

## **CHAPTER III**

### **RESEARCH METHOD**

In this chapter discusses about the research design, respondent of the study, research instrument, data collecting method, data analysis technique and validity and reliability testing. The explanation of each item would be discussed as follow:

#### **A. Research Design**

The approach of this study was applied descriptive quantitative with survey design. According to Creswell (2013:18) a descriptive survey is a research design that intended to describe quantitatively the tendency, behavior, opinion of a certain population by taking some samples as the representation. Surveys permit the researcher to summarize the characteristics of different groups or to measure their attitude and opinion toward some issues ( Ary et al, 2010:372). Descriptive survey design is suitable to be used because it aims to describe the condition of the population. Lidico in Ary et al, (2010) stated that survey research has some purposes those are; gathering opinion, beliefs, or perception about current issue from a large of people. In educational research, these issues can be wide ranging and may include school improvement and classroom instructional.

Related with purposes of survey research, this survey research is intended to describe the students' perspectives on the use of Vlog media at SMK Negeri 01 Pagerwojo.

## **B. Respondent of The Research**

The respondent of this research were thirty one students of X DPIB 1 at SMK Negeri 01 Pagerwojo that designed the vlog. According to Lisa M Given (2008), respondents are those persons who have been invited to participate in particular study and have actually taken part in the study. The reason why X DPIB 1 was chosen as the respondent was because they agreed to be respondents and they were familiar before about Vlog.

## **C. Research Instrument**

Research instrument is the tools that the researcher uses to collect the data. According to Fraenkel and Wallen (2013:111) instrument is the devices such as: pencil-and-paper test, a questionnaire or rating a scale that the researcher uses to collect the data. There are two types of instruments employed in this study, they are questionnaire and interview.

### **. 1. Questionnaire**

The first instrument is use in this study is questionnaire. It is used to investigate the students' perceptive on the use of the Vlog media at SMK Negeri 01 Pagerwojo. The respondent directly supplies his or her own answer to set of statements.

According to Riski Sari Aninda (2016) on her research, the researcher used of the structured questionnaire that distributed by translating into bahasa Indonesia. After distributed the questionnaire, the researcher used in closed form contain of Likert scale. It also provided five choices of response for the respondents in answering the questionnaire. Kinds of the answers are, strongly agree, agree, neutral, disagree and strongly disagree. The likert scale was chosen because this study intended to measure about the people views or perception.

According to Adams (2008:21) the most commonly used attitude or opinion scale is likert scale. The table bellow showed the score for each rating scales.

**The Table 3.1 Score For Each Likert Scales**

No	Scale	Score
1	Strongly Agree	5
2	Agree	4
3	Neutral	3
4	Disagree	3
5	Strongly Disagree	1

The questionnaire was in the form of statements that drawn based on the theory. It contains of 20 statements. There are 4 (four) items asked about teaching and learning process. Next, 7 (seven) items asked about the process of creating Vlog. Then, 9 (nine) items asked about students' perception on the use Vlog media . The questionnaires were administered

by using bahasa Indonesia in order to make the respondents understand about the whole statements.

## 2. Interview

In other hand, the researcher also used interview as the way to collect data. It is as additional information from the students. As stated by Leedy and Ormrod (2001) state in quantitative research (survey research), interviews are more structured than in qualitative research. In a structured interview, the researcher asks a standard Set of questions and nothing more. So, during interview process the researcher used interview guided.

## **D. Data Collecting Method**

The data started to be collected after the students finished their Vlog. This research used survey method as the method of gathering data. According Ary, Jacobs and Sorensen (2010), there were six steps which should be done when the research uses survey method. The first step was planning. Before the questionnaires and the interviews were conducted, the researcher confirmed that the statements were understandable. The statements were made in order to answer the research problem. The research problem of this research was “How are students’ perspectives on the use of *Vlog* media for speaking class at SMK Negeri 01 Pagerwojo.

The second step was to define the population. After deciding the population, the researcher did sampling to choose the respondents. The

respondents were thirty one students for questionnaires and two students for interview.

The next step was defining the instruments. The instruments to gather the data were questionnaires and interviews. Then, the researcher distributed the questionnaires to respondent of the students X DPIB 1at SMK 01 Pagerwojo. After distributing the questionnaires, the researcher did interview with two participants.

Last step was processing the data. The researcher analyzed the answer to interpret the information. The data were summarized in the form of descriptions, so the researcher was able to conclude the data and the research problem was answered.

#### **E. Data Analysis Technique**

After collecting the data from the students, the next step is analyzing the data. The purpose of the data analysis is to give the meaning and finding the essence of the numbers in the data itself.

##### 1. Questionnaire

The first of the data analysis is making the interpretation by finding the maximum (X) and minimum (Y) score by using the formula follow:

$X = \text{The maximum likert score (5) x total respondent}$ $Y = \text{The minimum likert score (1) x total respondent}$
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From those formula can be calculated that the maximum score in this study is 135 and the minimum score, and the minimum score 38.

After knowing the maximal and the minimum score, the next step is calculating the total score for each item.

In order to compute the data, the researcher used Microsoft Excel to calculate the result form of percentage by using the formula:

Percentage Data:

$$\text{Index \%} = \frac{\text{TS}}{X} \times 100$$

Notes :

TS = total score for each items

X = maximum score

After getting the percentage result, the next step is finding the category for the result of each items weather it means strongly agree, agree, neutral, disagree or strongly disagree. The interpretation for each percentage data can be shown in the table 3.2

**Table 3.2 The Category for each Result of Precentage Data**

<b>Indeks</b>	<b>Notes</b>
0 % - 19,99%	Strongly Disagree
20 % - 39,99 %	Disagree
40 % - 59, 99 %	Neutral
60 % - 79, 99 %	Agree
80 % - 100%	Strongly Agree

After knowing the result of index value and the category of each item, the last step is the researcher categorizes the result of answers from all items in the questionnaire.

## 2. Interview guidance

The researcher used a recorder to collect the information from the interviews, then, the researcher made the transcript by listening to recorder repeatedly. Next, the researcher concluded the important points of the interviews which supported the research. It was showed in a written form to answer the researcher problem. That information related to the students' perception on the Vlog in their speaking class was presented in the form of description to make the readers noticed easily.

#### **F. Validity and Reliability Testing**

Validity and reliability of instrument are integral parts in conducting a study since the instrument which will be used must be valid and reliable before using it to collect the data. Because of the questionnaire and interview from adopted previous research and here to make sure validity and reliability, in this research the researcher was doing validity and reliability testing as follows:

##### **1. Validity**

Validity is measuring what it is designed to be measured. In language testing, Brown (2004:22) defines validity as the extent to which inference made from assessment results are appropriate, meaningful, and useful in terms of the purpose of assessment. Before conducting the research, the researcher will

ascertain that the instrument had three kinds of validity as follows:

a. Construct Validity

To understand the definition of construct validity, it is first necessary to understand what a construct is. According to James Dean (2000) a construct or psychological construct as it is also called, is an attribute, proficiency, ability or skill that happens in the human brain and is defined by established theories. In addition, the test items developer should provide evidence that the scores really reflect the construct, by reviewing the theory and the previous studies (Ary et al., 2010:231). So, it should be measured to prove that some items in the instrument measure the construct that was designed to measure and it was not some other theoretically unrelated of the construct. In this study the construct provided in the Blue Print deal with expert from Riski Sari Aninda (2016).

The Blue Print is used to create the formation of the instrument. In this research, the questionnaire had high construct validity if it contains the statements investigating the students' perception of applying vlog media for speaking class.

b. 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 (Brown, 2004:26).

The questionnaire in this research is used to investigate the students' perception. After that, to achieve validity the researcher provided statements asked about the students' perceptions of applying vlog media for speaking class.

### c. Content validity

Content validity is requires the test takers to perform the behavior that is being measured (Brown, 2004:22). The purpose of this study is to investigate the students' perception about the use of vlog media for speaking class at SMK Negeri 1 Pagerwojo and statements in this questionnaire related to the purpose of this study. That is asking about the students' opinion about applying vlog media. Before being used as an instrument, the researcher gave the questionnaire to X DPIB 1 as a trial. They are chosen because of the teacher in their class said that students were familiar of vlog. So they could give the response in the questionnaire well. After got the students' score for each statement the researcher calculated the validity for each items in the questionnaire by using Pearson Product Moment in IBM SPSS 17.

Each items are considered to be valid if the value of  $r_{obtained} > r_{table}$ . From 31 (N) samples with significance level 5% the  $r$

table was 0,355. The result of its calculation is summarizing in the table 3.2 below:

**Table 3.2: The Result of Validity Testing for Each Item.**

	r-obtained	r-table (N=15, $\alpha= 5\%$ )	Notes
Item 1	0,593	0,355	Valid
Item 2	0, 483	0,355	Valid
Item 3	0,626	0,355	Valid
Item 4	0,424	0,355	Valid
Item 5	0, 615	0,355	Valid
Item 6	0, 683	0,355	Valid
Item 7	0,783	0,355	Valid
Item 8	0,694	0,355	Valid
Item 9	0,468	0,355	Valid
Item 10	0, 458	0,355	Valid
Item 11	0,747	0,355	Valid
Item 12	0, 633	0,355	Valid
Item 13	0,610	0,355	Valid
Item 14	0,503	0,355	Valid
Item 15	0,566	0,355	Valid
Item 16	0,658	0,355	Valid
Item 17	0,520	0,355	Valid
Item 18	0,516	0,355	Valid
Item 19	0,400	0,355	Valid
Item 20	0,375	0,355	Valid

As the table above shows, the  $r_{\text{obtained}}$  for all items are bigger than  $r_{\text{table}}$  0.355. It means that all items were valid. In other

words, based on those calculations from IBM SPSS Statistic 17 all the items can be used to get the data.

## 2. Reliability

Reliability is the consistency of the instrument in producing the same score on different testing occasion or with different raters. According to Fraenkel and Wallen (2013:97) reliability refers to the consistency of the score obtained how consistent they are for each individual from one administration of an instrument to another and from one set of items to another. After calculating the validity of the instrument, than the researcher came to the X DPIB class to distribute the instrument. All items were easily understood by respondents and none of the items was ambiguous. To find out the reliability of the score for each statements' obtained, the researcher calculated the score by using Cronbach's Alpha from IBM SPSS Statistics 17. The table below shows the statistical calculation of Cronbach's Alpha from IBM SPSS Statistics 17.

**Table 3.3 Reliability Statistic of Cronbach's Alpha**

Cronbach Alpha	N of Items
0. 742	20

The result of the test was found reliable based on the value of the Cronbach's Alpha that is 0,742. According to V. Wiratana

Sujarwani (2014) reliability divided into two aspect of retrieval reliability test:

1. If the alpha Cronbach score  $> 0,60$  : the item is reliable.
2. If the alpha Cronbach score  $< 0,60$  : the item is not reliable.

It can be concluded that  $\text{Alpha} = 0,742 > r \text{ table} = 0,60$ , so the instrument of the all items were reliable.