Chapter Three

Research Methodology

The researcher discusses the methodology used in this research, which is explained in six parts. At the beginning, it discusses the design of this research. It elaborates the method used in this research and provides the reason why the researcher used it. The next part is the research setting. It discusses the place and the time the researcher conducted this research. The next part elaborates the participants joining in this research. The next part explains the data collection technique used in this research. Then, this chapter elaborates the data collection procedure. The last part discusses the data analysis of this research.

Research Design

The researcher used quantitative research because the researcher wanted to know and identify the effectiveness of using poster in teaching descriptive text in one of Junior High School in Yogyakarta. In this quantitative research, the researcher used experiment research methodology to examine the effectiveness of using poster in teaching descriptive text. An experimental design is used when the researcher wants to establish possible cause and effect between independent and dependent variable (Creswell, 2012). Similarly, Cohen, Manion, and Morrison (2011) mentioned that an experiment involves making a change in the value of one variable and observes the effect that changes on another variable. They stated that the essential feature of the experimental study is the researcher purposely controls and manipulates the conditions that determine the events when the

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researcher introduces an intervention and measure the difference. The researcher measured the impact by giving one group one set of using poster in teaching descriptive text.

Table 2. Research design

Experimental =
$$O_1$$
— X — O_2

Where:

 $O_1 = Pre-test$

X = Treatment using poster

 $O_2 = Post-test$

The researcher used quasi-experimental (a pre-experimental design) with one group pre-test and post-test. According to Cohen (2011), the continual tests between before and after treatment support the students to become their own controls. Therefore, this design helped the researcher to focus on the students' performance before and after intervention.

Research Setting and Participants

This research was conducted at one of Junior High School in Yogyakarta. The researcher chose this school because the researcher already knew the English teacher in this school. Thus, it was easy for the researcher in accessing the data. This research was conducted in second semester on academic year 2017/2018. This research was started on 01th -25th of March, 2018.

The participants in this research were students at eighth grade in one junior high school in Yogyakatra which consisted of twenty students, and their ages

were thirteen to fifteen years old. The participants of this study had the same background. They used English as a foreign language.

Data Collection Method

In collecting the data, pretest and posttest were applied. This research was conducted in four weeks. Here is the research schedule;

Table 3. Research Schedule

Observation Pretest		Treatment	Posttest
Early of March	Early of March	Early-end of March	End of march

In this research, participants were intervened through treatments.

Treatments were given six times to the participants. The researcher used syllabus of curriculum 2013 as a standard during treatment process. Then, the researcher made a lesson plan for the descriptive text. Time allocation was forty minutes for each meeting. In treatments process, the researcher gave some materials. The materials were structure of descriptive text, grammar used in descriptive text, and also the vocabulary usually used in descriptive text. In the treatments, participants got chance to practice their writing in the class.

During six meetings of treatment, the topic was similar. The topic was social function, schematic, structure, and grammatical pattern. However, in every meeting there was an additional material given by teacher. In every early activity in each meeting, the teacher greeted and asked the students what the teacher brings. The teacher showed the poster. For the last activity in early activity, the

teacher asked the students about things related to the poster. It also happened in main activity, the teacher explained social function, schematic, structure, and grammatical pattern. The teacher asked the students if they still did not understand about the material then teacher would explain more the explanation before.



Figure 2. Poster of Mother

For the first and second meeting, the teacher used the same poster which was Poster of Mother. However, in first meeting in the last activity, the teacher asked students to make group of 4 people. They write an adjective about poster of Mother in a paper. Each group showed their adjective in front of class. The teacher corrected the students' answer. Then, in main activity of the second meeting, the teacher explained social function, schematic, structure, and grammatical pattern. The teacher asked the students if they still did not understand about the material, then teacher would explain more the explanation before. The next activity was the teacher asked the students to make a simple sentence based

on the poster of mother in descriptive text. The students wrote their sentence in whiteboard. Then, the teacher and the students corrected the sentence together.



Figure 3. Poster of Giraffe

In third and fourth meeting, the teacher used poster of giraffe. For the main activity in the third meeting, the teacher explained social function, schematic, structure and significant grammatical pattern. The teacher asked the students to make a group of 4 people. Then, they wrote the part of giraffe body based on the poster in the whiteboard in English and Indonesian language. The students wrote on the whiteboard and discussed together.

For the main activity in the fourth meeting, the teacher explained social function, schematic, structure and significant grammatical pattern. Then, the teacher gave student assessment about descriptive text about giraffe in multiple choice consisted of five questions.



Figure 4. Poster of Watu Lumbung

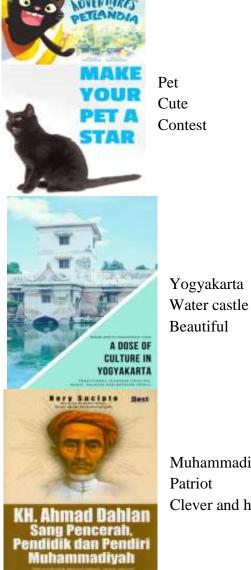
The last poster was a beach poster (Watu Lumbung beach Beach) for fifth and sixth meeting. The main activity in fifth meeting, the teacher explained social function, schematic, structure and significant grammatical pattern. Then, the students made a group of 4 people. They should write the part of Watu Lumbung Beach based on the poster. The students wrote on the whiteboard and discussed together.

For the last meeting, the teacher explained social function, schematic, structure and significant grammatical pattern. The teacher asked the students to make sentences based on the beach poster. Then, the teacher corrected the answer and gave feedback to the students.

The final point was the researcher gave a posttest to identify the effect of using poster in teaching descriptive text. The tests were about descriptive text writing. The researcher gave the students three posters with keywords. The students chose one of the posters. They should write a description about the

poster. The description should in two paragraphs include identification and description. One paragraph consisted of three sentences as a minimum.

Choose one of the poster and describes based on the keywords!



Muhammadiyah Patriot Clever and humble person

Figure 5. Posters of Pre-test and Post-test

The English teacher and the researcher scored the test result. Pretest results was compared to the posttest results. Thus, the test was an instrument for gathering the data. The measurement of the students' achievement suggested by Harris (1969:134) could be interpreted in the following table.

Table 4. Scoring level

Criteria of mastery	Grade
9.1-10	Excellent
8.1-9.0	Very Good
7.1-8.0	Good
6.1-7.0	Fair
5.1-6.0	Poor
Less than 5.0	Very Poor

Data Analysis

After conducting a test to the participants, the researcher measured the validity of the test. The purpose of the validity is to make sure that the item test is valid to distribute to the students. According to Cohen et al. (2011), validity is the accuracy of the instruments. The researcher used icon test for measure the validity of the test. The researcher asked three experts to be validators. After the researcher got the validators' score (v value), the researcher checked the validators' score using Ms. Excel formula. The table is presented below.

Table 5. Validity score

v value	Inference
<0.4	Low
0.4 <v<0.8< td=""><td>Moderate</td></v<0.8<>	Moderate
>0.8	High

Table 6. Validity Score Result

No	Item	v value	Inference	Result
1	Q1	1.00	High	Valid
2	Q2	0.67	Moderate	Valid
3	Q3	0.78	Moderate	Valid

Based on the table result above, it showed that the validity of item 1 is determined as the high validity. Then the validity of item 2 and 3 is moderate. The value of the entire items is 0.67-1.00. It means that the entire item is valid. Thus, the item can be used for measuring the variable. It could be concluded that from the three items test developed by the researcher, there is zero items that low, two items moderate, and one items high.

The next step was the researcher checked the reliability of this test. To check the reliability, the researcher used IBM SPSS 22 version. According to Cohen, Morison, and Minion (2011), to determine the reliability, there are some ranges. The ranges are presented as follows:

Table 7. Reliability Cronbach Alpha

Score	Range	
>0.90	Very highly reliable	
0.80-0.90	Highly reliable	
0.70-0.79	Reliable	
0.60-0.69	Marginal/minimally reliable	
<0.60	Unacceptably low reliability	

Thus, the test item is considered reliable if the Cronbach Alpha values is more than 0,60. The reliability of this research is presented below.

Table 8. Item-Total Statistics reliability

		Scale Variance	Corrected	Cronbach's
	Scale Mean if	if Item	Item-Total	Alpha if Item
	Item Deleted	Deleted	Correlation	Deleted
PreTest	24.4840	43.498	.971	.932
PostTest	23.0790	44.727	.969	.938
Total	17.8365	24.750	1.000	.987
Ratarata	23.7800	44.010	1.000	.930

Both of pre-test and post-test have very highly reliable results, Alpha Cronbach Value (0.932) for pre-test, and number of Alpha Cronbach Value (0.938) for post-test.