

CHAPTER III

RESEARCH AND DEVELOPMENT METHOD

This chapter presents some points related to Model of Research and Development and Procedures of Research and Development.

3.1 Model of Research and Development (R&D)

This research was categorized as Research and Development (R&D). The research would follow the model which designed by Sugiyono. According to Sugiyono (2011), he said that Research and Development (R&D) method was used to design a certain product and examine the effectiveness of the product. In order to design a certain product, the researcher needed conducting Need Analysis. Then, to examine the effectiveness of the product, it needs to be tried. After the product was tried, later on it could be applied. The process of testing by experimenting the product named applied research. In other words, Research and Development was longitudinal and the product that was found could be in the form of model, pattern, procedure, and system. In education, the product of Research and Development was counted on to improve the productivity of education itself.

3.2 Modification Model of R&D

In this study, the researcher developed English booklet for *freelancing* hotel drivers by using Sugiyono's model of R&D which had been modified by the researcher. It was done by selecting only some steps to be applied in this study, those were *data collection*, *designing the product*, *try out of the product*, and *revision of the product*. The modification was chosen under consideration that was to shorten the research time. The model was illustrated as follows:

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learning objective in English? When you learn English speaking independently, what is the form of material that you want? What is the topic which suitable with your needs? When you have to learn without teacher, could you learn along with your friends? According to your needs, what language which suitable to give direction and instruction in the English booklet for freelancing hotel drivers?

3. Document Analysis

Document analysis was the last activity in this phase. The researcher analyzed books and magazines which provide learning material that would be arranged into the booklet. The references books were taken from some books, entitled:

1) Tourism English: A Complete Introductory Course; 2) Look Ahead 1: An English Course for Senior High School Students Year X; 3) Look Ahead 2: An English Course for Senior High School Students Year XI; 4) Smart Steps: An English

Textbook for Junior High School Grade IX;
 5) *English 900: Basic Course One;* 6)
English 900: Basic Course Two; 7) *Instant*
Vocabulary: Categorized and Picture
Dictionary, 8) *GLOOB! 10th Edition, 2007;*
and 9) Pesona Magazine: Tourism, Lifestyle,
Celebrity 1th Edition, 2015.

The data collection phase through need analysis which consist of activities like conducting interview, giving questionnaire, and document analysis were totally important. From the result of this phase, the researcher got many information related to character of subjects and identification of documents.

Characters of subjects were the important things because they were being the main factor of developing the booklet. Identification of document also took the important role in constructing the good product. Both characters of the subject and identification of the document should be considered by material developer, in order to decide how and why the character product which was developed and/or the steps of

material which would be developed. Character of the product determined the quality of the product, whether it was good or moreover it was effective in trying out of the product and implementation in the future.

In data collection phase, the researcher should get much more information or dig information deeply in order to develop the product ideally. Character of the subjects and identification of the documents should be looked after carefully which the results were made the main character of the product. The character of the product took the important role which drew the request of the subject and document.

3.1.1.1 Development Phase

In development phase, there were activities to develop the product. It started from the beginning when developed the product to be tried and the result of tried out up to writing final draft. The development phase had many steps which was done by the researcher through modified some steps, they were: *1) Writing Draft; 2) Revising Draft; 3) Validating Draft; 4) Revising Draft; 5) Try Out of The Product; 6)*

Getting Expert Validation and User Validation; 7) Revising Draft; and 8) Writing Final Draft. Those steps were explained as follows:

3.1.1.1.1 Writing Draft

In this step, the researcher constructed the content and blueprint of the booklet. It was directed to arrange the initial feature or plan which was going to be developed by the researcher. It was executed through writing the draft which followed by revising the draft and validating the draft, and the last was revising the draft according to feedback.

3.1.1.1.2 Revising Draft

This step was the continuence from the previous step that was writing draft. Revising the draft was done after the initial draft was given feedback by the expert. Then, the draft that had been revised was going to be floored in the form of storyboards and graphics. The revision was needed to identify unappropriateness of the product before it was ready to be printed out and tried out.

3.1.1.1.3 Try Out of the Product

The next step after the product had been revised, it was going to be tried out to the *freelancing* hotel drivers in Surabaya. It was directed to identify the shortage of the product that had been developed. After that, it was going to be identified the appropriateness of the product by using the instrument called user validation sheet/questionnaire in the next step.

3.1.1.1.4 Getting Expert Validation and User Judgment

This step was started by giving both expert validation questionnaire to the expert and user judgment questionnaire to the *freelancing* hotel drivers. The expert validation questionnaire was proposed to the material experts to get known their opinion and suggestion about material that had been developed. Whereas, the user judgment questionnaire was also aimed to get known about the user opinion and suggestion related to the material that had been developed by the researcher. Then, it was continued by revising the draft and writing the final product.

3.1.1.1.5 Revising Draft

The researcher did revision of the product which had been tried out before the final product would be produced. It was important to make the final product be better according to the learners' needs. The revisions were based on the some categories such as the content, language, presentation, and layout.

3.1.1.1.6 Writing Final Draft

After revising the draft, the researcher was reconstructed the product based on the feedback given in the previous steps. It was done by writing the final draft which followed by printing it out in the form of English booklet for *freelancing* hotel drivers in Surabaya.

3.1.2 Kinds of Data

Kinds of data are all of data or whole data which are resulted from both Research and Development steps. Those are taken from need analysis in the initial step to the end of the research and development. They could be in the form of numerical data, statement or utterances, documentation, and word.

In this study, there were 3-kinds of data, those were word, utterances, and numerical data. The data in the form of word were collected through questionnaire, printed material, and internet sources, while the data in the form of statement or utterances were taken from interview. The data in the form of numerical data were taken from questionnaire which was converted into percentages.

3.1.3 Data Sources

Data sources are object and/or subject or people that provide the data needed by the researcher. Data sources were needed for gaining information in this research and development. Those were used by the researcher to dig information from the initial part until the end process of research and development. They usually taken from various sources, that were: 1) Informant; 2) Respondent; 3) Printed materials and/or documents in the form of reference material; and 4) Internet sources.

The first data sources were taken from informants through structured and unstructured interview. In this study, the informants were *freelancing* hotel drivers in Surabaya. The second data sources were collected from respondents through distributing questionnaire which the *freelancing* hotel drivers were automatically became respondent. There were three kinds of the questionnaire applied in this study, they were need analysis questionnaire, expert validation

questionnaire, and user validation questionnaire. In this case, the *freelancing* hotel drivers were automatically became respondents. The third data sources were gathered from printed materials and/or documents in the form of reference material. And the forth data sources were taken from internet sources.

3.1.4 Instruments of Data Collection

Instrument of data collection is device or tool that is used for research in collecting data. In this study, the researcher used some instruments to collect the data. They were document analysis, questionnaire sheet and interview guide.

1. Document Analysis

In this study, document as instrument was classified into printed materials or document in the form of reference material. In this study, the researcher took the data from books and magazines. Those were: 1) *Instant Vocabulary: Categorized and Picture Dictionary*; 2) *Pesona Magazine: Tourism, Lifestyle, Celebrity 1th Edition, 2015*; 3) *GLOOB! 10th Edition, 2007*; 4) *English 900: Basic Course Two*; 5) *English 900: Basic Course Two*; 6) *Smart Steps: An English Textbook for Junior High School Grade IX*; 7) *Look Ahead 2: An English Course for Senior High School Students Year XI*; 8) *Look Ahead 2: An English Course for Senior High School*

Students Year X; 9) Tourism English: A Complete Introductory Course. The conversations and vocabularies involved in the booklet were taken from these books and magazines.

2. Questionnaire Sheet

It was sheet that has list of questions or statements. In this study, the researcher constructed open-ended questionnaire. The first questionnaire was Need Analysis questionnaire which consisted of three parts and intended to know personal identity of the learners, learning needs, and target needs. It consisted of 14 statements which each number was equipped by the blank space that could be answered freely if there was no appropriate choices which has been provided. So that the respondents could write down the answer based on what they were desirable.

The second questionnaire was used to validate the materials, they were expert judgment questionnaire and user judgment questionnaire. Both questionnaires were proposed to get known opinion and suggestion about material that has been developed.

Target need are what knowledge and abilities the learner will require in order to be able to perform appropriately in the target situation. It is divided into three points, those are

necessities, lacks, and wants. The analysis of those points are needed for ordering questions of the learners, like:

Why is the language needed?

- for study;
- for work;
- for training;
- for a combination of these;
- for some other purpose, e.g. status, examination, promotion.

How will the language be used?

- medium : speaking, writing, reading, etc;
- channel : e.g. telephone, face to face;
- types of text or discourse : e.g. academic texts, lectures, informal conversations, technical manuals, catalogues.

What will the content areas be?

- subjects : e.g. medicine, biology, architecture, shipping, commerce, engineering;
- level : e.g. technician, craftsman, postgraduate, secondary school.

Who will the learner use the language with?

- native speakers or non-native;

- level of knowledge receiver : e.g. expert, layman, students;
- relationship : e.g. colleague, teacher, customer, superior, subordinate.

Where will the language be used?

- physical setting : e.g. office, lecture theatre, hotel, workshop, library;
- human context: e.g. alone, meetings, demonstrations, on telephone;
- linguistic context : e.g. in own country, abroad.

When will the language be used?

- concurrently with the ESP course or subsequently;
- frequently, seldom, in small amounts. In large chunks.

(Hutchinson and Waters, 1987)

By analyzing what the learners do, it will inform what they had learnt. That is why, ESP not only focus on what should be known or done, but also focus on what should be learnt in language learning.

In order to know learning material that is needed by the learners, the material developer should know the learning situation. The learning situation is the necessity to do

assignment in the please, well-organized, gratified, and generative situation. It is commonly called the learning needs.

In analyzing the learning needs, the material developer could construct framework like:

Why are the learners taking the course?

- compulsory or optional;
- apparent need or not;
- Are status, money, promotion involved
- What do learners think they will achieve?
- What is their attitude towards the ESP course? Do they want to improve their English or do they resent the time they have to spend on it?

How do the learners learn?

- What is their learning background?
- What is their concept of teaching and learning?
- What methodology will appeal to them?
- What sort of techniques are likely to bore / alienate them?

What resources are available?

- number and professional competence of teachers;
- attitude of teachers to ESP;
- teachers' knowledge of and attitude to the subject content;
- materials;
- aids;

- opportunities for out-of-class activities.

Who are the learners?

- age / sex / nationality;
- What do they know already about English?
- What subject knowledge do they have?
- What are their interests?
- What is their socio-cultural background?
- What teaching styles are they used to?
- What is their attitude to English for to the cultures of the English speaking world?

Where will ESP course take place?

- are the surroundings pleasant, dull, noisy, cold, etc?

When will the ESP course take place?

- time of day;
- everyday / once a week;
- full-time / part-time;
- concurrent with need or pre-need. (Hutchinson and Waters, 1987)

3. Interview Guide

Interview guide is used in conducting interview which is in the form of written questions. In this study, the researcher

conducted interview through telephone and *whatsapp* to collect the data that was in the form of statements or utterances. The researcher used structured interview because the researcher want to get closer to the informants and to gather information deeply. It also allowed for gathering personal responses and views privately.

The interview was done through asking questions like:
Did you ever learn English before? What do you think about your English skill, is it good enough? Is your English speaking ability is good enough? What kinds of material that you want if you should learn English independently? What language do you want as the input in the learning material / English booklet for freelancing hotel drivers? What kinds of activity that you want in learning English speaking? What is your objective in learning English? In what situation did you usually use English?

The points of questions above covered informations which useful to develop the English Booklet. Those were about learners' learning objective in English, particular situation that usually be used by them in English communication, topic and activity that they want in learning English speaking independently, the language that was suitable in English

booklet for *freelancing* hotel drivers, and problems in English speaking.

3.1.5 Data Collection Techniques

Data collection technique is used for gathering data by using certain instrument according to the research needs. it was done by the researcher before trying out of the product. In this research, there were 4-kinds of data that was used, those were:

1. Documentation

It is the data that is gained from paper, for example book and magazine. In this study, the researcher took the data from book and magazine. In document analysis, the researcher analyzed some English books and magazines. The conversations and vocabularies involved in the booklet were taken from these books and magazines. Those were listed by the researcher below:

a. Book:

- *Tourism English: A Complete Introductory Course*
- *Look Ahead 1: An English Course for Senior High School Students Year X*
- *Look Ahead 2: An English Course for Senior High School Students Year XI*
- *Smart Steps: An English Textbook for Junior High School Grade IX*
- *English 900: Basic Course Two*

- *English 900: Basic Course Two*
- b. Magazine:
 - *GLOOB! 10th Edition, 2007*
 - *Pesona Magazine: Tourism, Lifestyle, Celebrity 1th Edition, 2015*
- c. Dictionary entitled “*Instant Vocabulary: Categorized and Picture Dictionary*”

2. Questionnaire

It is the technique of collecting the data through giving the list of question to the respondent. In this study, the researcher used open-ended questionnaire to the respondent (the *freelancing* hotel drivers). Open-ended questionnaire was chosen by the researcher to make it possible if the available answers were not suitable with the respondent conditions and/or needs.

There were 3-kinds of questionnaire which been used, those were need analysis questionnaire, expert judgment questionnaire, and user validation questionnaire. The first questionnaire was need analysis questionnaire which was distributed to get known about personal identity of the respondent, the target needs and learning needs of the *freelancing* hotel drivers.

The second questionnaire was the expert validation questionnaire, which was proposed to the material experts to

get known their opinion and suggestion about material that had been developed. The third was user validation questionnaire. The aim was also to get known about the user opinion and suggestion about material that had been developed. The following tables were the organization of the questionnaires.

Table 1 : The Organization of the Needs Analysis Questionnaire

Aspect	The purpose of the questions	Items numbers	Reference
Personal identity of learners	To find out the background of the learners	1, 2, 3	Hutchinson and Waters (1987)
Target Needs			
Goal	To find out the reasons of learning English	7	Hutchinson and Waters (1987)
Necessities	To find out the learners' needs	6, 8a, 8b, 9, 12	Hutchinson and Waters (1987)
Lack	To find out the gap between the learners' existing knowledge and the required knowledge level	4, 5	Hutchinson and Waters (1987)
Wants	To find out the learners' wants related to the materials	9, 11	Hutchinson and Waters (1987)
Learning Needs			
Input	To find out the suitable input for the English materials that the learners like the most	8a, 9, 11, 12	Nunan (2004)
Procedures	To find out the suitable activities/procedures be used that the learners want the most	11, 12	Nunan (2004)
Teacher's Role	To find out the role of the teachers in the learning process	8b	Nunan (2004)

Learning Needs			
Learner's Role	To find out the role of the learners in the learning process	10	Nunan (2004)
Setting	To find out the setting of the tasks (individual, in pairs, or in group)	10	Nunan (2004)

Table 2 : The Organization of Expert Validation Questionnaire

Components of evaluation	The purpose of the questions	Items numbers	Reference
Content	To validate the content of materials	1-5	BSNP
Presentation	To validate the presentation of the materials	6-8	BSNP
Language	To validate the language of the materials	9-10	BSNP
Graphic	To validate the graphic design of the materials	11-15	BSNP

Table 3 : The Organization of User Judgment Questionnaire

Components of evaluation	Aspects	Items numbers	Reference
Objective	Comprehension related to the objective	1	BSNP
Main activities Main activities	Comprehension related to the instruction	2	BSNP
	Appropriateness of examples	3	BSNP
	Comprehension related to the examples	4	BSNP
	Comprehension related to the explanation of examples	5	
	Adequacy of explanation	6	BSNP

Components of evaluation	Aspects	Items numbers	Reference
Main activities	Improvement in part of knowledge of the language (vocabulary, grammar, and expression)	7	BSNP
	Order or sequence	8	BSNP
Graphic	Font size	9	BSNP
	Font	10	BSNP
	Layout	11	BSNP

3. Interview

Interview is a technique which allow for gathering personal responses and views privately (Yohana, 2017). It is used to gain information from the subject in deeply. In this study, the researcher did interview with the *freelancing* hotel drivers to gain information in Need Analysis phase. The points that covered in the interview were about their objective in learning English, particular situation that usually be used by them in English communication, topic and activity that they want in learning English speaking independently, the language that was suitable in English booklet for *freelancing* hotel drivers, and problems in English speaking. The researcher did interview to dig information deeply.

3.1.6 Data Analysis Technique

There were two types of data in this study, those were quantitative and qualitative data. The quantitative data was the result of the needs analysis, the expert judgment, and the user judgment, while the qualitative data was the comments or opinions from the experts related to their assessment of materials.

1) Needs Analysis Questionnaire

The data which has been taken from need analysis questionnaire was analyzed using frequencies and percentages. Then, the highest percentages of the answer of each question were considered by dividing the frequency of the total respondents and the results was multiplied by 100%. Based on Suharto (2006) the range of score can be used to create score conversion by dividing the range with the objected category as follows:

$$P = \frac{\Sigma x}{\Sigma x^1}$$

Explanation:

P = Percentage

Σx = The number of all responses' answer

Σx^1 = The all number of responses

2) Expert Validation and User Judgment Questionnaire

The result of both questionnaires were calculated by using formula proposed by Suharto (2006). *Likert-scale* was used as

the measurement to analyze the data of the expert validation and user judgment questionnaire. In order to make both of the data easier to be read, these data were converted into interval of mean values on a scale of 1 to 4 using a range of the factual score.

Table 4: The Organization of Descriptive Analysis

Scales	Interval	Descriptive Categories
1	$3.24 < X \leq 4$	Very good
2	$2.5 < X \leq 3.24$	Good
3	$1.75 < X \leq 2.24$	Fair
4	$1 < X \leq 2.24$	Poor