

## **CHAPTER III**

### **RESEARCH METHOD**

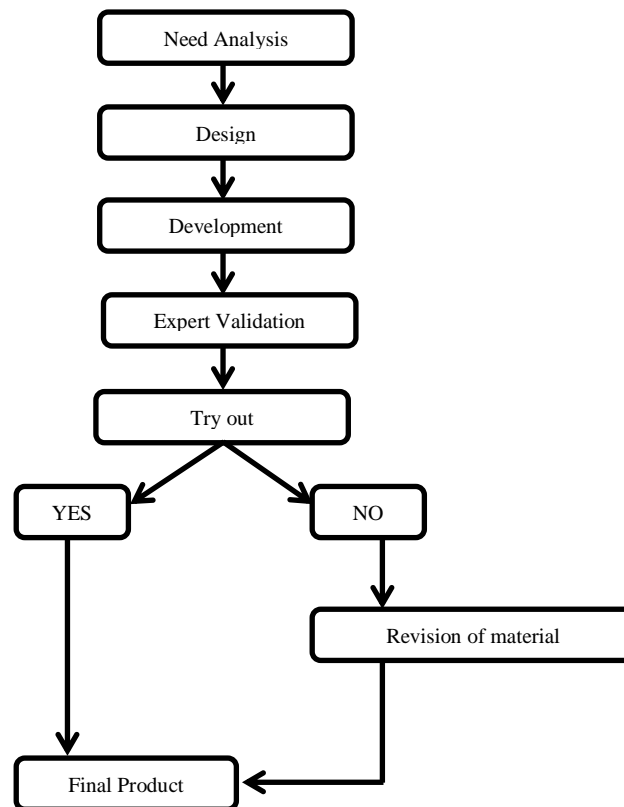
This chapter will describe the research method which is used to conduct this study. It covers the research design, instrument of the study, and procedure of developing English vocabulary game.

#### **3.1 Research Design**

The research design of this study is Research and Development study. The researcher chooses this research design since she would like to develop English vocabulary game for young learners. As stated by OECD (1993), 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. Knowing the definition of Research and Development study above, the researcher decides to use this kind of research design.

There are several models of developing materials which have been developed by some experts, but 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 change evaluation stage from Passerini and Granger's diagram to be expert validation, and in delivery stage change with try out stage. The researcher modify the shape of

the diagram to be more simple and easy to understand. Hence, the better result of English vocabulary game by using android platform 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 she thinks that she is not the expert. Therefore, she needs expert to validate her learning product. This model will be used to develop this study, it will be presented further in procedures of developing English vocabulary game for young learners by using android platform.

### **3.2 Instrument of the Study**

The researcher uses several instrument to collect data. First, the researcher gives questionnaire to young learners who aged 9-10 years old or categorized as students of 4<sup>th</sup> grade. Second, the researcher conducts interviews to the English teacher to get deeper information. This are done to know their target need and learning need about English vocabulary game.

After the researcher develops the product, the researcher provides validity checklist for expert. Here, the expert duty is to give score, comment and suggestion toward the English vocabulary game which is developed by the researcher before try out the product. The researcher will revise the product after does the expert validation. Next, The researcher tries out the product to young learners. The last activities after young learners got and used electronic vocabulary game learning media, they will be given questionnaire as well. It is done to know their comments about English vocabulary game.

### **3.3 Procedure of Developing English Vocabulary Game for Young Learners by Using Android Platform**

#### **3.3.1 Need Analysis.**

There are several procedure that should be obeyed by the researcher. First, the researcher does need analysis. This is done to find out what is needed by young 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.

### **3.3.1.1 Target Need**

When analyzing young learners' needs, the researcher gives questionnaire toward some young learners as the representation. It is done to determine the target situation include why is the language needed, what will the content areas be, the difficulties that young learners face when learning English vocabulary, how do the young learners' interest in learning English vocabulary via mobile technology, and what part that make the interest when learning English vocabulary via mobile technology especially android platform. The researcher uses questionnaire to students and interview for English teacher to know need analysis.

### **3.3.1.2 Learning Needs**

According to Noessel (2003) 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. In order to know what is needed by the students in learning language, the researcher needs to know about how do the learners learn, what resources are available, who are the learners, why the learners taking the course. These questions are necessary to determine the condition as well as their needs to learn English.

### **3.3.2 Developing Vocabulary**

Next step, the researcher should know the standart competence (SK) and basic competence (KD) to develop indicator and the vocabulary topic that taught should be matched with syllabus. The standart competence and basic competence has been developed by the government. Based on the standart competence at the

writing skill the students are able to complete and rewrite simple word in English which the researcher used as a guideline for develop the English vocabulary game. After the researcher analyzes the standart competence and basic competence. The researcher identifies learning material based on standart competence, basic competence, questionnaire, also the result of interview English teacher. Then, the researcher formulates learning activities, indicators, and divides kind of assessment, time allocation, and the researcher determines the learning resources.

The researcher tries to find the vocabulary for each topic based on syllabus, coursebook and the result of interview English teacher. So, the researcher makes list of some vocabularies that possible to be used, be taught, and useful for the students.

### **3.3.3 Developing Android game**

The researcher develops vocabulary game by using *Ai2.appinventor.mit.edu* online but the english vocabulary game is offline game. The researcher logins to *Ai2.appinventor.mit.edu* uses *gmail*, then starts with creating new project and enter *project name*. The researcher designs the main menu of english vocabulary game application and adds song to make it more interesting. The researcher designs sub-menu, in the sub-menu the researcher put three buttons that are animals, vegetables, and dresses. The researcher adds some pictures and audio to help students learn pronunciation. The researcher makes mini dictionary, the step is same with game, adds some pictures, vocabularies and audio but different coding (see appendix).

### **3.3.4 Design Instruction**

After identifying young learners' needs of vocabulary, the researcher begins to make design instruction. The researcher designs the media by making draft of young learners' vocabulary need that will package in a form of application with *apk* format that can run in android mobile technology. There are two types of activities in designing this English vocabulary game. First, there are introduction some vocabularies which are divided into different topics. In each topic, young learners will see some pictures which are completed with the text and pronunciation too and the vocabulary game is word shooting, there is picture with vocabulary which has blank letter, then young learners should fill it. When young learners presses the key board to fill the blank letter, if young learners presses the button with right answer there will be pronunciation but if false there is no pronunciation.

### **3.3.5 Developing Media**

After Passing through design instructional phase, the researcher goes on to the next phase, that is developing media. In this phase, the researcher does not make the syllabus because school has made it.

The researcher matches between syllabus, coursebook, the result of questionnaire and interview. The researcher makes a list of vocabulary which adds in game and mini dictionary.

The researcher focuses on English vocabulary game because the design is specifically to help young learners at 4<sup>th</sup> grade in learning vocabulary, spell, and

pronounce the word. This application comes with word, picture, and audio which is expected to make young learners interested in learning English.

### **3.3.3.1 Expert Validation**

After English vocabulary game has developed, it should be validated by experts. This validation is done twice; first, after the researcher develops the product, and second, after the researcher does the revision to some part of the product based on the expert revision. Here, the expert will get checklist of courseware..

The first expert of vocabulary game assess; vocabulary and pronunciation. The vocabulary point is measuring; vocabulary choice and the suitability between the vocabulary with syllabus, textbook, and the material that have been taught by the teacher. Pronunciation point is measuring about the pronunciation is correct or not?, how the fast of the speed pronunciation can be accepted by the young learners?.

The second expert of vocabulary game assess; font, picture, and button. the first point is measuring; font selection and whether the students can read the font?. The second point measure the background selection. The last poin is button measure the reseacher put the button in right place or not?, and the color selection for the button.

### **3.3.6 Try Out of the Media**

After developing the English vocabulary game, the researcher tries to try out the product to young learners. The reseacher comes to the class and asks some

students who aged 9-10 years old of Muhammadiyah 1 Balongpanggang elementary school to join this try out. This try out will be done three times. Previously, the application is installed to their mobile technology a day before doing the try out.

The reseacher comes to the school in the first meeting, students start learning about animals and vegetables. In the last meeting students learn about dresses and the reseacher will ask the students to fill the questionnaire. It is done to know whether the English vocabulary game application is interested or not. In addition, the questionnaire also is uses as feedback for the reseacher to improve the application that has been created by her.

### **3.3.7 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 young learner. The revisions will be done in accordance with the experts' suggestion.

### **3.3.8 Final Product**

This is the final stage of media development. After completing the revision, this final product is in the form of vocabulary learning application for young learners. The application comes with colorful cartoon picture, text, and audio that is expected to make young learners interested in learning English vocabulary.

At the begining of the application there are some menu. In each topic, there are some activities that present, including; first is mini dictionary about the topic animals, vegetables, and dresses. Moreover, those are completed with the correct



pronunciation as well. Second is game, there are some pictures that the students should know the spelling to answer the blank word.