

## **CHAPTER III**

### **RESEARCH METHOD**

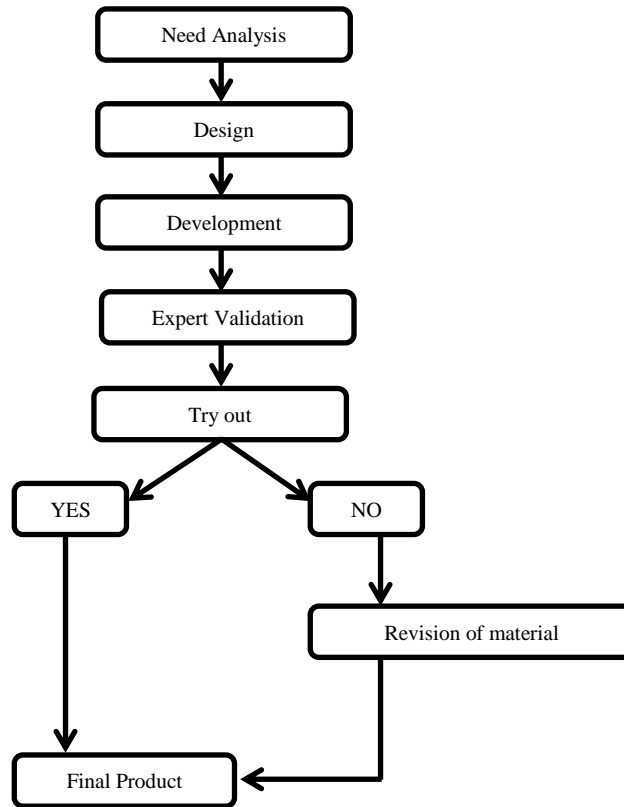
This chapter will describe the research method which is used to conduct this study. It covers the research design, instrument of the study, and procedure of developing speed reading material.

#### **3.1 Research Design**

The research design of this study is Research and Development study. The researcher chooses this research design because he will develop speed reading material. OECD (1993) states that the definition of Research and Development is a creative work which is created systematically in order to raise the supply of scientific and technical knowledge. After the researcher know about the definition of Research and Development study above, the researcher decides to use this kind of research design in this research.

There are several models of developing materials which have been developed by some experts, but in this study, the researcher attempts to adapt hybrid development model by Passerini and Granger (1999). There are five steps in this model; analysis, design, development, evaluation, and delivery. From the hybrid development model, the researcher tries to modify the diagram from Passerini and Granger in order to be more suitable to this study. The researcher modifies two steps in Passerini and Granger. The first is evaluation step change in to expert validation because the researcher is not an expert so the researcher asks some expert to validate the product. The second

is delivery change in to try out. Hence, the better result of Speed reading material by using CALL can be obtained. The process of developing model can be seen as follow:



Adapted from Passerini and Gragner (1999),

The researcher chooses this model because he thinks that he is not the expert. Therefore, he needs expert to validate his learning product. This model will be used to develop this study, it will be presented further in procedures of developing speed reading material by using CALL.

## **3.2 Procedure of Developing Speed Reading Material by Using CALL**

### **3.2.1 Need Analysis.**

There are several procedures that should be obeyed by the reseacher. First, the reseacher does need analysis. This is done to find out what is needed by learners so that the media and material will be developed in accordance with their need. Based on Hunchinson and Water (1987) need is divided into two majors, that are target needs and learning needs.

#### **3.2.1.1 Target Needs**

When analyzing learners' needs, the reseacher gives questionnaire and interview toward some learners and lecturer as the representation. It is done to determine the target situation include what types of books that are often read, what genre of book that often read, how long learners takes to read in a day, the learners comprehension in reading, the learners comprehension in reading with limited time, what will the content areas be, the difficulties that learners face when learning speed reading, and how do the learners' interest in learning speed reading by using technology. The goal of target need analysis is to know the learners need in learning speed reading (appendix 1).

#### **3.2.1.2 Learning Needs**

According to Noessel (2003) that the needs of learners represent gap between what they want to get out of learning experience and his or her current state of knowledge, skill, and enthusiasm. To get learning need, the

researcher will give questionnaire for first semester morning class students of English department at University Muhammadiyah of Gresik who takes basic reading class (appendix 1).

### 3.2.2 Design

To make design, researcher analyses from need analysis. The researcher will analyze finding in need analysis and syllabus. The researcher will make activity in learning that it will be appropriate with target needs and learning needs to help students learn speed reading. The material will be taken from reading speed and reading short story, so it can help students in learning speed reading.

### 3.2.3 Development

From design, the researcher will apply the design activity that match with lesson plan in Macromedia Flash 8. The researcher will develop speed reading material by using Macromedia Flash 8. The first, researcher will open Macromedia Flash 8 application, then starts with creating new *flash document*. After making new file the researcher will make button. There some steps to make button, first draw a square by using rectangle tool. Then convert object to button by pressing F8, it will be show convert to symbol dialogue and choose symbol also change name, ex: button1. After making button, select button object then give it action script. The second is copy the text that will be used as the content. The step is open file Asian

and Pacific Speed Readings.pdf and Reading Short Story.doc file then select text that will be used after that copy and paste on to flash 8.

After following the instruction above, the researcher will design the main menu of English speed reading material application. The researcher designs the menu page that will show five buttons. There are, text 1 button, text 2 button until text 5 button. Every text button have different short story. Before the students read the text, they should click start button below the page. It will show how much time they needs to read. After finish reading, they click stop button and go to comprehension page. In comprehension page, there are 4 questions based on the text that they have read. After answering all questions, they will click finish and the result page will be shown. In result page, it will be shown the result of their speed reading and comprehension. The measure of speed reading will be showed as words per minute (WPM) and for comprehension in percent (%) (appendix 2).

#### **3.2.4 Expert Validation**

After the researcher has already finished speed reading material, it should be validated by experts. There are two experts validations; the information and the technology specialist and the material and language expert. The first expert validation is to check the instuction of the application from speed reading material, attractiveness, design and mechanism. Whereas, the second expert validation is to check the content of short story, difficulty and mechanics. Here, the expert will get checklist

of courseware. Then to asses of attractiveness from the presentation of speed reading material will be assessed from font, illustration, background, form, and etc. Next, the mechanism is in the way to use the speed reading material. The content is to evaluate whether the material is appropriate with the subject and the subject knowledge.

### **3.2.5 Try Out of the Media**

After developing the speed reading material, the reseacher tries to try out the product to first semester morning class students who take basic reading class. The researcher will conduct try out. The reseacher asks some students who takes basic reading class of English department at University Muhammadiyah of Gresik to join this try out. This try out will be done twice. Previously, the application is copied to the computer or laptop a day before doing the try out.

The reseacher ask to the students to join in the first meeting to introduce the product and how to use it and then ask to use the speed reading material product. They can choose one of five texts that already served in the speed reading material product. After finishing the try out, the reseacher will ask the students to fill the questionnaire. It is done to know whether the speed reading material product is interested or not. In addition, the questionnaire is also used as feedback for the reseacher to improve the application that has been created by him. The second meeting will do to try out the media after revision. (appendix 3).

### **3.2.6 Revision of the Media**

After doing try out there will be some revisions which need to be improved in order to make this product can be used for basic reading class students to learn and train speed reading. The revisions will be done in accordance with the experts' suggestion, questionnaire and try out from the students (appendix 4).

### **3.2.7 Final Product**

This is the final stage of media development. After completing the revision, this final product is in the form of speed reading material for basic reading class students. The application comes with simple looks, text, and illustration.

At the beginning of the application designs, there is menu page that will show five buttons. There are text 1 button, text 2 button until text 5 button. Every button will show different short story. After finishing the reading, the students click stop button and it will show question that related with the text and the end will show the score for reading speed and comprehension.