CHAPTER III

RESEARCH METHODOLOGY

A. Research Method

The aims of the research is to find out whether the learners who are taught by using Gallery Walk technique can effected to the students ability in writing announcement text than learners who are taught by using lecture method. In this study, researcher uses quantitative research methods. According to Sugiyono, the quantitative research methods are used to research certain populations or samples, sampling technique is generally done randomly, the data collection using research intruments, the characteristic data analysis is statistical with the purposes to test the hypothesis that has been set.[1] It means that the writer collects and analyz's the data statistically. The research uses experimental design. Experimental design is a quantitative research design the aims to got the correlation of cause and effect clearly between some factors of causes with problem or condition.

In this study, the researcher uses pre-test post-test control group design to know the ability of students skill in writing announcement text. It includes in true experimental design. True experiments comprise the most rigorous and strong experimental designs because of equating the groups through

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[1] Sugiyono, *Metode Peneltian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D)* (Bandung: Alfabet, cv, 2015), 14.

random assignment.[2] True experimental research is the most accurate form of experimental research design as it relies on statistical analysis to prove or disprove a hypothesis. It is the only type of Experimental Design that can establish a cause-effect relationship within a groups. The design of this study is presented by the following design :

$$\text{E} \quad \text{O}_1 \quad \text{X} \quad \text{O}_2$$
$$\text{C} \quad \text{O}_3 \quad \text{Y} \quad \text{O}_4$$

Where :

E   : Experimental group

C   : Control group

O_1 : Pre-test for the experimental group

O_2 : Post-test for the experimental group

O_3 : Pre-test for the control group

O_4 : Post-test for the control group

X   : Treatment using Gallery Walk technique

Y   : Treatment without Gallery Walk technique

(Tuckman and Harper)[3]

There are two groups that got different treatments. The first group which was taught using Gallery Walk technique. The second group is control group which was taught using lecture method. After the two groups given the

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[2] John W. Creswell, *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research-4th Edition*, (USA: Pearson, 2011), 309.

[3] Bruce W. Tuckman and Brian E. Harper, *Conducting Educational Research: Sixth Edition*, (USA: Rowman & Littlefield Publishers, Inc., 2012), 153.

different treatments, the researcher gives the test to the experimental and control groups.

B. Place and Time of Research

This research is conducted on April 29, 2019 to May 17, 2019 at tenth grade students of SMKN 3 Serang City in The Academic Year 2018/2019. SMKN 3 Serang City is located in Kimara Street No. 1, Walantaka, Serang City, zip code: 42183.

C. Variable of the Research

This research had two variable, they were independent variable and dependent variable.

1. Independent variable of this research is *Gallery Walk Technique In Teaching Writing Announcement Text*. This technique is applied to know the achievement writing ability of announcement text who are taught using Gallery Walk technique in Tenth grade students at SMKN 3 Serang City.

2. Dependent variable is *The Students Writing Ability In Announcement Text*. It is expetation that students can be express their idea in writing announcement text in English language.

D.   Population, Sample, and Technique Sampling

1.   Population

Sugiyono says that "Population is a region of generalization consisting of objects or subjects that have certain qualities and characteristics which determined by researcher to be studied and conclusions drawn."[4] The population of this study is the tenth grade students of SMKN 3 Serang City in the Academic Year of 2018/2019 which are divided into various department in the very class: X Office Administration-1, X Office Administration-2, X Office Administration-3, X Accounting-1, X Accounting-2, X Multimedia-1, X Multimedia-2, X-Computer network Engineering-1, X Computer Network Engineering-2, X Banking, X-Culinery Art, and X-Motorcycle.

2.   Sample

According to Sugiyono "Sample is part of the number and characteristics possessed by the population."[5] Fraenkel and Wallen also give similar definition of sample, they said that a sample in a research study is the group on which information is obtained.[6] In this research, the sample of the study were class X Accounting-1 as the experiment group and class X Accounting-2 as the control group. And those two classes were randomly selected by researchers.

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[4] Sugiyono, *Metode Penelitian Pendidikan*, 117.
[5] Sugiyono, *Metode Penelitian Pendidikan*, 118.
[6] Jack R. Fraenkel and Norman E. Wallen, *How to Design and Evaluate Research in Education: Sixth Edition* (New York: McGraw-Hill, 2006), 92.

3. Technique Sampling

Basically, sampling techniques can be grouped in two, that is Probability Sampling (Random Sampling) and Non-Probality Samping (Non-Random Sampling).[7]

In this research, researcher took the sample by using random sampling. In doing this research, the research got two classes as the sample takes randomly by using lottery technique.

Here are steps in determining sample by using random sampling from lottery technique :

1) First, the paper of of twelve classes is prepared, X AP-1, X AP-2, X AP-3, X AK-1, X AK-2, X MM-1, X MM-2, X TKJ-1, X TKJ-2, X PB, X JB, X TSM.

2) Next, those pieces of paper were rolled and put them into a box.

3) Then the box was shaken until the first rolled-paper comes out of it and then this rolled-paper would be determined as the experiment class

4) The last, the box was shaken again until rolled-paper comes out of it and then this rolled-paper would be determined as the control class.

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[7] Sugiyono, *Metode Penelitian Pendidikan*, 119.

Based on the steps above, the experiment class will be taught using the Gallery Walks technique, while the control class will not be taught using the Gallery Walk technique.

E.   Instrument for Collecting Data

Research instruments are simply devices for obtaining information relevant for research project, and there are many alternatives from which to choose. The kinds of instrument, such as: (1) Questionnaire, (2) Observation Sheet, (3) Sheet of Interview, and (4) Test.[8]

In this study, the researcher used Writing Test as the instrument because this instrument is the most appropriate instrument to measure the students mastery in writing announcement text.

F.   Technique for Data Collection

In this research design the researcher used in this study, in collecting data, the researcher took the students scores in writing announcement text through pre-test and post-test. The following are the steps in collecting the data in this study :

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[8] David Wilkinson and Peter Birmingham, *Using Research Intruments: A Guide for Researchers* (New York: RoutledgeFalmer Taylor & Francis Group, 20013), 3.

1. Pre-test

    Pre-test is undertaken for the first step in a form of writing test. It is given before the students were given the treatment. Before starting the experiment, a pre-test was administered to the samples of both groups with the same items. The kind of the researcher give is an essai test where they will choose the topic already by teacher. Then their test is checked and colleted as the pre-test data and give the score. The purpose of the pre-test was to know the basic or prior knowledge and students skill in writing announcement text.

    Procedure before starting the Pre-Test :

    a. The teacher tells the students that will be held Pre-test today.

    b. The teacher prepares the students worksheet before starting the Pre-test.

    c. The teacher convey the exam instructions that will be held.

    d. The teacher convey the time to test that will be held.

    e. The teacher allows students to start working on the Pre-test.

2. Treatment

    Some treatment were given after conducting the pre-test to the experimental and control group. The experimental group and control group were taught by using the same materials but different treatment. The experimental group was taught by using Gallery Walk technique while the control group taught by using lecture method.

The treatment is conduct after the admintiration of pre-test. The teacher taught the presentation to the experimental group by the following procedures.

Table 3.1

The Treatment for Experimental Group

Steps	Experimental Group (Using Gallery Walk Technique)	
	Teacher Activity	**Students Activity**
1	**Pre-Test**	**Pre-Test**
	• Teacher greets the students and told the students that will be held Pre-test today.	• The students give a response for the teachers greeting and response for assignments given by the teacher.
2	**Treatment**	**Treatment**
	Giving Information • The teacher and the students discuss how to use the Gallery Walk Technique in writing activity.	• Students listen to the teacher.

	Grouping	
	• The class in dived into 5-6 group.	• Students sit in the groups.
	• In class there will be five-six stations, each station will be provide with Announcement Text and question.	• Every groups writer Announcement Text and some questions.
	• Each group will rotate from station one to five.	• Every groups answering all questions. There will be class discussion.
	• Then they go back to their groups and do a class discussion.	• This time they give feedback or comment to the other groups works.
		• Students try to make Announcement Text. Teacher and students review the material and make a conclusion.
3	**Post-Test**	**Post-Test**
	Individual	

	• Students try to make their own Announcement Text in worksheet. • After the time is out, teacher collects the paper students.	• Students write Announcement Text in their worksheet. • The students give their worksheet.

The teaching learning process that was applied in the control group by using without Gallery Walk Technique can be described as follows :

Table 3.2

The Treatment for Control Group

Steps	Control Group (Using without Gallery Walk Technique)	
	Teacher Activity	**Students Activity**
1	**Pre-Test**	**Pre-Test**
	• Teacher greets the students and told the students that will be held Pre-test today.	• The students give a response for the teachers greeting and response for assignments given by the teacher.

2	Treatment	Treatment
	Giving Information • The teacher explain about Anoouncement Text. • Teacher gives the example of Announcement Text. • Discuss the format of Announcement Text with the students and ask students analysis. • Review again about Announcement Text.	• Students listen to the teacher and write teachers explanation on the their note book. • Students read the example. • Explain the generic structure of Announcement Text. • Pay attention to the teacher.
3	Post-Test	Post-Test
	Individual • Students try to make their own Announcement Text in worksheet. • After the time is out, teacher collects the paper students.	• The students write Announcement Text in their worksheet based on the topic provide before. • The students give their worksheet.

3. Post-test

Post-test is conducted after the students were given the treatment. It is in the same form like pre-test, that is in a form of writing test. The kind of the researcher give is an essay test where they will choose the topic already by teacher. Post test will give to know differences score between experimental and control group. The purpose of the post-test is to measure the students skill in writing in announcement text after they got the treatment.

Procedure before starting the Post-Test :

a. The teacher tells the students that will be held Post-test today.

b. The teacher prepares the students worksheet before starting the Post-test.

c. The teacher convey the exam instructions that will be held.

d. The teacher convey the time to test that will be held.

e. The teacher allows students to start working on the Post-test.

4. Scoring System

In facilitating the analysis of the students test result in writing announcement text of the two groups, experimental and control groups, the researcher limited only to the analytic scale as stated by Brown and Bailey (1984) in book Brown in titled "Language Assessment":[9]

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[9] Brown, *Language Assessment*, 244-245.

Table 3.3

Scoring Guidance and The explanation Criteria

Aspect	Score	Criteria
1. Organization: Introduction, body, and conclusion	20-18	Appropriate title, effective introductory paragraph, topic is stated, leads to body; arrangement of material shows plan (could be outlined by readers); supporting evidence given for generalization; conclucion logical and complete
	17-15	Adequate title, introduction and conclusion; body of essay is acceptable, but some evidences may be lacking, some ideas are not fully developed; sequence is logical but transitional expression may be absent or misused
	14-12	Mediocre introduction or conclusion; problems with the order of ideas in body; the generalization may not be fully supported by the evidence given;

		problems of organization interfere
	11-6	Less recognizable introduction; organization can barely be seen; severe problems with ordering of ideas; lack of supporting evidence; conclusion weak or illogical; inadequate effort at organization
	5-1	Absent of introduction and conclusion; no apparent organization of body; severe lack of supporting evidence; writer has not made any effort to organize the composition (could not be outlined by reader)
2. Logical development of ideas: Content	20-18	Essay addresses the assigned topic; the ideas are concrete and thoroughly developed; no extraneous material; essay reflect thought
	17-15	Essay addresses the issues but misses some points; ideas could be more developed; some extraneous material is present

	14-12	Development of ideas not complete or essay is somewhat out off the topic; paragraphs are not divided exactly right
	11-6	Ideas incomplete; essay does not reflect careful thinking or was hurriedly written; inadequate of effort in area of content
	5-1	Numerous serious mistakes, no mastery of sentence construction, almost intelligible.
3. Grammar: Language Use	20-18	Native like fluency in English grammar; correct use of relative clauses, preposition, modals, articles, verb form and tense sequencing; no fragments or run on sentence
	17-15	Advance profiency in English grammar; some grammar problems do not influence communication, although the reader is aware of them; no fragment of run on sentence

	14-12	Ideas are getting through to the reader, but grammar problems are apparent and have negative effect on communication; run on sentence or fragment present
	11-6	Numerous serious grammar problems interfere with communication of the writer's ideas; grammar review of some areas clearly needed; difficult to read sentences
	5-1	Severe grammar problems interfere greatly with the message; reader cannot understand what the writer was trying to say; unintelligible sentence structure
4. Mechanics: Punctuation, spelling	20-18	Correct use of English writing conventions: left and right margins, all needed capitals, paragraph intended, punctuation and spelling; very neat
	17-15	Some problems with writing conventions or punctuation;

		occasionally spelling errors; left margin correct; paper is neat legible
	14-12	Uses general writing conventions but has errors; spelling problems distract reader; punctuation errors interfere with ideas
	11-6	Serious problems with format of paper; part of essay not legible; errors in sentence punctuation and final punctuation; unacceptable to educated reader
	5-1	Complete disregard of English writing convention; paper illegible; obvious capital missing, no margins; severe spelling problems
5. Style and quality of expression: Vocabulary	20-18	Precise vocabulary usage; use of parallel structures; concise; register good
	17-15	Attempts variety; good vocabulary; not wordy, register OK; style fairly concise

	14-12	Some vocabulary misused; lack awareness of register; may be too wordy
	11-6	Poor expression of ideas; problems in vocabulary; lack variety of structure
	5-1	Inappropriate use of vocabulary, no concept of register or sentence variety

Based on the table of scoring above, the researcher used the classification of students achievement according to Harris cited by Tristy.[10] The classification is as follow :

Table 3.4

Classification of Students Achievement

Test Score	Level of Achievement
80-100	Good to Excellent
60-79	Average to good
50-59	Poor to average
0-49	Poor

[10] Retana Tartila Tristy, "Improving Students Skill In Writing Report Text With All About Animals VCD", (Ph.D. Thesis, University of Semarang, Semarang, 2010), p. 26.

G.   Method of Analyzing Data

The next step is analyzing the result of the data. This is used to process the data in order to establish valuable and meaningful information so that further interpretation could be done. The writer used T-test to find out the differences between the students scores who has been taken. This study was analyzed based on the quantitative data from the students' tests result.

1.   Normality Test

Normality test will be done towards two classes; those are experiment class and control class. Normality test is one of the important requirements that might be followed in analyzing the data of the research. It is done to examine if the distribution of data collected is normal or not. Then, if the normality score is more than 0.05, it could be said that the data distribution were normal. On the contrary, if the score of normality test showed less than 0.05, it could be said that the data distributions were not normal. This is *Lilliefors* test (by significant 0,05) using the following formula is used to know the normality of the data.[11]

$$Lo = F(Zi) - S(Zi)$$

Specification :

Lo   : The higest absolute value

F(Zi)   : Opportunities figure raw

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[11] Kadir, *Statistika : Untuk Penelitian Ilmu-Ilmu Sosial*, (Jakarta: Rosemata Sampurna, 2005), 107.

S(Zi)   : Proportions figure raw

Normality testing criteria :

If Ltable > Lobserve , so the data distribution are normal.

If Ltable < Lobserve, so the data distribution are not normal.

2. Hypothesis Test

For the hypothesis test, the researcher uses T-Test to find out whether there are the differences between two variables in this study. After gaining the t-value, the writer compares T-value and T-table using formula for the manual calculation as Sudjiono stated on his book as follows:[12]

1. Determining mean of variable X1 with formula as follows :

$$M_1 = \frac{\sum X_1}{N_1}$$

2. Determining mean of variable X2 with formula as follows :

$$M_2 = \frac{\sum X_2}{N_2}$$

3. Counting standard of deviation score variable X1 with formula as follows :

$$X_1 = X_1 - M_1$$

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[12] Anas Sudijono, *Pengantar Statistik Pendidikan*, (Jakarta: PT RajawaliGrafindo Persada, 2017), 317.

4. Counting standard of deviation score variable X2 with formula as follows :

$$X_2 = X_2 - M_2$$

5. Testing normality of data by using *Lilliefors* method with formula as follows :

$$Z = \frac{X - \overline{X}}{SD}$$

6. Counting degree of freedom with formula as follows :

$$Df = N_1 + N_2 - 2$$

7. Analyzing and comparing the result of post-test from both groups by using t-test formula as follows :

$$t_0 = \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right)\left(\frac{N_1 + N_2}{N_1 . N_2}\right)}}$$

M_1 = Mean score of the experiment class

M_2 = Mean score of the control class

$\sum x_1^2$ = Sum of square deviation score in experiment class

$\sum x_2^2$ = Sum of square deviation score in control class

N_1 = Number of students of experiment class

N_2 = Number of students of control class

2 = Constant number