CHAPTER III

METHOD OF THE RESEACH

A. Design of the Research

The design of this research is an experimental research. According to Gay and Airasian (2000, p. 367), experimental research is the only type of the research that can test hypothesis to establish cause and effects relationship. Creswell (2012, p. 309) stated that there are three kinds of experimental design; true, quasi, and pre-experimental research. This research is quasi-experiment research by using non equivalent control group design. The non equivalent control group design involves random assignment of intact groups to treatments, not random assignment of individuals. The writer will assign groups into experimental and control class, administers a pre-test to both groups, and conducts the treatments (Content Purpose Audience) with the experimental group only, finally administers a post-test to assess the differences between two groups (experimental and control).

There are two variables used in this research. The first is CPA strategy (X), and the second is the students' writing ability (Y). This research will use control and experimental class. Both of the classes will be given pre-test, treatment, and post-test. Meanwhile, the control class will be treated without usingCPA strategy and the experimental will be treated by using CPA strategy. The design as Cohen et al (2007, p. 283) can be seen in the table below.

26

Table III. 1

Table of Research Design

Group	Pre-test	Treatment	Post-test
Experimental class	O_1	X	O_2
Control class	O_3	-	O_4

Where O_1 : Pre-test for experimental group

O_2 : Pos-test for experimental group

X : Treatment

O_3 : Pre-test for control group

O_4 : Post-test for control group

B. The Time and Location of the Research

This research will be conducted on March to May 2019 at Vocational High School Ibnu Taimiyah Pekanbaru. It is located on Jl. Angkatan 66, Pekanbaru.

C. The Subject and Object of the Research

The subject of this research is the students grade eleventh of Vocational High School Ibnu Taimiyah Pekanbaru. The object of this research is using CPA strategy on students' writing ability on Expository Paragraph

D. The population and Sample of the Research

1. Population of the Research

The population of this research is the eleventh grade students of Vocational High School Ibnu Taimiyah Pekanbaru in 2018/2019 academic year, there are five classes. The total number of eleventh grade students of Vocational High School Ibnu Taimiyah Pekanbaru is 58 students.

Table III. 2

The Population of the First Year Students at Vocational High School Pekanbaru

Number	Classes	Population		Total
		Male	**Female**	
1	AK	9	11	20
2	SK	4	16	20
3	PH	19	10	20
4	MM	9	11	20
5	TKJ	25	7	32
TOTAL				112

2. Sample of the Research

Based on the total population above, the researcher will take sample by using cluster sampling. Gay (2000, p. 394) said that cluster sampling randomly select groups, not individuals. Therefore, the

researcher will select groups of students to be the samples of the research. They were the students of X AK as the experimental group and X SK as the control group.

Here the researcher uses the cards. The total card is based on how many classes of tenth grade students at Vocational High School Ibnu Taimiyah Pekanbaru. It means, there are five cards use and each card is written with the name o classes. The researchermixed and choose randomly one card as sample. The specification of the research sample can be seen on the following table:

Table III. 3

The Sample of the Research at Vocational High School Ibnu Taimiyah

Pekanbaru

Number	Classes	Population		Total
		Male	Female	
1	AK	9	11	20
2	SK	4	16	20
Total				40

E. Technique of Collecting Data

In this research, the researcher will use observation and test to collect the data. The observation is done in purposing of getting the data about the implementation Content Purpose Audience Strategy on students' writing ability.

Therefore, the English teacher observed the researcher for four meetings in experimental class. It could be described in the tables presenting frequency distribution of each observation. Furthermore, the researcher used the following formula to get the percentage of the observation Sudijono(2007, p. 43):

$$P = \frac{F}{N} \; X \; 100\%$$

Where : P   : Percentage

         F   : Frequency of the score

         N   : Number of Case

Then, the test is used to find out the students' writing ability. The test that is given is writing essay.The data of this research is the score of the students' writing ability obtained by usingtest. As stated by Brown (2007, p. 3) test means that a method ofmeasuring of a person's ability, knowledge or performance in given domain. In this research, test is divided into two ways that is pre-test at the beginning of the research or before the treatment. Whereas, post-test is given at the end of the research or after the treatment conducted.

Before doing pre-test and post-test in experimental and control class, the questions are given to the class chosen as try-out class in order to check whether the test is valid and reliable or not in the questions that are used as instrument.

F.   Validity and Reliability

The quality of instrument is very crucial. It should be valid and reliable. Thus, the researcher will use a number of procedures to measure theirinstrument use.

1. Validity

The tests used to test students' writing ability should valid and reliable. The test can be valid if it measures accurately what it is intended to measure (Hughes, 2007:26). It means that the valid test should be appropriate, meaningful, and useful. In this research, thewriter used content of validity to know the validity of writing ability test. Hughes also stated that a test issaid to have content validity if its content constitutes sample of the language skill, structures and etc.

Thus, the test was given based on the material studied by the students.the writer used the materials tested based on the materials that they learned. It was about expository paragraph. It was clear to explain that the tests taken for this research were valid.The index of writing descriptive paragraph test in this research was based on these categories, as follows:

a. Completing blank texts in short essay of expository paragraph.

b. Arranging sentence becomes functional text in writing expository paragraph.

c. Writing an essay in English writing expository paragraph form.

2. Reliability of the test

A test must first be reliable as meaning instrument. Reliability is a necessary characteristic of good test. According to Brown (2004:20), a reliable test is consistent and dependable. Reliability has to do with accuracy of measurement. Hughes (2003:44) stated that there are 2

components of test reliability: the performance of candidates from occasion to occasion and the reliability of the scoring.

There are some factors influencing the reliability of the test result. They are students-related reliability, rater reliability (inter-rater reliability and intra-rater reliability), test administration and test reliability (Brown, 2004:21). In this case, the rater used rater reliability especially inter-rater reliability because the score gotten from the test were evaluated by two raters, of course, the score given were different.

G. The Normality and Homogeneity Test

1. The Normality of the Test

In order to know whether the data has normal distribution or not, the researcher used Kolmogorof-Smirnov method as the formula to analyze the data. In this research, the researcher analyzed the data by using SPSS (Statistical Product and Service Solutions) 17.0. version program.

2. The Homogeneity of the test

According to Siregar (2013, p.167), the purpose of homogeneity test is to find out whether the object of the research has the same variance or not. The researcher assessed the homogeneity of data by using SPSS 1

H. Technique of Data Analysis

1. Normality and Homogenity

Before analyzing the data by using t-test formula, the researcher has to find out the normality test of the data. The normality test of the data is analyzed by using Kolmogorov-Smirnove technique with SPSS 17 version.

Analysis:

H_o: population with normal distribution

H_a : population with not normal distribution

If the probability > 0.05 H_o is accepted

If the probability < 0.05 H_o is rejected

Then, the researcher also has to find out the homogeneity of the test. To analyze the homogeneity is by comparing sig. in Based on trimmed mean with 0.05.

Analysis:

Sig. > 0.05 the data is homogenous

Sig. < 0.05 the data is not homogenous

2. Analysis Data of Independent Sample T- test

In analyzing the data, the researcher will use the score both pre-test and post-test of the students from experimental and control classes. In order to find out either there is a significant effect of using content purpose audience (CPA) Strategy on students' speaking ability or not.The data is analyzed by using Independent sample t-test. In taking the

result, the researcher concludesby comparing t-observed with significant value.

Analysis:

H_o: sig. (2 tailed)<significant value

H_a: sig. (2 tailed)>significant value

- H_o is accepted if sig. (2 tailed)<significant value or there is no significant effect of using Content Purpose Audience (CPA) on students' writingability at the eleventh grade students of Vocational High School Ibnu Taimiyah Pekanbaru.

- H_a is accepted if sig. (2 tailed)>significant value or there is a significant effect of using Content Purpose Audience (CPA) on students' writingability at the eleventh grade students of Vocational High School Ibnu Taimiyah Pekanbaru.

To identify the level effect of using content purpose audience (CPA) strategy on students' listening comprehension of the eleventh grade of Vocational High School Ibnu Taimiyah Pekanbaru, it was calculated by using eta squared formula and the guidelines from Cohen as follows,

Eta Square (η^2)

$$\eta^2 = \frac{t^2}{t^2 + (n_1 + n_2 - 2)}$$

Where: t   : value of t test
                    N1   : number of students of first group

N2   : number of students of second group

Then, according to Cohen(1988 in pallant, 2005:209). The

guidlines for interpreting the value of eta sequare are as follow:

Table III. 4
Effect Size Guidelines

0.01= Small Effect
0.06= Moderate Effect
0.14 = Large Effect