CHAPTER III
METHOD OF INVESTIGATION

A. Research Approach

Research methodology plays an important role in the research. In this research, the researcher uses the classroom action research as the approach. As we know that classroom action research is a number of procedures that is used to improve teaching learning process in classroom. Mills states that action research is a systematic inquiry that is done by teachers (or other individuals in the teaching/learning environment) to gather information about the ways their particular schools operate how they teach and how well their students learn.\(^\text{1}\)

The researcher used a classroom action research as an attempt to improve writing teaching learning process and to solve the problems that students had related to skill in writing.

B. Setting of Study

The researcher conducted the classroom action research at MTs Irsyaduth Thullab Demak. This setting is located in Tedunan Wedung Demak. It is located at RT/RW: 03/01. The researcher chooses this setting because it geographical location is not far from the researcher to reach. The students come from different intelligence, social background, and characteristic of student setting and subject of the research.

C. Subject of Study

The subject of this study was students of VIII of MTs Irsyaduth Thullab Demak, where the total number 23 students. This research was done at 1\(^{st}\) semester in the academic year 2010 / 2011.

D. Method of Study

1. Research Design

Research method is a systematic activity by using certain method to find new thing or to prove a theory. This research is classroom action research (CAR) that uses data observation toward teaching learning process in writing descriptive text. A form of research which is becoming increasingly significant in language education is Action research.\(^2\) This research is a classroom action research in improving students’ writing skill in descriptive text using the power of two and four as the strategy of teaching. This research has been defined in a number of different ways. Kemmis and MC Taggart (1988), for example, argue that the three defining characteristics of action research are that it is carried out by practitioners (for our purposes, classroom teachers) rather than outside researcher; secondly, that it is collaborative; and thirdly, that it is aimed to changing things. A distinctive feature of action research is that those affected by planned changes have the primary responsibility for deciding on courses. Cohen and manion (1985) argue that action research is first and foremost situational, being concerned with the identification and solution of problems in a specific context. They also state that the aim of action research is to improve the current state of affairs within the educational context in which the researcher is being carried out.\(^3\)

The aims of an action research are to know more about the students and what they find motivating and challenging.\(^4\) And as teachers of English we might want to learn more about ourselves as teachers and how effective of certain activity types that we have given.

\(^3\) *Ibid*, p.18
2. **Design of Study**

This research is Classroom Action research, the researcher that uses data was analyzed through two cycles in action. Generally, classroom action research involves a cyclical approach. The cycles of classroom action research involved identify of problem (planning), collect data (acting), analyze and interpret data (observing), develop an action plan (reflecting).

Before the researcher did the cycles in action, she had done initial observation at first. Research design could be done with some steps as follows:

a. **Initial Observation**

   In initial observation, the researcher intended to find out:

   1) Collecting data such as documentation includes the number of the students and students’ name list.
   2) After the researcher had collected the data, she did a pre cycle test. Its purpose is to know the score mean of students’ writing organization in descriptive text before using the power of two and four.

b. **Planning in Action**

   In this research, the researcher planned to conduct two cycles of classroom action research. There are four activities that should be done in one cycle. Its step in this kind of research is using cycle and it is implemented to increase the students’ writing skill in descriptive text. The four components consist of planning, actuating, observing, and reflecting:

   1) Planning

      Planning an action by focusing on who, what, when, where, and how the action will be done.

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2) Action

The planning strategy will be applied in teaching learning process.

3) Observation

In this phase, the researcher observes and takes notes during teaching learning process.

4) Reflection

Reflection means to analyze the result based on the data that have been collected to determine the next action in the next cycle. In this phase, the researcher could observe whether the acting activity had resulted any progress, what progress happened, and also about the positives and negatives. Result from observation then being reflected together by teacher and researcher, this includes analysis, and evaluation toward observation result.

A cyclical process involving stages of action research is followed by action. It can be illustrated below:

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7 *Ibid*, p.16

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Figure 3.1 Cyclical Process Of Action Research
E. Procedure of Study

In this classroom action research, the researcher conducted two cycles through the power of two and four strategy. In this research, the teacher taught writing in descriptive text.

The activities that were done in each cycle were as follows:

1. Pre Cycle Test:

   The first step in making classroom action research, the researcher used pre cycle test to check the students’ writing skill in descriptive text. In this activity, the teacher gave test. After the researcher got the data from the pre cycle test, the researcher decided to analyze the result to determine the use of the power of two and four in teaching writing.

   After recognizing the possible cause of problems faced by students, the researcher explored practical, realistic ways that the power of two and four could become a normative part of teaching learning process.

2. Cycle 1:

   a. Planning

      1) The researcher identified the teaching learning design, such as, arranging lesson plan which was according to the teaching learning process which was using ‘the power of two and four’.

      2) The researcher prepared the teaching learning process resources, such as, the materials, the media, the observation sheets, and the documentation.

      3) The researcher prepared present list in order to know students’ activeness in joining teaching learning process by using ‘the power of two and four’

   b. Acting

      In this step, the teacher along the researcher conducted an activity as it had planned in the lesson plan, organized the class to start
doing the strategy and collected the data while repair the problem. The activities were as follows:

1) Teacher showed picture and asked students about it and Students answered the questions orally.

2) Teacher wrote down the answer on the blackboard.

3) Teacher told what the topic of the lesson.

4) Teacher explained descriptive text and grammatical points.

5) Teacher gave the transcript of the text to students.

6) Teacher asked students to find 5 difficult words.

7) Teacher gave some vocabularies that related to the topic.

8) After giving some vocabularies, teacher gave a new picture and asked students to answer some questions individually.

9) After all students had completed their answer, teacher arranged them into pairs and asked them to share their answers.

10) Teacher asked students to work in groups of four to share their answers from their previous pairs.

11) After finishing the work, teacher asked a delegation of each group to read their work in front of the class and others responded it.

12) Teacher asked some of them some questions related to their work that had been read.

13) Teacher gave a chance to students to ask the difficult materials and provided feed back the material.

c. Observation

The researcher observed the activity by using observation format in order to evaluate the results, collect the data and monitor the teaching learning process. It was used to find out to what extent the action result reached the objective. The steps were as follows:
1) The researcher observed the teaching learning process in order to know the implementation of using ‘the power of two and four’ towards students’ writing skill in descriptive text.

2) The researcher observed the groups’ activity in discussing to write descriptive text.

3) The researcher wrote the success and the problems when the teaching learning in progress which was not enough sufficient in reaching the objectives.

d. Reflecting

The researcher analyzed and evaluated the actions that had been done to find weakness and how to improve in the next cycle, evaluated the step in teaching learning process and discussed the result of observation for the students’ ability in writing class; it consisted of quality, number and time from each action. The steps were as follow:

1) Researcher and teacher analyzed and discussed the result of the observation and test. It was continued then to make reflection which one should be maintained and which one should be overcome in the next cycle. For there was found that the first cycle has less significant improvement of students’ writing skill, the researcher and the teacher continued to the second cycle for then the problems were solved.

2) Made a conclusion from cycle 1.

3. Cycle 2:

a. Planning

1) The researcher identified the teaching learning design, such as, arranging lesson plan which was according to the teaching learning process which was using ‘the power of two and four’.
2) The researcher prepared the teaching learning process resources, such as, the materials, the media, the observation sheets, and the documentation.

3) Prepared present list in order to know students’ activeness in joining teaching learning process by using ‘the power of two and four’

b. Acting

In this step, the teacher along the researcher conducted an activity as it had planned in the lesson plan, organized the class to start doing the strategy and collected the data while repair the problem. The activities were as follows:

1) Teacher overviewed the material

2) Teacher gave students the information table.

3) Teacher asked students to write simple sentences together.

4) Teacher wrote down the answer on the blackboard.

5) Teacher gave some vocabularies that related to the topic.

6) Teacher gave students papers of information table and some questions based on the information table individually.

7) After all students had completed their answer, teacher arranged them into pairs and asked them to share their answers.

8) Teacher asked students to work in groups of four to share their answers from their previous pairs.

9) After finishing the work, teacher asked a delegation of each group to read their work in front of the class and others respond it.

10) Teacher asked some of them some questions related to their work that had been read.
11) Teacher gave a chance to students to ask the difficult materials and provided feedback on the material.

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2) The researcher observed the groups’ activity in discussing to write descriptive text.

3) The researcher wrote the success and the problems when the teaching learning in progress which was not enough sufficient in reaching the objectives.

d. Reflecting

In second cycle reflection was made in order to make a conclusion of all the teaching learning process of the class by using ‘the power of two and four’ which was hoped that it could improve students’ writing skill in descriptive text, so students had good descriptive writing.

F. Method of Data Collection

1. Source of Data

The source of data is the subject where the data can be got in detailed, those data are the field data, they are:

a) Data from the English teacher of eight grades involves teaching learning process and students’ name.

b) Data from the students involves: students’ achievement that is obtained from students’ score in the end of every cycle, data observation from
students during teaching learning process took place, data from the picture documentation during the research.(see appendix 13)

2. Data Collection Method

   An instrument is needed by researcher to collect the data. In this research the instruments are:

1. Interview

   Interview is the interaction process between the interviewer and the man/woman who gives the information (interviewee). The researcher used the interview to get information from the teacher in order to know the students’ condition and achievement before treatment. Here, the interview was the teacher of eight grade Mulimatul khasanah, S.Ag who taught the English there and in this classroom action research.

2. Observation

   Observation is a specialized skill. Here observation will be used as to observe the teaching process and the students’ activities using check list to get the data. It will be taken from opening until the end of teaching learning process.

3. Test

   Test is used to measure the person’s competence and to achieve the objective. The data is collected by giving writing test. Writing is conducted Three times, there are Assessment of pre cycle test, assessment of cycle I, and assessment of cycle II. The form of the test is direct writing.

G. Technique of Analyzing Data

   The researcher used the criteria of assessment, that is, since the content of students writing covered the generic structures, they are identification and description. In generic structure of description consists of parts, qualities, and characteristics. In assessing the result of students’ writing organization of descriptive text, the researcher used the score as follows:
There are five aspects, which are used as consideration in scoring. They are organization, content, grammar, mechanic and vocabulary. The researcher gives score for each elements of writing and explains the score for each elements of writing:

3. Figure 3.2

Matrix of Assessment for Students’ Writing Organization

<table>
<thead>
<tr>
<th>No</th>
<th>Aspect</th>
<th>Score</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Organization</td>
<td>20-18</td>
<td>Excellent to Good: Appropriate title, effective introductory paragraph, topic is stated, leads to body.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17-15</td>
<td>Good to Adequate: Adequate title, introduction, and conclusion.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14-12</td>
<td>Adequate to Fair: Mediocre or scant introduction or conclusion.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11-6</td>
<td>Unacceptable: shaky or minimally recognizable introduction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5-1</td>
<td>Not college-level work: Absence of Introduction or conclusion.</td>
</tr>
<tr>
<td>2</td>
<td>Content</td>
<td>30-27</td>
<td>Excellent to Good: Essay addresses the assigned topic.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26-22</td>
<td>Good to Adequate: Essay addresses the issues but misses some points.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21-17</td>
<td>Adequate to Fair: Development of ideas not complete or essay is somewhat off the topic.</td>
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<tr>
<td></td>
<td></td>
<td>16-13</td>
<td>Unacceptable: Ideas incomplete.</td>
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<tr>
<td></td>
<td></td>
<td>12-10</td>
<td>Not college-level work: Essay is completely inadequate and does not reflect college-level work.</td>
</tr>
<tr>
<td>3</td>
<td>Language Use</td>
<td>25-22</td>
<td>Excellent to Good: native-like fluency in English grammar.</td>
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<tr>
<td></td>
<td></td>
<td>21-18</td>
<td>Good to Adequate: Advanced proficiency in English grammar.</td>
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<tr>
<td></td>
<td></td>
<td>17-11</td>
<td>Adequate to Fair: Ideas are getting through to the reader, but grammar problems are apparent and have negative effect on communication.</td>
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<tr>
<td></td>
<td></td>
<td>10-5</td>
<td>Unacceptable: Numerous serious grammar problems interfere with communication of the writer’s ideas.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4-1</td>
<td>Not college-level work: Severe grammar</td>
</tr>
</tbody>
</table>

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Data analysis is an effort which is done by teacher and researcher to embrace the data accurately. After collecting the data, the researcher will analyzed the data. It can be defined as the process of analyzing data required from the result of the research. Qualitative data will be gained from field notes, observation, interview, that is analyzed by data triangulation.

The steps of data analysis:

1. After the researcher assessed the result of the students’ writing in pre cycle-test, she found the mean of it.

2. After that, the researcher assessed the result of students’ writing of each cycles, and found the mean of it.

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3. The last step is the researcher analyzes the improvement of students' score on pre-test and each cycles.

To get the mean, the researcher used this formula:

\[
X = \frac{\sum x}{N}
\]

Where:
- \(X\) = the mean
- \(\sum x\) = the sum of any test
- \(N\) = number of subject

From the results of the analysis, then take the conclusion on achievement indicators. Expected in this cycle indicator achievement of science process skills of students can be achieved. Components are observed or measured, along with indicators and data collection instruments are shown in the following table:

<table>
<thead>
<tr>
<th>No</th>
<th>Component Skills of science process</th>
<th>Indicator</th>
<th>Instrument</th>
</tr>
</thead>
</table>
| 1  | Plan the experiment                | a. Determine the tools, materials, and resources that will be used in research.  
  b. Determine fixed and changed variables.  
  c. Determine what will be observed and measured.  
  d. Arrange the step of work.  
  e. Determining how to process the data | Student worksheet |
| 2  | Formulate hypothesis               | suggests what might happen in circumstances that have not been observed. | Student worksheet |
| 3  | Observation                        | a. Record every observation in the form of observation data.  
  b. Optimizing senses owned. | Observation |
| 4  | Measure                            | a. Preparing the necessary tools and materials.  
  b. Using tools and materials | Student worksheet |
<table>
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<tr>
<th></th>
<th>Clasify</th>
<th></th>
<th>Interpreting</th>
<th></th>
<th>Be Scientific</th>
<th></th>
<th>Apply the concept</th>
<th></th>
<th>Communicate</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>a. Classify data</td>
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<td>a. Make a graph of data</td>
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<td>a. Distinguish fact and opinion.</td>
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<td>a. Using the concepts of reports</td>
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<td>a. Prepare and submit reports</td>
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<td></td>
<td>b. Develop observation data</td>
<td></td>
<td>b. Interpreting the data from</td>
<td></td>
<td>b. Objective and be honest to</td>
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<td>that have been studied with</td>
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<td>systematically.</td>
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<td></td>
<td></td>
<td>observation charts</td>
<td></td>
<td>the data / facts.</td>
<td></td>
<td>the new situation.</td>
<td></td>
<td>b. Explaining the results of the</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>b. Applying the concept on a</td>
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<td>study.</td>
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<td>new experience to explain</td>
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<td>c. Discussing the results of the</td>
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<td>d. Describing data, graphs,</td>
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<td>tables, or diagrams.</td>
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<td></td>
<td>Practicum report</td>
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</tbody>
</table>

**H. Indicators of Success**

Indicators of success in this research are:

1. The percentage of mastery for each of the components of science process skills is successful if it reached the limit of minimum passing score $\geq 60$.
2. There is an increasing percentage of the mastery of science process skills during the learning process in each cycle.