CHAPTER III
RESEARCH METHOD

This chapter explains Kind of Research, Design of Research, Population and Sample, Assumption, Research Instrument, Technique of Data Collection, Technique of Data Analysis, and Validity of The Research.

3.1 Kind of Research

This research classify quantitative research. According to Cohen (1980): "Quantitative research is defined as social research that employs empirical methods and empirical statements."

In this research, the researcher apply imitative writing especially in teaching writing at the eighth grade students of SMPN 8 Palangka Raya. And describe the students' achievement in the subject as well.

3.2 Design of Research

This research used pre-experimental research. Their classification of research designs, Campbell and Stanley (1963) described pre-experimental design include the one-shot case, the one pretest-posttest design, and the statistic group comparison.
Therefore the design of this research was one group pretest posttest design means each subject measured twice, before and after an intervention occurs. The design as followed;

\[ 01 - X - 02 \]

Where :

01 = pre-test (observation before receiving X)

X = Treatment

02 = post-test

(Arikunto, 2002:78)

a. Pre-test

Pre-test see the students' initial score before the treatment given. The researcher prepare the pre-test which is appropriate with the material to know the student ability in writing. These one is procedure of pre-test :

- The researcher devided the students into groups that contain of 4 students in each group. Each group given a materials to made their own greeting cards by their creativity based on material that given by researcher.
- The researcher proposed some questions about what they have known about Greeting Card.
- After the students gave their opinion, the researcher explained about greeting cards, the kinds of greeting card.
• The researcher demand the student to made a Greeting card by using material and made based on their.
• The researcher demand the student to write down a greeting latter on their greeting card.

b. Treatment
• Treatment was given to the students after the pre-test. During this process, greeting card video method and imitative writing applied to help students in writing generic structure of greeting card. The treatment given 1 week after after pre-test.
• The researcher presented a the generic structure of greeting card, and the expressions of greeting card.
• The researcher show the greeting card video.
• The researcher give them the instruction and leaded them to make greeting card by put an expressions of greeting card based on the table that researcher prepare.
• The students do the task based on the topic they get. Each person in the group has to participate.
• Student asked to discuss and arranged their answer into good greeting card.
• After bring the task, the researcher ask student to present their observation in front of class and the researcher give some question to the student about their observation based on what their write.
• The researcher and students evaluate the contribution of each group to work. Evaluation may include each student individually or in groups, or both.

c. Post-test

After implementing treatment, post-test was conducted to used the score as comparison of pre-test and seen the significant effect before and after treatment.

• In this part, the researcher asked the student if there was difficulty and give the student change to ask question.

• The researcher administered the post-test and asked students to do the post-test.

• The researcher admire questionnaire to support the research findings.

• The researcher concluded the material have been taught.

3.3 Population and Sample

3.3.1 Population

The populations of this research are the classes of tenth grade students of SMP Negeri 8 Palangka Raya. The following is the description of the research:

Table 3.1 Population of The Research

<table>
<thead>
<tr>
<th>No.</th>
<th>Class</th>
<th>Number of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>VIII-1</td>
<td>36 Students</td>
</tr>
</tbody>
</table>
3.3.2. Sample

Sample is the smallest group of population. In this research, the sampling technique used by the researcher is cluster random sampling. According to Toendan (2016:80) the cluster random sampling is used when it is more feasible or convenient to select groups of individuals than it is to select individuals from defined solution. Cluster random sampling is sometimes used in educational research with multiple classrooms as the unit of the sampling. The advantage of this sampling is saves time and money. To take the sample from population, the writer chose one class (Group of student) randomly from 10 classes above. Therefore, the researcher decide to choose the sample class VIII-9 which had 34 students.
3.4 Assumption

The assumption of this research is the technique of greeting card video and imitative writing can be used in teaching writing.

3.5 Research Instrument

Research instruments are devices which are used by the researcher to collect the required data. There are two kinds of data in this research, primary and secondary data. The primary data is the Pre-Test and Post-Test and the secondary data is the questionnaire’s results. The essay test is called post-test. Post-test is a test that be given after conduct treatment. There are several instruments used such as pre-test, post-test, and questionnaire. Those are as the following:

3.5.1 Test

There are two kinds of tests in this research; those are pre-test, treatment, and post-tests. The first administered is pre-test. Students asked to write a greeting card based on four topics given by the researcher. There are four topic given because the researcher assume that the students had to refresh their knowledge about greeting card. This test is intended for measuring students’ ability in writing greeting card. Secondly, the treatment is the researcher will show the video and teaching how to write birthday greeting card.

Then, the post-tests are administered at the end of research to the student in order to test the improvement of writing greeting card by using imitative writing.
The post-test which asked the students to make topic give by the researcher. The function of administering post-test is to evaluate the effectiveness of imitative writing to greeting card. The score for each right answer was ranging depend on the scoring rubric.

3.5.2 Questionnaire

Another questionnaire administered at the end of the last cycle in order to check and to measure the responses of the student about the implementation of the technique to support the data collection. The questionnaire is administer to find out the student responses when learning to make greeting card through imitative writing. Multiple choices form questionnaire which is construct. The purpose of application of questionnaire is to measure quantitatively the student's qualitative behavior including interest, motivation, or creativity. The questionnaire consisted ten questions which is write in Bahasa Indonesia to avoid misunderstanding and confusion the questionnaire. The score of questionnaire used rating scale of 1-4. The choice in each statement are in the same types in which option A is strongly agree, option B is agree, option C is disagree, and option D is strongly disagree. The measurements of this questionnaire would be analyzed by using rating scale 1-4 in which scale 4 for option A, scale 3 for option B, scale 2 for option C and scale 1 for option D. The result of the questionnaire which is considered as the additional data required for this research is descriptively analyzed in the form of comparative percentage.
3.5.3 Instrument Try Out

Since the instrument is only in form of instruction to write a greeting card and it is derived from students' handbook which is used in teaching and learning activities (Erlangga: English for VIII Grade of Junior High School), then the instrument of this research necesserally to be tried out. Because the researcher constructed a subjective test in form of essay test with instruction. The result of the research out was useful for the following:

1. To determine the time allocation.

2. To find out wheter the instruction is clear and understandable or not.

3. To find out whether the instrument is acceptable and understandable or not.

4. To gather evidence to support the instrument's validity and reliability. The instrument would be reliable if the result of try out shows good reliability.
3.5.4 Instrument Validity

According to Toendan (2016:11) validity of data collection addresses the question of whether a data collection process is really measuring what it purports to be measuring. A data collection process is valid to the extent that the results are actually a measurement of the characteristic the process was designed to measure, free from the influence of extraneous factors.

Relating to this research, the researcher want to measure wheter or not teaching using group investigation method give significant effect to the ability of students to write greeting card. Therefore this research valid if the test instrument really measure the ability of students to write greeting card as the effect of using imitative technique of learning method.

3.5.4 Instrument Reliability

As have been discussed above regarding the type of instrument of this research which is adopted from students' handbook which is used in teaching and learning activities . Beside the test shall be valid, its also be reliable Toendan (2016:93) said that "reliability addresses the question of whether the results of measuring processes are consistent on occasion when they should be consistent". The purpose of interscorer reliability is to determine that extent to which the results are objective (Toendan 2015:103). The score of the test is score by two raters, with following formula:
\[ r_{xy} = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{N \sum x^2 - (\sum x)^2} \left( N \sum y^2 - (\sum y)^2 \right)} = \ldots \]

Where:  
\( r \) = Instrument Reliability 
\( N \) = The number of the students follows the test 
\( X \) = Score of the rater 1  
\( y \) = Score of the rater 2  
\( \sum x \) = Sum of all the students’ score taken from rater 1  
\( \sum y \) = Sum of all the students’ score taken from rater 2

Then the value consulted to the standardization of coefficient reliability.

<table>
<thead>
<tr>
<th>Correlation Value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(0.0) - (+0.19)</td>
<td>Unreliable</td>
</tr>
<tr>
<td>(+0.20) - (+0.39)</td>
<td>Poor Reliability</td>
</tr>
<tr>
<td>(+0.40) - (+0.69)</td>
<td>Fair Reliability</td>
</tr>
<tr>
<td>(+0.70) - (+0.99)</td>
<td>Good Reliability</td>
</tr>
<tr>
<td>(+1.00)</td>
<td>Excellent Reliability</td>
</tr>
</tbody>
</table>

(Arikunto, 2002:157)

3.6 Technique of Data Collection

Data collection is all the data that is gather when the researcher conduct the research which can support the research findings. Data collection on this research take from the students of SMPN 8 Palangka Raya in which the researcher collect
the data from the pre-test, post-tests, and questionnaire. There be two kinds of raw scores obtained, those were as the following:

1. *Checking*. The researcher check the students name in the presence list, then compared with worksheets collected by students.

2. *Coding*. The researcher code the students' worksheets with the number codes, such as A1, A2, A3, A4 and so on. It was done in order to protect the students identity.

3. *Scoring*. The researcher score the students' work by using the writing skill scoring system referring in brown (2007). The researcher used criteria of assessment that is since the content of students writing cover the generic structures. The element of writing is content, organization, grammar, vocabulary, and mechanics. After classifying the test items, the researcher give score for each item. A rubric contains three important properties; they are criteria, descriptors and level of scores.

**Table 3.3 Scoring Rubric For Greeting Card**

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Criteria</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Function:</td>
<td>Few errors of spelling, punctuation, capitalization and paragraphing.</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Occasional errors of spelling, punctuation, capitalization and paragraphing.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Frequent errors of spelling, punctuation, capitalization and paragraphing.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Dominated by errors.</td>
<td>1</td>
</tr>
</tbody>
</table>
### Generic Structure:

<table>
<thead>
<tr>
<th>No.</th>
<th>Aspects</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The topic and the content are very relevant. Every part of the writing is in good order, either in orientation, complication, and resolution.</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>There are several words that are used irrelevantly but do not influence the intended meaning. The generic structure of the writing is not in good, but this is actually not too principle.</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>There are many confusing things; many contents are not relevant with the topics, so much disorderliness is found in the content of the writing, but those do not make the readers confused yet.</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>The content is not relevant with the topic at all. The generic structure of the content is very bad and it does not often consist of orientation and resolution</td>
<td>1</td>
</tr>
</tbody>
</table>

### Language Features:

<table>
<thead>
<tr>
<th>No.</th>
<th>Aspects</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Few errors of tense, word order, conjunction, character, verbs, or direct speech.</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>Several errors of tense, word order, conjunction, character, verbs, or direct speech.</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>Frequent errors of tense, word order, conjunction, character, verbs, or direct speech.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Dominated by errors.</td>
<td>1</td>
</tr>
</tbody>
</table>

**Maximum Score**

12

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### A. Students’ Score (Post-Test Result by Rater 1 and 2)

<table>
<thead>
<tr>
<th>No.</th>
<th>Students’ Code</th>
<th>Aspects</th>
<th>Total Points</th>
<th>Students’ Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Social Function</td>
<td>Generic Structure</td>
<td>Language Features</td>
</tr>
<tr>
<td>1.</td>
<td>A1</td>
<td>…</td>
<td>…</td>
<td>…</td>
</tr>
<tr>
<td>2.</td>
<td>A2</td>
<td>…</td>
<td>…</td>
<td>…</td>
</tr>
<tr>
<td>3.</td>
<td>A...</td>
<td>…</td>
<td>…</td>
<td>…</td>
</tr>
</tbody>
</table>
Students’ Score = \( \frac{\text{Total points}}{\text{Maximum score}} \times 100 \)

4. Tabulating. The researcher put the students’ scores into the following table.

**3.7. Data Analysis Techniques**

The purpose of this research is to find out whether is an effect on the students’ achievement after the treatment of teaching writing by using Greeting Card Video and imitative writing. The data then are analyzed as follows:

1. Calculating the students’ score to indicate their achievement in writing greeting card.
2. Comparing the score before and after the treatment have done.
3. Drawing conclusion of effect on the achievement by using t-test, with the following formula:

\[
 t^* = \frac{\sum D}{\sqrt{\frac{n\sum D^2 - (D)^2}{(n-1)}}}
\]

(Adapted from Toendan, 2016:90)

4. Testing the data hypothesis to see whether is accepted or rejected. The result of the test is compared to t-test score in table at significant of 5% at degree freedom (df) N-1.
5. The mean score of the data counted by using formula:

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

Where:

- \( M \) = Mean score obtained the subjects
- \( \sum X \) = The sum of total the score
- \( N \) = The number of students

6. The questionnaire be analyzed descriptively as the following of an item

Besides, analyzed the data from pre-test and post-tests, the researcher also analyzed the data obtained from administering questionnaire. The data from administering questionnaire presented in percentage and count by using the following formula:

\[ \text{Percentage} = \frac{\text{Number of students in each level}}{\text{Total number of students}} \times 100\% \]

The mean score is going to use to evaluate the achievement of teaching learning process by using group investigation, whether it was effective to improve the students' writing skill or not.
3.8 Validity of The Study

According to Toendan (2016), internal validity deals with the question of whether the treatment actually caused the observed outcome in an experiment. In other words, it deals with the authenticity of a started cause-effect relationship between the treatment and the outcome variable.

In this research, the researcher used pre-experimental design. The researcher used one group pre-test post-test design research. It means that it is not pure experiment. Thus, it is can not be generalized to the population. The internal validity not be much of a concern because later this research be generalized to the population. The researcher use cluster random sampling to select which class from the eight students population to be sampling.