

## **CHAPTER III**

### **RESEARCH METHOD**

In this chapter, there are discussions about the methodological steps which underline this study. It covers the research design, research subject, research setting, research instrument, data collection techniques, data analysis techniques, and research procedure.

#### **3.1 Type of Study**

The objective of this research is to develop appropriate model of English learning materials for students of Tourism program. This research uses Research and Development to get best result. The research adapts the Sugiono model. The research is implemented in ten phases; (1) problem and potency analysis; (2) collecting the data; (3) designing the product; (4) design validation; (5) design revision; (6) tryout of the product; (7) product revision; (8) tryout of applying the product; (9) product revision; (10) dissemination. Nevertheless, the research is applied up to nine phase due to the inadequacy of time.

#### **3.2 Research Setting**

The research is conducted in SMK Satya Widya Surabaya. There are 2 majors in SMK Satya Widya Surabaya, those are travel program and hotel accommodation program. And this research is focus on the travel study program.

#### **3.3 Research Subject**

The subject of the research is Grade X students of tourism study program in SMK Satya Widya. The research is limited for only one class. The total of the students in the class is 33 students. 27 students are female and 7 students are male.

#### **3.4 Research Procedure**

The procedure of this research refers to the system approach model proposed by Sugiyono (2015). These procedure leads the research to get the goal of it. The steps is explained as follows :

### 1. Problem and Potency analysis

Vocational High School are designed to prepare the students to be ready to work after they graduate. The fresh graduate Vocational High School students are expected to master English. The problem in English learning Vocational High School is the English learning is in general English as same as in Senior High School. From the problem, the potency is the Vocational High School students needs their English proficiency to be ready in their future job.

### 2. Collecting the data

In this study, the data is collected through student questionnaires. The needs analysis questionnaire is used to gather the data of the target and learning needs in English. The learners are asked to answer several questions related to their characteristics and needs in learning English by choosing one or more options from several options provided. The teacher will be interviewed informally to support the data from the questionnaire.

### 3. Designing the product

The product is designed after the data has been collected. The phases of the design determines the syllabus, the lesson plan and the design of the product. The design of student questionnaires also are conducted to perform in field try out to find out the practicality of the product.

### 4. Design Validation

This phase is conducted to show the validity of the product. the phase is done by the expert judgement to evaluate the product. They fills a validation sheet to give score for the product and give some suggestion to make the product appropriate before it is tried out in field research.

### 5. Design Revision

The result of evaluation and suggestion are applied to revise the product to be ready for implemented in the class. The weakness of the product has been decreased by applying the evaluation and suggestion from the expert. After design revision, the product is finally more efficient and appropriate

### 6. Try out of the product

This phase is trying out the product to the students who has filled the needs analysis questionnaire before. The phase is conducted to reach the goal of

the research to find out whether the product is appropriate or not. The applying product is conducted in two meetings and students are given their assessment through the product. The assessment is done by giving them questionnaire. The average score of the students questionnaire determines whether the product practical or not.

#### 7. Product revision

Revision is conducted if there is still the weakness of the product. Revision is conducted to improve the product into more appropriate product. The revision can be the content, the design and layout, writing and language, font, etc.

### 3.5 Research Instrument

The research instrument is conducted in three ways; (1)The needs analysis questionnaire sheet, (2)The validation sheet, (3) The student questionnaire sheet.

#### 1. The needs analysis questionnaire sheet

The needs analysis questionnaire sheet is used to find out the data from the students by obtaining the target needs and learning needs.

#### 2. The validation sheet

The validation sheet is used to obtain the validity of the developed English materials.

#### 3. The student questionnaire sheet.

The student questionnaire is used to find out the respond and the interest of the students after using the developed English material in their learning activity.

### 3.6 Data Analysis Technique

Data which obtained in the research analysis is used to revise material book which is suitable with determined criteria. The analysis applied as follows :

#### 1. Data analysis from needs analysis questionnaire sheet

The formula of frequency was used to analyze the data from the first questionnaire. The number of the data was presented in the form of percentage. It can be written in the following formula:

$$P(\%) = \frac{f}{n} 100$$

Where P = percentage

N = total respondents

f = frequency

100 = fixed number

## 2. Analysis of product validation

The criteria which are assessed in the developed product are content, language, presentation and lay out. Every validator validates by giving the check list into the column assessing category. The the score were given by the validators will be counted by formula as follows:

a) to find the average of the ecvery item using the formula:

$$B_i = \frac{\sum_{h=1}^n V_{hi}}{n}$$

Explanation:

$B_i$  : The average of the item

$V_{hi}$ : Score of assessing result

$n$  : The number of validator

b) To find the average of every component using the formula:

$$S_i = \frac{\sum_{j=1}^n B_{ij}}{n}$$

Explanation:

$S_i$  : The average of subcomponent i

$B_{ij}$  : The average of subcomponent i-j

$n$  : The total of item in subcomponent i

c) To find the average of every component using the formula:

$$K_i = \frac{\sum_{j=1}^n S_{ij}}{n}$$

Explanation:

$K_i$  : The average of component-i

$S_{ij}$  : The average of component i-j

$n$  : Total of items in component-I

d) To find the average of total validation of all components using the formula:

$$RTV_{developed\ materials} = \frac{\sum_{j=1}^n K_i}{n}$$

Explanation:

$RTV_{developed\ materials}$  : The average of total validation

$K_i$  : The average of component-i

$n$  : The total of components

e) To determine the category of validation by matching total of averages by the criteria of worksheet validation:

**$4 \leq RTV_{developed\ materials} \leq 4$       very valid**

**$3 \leq RTV_{developed\ materials} < 3$       valid**

**$2 \leq RTV_{developed\ materials} < 2$       less valid**

**$1 \leq RTV_{developed\ materials} < 1$       not valid**

(Khabibah, 2006)

The developed English materials are valid if the average of total validity goes to valid or very valid.

### 3. Analysis of student questionnaire

The developed English materials are practical if the result of students respond goes to positive category. Analysis of students respond are counted through attitude aspect used to measure the tendency of students' attitude toward the submitted questions. Students give a range score: very approve (VA), approve

(A), don't approve (DA), and don't approve at all (DAA). In the research, the statements which are applied are favorable.

To analyze the student questionnaire data, firstly the total of respondents is counted through the answer on each statement item. Then, to find out the student questionnaire score, the total of respondent is multiplied by the chosen answer score.

$$\mathbf{NRS = \Sigma R \times \text{The score of question choice}}$$

Explanation:

*NRS* : The score of student response

$\Sigma R$  : The total of respondent who choose the

The formula to count score of student response as follows:

$$\mathbf{NRS\ SS = \Sigma R \times 4}$$

$$\mathbf{NRS\ S = \Sigma R \times 3}$$

$$\mathbf{NRS\ TS = \Sigma R \times 2}$$

$$\mathbf{NRS\ STS = \Sigma R \times 1}$$

Explanation:

*NRS SS* : The score of students who choose very approve response.

*NRS S* : The score of students who choose approve response.

*NRS TS* : The score of students who choose don't approve response.

*NRS STS* : The score of students who choose don't approve at all response.

To find the percentage of score of student response from each answer is using the formula:

$$\mathbf{PERCENTAGE\ NRS = \frac{\Sigma NRS}{NRS\ maximum} \times 100\%}$$

$\Sigma NRS$  ( Total Student response) :  $NRS\ SS + NRS\ S + NRS\ TS + NRS\ STS$

$NRS\ maximum$  :  $\Sigma R \times \text{best choice} = \Sigma R \times 4$

Next step is to determine the percentage of criteria of student response score.

0%	≤	NRS	<	20%	Very weak
20%	≤	NRS	<	40%	Weak
40%	≤	NRS	<	60%	Enough
60%	≤	NRS	<	80%	Strong
80%	≤	NRS	<	100%	Very Strong

(Masriyah, 2006)

The last step is to count the total of the very weak, weak, enough, strong, and very strong criteria from all items of question. The category of all questions as follows:

- a. If  $\geq 50\%$  from all question items, the category is very strong, so response of student is positive.
- b. If  $< 50\%$  from all question items, the category is very weak, so response of student is negative.

The developed materials are appropriate and can be applied in teaching and learning English if they meet the requirement of validity and practicality.