

CHAPTER III

RESEARCH METHOD

In this chapter discuss about the research design, setting and subject of research, collecting data instrument, technique of data collection, data analysis technique.

A. Research Design

This study uses Research and Development Method based on Richey (2007, pp. 7), because of the problem that need solving with a certain product. This research reference refers to Students Textbook for Eighth Grade in Genre materials. In this study, researchers used the development of 4-D device model developed by Thiagarajan (1974; in Winarni 2021). As explained by Thiagarajan, there are 4 stages in the 4-D development model; they are define, design, develop and disseminate. The model of development is adapted to the needs and context of the research. As for the summary of the development the stages of the model, namely:

1. Define

In the context of developing teaching materials the definition stage has 4 main stages, namely curriculum analysis, students' analysis, material analysis, and concept analysis and specification of learning objectives.

a. Curriculum analysis

At the initial stage, the researcher examines the current curriculum, the 2013 curriculum. There are competencies that have to be achieved in the curriculum. This curriculum analysis is carried out to

determine the competencies in which the teaching materials will be developed. This is have to do because there is a possibility that not all competencies in the curriculum can be provided with teaching materials.

b. Students analysis

In this analysis, there are identifiers of characteristics and students' initial behavior according to the process of developing teaching materials in accordance with the local ethnic Banjar culture.

c. Material analysis

The analysis of the material is done by distinguishing the main material that should be instructed, gathering and choosing applicable material, then rearranging it systematically.

d. Concept Analysis and Specification of Learning Objectives

The purpose of this analysis is to identify, detail, and organize the material systematically according to the concept that will be taught to students. Teachers have to know the characteristics of students who will use teaching materials. This is noteworthy because all learning processes must be adapted to the characteristics of students.

2. Design

In this stage, it aims to prepare learning tools. The design of learning devices and instruments to be developed is in this initial design. At this stage the activities carried out is designing teaching materials in the form of text types related to local culture from Banjar.

3. Develop

The development stage has a goal in modifying learning tools that can produce learning materials based on local culture of the Banjar tribe. The phase of the development are validation to the expert and test the product. The validation from the experts aims to assess whether the product is appropriate with the basic competencies to be achieved, material, and use media. Product validation can be done by presenting several experts to assess the product (Sugiyono, 2015, p. 414). Then, tested on small scale in class VIII of one of the junior high schools in Banjarmasin for the 2021/2022 academic year. The programs at this stage are:

- a. Validation sheet of the development of teaching materials in genre based on Banjar cultural approach.
- b. Product test
- c. The implementation

4. Disseminate

As explained by Thiagarajan (1974) he divided the dissemination stage into three activities, there are (Winarni: 2021, pp. 262-263): validation trying out, packaging, diffusion and adoption. At the stage of the validation trying out, the product has been revised at the stage of the development, then implemented on the real target. At the implementation time, measurement of the goal achievement is executed. This measurement is done to determine the effectiveness of the developed product. After the product is implemented, the developer needs to take a look at the results of the

achievement destination. The solution that has not been achieved needs to be explained so, similar errors do not rehash after the product is disseminated. The last activity in the development stage is to carry out packaging, diffusion, and adoption. This stage is done so that the product can be used by others. Packaging of learning models can be done by printing. Once printed the material can be disseminated so that it can be diffused or understood by others and used in their class.

B. Setting and Subject of Research

This research was conducted at SMP IT Ukhuwah Banjarmasin. This school is located in Bumi Handayani 12A KM. 4.5, Bumi Mas Raya Street, Pemurus Baru, Banjarmasin City. This research was conducted by researchers in the in the second semester of academic year 2021/2022. The subject in this study were students of eighth grade in SMP IT Ukhuwah Banjarmasin.

C. Collecting Data Instrument

The using of data collection instrument in this research was a validation sheet and the results of the questionnaire.

1. Validation Sheet for Development of Reading Materials (Text Type). The using of validation sheet is to get the information from the experts in the development of teaching products material in the form of text types developed according to culture approach.
2. The results of filling out questionnaires from students. The questionnaires are given to the students based on the product that is reading materials.

D. Technique of Data Collection

The author uses documentation techniques in this study. The using of the document in this study is an English textbook entitled “When English Rings a Bell for the Eighth Grade of Junior High School.” and “Buku Interaktif Bahasa Inggris” for the eighth grade of Junior High School published by PT Penerbit Intan Pariwa. Researchers collect data using several steps as follows: (1) Doing observation by reading the textbook entitled “When English Rings a Bell for the Eighth Grade of Junior High School.” and “Buku Interaktif Bahasa Inggris” to find out existing materials; (2) Deciding which chapters will be developed (descriptive text and recount text); (3) Get information about the principles of process-based material reading standards and learning cycles that apply a scientific approach to the curriculum 2013; (4) Developing materials based on the principles of reading; material based on process standards and applied learning cycles scientific approach for Eighth grade of Junior High School.

E. Data Analysis Technique

The data analysis technique aims to process data collected from the results of experts' validation and the results of students' questionnaire. The results of data analysis are separated into two types, qualitative data analysis and quantitative data analysis.

1. Qualitative data analysis

In simple terms, qualitative research aims to find answers to a phenomenon systematically using a qualitative approach. Denzin and Lincoln (2000, In Winarni, 2021, p. 146), state that qualitative research emphasizes the use of two approaches, interpretive and naturalistic. The using of qualitative data analysis on this development research is in the form of publicity to qualitative data from experts and responses to subject trials. The sources of qualitative data come from direct interviews with informants and written responses filled out in the questionnaire. Also, the using of the qualitative data as a guide to improve product development, apart from the questionnaire assessment.

2. Quantitative data analysis

On the questionnaire, the responses from the subjects will be calculated in the form of percentages. The validity of the results data analyzed by the experts obtaining to get the result of the materials developed based on this culture is valid. Based on Riduwan & Sunarto (2016, p. 21) the answer from each question score are:

Category	Score
Strongly Agree (Sangat Setuju/SS)	4
Agree (Setuju/S)	3
Disagree (Tidak Setuju/TS)	2
Strongly Disagree (Sangat Tidak Setuju/STS)	1

To analyze the percentage, the researcher use the following formula:

$$NS = \frac{PS}{SM} \times (100\%)$$

SM

Where: NA = Final Score

PS = Score Obtained

SM = Maximum Score

Table 4
The range of score interpretation criteria proposed by Riduwan (2016, p.41)

Score Interpretation Criteria	Category
0% - 20%	Very Low
21% - 40%	Low
41% - 60%	Sufficient
61% - 80%	High
81% - 100%	Very High

Seen from the table above the data that get score 0%-20% get very low category. If get the score 21%-40% is the low category, it is mean that has flaws that need to be fixed. Sufficient category is get score 41%-60%, the score is in the middle. The data that get high category is in 61%-80%, the data is proven valid. If the data get percentage score in 81%-100% is very high category, it is mean that the data is proven and very valid criteria.