

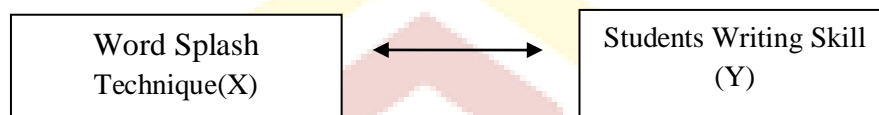
CHAPTER III

RESEARCH METHOD

A. Research Design

The researcher used true-experimental research because the purpose of this study was to identify the cause effect between both of the variables, whereas Word Splash (X) and Students' Writing Skill (Y).

The relationship between both variables was shown in the schema below:



In this research, there are two groups involve. One group is the experimental group which will give treatment, in this case by using Word Splash technique, while the other group is the control group that will be treated as usual. This research will involve two variables, independent and dependent variables. Independent variable, also call experimental variable, is that process or activity believe to make difference in performance, while dependent variable is the outcome of study, the measure of the change.

In this research, the researcher used *posttest-only control design* where a group is given treatment and the other one is not.(Sugiyono,2013: 114). The design of this research can be represented as follows:

Table 3.1
Post test-Only Control Design

Group	Treatment	Post test
E	X	O ₁
C	-	O ₁

Where:

E = Experimental Group

C = Control Group

X = Teaching Writing by Word Splash Technique

O₁ = Students' score of post test

This design has two classes where the researcher chose randomly. The first, one class will be the experimental class that received a treatment (X) or Word Splash technique in teaching writing process, while another class is the control class that receives no treatment. The effect of giving treatment was posttest result. In this research, the effect of Word Splash technique will being statistically analyze with t-test.

B. Population and Sample

1. Population

Sugiyono (2013:119) states that population is generalization region consisting of objects/subjects that have certain qualities and characteristics defined by the researchers to learn and then drawn the conclusions. So population is not just for person, but also everything included in research.

The population of this research was class eight of MTsN 6 Solok. That population consists of four classes with total numbers of students were 120 students.

Table 3.2
Total of students of MTsN 6 Solok

Class	Total
VIII.1	30
VIII.2	30
VIII.3	30
VIII.4	30
Total	120

Source: English Teacher of MTsN 6 Solok

Those four classes used SPSS (Statistical Product And Service Solution) 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).. There were two classes which have normal. They are class VIII.1, VIII.4. While there are two classes that not normal. They are class VIII.2 and VIII.3.

Table 3.3
Normality of Normal and Homogeneous of Population

Tests of Normality							
	Class	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
score	1	,129	30	,200 [*]	,969	30	,509
	2	,147	30	,095	,933	30	,058
	3	,129	30	,200 [*]	,969	30	,509
	4	,143	30	,121	,937	30	,075

^{*}. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Nilai	Based on Mean	,579	3	116	,630
	Based on Median	,403	3	116	,751
	Based on Median and with adjusted df	,403	3	112,448	,751
	Based on trimmed mean	,564	3	116	,640

After knowing normality and homogeneity test by using SPSS, the researcher found all classes normal and homogeneity as a population and 147 students as population and homogeneity more than 0.05.

2. Sample

After decided the population, the researcher needed to choose the research sample. In deciding which group would be experimental group, the sample would be taken by cluster random sampling. According to Sugiyono (2013:220) also add that cluster sampling is a way to select sample in groups, not individually but randomly selected. The researcher chose two classes that has similarity in skill among the students in it.

Before the researcher took the sample, the researcher did these steps:

- a. Collected the MID test score data from all students grades VIII in first semester.(see Appendix I)
- b. Test of normality

Normality test had an objective to know the population normal or not. In this research, to do the normality test the writer used

Kolmogorov Smirnov and Shapiro Wilk. This test was SPSS test. If the data was significant or more than 0.05 the class was normal. The normality table as is stated as follow:

c. Test of Homogeneous Variances

After done the normality test and got the normal data. Then the writer did the homogeneous variation test. This test had an objective as to know the sample homogeneity or not. This test used SPSS with Levene test, if the data were significant or the data were more than 0.05 it meant the data was homogeneous.

After know normality and homogeneity tests by using SPSS, The researcher found all classes that normal and homogenous. Next, the researcher took a piece of paper and split it into four parts. Then the researcher counted the four parts of paper with the classes in normal and homogeneity and rolls them. The result was VIII.1 as control class and VIII.4 as experimental class.

Table 3.4

Sample of the Research

No	Grade	Total of Students
1	VIII 4(Experimental Class)	30
2	VIII 1 (Control Class)	30
Total		59

C. Instrument of The Research

Instrument is a tool to collect data from the sample. This instrument which was used in this research focused on the data that needed to be collected. The collecting data was used to explain the application of this research. The instrument for this research is the form of written test. The researcher used the Curriculum or Syllabus and teaching material to construct the test. This instrument was used to collect the data about students' writing skill before and after using Word Splash technique. The score of students' writing was calculated by using Jacob's theory (1981: 90). The blueprint of writing test could be seen table 3.5

Table 3.5
Blueprint of Writing Test

No	Component of Writing Test	Indicator	Topics	Number
1	Content	The students are able to write down a paragraph in good content, organization, vocabulary, language use, and mechanic	Recount text	1
2	Organization		1. My holiday	
3	Vocabulary		2. My good experience	
4	Language use		3. My bad experience	
5	Mechanic		4. Last Experience	
Total				4

From the table above, the students asked to write a recount text based on the topics given. They allowed to choose one of four topics that they like most. The four topics are talk about experience, such as talk about good/bad experience.

D. Place and time

This research was done at MTsN 6 Solok. This place was chosen because the researcher had ever do observation there. The treatment was conducted at the class VIII students of second semester of MTsN 6 Solok.

E. Technique of Collecting Data

The data would come from test. Data of the test consisted of students' scores in post-test. Post-test was provided at the end of the research or after finishing the treatment for six meetings. To collected data by using test, the researcher was guided with Jacob's criteria in writing. Those criteria could be seen from table below:

Tabel 3.6

Indicator and Criteria of Scoring Writing based on Jacob (1981: 101)

No	Items	Criteria of Each Item	Score
1	Content	a. Excellent to very good: Knowledgeable; substantive; thorough development of thesis; relevant to assigned topic.	30-27
		b. Good to average: Some knowledge of subject; adequate range; limited development of thesis; mostly relevant	26-22

		to topic, but lacks detail. c. Fair to poor: limited knowledge of subject; little substance; inadequate development of topic. d. Very poor: does not show knowledge of subject; non-substantive; not pertinent; or not enough to evaluate.	21-17 16-13
2	Organization	a. Excellent to very good: Fluent expression; ideas clearly stated/ supported; succinct; well organized; logical sequencing; cohesive. b. Good to average: somewhat choppy; loosely organized but main ideas stand out; limited support; logical but incomplete sequencing. c. Fair to poor: non-fluent; ideas confused or disconnected; lacks logical sequencing and development. d. Very poor: does not communicate; no organization; or not enough to evaluate.	20-18 17-14 13-10 9-7
3	Vocabulary	a. Excellent to very good: sophisticated range; effective word/ idiom choice and usage; word form mastery; appropriate register. b. Good to average: adequate range; occasional errors of word/ idiom form, choice, usage but meaning not obscured. c. Fair to poor: limited range; frequent errors of word/ form choice, usage;	20-18 17-14 13-10

		<p>meaning confused or obscured.</p> <p>d. Very poor: essentially translation; title knowledge of English vocabulary, idioms, word form, or not enough to evaluate.</p>	9-7
4	Language Use	<p>a. Excellent to very good: effective complex constructions; few errors of agreement, tense, number, word order/ function, articles, pronouns, prepositions.</p> <p>b. 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</p> <p>c. Fair to poor: major problems in simple/ complex constructions; frequent errors of negation, agreement, tense, number, word order/ function, articles, pronouns, prepositions and/ or fragments, run-ons, deletions; meaning confused or obscured.</p> <p>d. Very poor: virtually no mastery of sentence constructions rules; dominated by errors; does not communicate;</p>	<p>25-22</p> <p>21-18</p> <p>17-11</p> <p>10-5</p>
5	Mechanics	<p>a. Excellent to very good: demonstrates mastery of conventions few errors of spelling, punctuations, capitalizations,</p>	5

		paragraphing.	
		b. Good to average: occasional errors of spelling, punctuation, and capitalization, paragraphing, but meaning not obscured	4
		c. Fair to Poor: Frequent errors of spelling, punctuations, capitalizations, paragraphing; poor handwriting, meaning confused or obscured.	3
		d. Very poor: no mastery of conventions dominated by errors of spelling, punctuation, capitalization, paragraphing; handwriting illegible; or not enough to evaluate.	2

F. Procedure of The Research

To obtain the achievement in this research, the researcher divided the procedure of this research into three points, as following:

1. Preparation Steps

The researcher would collect the data that relate with preparation steps:

- a. Planning learning in experimental class and control class
- b. Determining learning material
- c. Determining population and sample
- d. Preparing learning design
- e. Preparing research instrument

2. Application Steps

Teaching and learning process that the researcher do during this research:

a Giving the treatment

In this session, the experimental class received treatment for six meetings using Word Splash technique in the teaching writing recount text, but the control group did not get the treatment in the teaching writing recount text for six meetings.

b Giving post- test

The researcher gave post-test for both oh groups to know the score of the students after giving the treatment for six meetings with different topics and it is based on the syllabus.

3. Finishing Steps

a. Processing data

b. Taking conclusion from technique of data collection

G. Technique of Data Analysis

In this research, researcher measures the writing's score of students through students' writing products. Students' writing products will be analyzed by using ESL Composition Profile which consists of five components such as content, organization, vocabulary, language use, and mechanics. Statistical procedure is the technique used to analyze the data by using a set of test. It is used to see the different quality of the student's writing in before (pretest) and after (posttest) using treatment.

1. Normality Testing

This test is used to know whether the distribution of each variable is normal or not. Testing normality is done by applying kolmogorof-sminov and shapiro-wilk test by using computer program called SPSS (statistical product and service solution) version 20. The criteria of normality test are significance, if the score analysis is biggest than standard significant 5 percent (0,05) the data distribution is normal.

2. Homogeneity Testing

This test is used to see whether the sample which sample from population have the same characteristic as population or not. The formula which is used in this test is levene statistic by using SPSS (statistical product and service solution).

3. Hyphothesis Testing

The data was analyzed by using T- test formula as suggested by Sudjana (2005: 239). And the formula of T-test is:

$$T = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

Where:

$\overline{X_1}$ = Mean score of post-test

$\overline{X_2}$ = Mean score of pre-test

S_1^2 = Standard deviation of pre-test

S_2^2 = Standard deviation of post-test

n_1 = Number of samples in pre-test

n_2 = Number of samples in post-test

The t-table was employed to see whether there is a significant difference between the mean score of pre-test and post-test of experimental class. The value of t-obtained consulted with the value of t-table. The data analyzed by using simple regression for hypothesis with 5 % (0.05) of significance level and the value of t-table of the level of freedom $(N_1-1) + (N_2-1)$

If the value t-obtained was bigger than the value of t-table, the null hypothesis was accepted. On the contrary, if the value of the t-obtained was equal, or smaller than the value t-table, the alternative one was not accepted (t-table) t-obtained.

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