CHAPTER III
RESEARCH METHOD

This chapter presents the method which had been used in the research. It consists of the research design, setting of the research, subjects of the research, research data, data analysis techniques, validity, reliability, and procedure of the research. Each of them will be presented in the following discussion.

A. Research Design

The type of the research was an action research study. In this research, the researcher was directly involved in improving students’ writing ability. It is aimed at exposing the process of students’ writing ability improvement. The nature of action research that would be carried out at SMP Muhammadiyah 8 Yogyakarta VIII A class was collaborative which involved the English teacher as the collaborator and the researcher herself.

Kemmis and McTaggart (1988) in Burns (2010: 8) propose a model of a classical action research. The model was illustrated in figure 8. There were some other models of action research, but they were criticized by Kemmis and McTaggart as being too fixed and inflexible. Regardless of the criticisms, it was a useful model because it expresses briefly the more important ideas about the essential phases in an action research study. Hence, the researcher selected to use it as a way in conducting an action research study.
B. Setting of the Research

This section consists of two parts. The first part describes about the place of the research, the second issue is the time of the research and the third part is about the place of the research. Each part is discussed below.

1. Time of the Research

The researcher conducted the research in the second semester of the academic year of 2011/2012. The research was conducted from April to May 2012. The English teaching-learning activity in this class is carried out three times a week in the duration of forty minutes per class hour. Following the English schedule class VIII A of SMP Muhammadiyah 8 Yogyakarta, she organized the time as follows.
The time was set in order to plan the actions that were going to teach in the classroom. In implementing the actions, she followed the class’ schedule from the teacher. The topics chosen in each meeting were varied between Cycle 1 and Cycle 2. However, the materials were still about recount texts. In doing the research, the researcher followed the schedule of VIII A class and discussed the time with her collaborator.

The researcher managed to get the permission letter from the institution of Muhammadiyah. The institution gave permission to her to conduct and finish the research for three months. Thus, this research was eventually conducted from May 3rd, 2012 to May 24th, 2012 by considering the permission above.

<table>
<thead>
<tr>
<th>Date</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday/ May 3rd, 2012</td>
<td>First Meeting</td>
</tr>
<tr>
<td>Friday/ May 4th, 2012</td>
<td>Second Meeting</td>
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<tr>
<td>Saturday/ May 5th, 2012</td>
<td>Third Meeting</td>
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<tr>
<td>Thursday/ May 10th, 2012</td>
<td>Fourth Meeting</td>
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<tr>
<td>Saturday/ May 12th, 2012</td>
<td>Fifth Meeting</td>
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<tr>
<td>Saturday/ May 19th, 2012</td>
<td>Sixth Meeting</td>
</tr>
<tr>
<td>Thursday/ May 24th, 2012</td>
<td>Seventh Meeting</td>
</tr>
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</table>
2. **Place of the Research**

This research was conducted in SMP Muhammadiyah 8 Yogyakarta, focusing on class VIIIA. SMP Muhammadiyah 8 Yogyakarta is located at 302 Kenari Street, Miliran, Umbul Harjo II, Yogyakarta. Being located in an urban area, the school is relatively accessible.

The school has a library, a science laboratory, two computer laboratories, a skill room, an art room and 11 classrooms. Each class has maximum 28 students. In the academic year of 2011/2012, totally there were 267 students, 30 teachers, five members of administration, a school librarian, and a headmaster.

C. **Subjects of the Research**

The researcher involved the students of class VIIIA in the second semester of the academic year of 2011/2012. There were 28 students (11 male students and 17 female students). She had some considerations related to the writing problems found in VIIIA class. First, most of the students encountered the problem in their writing. In this class, there were only two students who performed good scores in English. Second, the technique applied in teaching and learning process in the classroom activities were categorized as less effective. The teacher placed her role as the centre. Hence, the researcher carried out an action research study to improve the teaching and learning process in writing by involving the students of VIIIA class as the subjects of the research and the English teacher as the collaborator.
D. Research Data

The data of the research were qualitative and quantitative. They were obtained through classroom observation, interview and documents. The data from observation were transformed into field notes. Meanwhile, the recorded data from interviews were transformed into transcripts. Hence, the qualitative data were in the forms of field notes and interview transcripts and the quantitative data were in the forms of writing tasks’ score. The tasks were obtained from Cycle 1 and Cycle 2. In addition, the instruments of the research were in the forms of observation checklists, observation guidelines, interview guidelines, and writing tasks.

The data of the research were in the form of field notes, interview transcripts, and students’ writing tasks. The techniques to collect these data were obtained from observation, interview and tasks. Observation was conducted from the preliminary observation to find out the problems in the classroom during the writing activity. It was also carried out in order to see the condition in the classroom when actions were implemented. Before conducting observation, the researcher provided observation guidelines. She also provided the observation checklists which included some steps in implementing the actions. In this case, the collaborator acted as an observer. Then, the result of the observation was written in the forms of field notes.

Interviews were conducted to discover the subjects’ response toward the actions implemented. Interview guidelines were provided in order to plan the questions she would like to deal with. The questions included the issues in writing, recount text, mind mapping, and action research. It was categorized into
guided or semi-structured interview. The advantage of using this interview is that the researcher is more possible to find out about some things in more depth, so the researcher will get richer information (Burns, 2010: 75).

Besides, the students’ writing tasks were used in this research. They were used to find out whether there was significant improvement or not in students’ writing. The mean value of the tasks was compared between Cycle 1 and Cycle 2.

Table 5: **Data Collection Techniques and Instruments**

<table>
<thead>
<tr>
<th>No.</th>
<th>Techniques</th>
<th>Instruments</th>
<th>Data</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Observation</td>
<td>Observation Guideline</td>
<td>Field Notes</td>
<td>Qualitative data analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Observation Checklists</td>
<td>Documents</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Interview</td>
<td>Interview Guidelines</td>
<td>Interview</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Transcripts</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Evaluating Students’ Writing Task</td>
<td>Students’ writing tasks</td>
<td>Writing Scores</td>
<td>Quantitative data analysis</td>
</tr>
</tbody>
</table>

**E. Techniques of Data Analysis**

Analysing action research data is a continuing process of reducing information to find explanation and patterns (Burns, 2010: 104). In addition to get a framework for the analysis, the researcher followed the five stages proposed by Burns (2010: 105) adapted from Burns (1999, 157-160):

1. **Assembling the data**

   In the first stage, the researcher gather the data over the period of the research, i.e. field notes, interview transcripts, photographs and students’ writing task. The data were examined to get the meaning of the data.
2. **Coding the data**

This stage allowed the researcher to identify which of the data could code qualitatively (field notes, interview transcript, photographs) and which could code quantitatively (students’ writing task).

3. **Comparing the data**

Once the coding was complete, the researcher compared the categories across different sets of data to see whether they say the same thing or not that she can focus on. The aim of this stage is to display and describe data rather than interpret them.

4. **Building meanings and interpretation**

Refining her personal theories brought the meanings of this research. This point demanded the researcher to look for not only step-by-step descriptions of what she has found but also to think deeply about what the data are saying.

5. **Reporting the outcomes**

The last stage was about how the researcher organizes the whole story of the research from beginning to end. It was more about how the researcher can present her research and what she has found to tell others.

Besides qualitative data analysis, the researcher also used quantitative data analysis. The researcher analysed the data by giving score of the students’ writing tasks which obtained from Cycle 1 to Cycle 2. After giving score by using analytical rubric, the researcher compares means score of students’ writing both in Cycle 1 and Cycle 2.
Analysing the data required the researcher own attention of what the data were telling about. In this way, the researcher can draw out new concepts, develop personal theories, and find good improvement for classroom practice that she can try out for further cycle. Hence, analysing the data was useful to get trustworthiness.

F. Validity and Reliability of the Data

1. Validity

The data validity of this research was based on Anderson et al. in Burns’ (1999: 161-162) criteria of validity. They were democratic validity, outcome validity, catalytic validity, process validity, and dialogic validity.

a) Democratic Validity

In this research, to get the democratic validity the researcher did a collaboration with the English teacher and the students as the data resources who have a right to give their opinion, ideas, criticism and suggestion about the implementation of the actions. Their opinions, ideas, criticism and suggestion were used to improve the actions of cycle conducted.
b) Catalytic Validity

The researcher gathered the subjects’ responses to bring about changes and to see how deep the subjects’ understanding toward the materials given. By monitoring the subjects’ problem, she could take the actions as a result of these changes.

c) Outcome Validity

This criterion related to the notion of the actions leading to the outcome that are successful in the research situation. The outcome validity in this research was obtained by looking at the result of the actions which have been done. The researcher and the collaborators analysed the successful and the unsuccessful of the actions. Outcome validity also depended on the validity of the process of conducting the research, which would next be described.

d) Process Validity

The process validity was obtained to see how adequate the process of conducting the research. During the research process, events or behaviours were viewed by different perspectives and different data sources. This was done in order to avoid the biased interpretation.

e) Dialogic Validity

To get the last criteria of validity, the dialogic validity, the researcher did reflection with the teacher and the students in order to get suggestions to improve the actions.
2. **Reliability**

Triangulation was valuable in strengthening the reliability of data in this study. R. B. Burns. (1994: 272) in Burns (1999: 163) stated that triangulation is a way of arguing that if different methods investigation produce the same result then the data are likely to be valid. Applying triangulation to data collection will help give more objectivity. The researcher could gather various perspectives on the situation being studied. There are three forms of triangulation that the researcher used on similar area in collaborative action research study to gain objectivity of data collected:

a) **Time Triangulation**

Data were collected at one point at time or over period of time to get a sense of what factors were involved in change processes. The researcher not only observed the process happened in cycle 1, but also the process happened in cycle 2.

b) **Researcher triangulation**

The English teacher in VIIIA and the researcher observed the same research setting. This helped avoid observer biases when assessing the students’ writing task.

c) **Theoretical triangulation**

Data were analysed from more than one perspective. The researcher analysed both internal and external factors which become the problems in writing and how they produce paragraphs.
G. Procedure of the Research

As described in Figure 8, the research procedure in this study follows the cyclical action research study proposed by Kemmis and McTaggart. The further steps of the model are described as follows.

1. Planning

After the researcher and the collaborator identified the problems, they made some planning to decide the actions that were feasible to be implemented in the field. She worked together with the English teacher of VIIIA class of SMP Muhammadiyah 8 Yogyakarta, prepared the teaching material, and prepared the instruments to collect the data to solve the problems. In planning the actions, she classified the action into two cycles. She also prepared the instruments to obtain the research data.

2. Action and Observation

The data collection techniques which were used were filling the observation checklists form, observing the teaching and learning process through the writing of field notes, taking photos, and collecting documents including students’ works and lesson plans. To assess the process validity, the researcher examined data and identified them whether the students were able to continue learning from the process or not. It was supported by some data sources which showed the valid process. In addition, to fulfil the catalytic validity, the researcher gave an opportunity to the collaborator and students to give their response to the change occurred after the implementation of the action.
3. Reflection

Reflection is used to assess the outcome validity. The researcher and her collaborator discussed circumstances concerning the actions. It was done to find out whether the actions were successful or not. If the actions carried out were successful, she and her collaborator would continue to implement those actions by giving a different instruction to the students. However, if the actions were not successful, she and her collaborator would try to find the suitable actions to use the mind mapping software in teaching writing so that the condition would be better and could improve students’ writing ability.

To assess the dialogic validity, the researcher collaborated with the English teacher to review the value of the actions. This stage elaborated the significances and revised or continued the cycle.