CHAPTER III

RESEARCH METHOD

In this chapter, the researcher presents research method including research design, population, sample and sampling, research instrument, validity and reliability,and data collecting method.

A. Research Design

To investigate the effectiveness of Edmodoon students' writing ability in recount text uses an experimental study with quantitative research would be suitable to the purpose of the research.Ary (2006:325) explains that:

A design is a general plan for carrying out the experimental research study. The purpose of the experimental design is to enable researchers to estimate the effect of an experimental treatment. The design functions to (1) make sure that the outcome is consequence of the manipulation of the independent variable and not some spurious factor and (2) to ensure that the subjects assigned to the treatment and control groups do not differ systematically on any variables except those under consideration. Thus the experimental design has a significant effect on the validity of any conclusions that might be draw from the research study.

According Louis (2007:291) state that an experiment involves making a change in the value of one variable -- called the independent variable and observing the effect of that change or another variable -- called the dependent variable.

The research method is pre-experimental design. There are kinds of pre-experimental design: One-shoot case study, One Group Pretest-Posttest, and Intec group Comparison. In this study, the researcher uses pre experimental design with One Group Pretest-Posttest design. Cohen et al (2005: 212) states in one-group pretest posttest design there is no control

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group and the students are given some experimental instruction or treatments for a period of time. It can concluded that posttest score is then determined to measure the difference after treatment which between pretest and posttest.

This design includes a pretest measure followed by a treatment and a posttest for a single group. Then the design of the one group pretest-posttest typically represented as follows:

According to John W. Creswell (2009:160) it can be described as following table:

Table 3.1 Pretest-Posttest Design

Pre-test	Treatment	Post-test
O_1	X	O_2

X   : Treatment by using Edmodo

0_1 : The students' pretest

0_2 : The students' posttest

In term of variable, there were two variables in this study, Independent variable, and Dependent variable. According to Balnaves&Calputi (2001) a variable is a general class of objects, events, situations, characteristics, and attributes that are of interest to the researcher. The independent variable has an impact on the dependent variable. In other words, the values that the dependent variable takes on are influenced by the independent variable. Thus, in this research, the independent variable was the use of Edmodo, whereas the dependent variable was students' writing ability in recount text.

B.   Population, sample and Sampling

1.   **Population**

Population is all the total of calculation or measurement both on quantitative or qualitative research by the certain of characteristics about a group of complete subjects. According to Ary, et al (2010:148) sates that population is defined as all members of any well defined class of people, event and object. Moreover, Creswell (2008:151) said that a population is a group of individuals who have the same characteristics. It means, population is the object or subject that has quality and certain characteristic determined by the writer to be learned to get the conclusion.

The population in this study is all of the studentsat second grade that consist of ten classes (A, B, C, D, E, F, G, H, and I class) in SMPN 1 Sumbergempol 2017/2018. There are 367 students of the second grade.

2.   **Sample**

Sample is a smaller group or subject of population. From Ary et al (2002:163) sample is the small group that is observed. Moreover, sample is sub group of target population that researcher plan to study for generalizing about target population (Creswell, 2008:152). In this research, the sample of the study was taken from the second grade of the students in SMPN 1 Sumbergempol in academic year 2017/2018. The researcher chooses VIII F as the sample of the study. It consist of 35 students with 14 male and 21 female students The students of this class use laptop or computer and mobile phone in daily learning.

3.   Sampling

Sampling is a way the researcher select number of individuals as a sample which represents the population. The researcher usedpurposive sampling to select of the sample.Sampling is indispensable to researcher (Donald et. Al (2010:149).According to Cohen et al., (2007) purposive sampling technique is satisfactory to specific need. Then, the researcher took VIII F as a sample in this study. The teacher chose this class to give the treatments because this class was low in writing.

C.   Research Instrument

The research instruments that the researcher used in this studywere test.The researcher used test to elicit and collect information on students' writing skill before and after giving treatments.

1.   Test

Test is a process of measuring students' knowledge and ability of students. According to Ary et al (2006:201) test is a set of stimuli presented to individual in order to elicit responses on the basis of which a numerical score can be assigned.There were two tests in this research, pre-test and post-test.The tests were subjective form. Pre-test is a test to know and measure students' writing ability in recount text before the treatment given. Whereas, post-test was to measure students' writing ability after the treatment given. The tests were in the form of subjective test to measure of students' writing ability in recount text.

Table 3.2 The schedule of the test and treatment

No	Day and Date	Activities
1	Tuesday, 30 January 2018	• Explain about recount text • Doing pretest
2	Saturday, 3 February 2018	• Give treatment 1 explain definition, generic structures, and language feature of recount text by Edmodo • Discussion
3	Tuesday, 6 February 2018	• Give treatment 2 explain definition, generic structures, and language feature of recount text by Edmodo and identify the generic structure and language feature based on the topic "My Holiday" • Discussion about the text
4	Saturday, 10 February 2018	• Give treatment 2 explain definition, generic structures, and language feature of recount text by Edmodo and identify the generic structure and language feature based on the topic "Go to parangtritis beach" • Discussion about the text
5	Tuesday, 13 February 2018	• Explain about recount text • Doing posttest

To assess of students' writing ability the researcher set up analytic scoring rubric which include the criteria such as (1) Content, (2) Organization, (3) Vocabulary, (4) Grammar, and (5) Mechanics.

The researcher gave score to the students' writing by using scoring guide of writing according to Cohen (1994:328-329) in the following formula below:

Table 3.3scoring guide of writing

Aspect	Scores	Indicators
Content	5 (Excellent)	Main ideas started clearly and accurately, change of opinion very clear
	4 (Good)	Main ideas stated fairly clearly and accurately, change of opinion relatively clear
	3 (Average)	Main ideas somewhat unclear and inaccurate, change of opinion somewhat weak
	2 (Poor)	Main ideas not clear or accurate, change of opinion weak
	1 (Very Poor)	Main ideas not all clear or accurate, change of opinion very weak
Organization	5 (Excellent)	Well organized and perfectly coherent
	4 (Good)	Fairly well organized and generally coherent
	3 (Average)	Loosely organized but main ideas clear, logical but incomplete sequencing
	2 (Poor)	Ideas disconnected, lacks logical Sequencing
	1 (Very Poor)	No organization, incoherent
Vocabulary	5 (Excellent)	Very effective choice of words and use of idioms and word forms
	4 (Good)	Effective choice of words and use of idioms and word forms
	3 (Average)	Adequate choice of words but some misuse of vocabulary, idioms and word forms
	2 (Poor)	Limited range, confused use of words, idioms, and word forms
	1 (Very Poor)	Very limited range, very poor knowledge of words, idioms, and word forms
Grammar	5 (Excellent)	No errors, full control of complex structure
	4 (Good)	Almost no errors, good control of structure
	3 (Average)	Some errors, fair control of structure
	2 (Poor)	Many errors, poor control of structure
	1 (Very Poor)	Dominated by errors, no control of structure
Mechanics	5 (Excellent)	Mastery of spelling and punctuation
	4 (Good)	Few errors in spelling and punctuation
	3 (Average)	Fair number of spelling and punctuation errors
	2 (Poor)	Frequent errors in spelling and punctuation
	1 (Very Poor)	No control over spelling and punctuation

Score: $\dfrac{T\ t\ n\ g}{T\ m\ s} x100 = n$

D. Validity and Reliability

Validity and reliability is a part in conducting a research since the instrument will be used must be valid and reliable before using it to collect the data. In this study, the instrument (test) was valid and reliable by doing validity and reliability testing as follows:

1.   Validity

Validity is measuring what it is designed to measure.Acording to Frankel and Wallen (2005:113) that a valid instrument is measures what it is supposed to measure. Validityis the degree to which the test actually measure (Brown 2000:388).The researcher analyzed writing test from content validity, construct validity and face validity.

a.   Content validity

A test is said to have content validity if its contents constitutes a representative sample of the language skill, structures and etc. in other words, content validity is correspondence between curriculum objective and objectives being assessed. In this study, the test had have content validity because the test in this study was designed based on main competence and basic competence in Curriculum of 2013 since the school implements the Curriculum of 2013 in the time the researcher conducted this research.

Table 3.3: Main Competence and Basic Competence in Curriculum of 2013

Core Competence	Basic Competence
3. Understanding, implementing, analyzing factual, conceptual, and procedural knowledge based on the curiosity towards science, technology, art, culture, and humanity with the knowledge of humanism, nationalism, and civilization related to the cause of phenomena and events, and implementing the procedural knowledge in a specific field according to the skill and interest to overcome the problem.	**3.4** Analyzing social function, text structure, and language features in recount text related to the simple experience and events according to its context.
4. Analyzing, thinking, andperforming in both concrete andabstract field related to thedevelopment of what has beenlearnt in school individually, andbeing able to use the method basedon the theory in science.	**4.6**Composing simple written andspoken recount texts aboutactivity and events by concerningon the social function, textstructure, and language featurescorrectly according to its context.

b. Construct validity

Construct validity deals with the relationship between a test and a particular view of language and language learning (Johnson, 2001: 303). In this research used writing test.. In this study, the researcher tested the students' writing ability by writing test and the technique of scoring the students' is based on five aspects of writing, they are: content, organization, vocabulary, grammar, and mechanic. The researcher used analytic scoring by Cohen (1994:328-329).011:45).

c. Face validity

Face validity refers to the degree to which a test looks right, and appears to measure the knowledge or abilities it claims to measure, based on subjective judgment or the examinees who take it, the administrative personnel who decide on its use, and other psychometrically unsophisticated observeers(Brown, 2004). The test

was designed to measure students' writing skill, thus to achieve face validity the researcher uses face validity in this research by consulting with expert and lecturer.

2. Reliability

The reliability of the test is its consistency and dependable (Brown, 2003:20). According to Ary et al (2006:236) that reliability as the degree of consistency with which an instrument measureswhatever it is measuring. Thus, it can be said that a reliable test isconsistent and dependable. To make sure the instrument (test) was reliable, the researcher conducted a try-out for the test but in different subject before truly conducting this sample of research. It was done on Friday, 26th January 2018 in the IX G class. Then, the researcherto find out the reliability of students score which willcalculated of score the test in *Pearson Product Moment* in IBM SPSS Statistics 16. Table 3.3 showed the result of the try out and followed by the table 3.4 showing the statistical calculation of *Pearson Product Moment* from IBM SPSS Statistics 16.

Table 3.4The Statistical Correlation of Product-Moment

Correlations		
	RATER_1	RATER_2

RATER_1	Pearson Correlation	1	.703[**]
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	1539.027	751.243
	Covariance	42.751	20.868
	N	37	37
RATER_2	Pearson Correlation	.703[**]	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	751.243	741.189
	Covariance	20.868	20.589
	N	37	37

[**]. Correlation is significant at the 0.01 level (2-tailed).

The table showed that the result of Pearson Correlation is 0.703. It is conclude that the instrument was strong the positive correlation. Based on the result of statistical correlation, the instrument indicating that the correlation was strong respective positive, it could be concluded that the instrument were reliable.

E.   Data Collecting Method

Data collection method is an important aspect of the research. Data collection is all of process to collect data in the research (Fraenkel and Wallen, 2009:293).In this research, the data was collected through pretest and posttest. During two week study, exactly from January, 30th 2018 until February, 13th 2018 students followed instruction of the researcheron direct meeting.

1.   Pretest

A pre-test provides a measure on some attribute or characteristic that you assess for participant in an experimental before they receive treatment (Creswell: 2003). The purpose of this test is to know the student's ability before they gave the treatments. The students have to

answer the questions of pretest. The types of questions is essay, exactly is instruction.It was done on Tuesday, January 30th 2018. The topic of pretest is writing the happiest experience that decided by the researcher.

2. Treatment

The researcher gave the treatment in 3 times. Treatment here means instructional to write the one text that the researcher useEdmodo. Giving treatmenton, January 30th until February 10th 2018. Treatment will make the students' to get the motivation to get ideas or materials to write a recount text. That is the schedule of treatment.

Table 3.5 Steps the treatment of Edmodo
The first treatment on Saturday February, 3th 2018

Aspect	Teacher's activity	Students' activity
Pre activity	• Greeting • Check the attendance • Give the stimulation for students with the questions	• Give response of greeting • Answering • Answering the questions
Main activity	• Introduction about Edmodo and explain how to access and fiture of Edmodo • Give handout and explain of recount text, generic structure, language feature and give an example of Recount text	• Pay attention to the teacher's explanation • Give the response of the explanation
Closing	• Give the conclusion about the material • Closing	• Listen the explanation

Second treatment on Tuesday February, 6th 2018

Aspect	Teacher's activity	Students' activity
Pre activity	• Greeting • Check the attendance • Give the stimulation for students with the questions	• Give response of greeting • Answering • Answering the

		questions
Main activity	• Explain definition, generic structure, language feature and give an example of recount text by Edmodo • Asking the student to identify the generic structure based on the text in Edmodo	• Pay attention to the teacher's explanation • Give the response of the explanation
Closing	• Give the conclusion about the material • Closing	• Listen the explanation

Third treatment on Saturday February, 10th 2018

Aspect	Teacher's activity	Students' activity
Pre activity	• Greeting • Check the attendance • Give the stimulation for students with the questions	• Give response of greeting • Answering • Answering the questions
Main activity	• Explain definition, generic structure, language feature and give an example of recount text by Edmodo • Asking the student to write down recount text in Edmodo • Giving the comment and make conclusion about all of the materials	• Pay attention to the teacher's explanation • Doing the assignment • Students give the response
Closing	• Give the conclusion about the material • Closing	• Listen the explanation

3.   Posttest

A post-test is a measure on some attribute or characteristic that is assessedfor participants in an experiment after a treatment (Creswell, 2008: 301). This test is done after the students get treatment is taught by Edmodo in teaching English. The type of questions is same with pretest but different of the topic. The topic of posttest is the bad experiences. It was done on Tuesday, 13th February 2018. Before the students already to post their writing on Edmodo the researcher give evaluation and feedback about their writing last week. The researcher analyzed the students writing as final of the result of their writing.