#### **CHAPTER III**

#### RESEARCH METHOD

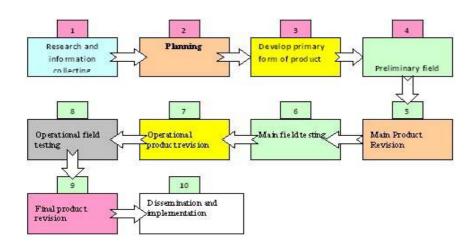
This chapter deals with research methodology. It covers the type of the research, research setting and subject, research procedures, data collection technique and research instrument, and data analysis technique.

# A. Type of the Research

In this study researcher used research and development method. According to Sugiyono (2014:407) research and development method is a method use to produce a certain product, and test the effectiveness of the product. Furthermore Gall, et. al (2003:45) stated that basically research and development have two main objectives, they are: to develop a product and to test the effectiveness of the product. This study conducted to develop English materials textbook for VII grade of Junior High School without testing the effectiveness of this product toward students' achievement.

Borg and Gall model consists of ten major steps. They are as follows: step 1 involves research and information collecting or need analysis. It includes review of literature, classroom observations, and preparation of report of state of the art. Step 2 and 3 consists of planning and develop preliminary form of product. Planning includes defining skills, stating objectives determining course sequence, and small scale feasibility testing. Develop preliminary form of product includes preparation of instructional materials, handbooks, and evaluating devises. Then step 4 involves preliminary field testing. They are interview, questionnaire data collected and analyzed from the school. For step 5 and 6 conduct main product revision and main field testing. Main product revision uses quantitative data on subjects' course as evaluation. Operational product revision is happened in step 7, revision of product as suggested by main field-test result. Next, for step 8 and 9 involve operational field testing and final product revision. And the last step or

step 10 involves dissemination and implementation. It is a report on product at professional meeting and journals. Work with publisher who assumes commercial distribution. Monitor distribution to provide quality control.



(Figure 3.1) Bog & Gall Steps Scheme

However, to ease and make shorter the process of designing the product, the researcher limits the development just to six steps. Besides, the researcher also adapts the process with the needs of development.

## B. Setting and the Subjects of the Research

The research was conducted in SMPIQu Al Bahjah. It is located in Jl. Raya Karangrejo no 132, Tulungagung, Each Java. It is islamic junior high school. There were 20 students involved as participants in this research. This subject was determined using cluster random sampling technique.

SMPIQu Al-Bahjah is one of Islamic Junior High School in Tulungagung which teach students the basic of islamic value and general science. SMPIQu Al-Bahjah uses Madrasah curriculum, which consists of 50% general subjects and 50% religious lessons. With the existence of religion subject, the awareness and the understanding of learning in

islamic become an advantage for the process of integrating islamic values and the implementation of learning.

#### C. Procedure of the Research

The procedure used in this research was research procedure proposed by Borg and Gall (1983). Then it was combined with the model of material design proposed by Jolly and Bolitho in Tomlinson (1998) with some adaption. The combination was needed because the research procedure proposed by Borg and Gall was still too general. It was made for all products.

Meanwhile in this research, the focus was learning material therefore it should be adjusted to the model of material designed proposed by Jolly and Bolitho in Tomlinson (1998). The first and third steps were taken from Jolly and Bolitho in Tomlinson (1998), the fifth step was taken from Borg and Gall, while the second and the fourth step were adjusted to the need of the research.

The model of materials development in this research is presented below:



(Figure 3.2) Combination of research procedures by Borg and Gall (1983) and Jolly and Bolitho's material development model in Tomlinson (1998: 98)

## 1. Conducting needs analysis

This step aims to get information about the learners: target need and learning need. This information is very important in developing material for ESP students. The need analysis process was conducted by giving questionnaires to the students of islamic Junior high school study program. The questionnaires are organized based on the task component. The result of this analysis, then would be used to create course grid.

# **2.** Developing the course grid

The course grid was developed based on the curriculum of vocational high schools with some adjustment in terms of content because the target students are students of islamic junior high school study program.

## **3.** Designing the materials

The units of materials were designed by following the course grid. This process is called first draft. There were two units developed in this research in which each unit consists of 20-24 tasks.

## **4.** Expert Judgment.

The first draft needs to be consulted with the experts. The expert can be lecturer of English education department who are capable in judging material and have experience in material development. It aims to see if there are some parts needed to be revised in the term of content, presentation, language, and lay out. The result was used as the base of writing final draft.

## **5.** Writing the final draft

After having suggestions from experts, the materials were revised based on the suggestions given by the experts. This was called final draft.

# **D.** Data Collecting Technique and Research Instruments

Data collected in this study includes quantitative and qualitative data. Qualitative data are about the development material and media experts. Quantitative data are data subject within research in the form of expert's assessment material and experts in students questionnaire. Data from the study of students' motivation also includes quantitative data. There are two techniques used in the collection of data in this study, questionnaire and interview.

# 1. Questionnaire.

The questionnaires were used as instrument in this research. The Questionnaire was addressed to the students of islamic junior high school as an instrument to collect information about target need and learning need. All questions were in the form of multiple choice in which the students could choose more than one answer in each question. The organization of the questionnaires is presented in the table below:

(Table 2.1) The organization of the questionnaires for needs analysis

Aspec	ct	Item number	Objective	Reference
T		1	To fund out the	Brown (2001:
A			students'	142) Nunan
R			expectation	(2004: 174)
G	Necessities	2,3,4,7	To find out student	
Е				Hutchinson
Т			needs in terms of	(1987: 55)
			target situation	
N	Lacks	5,6	To find out the gap	Hutchinson
Е			between learners'	(1007, 55)
E			between learners	(1987: 55)
D			existing knowledge	

S			and required	
3			_	
			knowledge	
	Wants	8,9	To find out students	Hutchinson
	, , , , , , , , , , , , , , , , , , , ,			
			want related to the	(1987: 55)
			material	
	Input	10, 11, 12, 13,	To find out the	Nunan (2004:
L		15, 17,	content should be	53 – 63)
Е		19. 20	content should be	33 03)
A		18, 20	carried out in	
R				
N			designing task for	
I			listening, speaking,	
			instelling, speaking,	
N			reading, and writing	
G	Procedures	14, 16, 19, 21	To find out learners'	Nunan (2004:
				,
N			preferred activities	53 – 63 )
Е			. 1	Hutcinson
E			in listening,	
D			speaking, reading,	(1987: 60 –
S				63)
3			and writing	
		22.22	TD C' 1 4.1	
		22,23	To find out learners	
			preferred action in	
			r	
			terms of vocabulary,	
			pronunciation, and	
			grammar	
	Setting	24		Nunan (2004:
	Seame		To find out learners'	11011011 (2004.
			preferred learning	70 – 73)

		mode	Hutcinson
			(1987: 60 –
			63)
Learner's	25	To find out learners'	Nunan (2004:
role		preferred role in	64)
		classroom	
Teacher'r	26	To find out the	Nunan (2004:
role		teacher role in	67)
		classroom	

#### 2. Interview

Interview is used by asking teacher several questions to obtain their responses in the forms of opinions and impressions during they use English textbook "When English Rings A Bell" when she/ he teach. Interview questions are developed by researcher. Interview was useful to provide additional information related to Developing English textbook.

There were also three open - ended questions that were delivered to the experts:

- 1. What is your opinion of this unit?
- 2. What aspects should be revised in this unit?
- 3. What is your suggestion to this unit?

# 3. Document Analysis

The document used in this research was the English textbook entitled "When English Rings the Bell" for the seventh Grade of junior high school. Analyzing the textbook by reading the teacher and students book entitled "When English Rings the Bell" in order to know the existing materials and decide the chapters to be developed.

# E. Data Analysis Tecnique

The data were analyzed in two ways. Data from the first questionnaires, which was used in need analysis process, was analyzed by calculating the percentage of each point of choice within the questions. Then, it was described in descriptive statistic. Suharto (2005) proposes the formula of the analysis as presented below:

P(%) = f/N(100)		
P = Percentage	f = frequency	
N = Total Respondents	100 = fixed number	

(Tabel 2.2) formula of the analysis

An item which has the highest presentation is considered as tendency of students.

The interview used for teacher consisted statements and the responses in the form of Likert-Scale and dialogue. It asked the respondents to indicate the strength of their agreement and disagreement dealing with statements given.

NO	Categories	Score
1	Strongly agree	4
2	Agree	3
3	Disagree	2
4	Strongly disagree	1

(Table 2.3) agreement and disagreement given

Then, the data gathered from the expert was calculated by using formula proposed by Suharto (2005: 59) to find the range or the data interval. The formula is presented below:

R: XH-XL/ 4		
Where: R = Range		
Xh = the highest schore		
Xl = the lowest schore		
4 = range of likert-scale		

(Table 2.3) Formula to find the range or data interval

The data then was converted into descriptive statistics. It aimed to summarize a given data set which cannot be represented entirely. The researcher used mean (x ) as the indicator of measurement. The means were calculated using the formula below:

Mn (X )= 
$$\sum FX/N$$

Data Conversion Table (Suharto, 2005) (Table 2.4)

Scales	Interval	Descriptive Categories
1	$3.00 < X \le 3.25$	Poor
2	$3.25 < X \le 3.50$	Fair
3	$3.50 < X \le 3.75$	Good
4	$3.75 < X \le 4.00$	Very Good

If the score is fair or poor, it means that revision is needded. On the contrary, if the score is good or very good, the final product is acceptable to use, in this case for teaching English in Islamic Junior high school.