CHAPTER III
RESEARCH METHODOLODY

A. The Design of the Research

This research was an experimental research. Gay says that the experimental research is the only type of research that can test hypotheses to establish the use and affect relationship.[1] The design of the research was a quasy experimental research - non-equivalent control group design, which was intended to find out the effect of using graphic organizers method to increase students' ability in writing descriptive text.Quasy-experimental design is experimental situation in which the researcher assigns, not randomly, participants to groups because the experimenter cannot artificially create groups for the experiment.[2]

This research used two classes as sample. The first class functioned as experimental class treated by using Graphic Organizers method. The second was the control class which was treated without using Graphic Organizers method. In conducting the research, the writer gave treatment to experimental group by using graphic organizers method and conventional method to the control group, after that the writer took posttest result both of them. The model of the research design is illustrated as follows:

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[1] L.R.Gay and Peter Airasian. *Educational Research Competencies For Analysis and Application Sixth Edition.* (New Jersey: Pearson Education, 2000).p.367.
[2] Jhon W. Creswell. *Educational Research: Planning Conducting and Evaluating Quantitative and Qualitative Research.* (New Jersey; Pearson Education,2008),p.645.

Table III.1
The Research Design

Class	Pre-test	Treatment	Post-test
Experimental	T1	X	T2
Control	T1	-	T2

Note:

T1: Pre-test for both experiment and control classes

T2: Post-test for both experiment and control classes

X : Receiving treatment, using Graphic Organizers Method.

B. The Location And Time Of The Research

The research was conducted at MAN 1 Pekanbaru at Bandeng Street 51 A, Pekanbaru, Riau. This research was conducted from May,13th until June, 17th 2013.

C. The Subject And Object of The Research

This research subject was the first year students'at MAN 1 Pekanbaru and the object was graphic organizers method toward students' ability in writing descriptive text.

D. The Population and Sample of the Research

The location of this study was at MAN 1 Pekanbaru. Population of this research was the first year students of MAN 1 Pekanbaru. It had nine (9) classes, Consisted of X1 until X 9. The total number of first year atMAN 1 Pekanbaru was 270 students. It can be seen as follows:

Table III.2

Distribution of the Research Population and Sample

No	Classes	Population	Sample
1	**X.1**	30	
2	**X.2**	30	
3	**X.3**	30	Experiment
4	**X.4**	30	Control
5	**X.5**	30	
6	**X.6**	30	
7	**X.7**	30	
8	**X.8**	30	
9	**X.9**	30	
	Total	**270**	

The population above is quite large to be taken as sample in the research. The number of of sample was 60 students from two classes. The writer took the sample by doing cluster random sampling. Based on the data above, the writer determined that the experimental class was X.3 and the control class was X.4 because they were homogenous and had same characteristic.

E. **The Research Procedure**

1. **Experimental Group.**

   a. Pre-test

   The pre test was given after teaching writing descriptive text without using graphic organizers. It was used to measure the students' ability in writing descriptive text before they were taught by using graphic organizers method.

   b. Treatment

The treatment had been conducted for experimental group taught by using graphic organizers method. Teacher gave explanation to the students about what descriptive text is, and taught them how to write descriptive text by using graphic organizers method. For applying graphic organizers method, teacher asked students to write descriptive text by using graphic organizers method.

c. Post test

Posttest was given to the students after applying graphic organizers method. The result of posttest was compared with the pretest to get the influence of this method and to know students' ability in writing descriptive text after being taught by using graphic organizers method.

2. **Control Group**

a. Pre-test

The control group was given pre-test to know writing descriptive text. The test was the same as experimental group.

b. Teaching by using Conventional strategy

Students were given the explanation about descriptive text by the teacher and asked them to write descriptive text.

c. Post-test

Posttest was given to the students after being taught by using conventional strategy. It was used to know whether the students were able to write descriptive text or not.

Table III.3

Meeting and Topic of the Research.

No	Meeting	Topic
1	I	My pet
2	II	Elephant
3	III	Elephant
4	IV	Hill
5	V	New Chef
6	VI	New Chef
7	VII	Bird

Finally, the result of the test in experimental class and control class was compared. From the result, the writer found that whether graphic organizers method could influence writing descriptive text or not.

F. The Technique of Collecting Data

The instrument was used to acquire the data in this research.It was test. Test means measuring the knowledge, skill, feelings, intelligence, or aptitude of an individual of group.[3] It was used to measure the students' ability in writing descriptive text. The test was written test. The form of paragraph was descriptive text. The data of this research were the score of the students' writing ability in writing descriptive text that could be measured by using writing assessment used by the English teacher atMAN 1 Pekanbaru.

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[3] L.R. Gay and Peter Airasian, Op.cit, p.630.

G. The Reliability and the Validity of the Test

For testing students' writing ability the writer used test to know reliability and validity. To know the validity of the test, the writer used content validity. Content validity was used by the writer in the test, in which students were asked to write about the topics related to the materials. Gay says that reliability is the degree in which a test consistently measures whatever it is measuring.[4] As supported by brown reliability has to do with accuracy of measurement.[5]

In obtaining the reliability of test, the writer used inters rater reliability. In this research, the writer used two raters to score the students' writing ability on descriptive text. Browns says that inter rater reliability occurs when two or more scores yielded inconsistent scores of the same test, possibly for lack of attention to score criteria, inexperience, inattention or even preconceived biases.[6] The score of judge 1 can be correlated to judge 2. To know the reliability of the test, the writer used product moment formula through SPSS 16.0 Version.

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[4] L.R.Gay and Peter Airasian, *Educational Research Competencies for Analysis and Application Sixth Edition*. (New Jersey: Pearson Education, 2000),p.196.

[5] H. Douglas Brown. *Language Assessment: Principles and Classroom Practices*. (New York: Pearson Education Inc, 2003), p.19-27.

[6] Ibid, p.21.

Table. III.5

Correlation

		rater1	rater2
rater1	Pearson Correlation	1	.457[*]
	Sig. (2-tailed)		.011
	N	30	30
rater2	Pearson Correlation	.457[*]	1
	Sig. (2-tailed)	.011	
	N	30	30

*. Correlation is significant at the 0.05 level (2-tailed).

From the output above, it can be seen that r calculation is 0.457, to correlate to r table. Firstly obtained the degree of freedom (df = n+n-2), the df was 58, because df = 58 was not found, so the writer took df = 60 to be correlated either at level of 5% and 1%. At the level 5% r table 0.250 and at level 1 % r table 0.325.

r calculation (r_o)	r table (r_t)
0.457	0.250 (5%) 0.325 (1%)

From the table above, the writer concluded that (r_o) is higher than (r_t) either at 5% and 1%. Thus, there is a significant correlation between score of rater 1 and rater 2. In other words, the writing test is reliable, because the reliability of writing test is moderate relationship.

H. The Technique of Analyzing Data

In analyzing the students' writing ability on descriptive text, the writer used passing grade of English lesson at MAN 1 Pekanbaru that was 70 for students' writing ability on descriptive text. It means that for those who get score > 70, they pass the passing grade. While for those who get score <70 they do not pass the passing grade.

In analyzing the data of this research, the writer used T-test formula. Gay says that, T-test is used to determine whether two means are significantly different at a selected probability level. The writer used score of post test experimental class and post test of control class.

In analyzing the data, the writer used the statistical calculation of independent sample T-test. Independent sample T-test was used to find out the significant influence of using graphic organizers method toward students' ability in writing descriptive text. The T-table was employed to know whether there was any significant influence between mean score both experimental and control class. The T-obtained value is consulted with the value of t-table at the degree of freedom (df) = (N1+N2)-2 which is statically hypothesis:

Ha: to > t-table

Ho: to < t-table

Ha is accepted if to > t-table or there is effect of using graphic organizers method toward students' ability in writing descriptive text.

Ho is accepted if to < t-table or there is no effect of using graphic organizers methodtoward students' ability in writing descriptive text.

The data were analyzed by using SPSS 16.0 version