has not been reached yet, the alternative action would be done in the next cycle.