

CHAPTER III

RESEARCH METHOD

3.1 Research Design

The research design in this study was quantitative method. The quantitative research is a research that collecting data by using statistical data. The aim of this research was to determine the effect of dictation method on students' writing ability in English for office. This research conducted in SMK PAB 2 Helvetia which located on Jalan Veteran Pasar IV Helvetia, Kecamatan. Sunggal, Kabupaten Deli Serdang, Medan, Sumatra Utara.

The research design used by researcher is quasi experimental with non-equivalent control group design. Quasi experimental is research that provides treatment and measures the effects of treatment but does not use random samples to conclude changes caused by the treatment. Quasi experimental involves at least two sample groups, namely the experiment sample group that is given treatment and one sample group as a control group that is not given treatment. Non-equivalent group design, uses a pre-test for the experimental and control groups whose results would be the basis for determining change. In this research design, experimental and control groups are not randomly determined, in this design experimental and control groups are compared, even though the groups are not randomly selected. Both groups are given a pre-test, then given treatment and then given a post-test.

This research conducted in two different classes. The first class was an experimental group. The second class was a control group. This research took the results of the pre-test and post-text values as a determinant of the effectiveness of Dictation Method on Students' Writing Ability in English for Office.

The researcher gave pre-test and post-test to measure change or effect in two groups. The pre-test was gives to the students in control class and experimental class before any treatment. The treatment was be given only to the experimental group. Then, the post-test was gives to both of the classes in order to determine the progress happened to both groups.

Tabel 3.1 Research Design

Pre-test	Treatment	Post-test
Experimental group	By using Dictation Method	Experimental group
Control group	By using conventional method	Control group

3.2 Population and Sample

3.2.1 Population

According to Arikunto (2010), population is the entire group of entities or persons to whom the results of a study are intended to apply. Population is a big group which the generalization can be made. It is well defined as a whole subjects, class of people, events or objects. The population of this research is all the students of SMK PAB 2 Helvetia which consist of 3 classes. Each class consist of 36, 39 untill 40 students. The total of population is 115 students.

Table 3.2 Population of Study

No	Class	Number of Students
1	X OTKP 1	39
2	X OTKP 2	40
3	X OTKP 3	36
	TOTAL	115

3.2.2 Sample

Arikunto (2010) stated that sample are a limited number of elements from a population to be representative of the population. The researcher divided two classes as the research sample grade X OTKP 1 as the experimental and OTKP 2 as the control class. Every sample consisted of 39 students and 40 students. The researcher used purposive sampling technique in this study, so the researcher only take two classes namely X OTKP 1 and X OTKP 2 as samples.

Table 3.3 Research Sample

No	Class	Number of Students
1	X OTKP 1	39
2	X OTKP 2	40
	TOTAL	79

3.3 Research Instruments

In this study, the researcher used 3 stages in to collect the data. They are :
Pre -Test, Treatment, and Post-Test.

3.3.1 Pre-Test

In this stage, the students were asked to do the writing test that was given by the teacher. So the students do their pre-test with their prior knowledge of writing by using dictation method.

3.3.2 Treatment

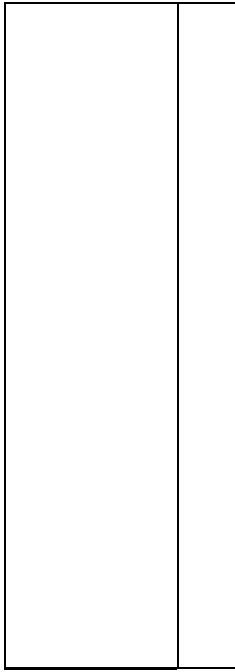
After the teacher found the writing result of the students, the teacher gave instruction or direction to the students, so the student knew how to write a correct writing by using dictation method.

Table 3.4 The Treatment in The Experimental Class

Meeting	Teacher's Activity	Student's Activity
I	Opening • The teacher greets the student • The teacher ask to student's opinion about introducing dictation	• The students answer the greeting. • Students gives their opinion orally

	method Main Activity • The teacher ask the student prior about writing • The teacher connect their discussion with writing using dictation method Closing The teacher end the lesson and telling the activity for next meeting	• The students mention kind of sentence based of their knowledge • The students pay attention to the teacher's explanation
II	Opening • Teacher greets the	• The students

	• students • Teacher asks the • students' understanding about • the material before. Main Activity • Teacher explain about dictation method • The teacher asks student to write down what the teacher has said Closing • The teacher end the lesson and telling the activity for next meeting	• answer the greeting • The students answer the teacher's question • The students pay attention to the teacher's explanation • The students write what teacher dictated



	Opening • Teacher greets the student. • Teacher asks the students' understanding about the material before. Main Activity • Teacher explain about dictation method • The teacher asks student to write down what the teacher has said Closing • The teacher end the lesson and telling the activity for next meeting	• The students answer the greeting • The students asks their difficulty to the teacher • The students pay attention to the teacher's explanation • The students write what teacher dictated
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IV	Opening • Teacher greets the students • Teacher asks about students' writing last meeting Main Activity • The students ask to apply dictation method in making at least 2 paragraph. • student to write an Analytical Exposition text Closing The teacher end the lesson	• The students answer the greeting • The students discusses their difficulty to the teacher • Students write what the teacher dictate
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Table 3.4 Treatment in The Control Class

First Meeting
Main Activity

Data Processing - The students gives their attention when the teacher dictate. Verification - The teacher gives direction about the characteristic of dictation and corrects the result of student presentation. Generalization - The students are asked to write down what the teacher has said.
• Closing - The teacher end the first meeting.

Second Meeting
• Opening The teacher gives greeting to the students
• Main Activity Data Processing - The students gives their attention when the teacher dictate. Verification - The teacher gives direction about the characteristic of dictation and corrects the result of student presentation. Generalization The students are asked to write down what the teacher has said.
• Closing - The teacher end the second meeting.

Third Meeting
• Opening The teacher gives greeting to the students
• Main Activity Explanation - The students gives an explanation of what and how to attention when writing text using dictation method. - The teacher explain how to apply the dictation method.
• Closing - The teacher end the third meeting.

Fourth Meeting
• Opening The teacher gives greeting to the students
• Main Activity Creativity - The students asks to apply dictation method in making a letter at least 1 paragraphs. Share - The students ask to write a letter base on what the teacher dictate.
• Closing - The teacher end the fourth meeting.

3.3.3 Post-Test

In this stage, the students were asked to re write a letter what the teacher dictated based on their knowledge that had been obtained from the teacher during the treatment in Experimental class and without treatment for control class.

3.4 Reliability and Validity

3.4.1 Reliability

Reliability refers to extend to which the test is consistent in its score and gives us an indication of how accurate the test score are (Hatch and Farhady, 1982: 244).

Inter-rater reliability is apply in this research in order to ensure the reliability of the score and to avoid the subjectively of the researcher. Before the instrument is given to the students, the researcher conduct trials to check the validity and reliability of the writing test. Based on Person's Moment formula

(Best and Khan, 2006:384) as presented below:

$$r = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{(N \sum X^2 - (\sum X)^2)(N \sum Y^2 - (\sum Y)^2)}}$$

Note :

- r = reliability coefficient
- $\sum X$ = sum of the first score
- $\sum Y$ = sum of the second the score
- $\sum X^2$ = sum of the squared first test score
- $\sum Y^2$ = sum of the product of second test score
- $\sum XY$ = sum of the products of paired first and second scores
- N = number of subjects

The rate of the value in the instrument reliability can be seen in the table below (Best and Khan, 2006:388).

Table 3.6 The Value of The Reliability Coefficient

Coefficient (r)	Relationship
0.00 to 0.20	Negligible
0.20 to 0.40	Low

0.40 to 0.60	Moderate
0.60 to 0.80	Substantial
0.80 to 1.00	High to very high

3.4.2 Validity

Moskal & Leydens (2000) defined the validity as the degree in which the evidence supports the interpretations of the data that are correct and the manner used appropriately. To find out the test was valid, the validity of the test was analyzed by using Correlation Point Biserial formula as presented below.

a) Validity Instrument

According to Sugiyono (2016: 173) valid means that the instrument can be used to measure what should be measured. In this study, the researcher used content validity and construct validity.

- Construct Validity

Construct validity is used to examine whether the test has a consistent representation with theories underlined the material given or not.

- Content Validity

Content validity is the process of how the test established the representativeness of the items in certain domain of the skill, tasks,

knowledge, and other aspects that are being measured (Wiersma and Jurs, 2005:328).

To give a score for the student's result in writing, the researcher used rubric assessment to examine that had been made by the students.

Table 3.7 Rubric Assessment of Writing by Using Dictation Method

Brown (2007)

Criteria	Score	Score Maximum
Generic Structure		
INTRODUCTION (Thesis)	15	15
ARGUMENT - Assertion - Extention (deeper analysis, fact, evidence, and other)	15 35	50
REITERATION	5	5
Grammatical Features		
• Using sentences with simple present tense or past tense	8	30
• Using internal conjunction / transactional signal	7	
• Using casual conjunction	7	
• Using related process	8	
Total		100

3.5 Technique of Data Collection

This study used a written test as data collection from the students. The experimental group and the control group was given the same pre-test to write text based on the topic dictation method provided by the researcher. After that the treatment was carried out in the experimental group, followed by giving a post test

to both groups to see the results of the effect of dictation method on writing ability in English for office.

Table 3.8 Assessment Aspect of Writing Ability

(adapted from Derewianka (2004: 23-27) in Darmadi (2015))

No	Aspect Assessed	Score				
		0	1	2	3	4
1	Vocabulary					
2	Content a. Title/goal/aim, heading and subheading b. Format c. Listing					
3	Spelling & Punctuation					
4	Creativity					
5	Consistency					
Total						
Maximum Score						

Explanation of score adapted from Jacobs et al in Febriani (2014: 51):

1. Vocabulary Score

- 0 = Almost total lack of vocabulary resources
- 1 = Limited vocabulary. Frequent errors of word/idiom form.
- 2 = The word choice is relevant to the topic
- 3 = Uses appropriate vocabulary
- 4 = Broad command of vocabulary

2. Content Score (Format, listing, title/goal/aim-heading-subheading)

- 0 = Poor handwriting; meaning confused.
- 1 = Logical but incomplete sequencing.
- 2 = Short instruction and to the point without title/heading

3 = Detail sequences activities in a list

4 = Cronological order of the steps in the planning process

3. Spelling and Punctuation Score

0 = Dominated by errors of spelling and punctuation

1 = Occasional errors of spelling and punctuation

2 = Few errors of spelling and punctuation

3 = Uses punctuation correctly

4 = Demonstrates mastery of spelling and punctuation

4. Creativity Score

0 = No organization

1 = Ideas confused or disconnected

2 = Loosely organized but main ideas stand out;

3 = Good at expressing ideas through doodling or sketching

4 = Organize and present well. Fluent expression and ideas clearly.

5. Consistency Score

0 = Stop using bullet journal

1 = Just writing for the first time and then never actually doing it

2 = Having it as part of the monthly schedule. Write it down on calendar.

3 = Writing in a consistent weekly spread.

4 = Write it down everyday to maintain dictation method as a habit

3.6 Technique of Data Analysis

To find out the effect of dictation method on students' writing ability in English for office and to calculate the results of the data, researcher used the T-test formula as follow:

$$t = \frac{Mx - My}{\left(\frac{dx^2 + dy^2}{Nx + Ny - 2} \right) \left(\frac{1}{Nx} + \frac{1}{Ny} \right)}$$

t : The value of t-calculated

Mx : The mean of experimental group

My : The mean of control group

dx : The standard deviation of experimental group

dy : The standard deviation of control group

Nx : The total of samples of experimental group

Ny : The total number of samples of control group