CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

This study was conducted by using experimental design. In conducting the experimental research, there were two groups of students, namely experimental group and control group. Both groups were given pre-test and post-test. The experimental is thought by using GIST strategy while the control group is thought without using GIST strategy. This research utilized random groups, pre-test and post-test design. In this design, the subject are assign to the experimental group and control group by random methods and both of them was given a pre-test. Pre-test was given in order to know the students's ability in writing a narrative text. After conducting the treatment, the writer gives post-test for both of group. The post-test was given to identify the student's ability in writing narrative text after treatment.the different average between the pre-test and post-test was found for each group and then these differentaverage scores are compared in order to ascertain whether the experimental treatment produce a greater change than the control group situation. To make it clearer, the design of this study can be seen in the following table:

Table 3.1
Research Design

Group	Pre-test	Treatment	Post-test
Experimental	✓	Using GIST strategy	✓
Control	✓	Without using GIST strategy	✓

B. Population and Sample

1. Population

Population is not only people, but also all of the quantity of object or subject that will learn, but also involve the whole of characteristic of the subject or object.[1]And population is the whole research subject.[2] The population has ever known with certainty the number is called the population of infinitive or limited. And population numbers are known with any certainty a particular population called limited. The population in each of the studies have been reflected in the title, including specific areas or gheografically.[3]

Therefore, the population of the research is at the second year of MA Hifzhil Qur'an Islamic Center Medan. There are four classses of grade XI, (XI Agama 1, XI Agama 2, XI IPA,and XI IPS). The total of the students was students.

Table 3.2
Population

No	Class	Number of Students
1.	XI Agama 1	23
2.	XI Agama 2	36
3.	XI IPA	36
4.	XI IPS	23
Total		118

[1] Sugiyono,(2011), *Metode Penelitian Kuantitatif dan R&D*, Bandung: Al-Fabeta, p. 80.
[2] Arikunto,(2010), *Prosedur Penelitian: Suatu Pendekatan Praktik*,Jakarta: Rineka Cipta,p. 173
[3]Syahrum and Salim,(2012),*Metodology Penelitian Kuantitatif*, Bandung:Citapustaka Media, p.113.

2. Sample

A sample is a part of the population. In this study simple random sampling will use. It is more fesiable or convenient in select group of individual as sample than select individuals from a population. Thus in this study unit of sampling is not individuals but group individuals. [4]

The classes in two piece of paper would be the sample. The classes are XI Agama 1 and XI IPS. These class devide into two groups, experimental and control groups. Class XI Agama 1 as a experimental groups include 23 students is teach by using Generating Interaction Between Schemata and Text (GIST) strategy and class XI IPS as the control groups include 23 students teach without using Generating Interaction between Schemata and Text (GIST) strategy. So, total number of the sample is 46 students.

Table 3.3
Sample

No	Class	Number of Students
1.	XI Agama 1	23
4.	XI IPS	23
Total		46

C. Data Collection

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[4] Arikunto, *op.cit.*, p. 109

To collect the data, the writing test was given to the students. It is meant to prove whether is significant difference on the students' achievement in writing narrative text. The writing result is evaluate and score.

In giving the scores for the students writing tests some indicators is give in order to find the score. There are five components or scales, namely content, organization, vocabulary, language use, and mechanism.[5]

The indicator of the assesment and the scoring of the writing, is based on the lesson plan in the syllabus. Those are the students are able to write a good steps to accomplish , execute from the material and identify communicative purpose, theoritical structure, and grammatical features.

The rubrics scoring of writing narrative includes:

Table 3.4
Rubrics Scoring

No.	Criteria	Indicator	Score	Score Maximum
Generic Structure				
1	Orientation	Introducing the Topic	10	10
2	Complication	Describing the series of event	40	40
3	Resolution	Telling the problem solving	10	10
4	Grammar	• Using simple past tense • Using adverb of time and place • Using linking verb • Using action verb	5 5 5 5	20
5	Vocabulary	• Using English word in common	10 5	

[5] J. B. Heaton, (1998), *Writing English Language Testing*, London: Longman, p. 146

		• Good in translation • Using appropriate words	5	20
Total score				100

D. Data Analysis

To find out the difference means of scores of the test between the experimental group and control group , the writer used t-test. The formulation of the t-test:[6]

$$t = \frac{Ma - Mb}{\sqrt{\frac{da^2 + db^2}{Na + Nb - 2} x \frac{1}{Na} + \frac{1}{Nb}}}$$

Where:

Ma   : mean value of the experimental group

Mb   : mean value of the control group

da^2 : variance of the experimental group

db^2 : variace of the control group

Na   : the number of students in the experimental group

Nb   : the number of students in the control group

[6] Anas Sudijono,(2015),*Pengantar Statistik Pendidikan*,Rajawali Pers:Jakarta,P. 314

E. Research Procedure

The research procedure is devide into three phrase. They are:

1. Pre-test

In order to find out the homogeneity of the sample, the pre-test was conducted to both group (control and experiment group) before the treatment or teaching presentation given. The research gave pre-test that is the writing test and time allocation of the test was 60 minutes.

2. Treatment

In order to find out the effect of teaching writing by applying Generating Interaction Between Schemata and Text (GIST) on students' acievement in writing narrative text, a treatment was conducted to the experimental group. It was conducted three meetings. The step and the activities in teaching and learning writing process in experimental group and control group were as follow:

Table 3.5
The Activities of Teacher's and Student's in Experimental Group

Activity	English Teacher	Students
Opening	English Teacher begins the class by greeting the students and explain what the class are going to do in the meeting.	Students respon the greeting and pay attentaion to the English Teacher explanation
Main Activities **1. Pre-writing**	English Teacher stands in front of the class, write a title of a narartive text "Prophet Adam as" and than invite students to mention what they know	Students mention and predict what they have heard about the story of Prophet Adam As.

	about the story.	
	English Teacher writes the students' prediction related to the story of Prophet Adam As and keep in the whiteboard.	Students pay attention to the English Teacher.
2. Writing	English Teacher display only the first paragraph (cover the other).	Students read the paragraph.
	English Teacher provides 20 blanks on the whiteboard and instruct students to write a summary with 20 or fewer of the own words.	Students try to generate the summary of the paragraph with 20 or fewer of his or her/his own words.
	English Teacher show the next paragraph of the text and instruct the students generate a summary that encopasses both of the first and the second paragraph.	Students read the second paragraph and try to create summary of 30 or fewer word that encompasses both the first and the second paragraph.
	English Teacher continues to show the next paragraph until students have produced a gist statement for the entire passage being taught.	Students read the next paragraph until entire paragraph has been summarized.
3. Post writing	English Teacher ask student one by one to read their GIST staement from the story of Prophet Adam as in front of the class. And show their writing.	Students stand in front of the class and read their GIST statement,and show their writing.

	English Teacher states clearly gist statement from the story Prophet Adam As.	Students pay attention to the English Teacher.
	English Teacher together with students correct the students prediction from the text.	Sudents lead by the English Teacher to correct the students prediction from the text.
Closing	English Teacher give the chance for the students to question and conclude the lesson.	Students ask question and listen to English Teacher explanation.
	English Teacher closes the class.	Students are dismissed.

Table 3.6
The Activities of Teachers and Students' in Control Group

Control group activities	English Teacher's activities	Students'activities
Opening	English Teacher begins the class by greeting the students and explain what the class are going to do in the meeting.	Students respond the greeting and pay attention to the English Teacher's explanation.
Main activities	English Teacher explain about the generic structure and language feature of narrative.	Students pay attention toward English Teacher explanation.
	English Teacher give copies passage of "Prophet Adam As" for all students.	Students get the copies of the passage.

		English Teacher asks the students to read the text.	Students read the passage individually.
		English Teacher give the students writing test to summarize the story with their own words.	Students write the narrative text.
		English Teacher asks sudents to collect their writing.	Students collect their writing.
	Closing	English Teacher give the conclusion of the lesson.	Students listen to the English Teacher's explanation.
		English Teacher closes the class.	Students are dismissed.

3. Post-test

After having the treatment , the post-test was given the students. It is the final test in order to know whether the treatment gave the significant effect or not. The researcher gave post-test to write the oe text of narrative text and time allocation was 60 minutes.