CHAPTER III

RESEARCH METHOD

In this chapter researcher presents the discussion about Model of Research and Development, Procedure of Research and Development, and Try-out of the Product.

3.1 Model of Reasearch and Development

In this study researcher used research and development method. The writer used CBI model. Priyanto (2009:7) explained that the steps in developing computer based instructional (CBI) consists of three stages, those are (1) Plan, (2) Development, and (3) Evaluation.

The writer's reason of choosing digital comic is because this model is appropriate to be applied in developing learning media for teaching vocabulary for eighth grade of SMPN 2 Ngunut. In addition, this model has simple steps and easy to use for the beginner teaching media developer like as the researcher.

3.2 Procedures of Research and Development

This digital comic consist of some stages. They are Plan, Development, and Evaluation, Plan phase in this research embraces include : need analysis, material survey, and determine learning objectives. Then, the development step is the step to develop the product. Researchers produce digital comics using the application media Medibang Paint & Correl Draw X7 which comic material has been obtained from Plan Stage. Then after the comic is finished this product will be packaged into

a CD. Finally, the evaluation step in this case try-out the product step consists of formative and summative evaluation. Formative evaluation is a data collecting process that the goal is to improve and increase the quality of the developing product. In this research, the formative evaluation means expert validation. While summativ e evaluation, in this case try-out the product is an evaluation to give final evaluation to the product. Then, the each step can be explained in detail as follows:

a. Plan stage

This stage started from need analysis. The need analysis conducted by doing preliminary observation in VIII A class of SMPN 2 Ngunut. The researcher joined during English teaching learning and observed the activity in the class. This observation emphasized on teacher's teaching media. In addition, researchers also distributed questionnaires to English language teachers and several eighth grade students at SMPN 2 Ngunut. The result was both students and teacher need a media that can make teaching and learning process run effective and efficient, that is by developing digital comic. After that, material survey, the writer determine the material in topics of first semester for VIII Grade of Junior High School. That is: Recount Text. Next, determine learning objectives, which is student able to reach each competence in topics above.

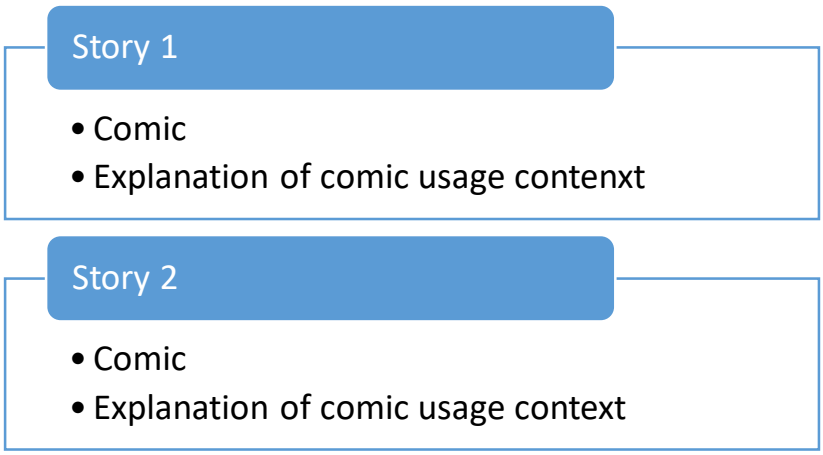
b. Development stage

After conducting the plan stage, the next step is development stage. This stage is developing the product process. The product that developed in this study is digital comic to improve students' vocabulary mastery for

VIII grade of Junior High School in topics of first semester by using Medibang Paint and Corel Draw X7. For the next this product will be uploaded to the webtoon and package in the CD (Compact Disc).

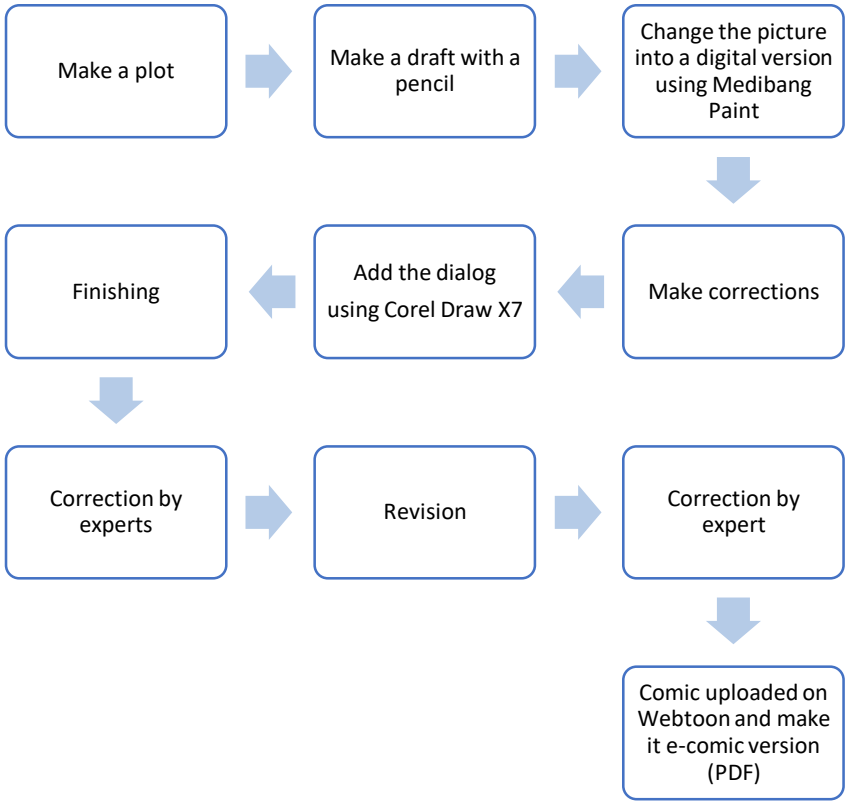
Before creating a comic, the researcher analyzes what is needed in this manufacturing process. Researchers observed English language learning in eighth grade of SMPN 2 Ngunut. The questionnaire was also given to ten students and five English teachers at SMPN 2 Ngunut. The researcher also consulted an English teacher who taught the eighth grade on what material was suitable to be presented in digital comics. In order to obtain the things needed in the next process.

The next process is the creation of comics. In this stage the researcher started from making the flowchart of content of product (see picture 3.1). In this comic the researcher makes two stories of recount text wich is related to eighth grade material in the second semester. Each story is presented with a recount text and is accompanied by a translation of each word in the comic so that readers will more easily understand in two languages at once. It also makes it easier for readers to find new vocabularies in comics. In addition, researchers also provide further information about stories in comics that are related to the material, such as tenses used or brief explanations to deepen the reader's understanding related to the material.



Picture 3.1 Content of Product

The next process was the developer making the design of each page of the product (see picture 3.2). Furthermore, the media created based on the design of the product by using some software, those are Medibang Paint and Corel Draw X7.



Picture 3.2 Flowchart of Making Digital Comic

c. Evaluation stage

The evaluation stage consists of formative and summative evaluation. The aim of formative evaluation is to improve and increase the quality of the product. In this research, formative evaluation is expert validation. There are two experts in this validation, they are teaching material and teaching media expert. The result of the validation is used to revise the product.

Meanwhile summative evaluation means try-out of the product. The try-out of the product in this study will be conducted on small numbers of students. This try-out is used to know the quality or attractiveness of the

product. After that, the researcher packaged the revised product in Compact Disk (CD).

3.3 **Try-out of the Product**

Try-out of the product is done to collect data useful to evaluate the quality of the product of the research and development. In this part described design of the try-out, subject of the try-out, types of data, instruments(s) of data collection, and technique(s) of data analysis.

3.3.1 Design of the try out

The try-out of the product in this study will be conducted on small numbers of students. It is intended to see readibility of test product. The students are invited to have teaching and learning English by using the media for about two meetings. In the end of teaching learning process the students answer the questionnaire to see the quality or attractiveness of the product.

3.3.2 Subject of the try out

The subject of this study in product validation was expert of English teaching media lecturer and English teacher of SMPN 2 Ngunut. Furthermore, the subject in small group evaluation was 10 students of VIII grade student.

3.3.3 Types of data

Try-out of the product in this research is used to evaluate the quality or attractiveness of the product. The type of data from the result of that evaluation is both qualitative and quantitative. Qualitative and quantitative data are gotten from some evaluations, comments, and suggestion from expert of teaching media, expert of material, and also student's evaluation about the product in the questioner instrument. Some comments from expert of teaching media and teaching material used to revise the design of product before the product is used in whole class. While the responds of students used to investigate the quality or attractiveness of the product when use in teaching and learning process.

3.3.4 Instrument(s) of Data Collection

According to Sugiyono (2009:184) research instrument is a tool used to measure both natural and social phenomenon which is specifically observe. In other word, instrument is an auxiliary tool to help researcher to collect the data.

Then the instrument that used in this research was questionnaire. This questionnaire is used to evaluate the quality or attractiveness of this media by doing validation from expert of teaching media and teaching material and also evaluation from VIII grade students.

This questionnaire was developed from criteria of teaching media evaluation based on some experts. Then, the writer made the grille of questionnaire into some criteria, those were educational criteria, layout criteria, and technical criteria. The questionnaires are written in Indonesia to avoid misunderstanding between the researcher and the respondents.

3.3.5 Technique(s) of Data Anallysis

From the questionnaire validation above each item on it classified in 5 scale and each scale have a certain score, they are very good that will give score 5, good will give score 4, fair will give score 3, poor will give score 2, and very poor will give score 1. Further more the indicator category for each item called high (H) if the score greater-than or equal to 3 (≥3) and called low (L) if the score less-than 3 (<3) (Alifah, 2013:32)

Finally those data will change into percentage of data, the formula will like follow:

$$\text{Percentage (\%)} = \frac{Score\ (n)}{Score\ maximal\ (N)}\ x100\%$$

After that, the data transform into qualitative data with high percentage is 100% and low percentage is 0%. The next is the data will describe qualitatively. Range is maximal score minus minimal score, and the result is 100%, also large of interval (100% divided

5 scale) equal 20%.So, based on the count up above, range percentage and the qualitative category will see as follow:

Percebtage	Category
81% < score < 100%	Very Good
61% < score < 80%	Good
41% < score < 60%	Fair
21% < score < 40%	Poor
0% < score < 20%	Very Poor