CHAPTER III
METHOD OF INVESTIGATION

A. Research Approach

Research is an activity or a systematic process to solve a problem that is done by applying scientific methods.¹

David Nunan explained research is, first, it is about inquiry. It has two components: process and product. The process is about an area of inquiry and how it is pursued. The product is the knowledge generated from the process as well as the initial area to be presented. Second, research is a process which involves, (a) defining a problem, (b) stating an objective and (c) formulating a hypothesis. It involves gathering information, classification, analyzes, and interpretation to see to what extent the initial objective has been achieved. Third, undertaking structured investigation, which hopefully result in greater understanding of the chosen interest area. Ultimately, this investigation becomes accessible to the public. Fourth, an activity which analyzes and critical evaluates some problems.²

There are various research designs including experiment, descriptive, correlative, comparative, error analysis and action research.

In this study, the researcher used classroom action research. As early as 1980, according to M.H.Long as cited by Marianne Celce Murcia defined classroom research as “research on second language learning and teaching, all or part of whose data are derived from the observation or measurement of the classroom performance of teacher and student”.³

¹Emzir, Metodologi Penelitian Pendidikan Kuantitatif dan Kualitatif (Jakarta: PT. Raja grafindo persada, 2008), p. 3
² David Nunan, Research Method in Language Learning(USA: Cambridge University Press, 1992), p.2
³ Marianne Celce Murcia, Teaching English as a Second or foreign Language (USA: Heinle & Heinle 2001), 3 ed., p.490
The term action research is an approach to collecting and interpreting data that involves a clear, repeated cycle of procedures. The researcher begins by planning an action to address a problem, issue, or question in his or her own context. This action (which is also called a “small scale intervention”) is then carried out. The next step is the systematic observation of the outcomes of the action. The observation is done through a variety of procedure for collecting data. These include audio or video recording, teacher’s daily entries, observation note, etc.

The broad goal of action research is to seek local understanding and to bring about improvement in the context under study.\(^4\) Carrand and Kemmis see action research as “self reflective inquiry, undertaken by participants in social situations in order to improve the rationality and justice of their own practices, their understanding of their practices, and the situations in which these practices are carried out”.\(^5\) Simpler, action research is learning by doing: one group identifies one problem, does to solve the problem, observes them how the achievement of them. If it doesn’t successful, they will try again to get the achievement.

There are four activities in every cycle for doing classroom action research. It steps using research cycle and it is implemented to increase the student’s spirit to solve their faced problem. The procedure generally associated with action research, according to Kemmis and Mc Taggart, classroom action research is one of a continuing which is most simply represented as a succession of stages, beginning with:

1. Planning that forms the basic for future.
2. Action to improve the situation, supported by,
3. Observation of what is happening, leading to more specific focus of interest.
4. Reflection on the focus which has been identified by planning and so on.

\(^4\) Ibid, p., 490
These components add together two components acting (second) and observing (third) as one component. So when a researcher applies a treatment, the researcher can observe them in one time.

The step of action research according to Kemmis and Mc Taggart was below:

All those steps can be explained as follow:

1. Planning

Planning is a plan to conduct treatment or after making sure about the problem of the research. It explains of word what, why, when, and where a researcher does the research. In this activity the researcher formulates some procedural acts how to improve student’s understanding on simple past tense. The procedures are put in some lesson plans. They are formulated based on observation and reflection note of the previous teaching and learning process.

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2. Acting

In this step, the researcher tries to implement some techniques or procedural acts that have been formulated at planning.

3. Observing

The researcher is implementing some techniques or procedural acts in improving students’ understanding on simple past tense, the researcher also observing the teaching and learning process.

In this step, the researcher identifies and analyzes the data collected during the treatment. The data being taken were quantitative data. It is taken from test.

4. Reflecting

Reflecting is the activity of evaluating critically about the progress or change of the students, class, and also teacher. In this step, the writer can observe whether the ‘action’ activity give result any progress, what progress happened, and also about the positives and negatives, and so on.

B. Research Subject/ Participant

This classroom action research would be held at the eighth grade students of MTs Nahjatus Sholihin Kragan Rembang. There are four classes at the eighth grade. They are class VIII A, B, C, D. The writer only used one class as the subject of study. They were students of class VIII (C) at MTs Nahjatus Sholihin Kragan Rembang that consist of 36 students.

C. Time and Setting

The research was conducted from August 26th, 2010 until October 4th, 2010.

This is the research time schedule:

<table>
<thead>
<tr>
<th>No</th>
<th>Task Description</th>
<th>Time schedule/ week</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Augt</td>
<td>26 Augt</td>
</tr>
<tr>
<td></td>
<td>23 Sept</td>
<td>30 Sept</td>
</tr>
<tr>
<td></td>
<td>4 Oct</td>
<td></td>
</tr>
</tbody>
</table>
1. Asking permission to the head master to do research and get familiar with the school situation.

2. Doing preliminary research

3. Doing the first cycle (explained pattern of simple past tense and applied Tic Tac Toe game)

4. Doing the second cycle (explained the pattern of simple past tense and applied Tic Tac Toe game)

5. Doing the third cycle (reviewed the material applying Tic Tac Toe game on simple past tense and did the test)

D. Technique of Data Collection

Collecting data method is the ways that can be used by researcher to collect data. They are interview, observation, questionnaire, test and documentation. In this study, the researcher used documentation, test and observation.

1. Documentation

Documentation is searching the data. It is about note, book, newspaper, magazine, etc. The researcher uses this method to obtain data which is related to this research. Those documents include students’ name and documentation of teaching and learning process of classroom action research.

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2. Observation

Observation is activities to observe the object closer about activities directly.\(^8\) Observation in this research would be used to monitoring the student’s activities during the teaching learning process of English study by using Tic Tac Toe game. Observation was used in every cycle to make a conclusion of teaching and learning process.

3. Test

Test is some questions that are used to measure the knowledge, intelligence, skill or ability from individual or group.\(^9\) This test could measure students’ ability to understand simple past tense by multiple choice questions related to the lesson. It is given after students got some activities of teaching trough Tic Tac Toe game.

E. Instrument of the Study

Research instrument is tool or facilities are used by researcher to collect data. It is easier his work and the result of research are better, more accurate, complete and systematic. So it is easier to be worked.\(^10\)

An instrument could be form of questionnaire, observation checklist, interview guided, and test.

In this research, the researcher used observation checklist, test and documentation.

1) Observation checklist

In arranging observation checklist, the researcher listed some students’ observable participate that indicated their activeness during teaching and learning process.

In observation stage, the researcher was helped by the teacher in observing what happen in the class during the lesson from opening until closing. In addition, the researcher also observed what was going on in the classroom and observed the effect of her teaching to improve

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\(^8\) Riduan, *Skala Pengukuran Variable Penelitian* (Bandung : Alfabeta, 2009), p. 30
students understanding on simple past tense. Observation was carried out four times; preliminary, cycle I, II and III. The observation checklist which is used in this study is as follow:

**Table I**

**Form of observation checklist:**

<table>
<thead>
<tr>
<th>No</th>
<th>Klp</th>
<th>Descr.1</th>
<th>Descr.2</th>
<th>Descr.3</th>
<th>Descr.4</th>
<th>Descr.5</th>
<th>Descr.6</th>
<th>∑</th>
<th>%</th>
<th>category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Description:**

1. Students give attention to teacher’s explanation.
2. Students respond or answer to teacher’s question.
3. Students ask question to teacher relating the lesson.
4. Students show their activeness and enthusiasm in joining the game.
5. Students respond the other group friend’s answer.
6. Students discipline in doing the task.

**Criterion**

Score 4, if the student’s condition is exactly the same as the criteria.
Score 3, if the student’s condition is close to the same as the criteria.
Score 2, if the student’s condition is far from the same as the criteria.
Score 1, if the student’s condition is totally different from the criteria.

2) **Test**

In this research, the researcher used multiple choice tests. Researcher gave test in after treatment for every cycle. The purpose is to measure the improvement of students’ understanding on simple past
tense in every cycle. There were 10 items of multiple choice consists of regular, irregular verb either verbal pattern or nominal pattern.

3) Documentation

The researcher used documentation which relate with this research. They were students’ name list, lesson schedule, students’ worksheet and photo of teaching and learning process by using Tic Tac Toe game.

F. Technique of Data Analysis

After the researcher collected data through test and observation, the researcher analyzed the data used percentage descriptive quantitative analysis in giving the score to find out the improvement of students’ understanding on simple past tense by using Tic Tac Toe game.

1) Method of Analyzing Observation Checklist

Researcher used observation checklist during the teaching and learning process in preliminary research, cycle I, cycle II and cycle III. Then the result of observation checklist would be analyzed by calculating the percentage as following:

The formula to measure the student’s participation is:

\[
\text{Percentage} \% = \frac{n}{N} \times 100\%
\]

\(n\) = the score of students

\(N\) = the sum of total score

\(\%\) = the percentage of the expectation.

From the formula above student’s participation can be categorized as follow:

a. Little participation

The aspect of activity that was observed above reaches out for about 25% from overall percentage 100%.
b. Enough participation
The aspect of activity that was observed above reaches out for about 50\% from overall percentage 100\%.

c. Good participation
The aspect of activity that was observed above reaches out for about 75\% from overall percentage 100\%.

d. Excellent
The aspect of activity that was observed above reaches out for 100\%.

2) Method of Analyzing Test Result
a) Measuring the students individual ability

In every cycle, after treatment researcher gave multiple choice tests to the students. It was contain of 10 multiple choice tests. The score of correct answer is 1 and 0 to each wrong answer. The result of the test would be analyzed by using percentage scoring as following formula:

\[
\text{Score} = \frac{\sum \text{right answer}}{\sum \text{items}} \times 100\%
\]

After giving percentage of score, then the researcher gave five letters: A, B, C, D and E to classify the grade of students’ scores level as follows:

The percentages of correct answer grade:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>81 - 100 %</td>
<td>A: Excellent</td>
</tr>
<tr>
<td>61 – 80 %</td>
<td>B: Good</td>
</tr>
<tr>
<td>41 – 60 %</td>
<td>C: Fair</td>
</tr>
<tr>
<td>21 – 40 %</td>
<td>D: Less</td>
</tr>
<tr>
<td>0 – 20 %</td>
<td>E: Poor</td>
</tr>
</tbody>
</table>
Then, the researcher determined the frequency of students score as below:

b) Calculating the result of study

The result from the achievement of study

\[ \text{The average of the student results: } \frac{\text{The total of the Percentage}}{\text{The number of students}} \times 100\% \]

c) Measuring the Mean of Test

The researcher calculated the mean of test to measure the improvement of students’ score in every cycle after calculated the percentages of individual students’ score. The mean are formulated as follow:

Calculate the mean of test.\(^\text{11}\)

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

\[ M = \text{The mean of score} \]

\[ X = \text{the total of score} \]

\[ N = \text{the sum of students number.} \]

From the result of analyze the score of test and observation checklist. Researcher finds out the improvement of students’ understanding on simple past tense by using Tic Tac Toe game.

G. Procedure of Collecting Data

This study was classroom action research, there were three cycles. Each cycle was ended by multiple choice tests. Before the researcher did a cycle, she conducted preliminary to know the student’s ability in understanding tenses especially simple past tense.

\(^{11}\) Sutrisno Hadi, Metodologi Research, (Yogyakarta: Andi Publisher, 2000) 3 edition, p.272
The steps of action research (taken from: Penelitian Tindakan Kelas, LP3 (UNNES: 2007).\textsuperscript{12}

The activities of research were done in each cycle are as follows:

1. Preliminary

   The first activity before the researcher did the cycle. The researcher got the score by using conventional method from teacher class on Thursday, August 26\textsuperscript{th}, 2010. Then the researcher gave multiple choice tests to measure the student’s ability before the researcher implements the Tic Tac Toe game.

2. Cycle of Action Research

   a. First Cycle (1\textsuperscript{st} meeting)

      For the first cycle, that be done on Thursday, September 23\textsuperscript{rd}, 2010 the researcher began with the teaching learning process.

      1) Planning

a) The researcher and teacher discussed about the implementation of Tic Tac Toe Game.

b) The researcher got information about condition of class.

c) Researcher made some groups of students in the classroom.

d) The researcher prepared the instructional tools, the material of the study that researcher need.

e) Researcher planed to make the lesson plan for the first meeting.

f) Researcher prepared the observation checklist of cycle I.

g) Researcher prepared the test for cycle I.

2) Acting

a) The teacher greeted the class and checked students’ attendance list.

b) The teacher asked some students about their activity in the past (as a brainstorming).

c) Teacher explained the simple past tense form.

d) Teacher divided students to 7 groups.

e) Teacher distributed Tic Tac Toe paper for every group.

f) Teacher stuck Tic Tac Toe verb on the blackboard.

g) Teacher introduced Tic Tac Toe game and explained the role of playing it.

h) Teacher implemented the Tic Tac Toe game for teaching and learning process.

i) Students played Tic Tac Toe game in a group.

j) At the end of the lesson, the teacher gave the students multiple choice tests.

3) Observing

When the researcher was implementing some techniques or procedurals act in his teaching. Researcher and English teacher
observed students’ activities in teaching and learning process and also made a note in every activity.

4) Reflecting
   a) Researcher and English teacher evaluated about the students’ condition in the class.
   b) Researcher and English teacher discussed about teaching and learning process that have done to find the weakness and how to improve it, in the next meeting.
   c) Researcher analyzed the weakness and strengthen of implementation Tic Tac Toe Game in learning and teaching with the teacher.
   d) Researcher analyzed the data from observation checklist and result of the test to find out the improvement of students’ understanding on simple past tense taught by using Tic Tac Toe game.
   e) Researcher made reflection and conclude the result of the first cycle.

b. Second Cycle (2nd meeting)
   After conducting the first cycle, the researcher conducted cycle II. The second cycle was done based on the result of the first cycle, if the result from observation shows that the students score still low, it is needed to be continued to the next cycle to fix the previous weakness. The second cycle conducted on Thursday, September 30th 2010. The designs of the second cycle are:

1) Planning
   a) Researcher evaluated the result of reflection and discussed with English teacher to be better in the next meeting.
   b) Researcher prepared the instructional tools, the material of the study that teacher need.
c) Researcher planed the lesson plan for the second meeting.
d) Researcher prepared the observation checklist of cycle II.
e) Researcher prepared the test for cycle II.

2) Acting

a) Teacher asked students about their difficulties of previous lesson.
b) Teacher asked the students about their activities in the last night, yesterday, two days ago, and condition of something.
c) Teacher reviewed the previous lesson.
d) Teacher explained simple past form more.
e) Teacher divided class to be 7 groups consist of different students from cycle I.
f) Teacher distributed Tic Tac Toe paper for every group.
g) Teacher implemented Tic Tac Toe game using different procedure from cycle I.
h) Teacher gave multiple choice tests.

3) Observing

When they were playing of Tic Tac Toe game and doing assignment of some question of multiple choice tests. Researcher observed students’ activities in teaching learning process and she was helped by English teacher as a collaborator.

4) Reflecting

a) Researcher and English class teacher discussed about teaching and learning process that have done to find the weakness and how to improve it, in the next meeting.
b) Researcher analyzed the students’ score and the observation checklist to find out the improvement of students’
understanding on simple past tense taught by using Tic Tac Toe game in cycle II.

c) Researcher evaluated and concluded the result of the second cycle for the next meeting.

c. Third Cycle (3rd meeting)

The third cycle was done based on the result of the second cycle. There are several aims of cycle III to improve the teaching learning process, to give more opportunities to students, to improve their understanding on simple past tense. The third cycle conducted on Monday, October 4th 2010. The designs of third cycle are:

1). Planning
   a) Researcher planned to make the lesson plan for next meeting.
   b) Researcher prepared the observation checklist of cycle III
   c) Researcher prepared the test for cycle III.
   d) Researcher prepared the instructional tools, the material of the study that researcher need.

2). Acting
   a) Teacher greeted and checked students’ attendance list.
   b) Teacher reviewed the previous material.
   c) Teacher asked students about the condition of something in the past and asked their activities in the past.
   d) Teacher explained about simple past tense again especially in nominal sentence to make sure that they have no problems.
   e) Teacher divided class to be couples.
   f) Teacher distributed Tic Tac Toe paper for every group.
   g) Teacher explained the procedure of Tic Tac Toe game. It was little different with procedure from cycle I and cycle II.
   h) Each couple matches with other couple.
3). Observing

Researcher and English teacher observed students’ activities in teaching learning process while they were playing Tic Tac Toe game and did the assignment of multiple choice tests related to the material.

4). Reflecting

Researcher and teacher discussed teaching learning process that has been done and then they analyzed students score to find out the improvement of students understanding on simple past tense. The result of students’ score was compared with the students score in cycle I and II.

From the all result English teacher and researcher reflected the activities that have been done. The result of this analysis could be used as review that by using Tic Tac Toe game could improve students’ understanding on simple past tense.