CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

This research was an experimental research. Gay (2003:234) says that experimental research typically consist of two groups, they are experimental group and control group. In this research Opinion Proof Strategy is independent variable and student's writing ability is dependent variable.

The experimental group should teach Opinion Proof Strategy in writing and the control group would teach with conventional strategy.

After doing treatment six meetings, researcher would give writing test. Writing test should do to know students' writing ability after treatment. The result will be known by comparing experimental group and control group.

The design of research can be figure out by this formula (Creswell, 1994:132)

Group A   0_____X_____0
Group B   0_____0
Where:
        A: Experimental Group
        B: Control Group
        X: Opinion Proof Strategy
        0: Pos-test

B. Population and Sample

26

1. Population

Gay (1987:102) says that population is a group to which the researcher would like the results of the study to be generalize and sampling is the processes of selecting a number of individuals for a study in such a way that the individuals represent the large group from which they were selected. In research's population is XI Grade The State of Islamic Senior High School 5 Agam.

The population of this research were students of XI Grade The State of Islamic Senior High School 5 Agam which consist of 3 classes of grade XI contain 67 students. The reason of choosing grade XI in this research would be conducted to the students'experience in studying English at XI Grade The State of Islamic Senior high school, they have studied some materials of English and they were taught by the same teacher. The population of the students was shown on the table below:

Table 5
The Number of the Students at XI Grade
The State of Islamic Senior High School 5 Agam at
Academic Years 2017/2018

Class	The Number of students
XI.IPA	21 Students
XI.IPS	20 Students
XI.PK	26 Students

2. Sample

According to Gay (2000: 121) sampling is the process of selecting a number of individuals for a study in such a way that they represent the larger group from which they were selected. A sample comprises the individuals, items, or events selected from a larger group referred to as a population. The purpose of sampling is to gain information about the population by using the sample.

The sample of the research should be took by using cluster sampling. Cluster sampling random selects group, not individuals. All the member of selected groups had similar characteristics. Cluster sampling is most useful when the population is very large or spread out over a wide geographic area. Sometimes it is the only feasible method of selecting a sample. It is not always possible, for example: to obtain or compile a list of all members of the population, as is required by simple random sampling and stratified sampling (Gay, 2000: 129).

Normality test has an objective to know the population normal or not. The normality analyzed by using SPSS (Statistical Product and Service Solution) with data exploration of Kolmogorov-Smoirnov test and Shapiro Wilk. Based on that test the data stated normal if every classes had significance or probability score bigger than 0.05.

To know the normality and homogeneous of the data, the researcher used the aid of computer program called by SPSS (Statistical Product and Service Solution). The table below shows the result of normality and homogeneity test. It can be seen on the table:

Table 6

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Class	Statistic	Df	Sig.	Statistic	df	Sig.
Score	XI. PK	.107	26	.200[*]	.973	26	.703
	XI. IPS	.125	20	.200[*]	.957	20	.488

Tests of Normality

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

From the table above, it can be seen that all classes (XI IPA, XI IPS, XI PK) are normal, and all score bigger than 0.05. To see whether the sample normal or not in distribution, researcher also use normal graphic of Q-Q plot, the data is normal if the distribution of data plot be in the surrounding of aslant and athwart line.

After doing the normality test and getting the normal data. Then the researcher did the homogeneous variation test. This test had an objective as to know the sample homogeny or not. This test used SPSS with Levene

test, if the data are significant or the data are more than 0.05 it meant the data is homogeneous. See the table below:

Table 7

		Levene Statistic	df1	df2	Sig.
Test of Homogeneity of Variance					
score	Based on Mean	.212	1	44	.647
	Based on Median	.188	1	44	.666
	Based on Median and with adjusted df	.188	1	43.859	.666
	Based on trimmed mean	.215	1	44	.645

From the data above, we know that the researcher got the data that had no significant differences among all of those classes. The decision of column *test of homogeneity of variance* shown that p-value 0.001 is smaller than 0.05, so it could be concluded that all the class were homogeneity.

C.   Place and Time of Research

The research would be held in eleven[th] grade students of The State of Islamic Senior High School 5 Agam. This research start in first semester of Academic Years 2018/2019

D.   Instrumentation

Instrument is a tool to collect data from sample. There are two instruments that used in this research and each of them would be used in different stages. The instruments in this research were test and scores

According to Gay (1987:121), validity is the most important quality of a test. It was degree to which a test measure and consequently, permitted appropriate interpretation of test scores. However, Arikunto (2006:239) says "A test has validity if could be measures the specific purpose related with material that students have learned".

The scoring of each component of writing would be determined on ESL Composition Profile by (Jacob 1981:92):

Table 6
The Scoring Of Writing Test

	Score Level	Criteria
C O N T E N T	30-27	Excellent to Very Good: knowledgeable; substantive; thorough development of thesis; relevant to assigned topic
	26-22	Good to Average: some knowledge of subject; adequate range; limited development of thesis; mostly relevant to topic, but lacks detail
	21-1	Fair to Poor: limited knowledge of subject; little substance; inadequate development of topic
	16-13	Very Poor: does not show knowledge of subject; non-substantive; not pertinent; or not enough to evaluate

	Score Level	Criteria
O R G A N I Z	20-18	Excellent to Very Good: fluent expression; ideas clearly stated/supported; succinct; well organized; logical sequencing; cohesive
	17-14	Good to Average: somewhat choppy; loosely organized but main ideas stand out;

	Score Level	Criteria
A T I O N		limited support; logical but incomplete sequencing
	13-10	Fair to Poor: non-fluent; ideas confused or disconnected; lacks logical sequencing and development
	9-7	Very Poor: does not communicate; no organization; or not enough to evaluate

	Score Level	Criteria
V O C A B U L A R Y	20-18	Excellent to Very Good: sophisticated range; effective word/idiom choice and usage; word form mastery; appropriate register
	17-14	Good to Average: adequate range; occasional errors of word/idiom form; choice; usage but meaning not obscured
	13-10	Fair to Poor: limited range; frequent errors of word/form; choice usage; meaning confused or obscured
	9-7	Very Poor: essentially translation; little knowledge of English vocabulary; idioms, word form, or not enough to evaluate

	Score Level	Criteria
L A N G U A G E U S E	25-22	Excellent to Very Good: effective complex construction; few errors of agreement, tense, number, word order/ function, articles, pronouns, prepositions
	21-18	Good to Average: effective but simple construction; minor problems in complex constructions; several errors of agreement, tense, number, word order/function, articles, pronouns, prepositions but meaning seldom obscured
	17-11	Fair to Poor: major problems in simple/complex constructions; frequent errors of negations, agreement, tense, number, word order/function, articles, pronouns, prepositions and/or fragments, run-ons, deletions; meaning confused or obscured
	10-5	Very Poor: virtually no mastery of sentence construction rules; dominated by errors; doesn't communicate, or not enough to evaluate

	Score Level	Criteria
M E C H A N I C S	5	Excellent to Very Good: demonstrates mastery of conventions; few errors of spelling, punctuations, capitalizations, paragraphing
	4	Good to Average: occasional errors of spelling, punctuation, capitalizations, paragraphing, but meaning not obscured
	3	Fair to Poor: frequent errors of spelling, punctuation, capitalizations, paragraphing, poor handwriting, meaning confused or obscured
	2	Very Poor: no mastery of conventions; dominated by errors of spelling, punctuation, capitalizations, paragraphing, handwriting illegible; or not enough to evaluate

Table 8
Sample of Instrument in Giving Writing Scores

No. of Students	Aspects					
	C (30)	O (20)	V (20)	LU (25)	M (5)	Total (100)
1						
2						
↓						
24						

A. Procedure of the Research

This research would be done at XI Grade The State of Islamic Senior High School 5 Agam. This research was equipped by Opinion Proof Strategy in teaching. The research was conducted in two classes. They were experimental class and control class. As mention before the experimental

class were the class that were taught by Opinion Proof Strategy, while control class were the class that were taught without Opinion Proof Strategy.

To obtain the achievement in this research, the researcher would divide the procedure of this research into three points:

1. Preparation steps.

   The researcher collected the data that relate with preparation steps:

   a. Planning learning in experimental class.

   b. Determining population and sample.

   c. Preparing the lessons plan arranged by curriculum or syllabus

   d. Preparing research instrument.

2. Application steps.

   This step would be conducted in six meeting. The first meeting would be introduction which included greeting, checking attendance, motivation and apperception. The second was main activities included observing, questioning, exploring, associating, communicating, and post-teaching. The last activities were post activities included concluding the material and evaluation. The scenario of learning for experimental class and control class can be seen as follows:

Table 8
Teaching Activities

N o	Teaching's Activity	Experimental Class	Control Class
1.	Pre-Teaching	**Pre-Teaching** **1** Teacher greets the class **2** Teacher checks students' attendance **3** Teacher and students pray **4** Teacher introduce himself to the students **Motivation** **5** Teacher gives students motivation **Apperception** **6** Teacher introduces learning objective to students. **7** Teacher writes a topic of the lesson on the whiteboard	**Pre-Teaching** **1** Teacher greets the class **2** Teacher cheeks students' attendance **3** Teacher and students pray **4** Teacher introduce himself to the students **Motivation** **5** Teacher gives students motivation **Apperception** **6** Teacher introduces learning objective to students. **7** Teacher writes a topic of the lesson on the whiteboard
2	**Main activity 1** **2**	**Main Activity Observing** **8** Teacher introduces a lesson by showing the text to the students. **Questioning**	**Main Activity Observing** **8.** Teacher introduces a lesson by showing the text to the students. **Questioning**

		9 Teacher leads student to give comment or ask question based on the text	**9**. Teacher leads student to give comment or ask question based on the text

3 Exploring

10 Teacher leads students how to write the analytical exposition text (tells the students about the role of Opinion proof strategy) After that give example of analytical exposition text " why is Learning English Important"

Planning
- first start with a clear topic. but sure you know exactly what you want to write
Organize
- to ask the students choose a portion of text to be read silently from which an opinion will be solicited.
- Give students a copy of the Opinion Proof Framework Sheet or write it on the board
Write.
- Ask students to write an opinion and support it with evidence from the text.
Example :

Opinion statement	Evidence to prove My Opinion
Sacagawa was an important member of the Corps of Discovery	She was an excellent navigator.
	Since she knew several languages, she could act as a translator.
	Her presence among the corps symbolized peace to the Indian they met.
	Meeting her long-lost brother helped the corps get horses and other important items.

Exploring

10. Teacher lead students how to write the analytical exposition text (tells the student about the role of conventional strategy) after that give example of analytical exposition text " Why is learning English Important"

Planning
- first start with a clear topic. But sure you know exactly what you want to write

Organize
- To ask the student choose a portion of text to be read silently on textbook.
- To ask the student to understand text that choice.

Write

| | | • Ask students to write a paragraph using their opinion as the topic sentence. The evidence is used as supporting details for the opinion statement. Students can use a "frame paragraph" to provide a framework and transition from information to writing the paragraph
Example : "framed paragraph"

....
One reason I feel this way is because...
.in
addition...
.... Also, ...
.... Finally ....

Example: a completed "framed paragraph"

Sacagawa was an important member of the Corps of Discovery. One reason I feel this way is because she was such an excellent navigator. In addition, her role as translator was very helpful. Also, she was seen as a symbol of peace to other Indians the corps met. Finally, meeting her long-lost brother helped the corps get horses and other important items.

Edit
• check all spelling, capitalization, punctuation, order of word and grammar.
• check weather your ideas are well | • Ask students to write analytical exposition text.
• Give students twenty minutes to write text. |

		stated. • it may helpful to read your paper aloud as a way of checking for errors **Revise** • based on your editing revising your paper • re-read it one last time before turning it **11** Teacher guides student to identify the purpose and generic structure of the analytical exposition text **4** **5** **Associating** **6** **12** Teacher leads the students to mention definition and generic structure of analytical exposition text **13** Teacher guides the student to discuss about their topic in writing text **14** Teacher observes the student's activity **Communicating** **15** Teacher asks the students to submit their writing the final copy	**Edit** • check all spelling, capitalization, punctuation, order of word and grammar. • check weather your ideas are well stated. • it may helpful to read your paper aloud as a way of checking for errors **Revise** • based on your editing revising your paper • re-read it one last time before turning it **11.** Teacher guides student to identify the purpose and generic structure of the analytical exposition text **Associating** **12.** Teacher leads the students to mention definition and generic structure of analytical exposition text. **13.** Teacher guides the student to discuss about their topic in writing text

		16 Teacher gives evaluation about this topic 17 Teacher makes sure the student understands how to write a analytical exposition text	14. Teacher observes the student's activity. **Communicating** 15. Teacher ask the students to submit their writing final copy 16. Teacher gives evaluation about this topic. 17. Teacher makes sure the student understands how to write a analytical exposition text.
3	**Post Teaching**	**Post teaching** 18. Teacher and students reviews and conclude the lesson. Teacher ask student understanding about material. 19. Teacher gives enrichment home work. 20. Teacher tells the students the topic for the next meeting and then close the class	**Post teaching** 18 Teacher and students reviews and conclude the lesson. Teacher ask student understanding about material. 19 Teacher gives enrichment home work. 20 Teacher tells the students the topic for the next meeting and then close the class

3. Finishing Steps

   a.   Giving the data (writing test)

b.   Processing data towards experiment and control class by using T-test formula and SPSS (Statistic Process and Service Solution) version 16.

c.   Getting the finding.

d.   Taking conclusion and proposing suggestion.

B. Technique of Data Collection

1. Test

The data of this research was collected by using writing test. The data of this research was the student's score in post-test. The researcher gave treatment to experiment and control class. The classes would be conducted for six meetings. And the material would be taught is *a kind of the monologue text* (analytical exposition text) by using Opinion Proof Strategy in experimental class and conventional Strategy. In this section, the researcher prepared an instructional design for each meeting.

At the end of this research, the researcher would give the post-test to students in experimental and control class. Post-test is the process of giving the test after giving the treatment. It is aimed to find out the effect of treatments to students' writing score.

2. Scoring

Researcher uses scoring technique of Jacob (1981: 92) in this research to assess students' writing.
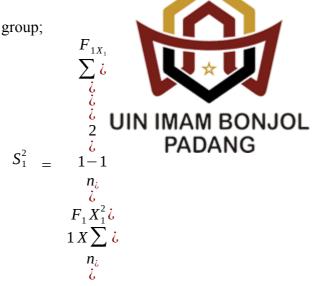
C. Technique of Data Analysis

Technique of data analysis in this research is statistical procedure. It gave an away to analyze the differences between the groups. To analyze the students` score test, the researcher used T-test mean a statistical procedure use to determine whether both of groups are in the same ability or not. T-test formulas develop which is presented as follow:

1. This formula was applied to decide mean of students` test score in experimental and control group;

$$\acute{X}_1 = \frac{\sum F_{1X_1}}{\sum F_1} \quad \text{(Experimental group)}$$

$$\acute{X}_1 = \frac{\sum F_{2X_2}}{\sum F_2} \quad \text{(Control group)}$$

2. This formula was used to decide standard deviation of experimental group;

$$S_1^2 = \frac{\sum \overset{F_{1X_1}}{¿}\overset{¿}{¿}\overset{¿}{¿}\overset{2}{¿}}{1-1}\frac{¿}{n_¿}\overset{¿}{¿}\frac{1X\sum F_1 X_1^2 ¿}{n_¿}¿$$

3. This formula was used to decide standard deviation of control group;

$$S_2^2 = \frac{\sum F_2 X_2^2 - \frac{(\sum F_{2X_2})^2}{n}}{n - 1}$$

The formula of T-test is as follows (Sudjana 1996)

$$t = \frac{\acute{x}_1 - \acute{x}_2}{s\sqrt{\dfrac{1}{n_1} + \dfrac{1}{n_2}}}$$

With:

$$s^2 = \frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}$$

Where:

t : The value of t calculated /observer/ obtained

$\acute{X}_1$: Mean score of experimental sample

$\acute{X}_2$: Mean score of control sample

n_1 : The number of subject of experimental group

n_2 : The number of subject of control group

S_1^2 : Standard deviation of experimental group

S_2^2 : Standard deviation of control group

To analyze students' response in writing by Opinion Proof Strategy, the researcher classified their score into three categories such low, average, and high.

Level	Score
Low	20 – 40
Average	41 – 60
High	61 – 80

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