CHAPTER III

RESEARCH METHODOLOGY

This chapter describes the methodology of this study that incorporates the research approach, model of the study, procedure of the study, location and subjects, time allocation of the study, research instruments and data analysis.

3.1 Research Design

Every research needs a method to make it easier to draw the conclusion and to have a satisfied result. Therefore, in order to achieve the objectives of the research, the researcher uses Classroom Action Research (CAR). The research consists of two cycles. Kemmis and McTaggart (1988) stated that there are four basic steps in the action research. They are planning, acting, observing and reflecting. The planning step consists of problem identification, while in acting and observing step the researcher gathers data, interprets data, and acts on evidence of the research. After that, the result of the research is evaluated and it is continued to the next cycle.

Figure 3.1 shows how the classroom action research works. The researcher conducts classroom action research to acquire information of an instructional activity by evaluating and reflecting instructional practice.
Classroom Action Research emphasizes the involvement of teachers problems in their own classrooms and has its primary goal the in-service training and development of the teacher rather than acquisition of general knowledge in the field of education.(Borg, 1981).

Figure 3.1 Action Research Cycle

Furthermore, Action Research is a process in which participants examine their own educational practice systematically and carefully, using the techniques of research. It involves the teacher and researcher with a method for solving everyday problems in school, in order to improve both students and teachers’ learning effectiveness. The teacher has opportunity as model for students, not only the skill needed for effective learning but also curiosity and excitement about gaining new knowledge (Kitchen & Stevens, 2008).
The goal of a teacher is to be a profesional problem solver who is committed to improve both their own practices and students outcomes. It provides a powerful reason to practice action research (Gay et al., 2006:499). Classroom Action Research is a study focused on specific problem that occurs in a class. It also focusses on the process not only the result.

Doing Classroom Action Research means observing the process of the treatment. It is strongly recommended that an observer watches the process of the Classroom Action Research. This is done so that the teacher can be helped in evaluating and formulating the lesson plan for the every cycle.

The teacher usually used Classroom Action Research because it deals with their own problems, it can start whenever they are ready and providing immediate results. Action research provides them with opportunities to better understand, and improve their educational practices. Action research can create a stronger relationships among staff. More Importantly, action research provides educators with alternative ways of viewing and approaching educational questions providing a new way of examining their own practices. (Mertler, C.A. & Charles C.M., 2008).
3.2 Participants

The researcher took one class as a sample, the object was the students of XI Culinary Class of a Vocational School in Subang. The researcher conducted the research collaboratively with one on-site English Teacher. Her engagements were aimed at obtaining the data needed as objective as possible. However, before the one on-site teacher took part in the research, she was given an explanation about the research procedure.

3.3 Data Collection

3.3.1 Site and Respondents

The study was conducted in a vocational school, to the XI Culinary Class. This setting was chosen because the researcher works here as an English Teacher and a pre-interview that have been conducted by the researcher showed that most students in the XI Culinary Class have difficulties in reading. This research was conducted on 25th of October to 28th of November 2012 it was divided into two steps; preparation step and action step. Every cycle has several activities; planning, acting, observing and reflecting.

The table below describes the time allotment of the research.
Table 3.3.1 Schedule of the Research

<table>
<thead>
<tr>
<th>No</th>
<th>Activities</th>
<th>Time (October – November)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Week 1</td>
</tr>
<tr>
<td>1.</td>
<td>Preparation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arranging concept of the research</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-test and Problem Identification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arranging concept of the cycles</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Action Research</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cycle 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cycle 2</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Conducting Post Interview</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Writing Report</td>
<td></td>
</tr>
</tbody>
</table>

3.3.2 Research Instruments

The research utilized some instruments to gather the data. The instruments of this research are observation sheet for the teacher and the students, interview, questionnaire, evaluation sheet, and reading comprehension test.
3.3.2.1 Observation Sheet

Observation was conducted to obtain the data about teacher and students activity. The observation form is adapted from Brown (2001); Teacher Observation form A: Observing other teacher. The researcher considers that this form is suitable to enclose the whole observation aspects in this research. It was divided into five categories. The first category was preparation step. It has three indicators that specify teacher’s preparation in teaching such as how to plan the lesson and worksheet. The second category was Presentation. It has ten indicators which monitor teacher’s activity in the beginning of the teaching instruction. The third category was execution method, this category has twelve indicators which shows how the teacher organize the class and deliver the material of the lesson. The fourth category was personal characteristic, it has five indicators which monitors teacher’s personality and action in the class. The last category was the teacher-students’ interactions, this category has ten indicators which indicate how teacher and students work together in an instructional activities. (see Appendix B)

Meanwhile, the students’ observation sheet was implemented to measure the activity of the students during the instructional processes. The observation sheet was used to know the students’ responses toward
the Cooperative Learning Methods in teaching reading. It consists three categories; interest, attention, and participation. (see Appendix B)

3.3.2.2 Interview

One-on-one Interview was conducted to gather the detail information from the respondent. It was divided into two parts; pre-interview and post-interview. Interviews were particularly useful for getting the story behind a participant’s experiences. The interviewer can pursue in-depth information around the topic. Interviews may be useful as follow-up to certain respondents to further investigate their responses. (McNamara,1999)

The pre-interview was conducted in preparation step; it was carried out before the cycle began. It has ten questions related to students’ difficulties in reading and also about their opinion toward Cooperative Learning Methods (see appendix B for detail). The result of the interview is used to plans the first cycle.

The post interview was conducted after all of the cycles ended. It was implemented to get the students’ perception toward learning reading through Cooperative Learning Methods. The interview has four questions about students’ perception toward the implementation of cooperative learning, advantages and motivation perceived during learning reading through cooperative learning method (see appendix B for detail).
3.3.2.3 Questionnaire

Questionnaire in combination form (close-ended and open ended) was implemented to identify the students responses toward cooperative learning. The questionnaire was given to the students after each cycle to get students’ opinion and suggestion about the learning activities. This students’ questionnaire helps the teacher to improve the instructional learning activities.

Students’ questionnaire consists of four questions. The first question asks student’s opinion on the instructional learning in one meeting. The second question, the students is asked about their view toward cooperative learning method, the next question concern to the teacher’s teaching performance in conveying the material, and on the last question students are asked to give their suggestion for the next meeting (see Appendix B for detail).

3.3.2.4 Reading Test

The Reading test consist of three tests, there are pre-test, post-test in cycle 1 and post-test in cycle 2. For the pre-test, it is conducted before the cycles began. It is implemented to measure the prior knowledge of students’ reading comprehension before the classroom action research conducted. Whereas, post-tests in cycle 1 and cycle 2 is conducted after
each cycle is complete. The tests are about the learning material which is delivered by the teacher. The tests are implemented to see whether or not Cooperative Learning Methods give an improvement to the students’ reading comprehension by comparing the average value of each test.

The post-test is conducted to see how far students’ comprehend the lesson material, especially for descriptive text. The students are considered to be successful if they got 75 in accordance with Minimum Mastering Criteria (MMC). Minimum Mastering Criteria is the minimum criteria to declare learners’ achievement of the lessons. MMC value is determined by the subject teachers with the approval of the school. (see appendix A for details).

The following indicators were made to measure student’s score improvement by the teacher.

**Table 3.3.2.4 Improvement Score**

<table>
<thead>
<tr>
<th>No</th>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>90≤A≤100</td>
<td>Excellent</td>
</tr>
<tr>
<td>2.</td>
<td>80≤B≤89</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>3.</td>
<td>70≤C≤79</td>
<td>Average</td>
</tr>
<tr>
<td>4.</td>
<td>60≤D≤69</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>5.</td>
<td>50≤E≤50</td>
<td>Poor</td>
</tr>
</tbody>
</table>
3.4 Research Procedure

The researcher implemented the Classroom Action Research that comprises some processes which were divided into two cycles. Each cycle consisted of some steps: planning, acting, observation, and reflecting. (Kemmis and Mc Taggart, 1988)

The researcher was helped by one on-site English teacher whose role as the observer. This collaboration was aimed at obtaining the data needed as objective as possible.

3.4.1 Preparation

The first step of this research was preparation. The researcher looked for the detail information about the site and respondents of the research, in this case was to the XI culinary class at a Vocational School in Subang. The researcher conducted this step before practicing the first cycle. Then, he prepared the administration letter and arranged the concept of the cycles.

3.4.2 Research Procedures in Cycle One

3.4.2.1 Planning
In this step, the researcher arranged the plan of action in the cycle. He prepared the lesson material which would be delivered in the first meeting. This step was conducted after finding out the detail information about the site and respondents of the research.

3.4.2.2 Action and Observation

In this step, the researcher implemented the plan of the research and observed by the observer. The observer observed how the researcher implements his lesson plan by ticking the observation sheet. In this step, the researcher must organize the time and use the method effectively. This observation was important to analyze everything that happened in the class during the implementation of the lesson plan in each cycle. While the researcher used students observation sheet to know the students’ interest, attention, and participation during the Implementation of Cooperative Learning Method. The observation sheet was adapted from Brown (2001).

The teacher observation sheet was divided into five categories. They were preparation step, Presentation, method execution, personal characteristic and the teacher-students’ interactions. Each category was assessed by the observer. The range of values for each category were 1-4, the greater value given by the observer meaning the better performance of the researcher. The average score for the researcher performance in this cycle was 3.2. The researcher did not tell the method to the students very well.
The students observation sheet shows the students’ interest, attention, and participation in learning. The students were excited to learn although there were still some students who were less motivated.

3.4.2.3 Reflecting

In reflecting step, the researcher and the observer discussed the results of observation sheets, student’s questionnaire, evaluation sheet, and also worksheets of the students to find out the weaknesses and solve the problems that were found in the implementation of Cooperative Learning Method in the class. In reflecting step, the researcher tried to find out a better teaching strategy that would be implemented in the next cycle.

3.4.3 Research Procedures in Cycle Two

3.4.3.1 Planning

In this step, the researcher arranged the concept of the cycle. He prepared the lesson material which would be delivered in the second meeting. This step was conducted after he found the deficiency of the first cycle.

3.4.3.2 Action and Observation

In this step, the researcher implemented the plan of the research and observed by a partner teacher. The observer observed how the
researcher improves his performance during the teaching and learning process. In this cycle, the teacher organized the time and used the method effectively. The average score for the researcher performance in this cycle was 3.6. The researcher implemented the Cooperative Learning Method well.

The students’ observation sheet showed some improvements of the students’ interest, attention, and participation in learning. All students were more focused in learning.

3.4.3.3 Reflecting

In reflecting step, the teacher and the observer discussed the results of observation sheets, student’s questionnaire, evaluation sheet, and also worksheets of the students to find out the weaknesses and solve the problems that were found in the implementation of Cooperative Learning Method in the class.

3.5 Data Analysis

The research used both quantitative and qualitative data analyses. The quantitative method was used to analyze the data from the students reading tests (pre-test and post tests) which implement the analysis of descriptive statistic. Meanwhile, the qualitative method was used to analyze the data from observation, student questionnaire, and interview.
The data from quantitative and qualitative method then compared and matched to give the final conclusion of the research.

The process of data analysis began from preparation step to last cycle. The process of cycle was described in this process. It consisted of planning, acting, observation, and reflecting. The data were collected from observation sheet, interviews, student’s questionnaire, and students’ reading tests.

3.5.1 Analysis Data of Student’s reading Test

3.5.1.1 Scoring Technique

This technique was described quantitatively. This scoring system was used to dive very specific range and criteria in each aspect of reading so that it makes the teacher easier to give the scores. The mean scores of pre-test, post-test in cycle 1 and post-test in cycle 2 were compared, and analyzed to identify students’ comprehension improvement.

3.5.2 Descriptive Technique

Some data in this research needed deeper analysis that may be difficult to convey in scoring technique. Gay (1987) stated that descriptive data are regularly gathered through interview, and observation. Therefore, descriptive study is utilized for the following instruments.

3.5.2.1 Analysis of Instructional Process
This process was carried out to analyze the observation sheet. This form described the teacher and students’ activities in the classroom. The data were obtained from the teacher observation sheet then analyzed to obtain deep information of the instructional process in every cycles. The teaching learning program was conducted from 5 November 2012- until 25 November 2012- (2 weeks). The observation was conducted in four meetings. In this case the researcher was fully participated in the activities of teaching and learning (Goetz and LeCompte, 1984). Since, the researcher had a role as the teacher during the implementation of Cooperative Learning model. The on-site English teacher as an observer kept to observe the teacher in the classroom by using the observation sheet.

The researcher conducted two steps to gather the data from the observation sheet:

1. Record complete events happened in the classroom into notes which recorded teacher’s preparation, the presentation and the method of instructional process, students and teachers’ interaction.

2. Analyzing and interpreting the information about the teacher and students’ activities such as students’ behavior in doing tasks and the teacher’s roles during the teaching learning process.

3.5.2.2 Analysis of Interview
There were two sections of interviews, pre-interview and post-interview. The pre-interview was conducted to find out the students’ difficulties in reading and their perception toward group work activity. The post interview was conducted to find out students perceptions on learning reading through cooperative learning. To analyze the result of the interview, the researcher conducted some steps:

1. Transcribing the data from interview into written text,
2. Analyzing the data from an interview into students’ progress in reading during the implementation of cooperative learning method and student’s response toward the teaching learning process.
3. Interpreting the data to address the research question.

3.5.2.3 Analysis of Students’ Questionnaire

The questionnaire (close ended and open ended) was given to the students after each cycle. The questionaires helped the teacher to improve his instructional activities through their views toward the instructional activity and material. It covered students’ opinion, suggestion, and impression. This instrument was only additional data to complete the research findings (see AppendixB for detail).

To analyze the result from student’s questionnaire, the researcher conduced three steps:
1. Collecting the data from students’ questionnaire,

2. Analyzing the data from students’ questionnaire into students’ progress in reading during the implementation of cooperative learning method and student’s response toward the teaching learning process.

3. Interpreting the data to address the research question.

3.5.2.4 Analysis of Evaluation Sheet

Evaluation sheet provided some information related to the responses of the students toward cooperative learning method. It measured how far cooperative learning method help them to improve their ability in reading, especially for descriptive text. To analyze the data from evaluation sheet, the researcher gathered the data, then they were analyzed and interpreted to address the research question.