

## **CHAPTER III**

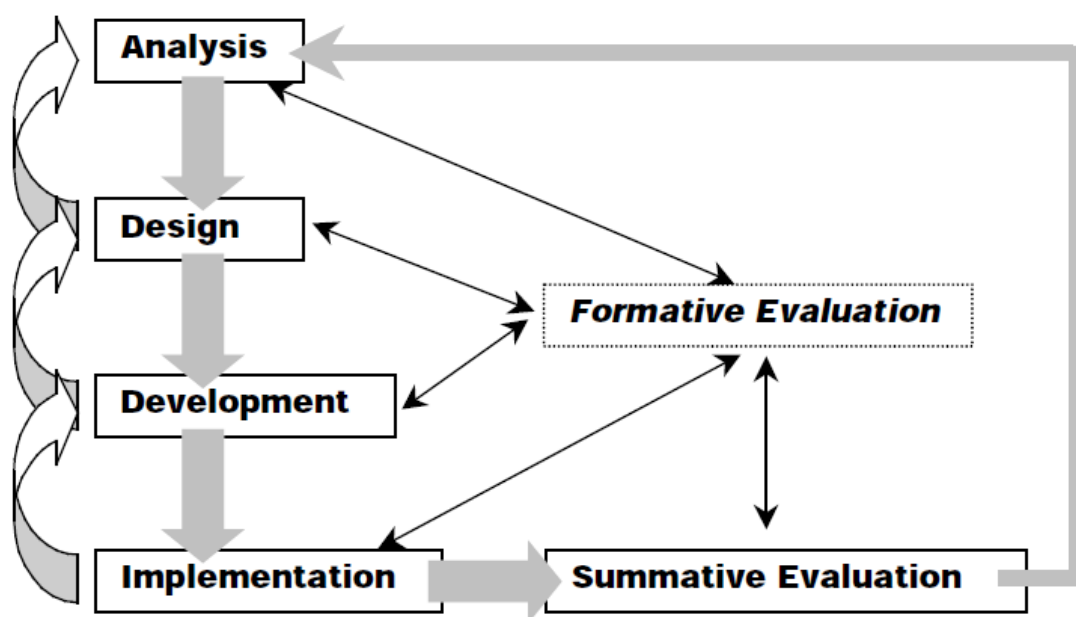
### **RESEARCH METHODOLOGY**

In this chapter, the researcher would present the method of study, this is important as a guideline to achieve the objective of the study. It is provided with research design, instrument of data collection, and procedure of developing English vocabulary material. In procedure of developing English vocabulary material will peel about need analysis, design instruction, developing material, expert validation, try out of the material, revision of the material, and final product. Those all will be presented as follows:

#### **3.1 Research Design**

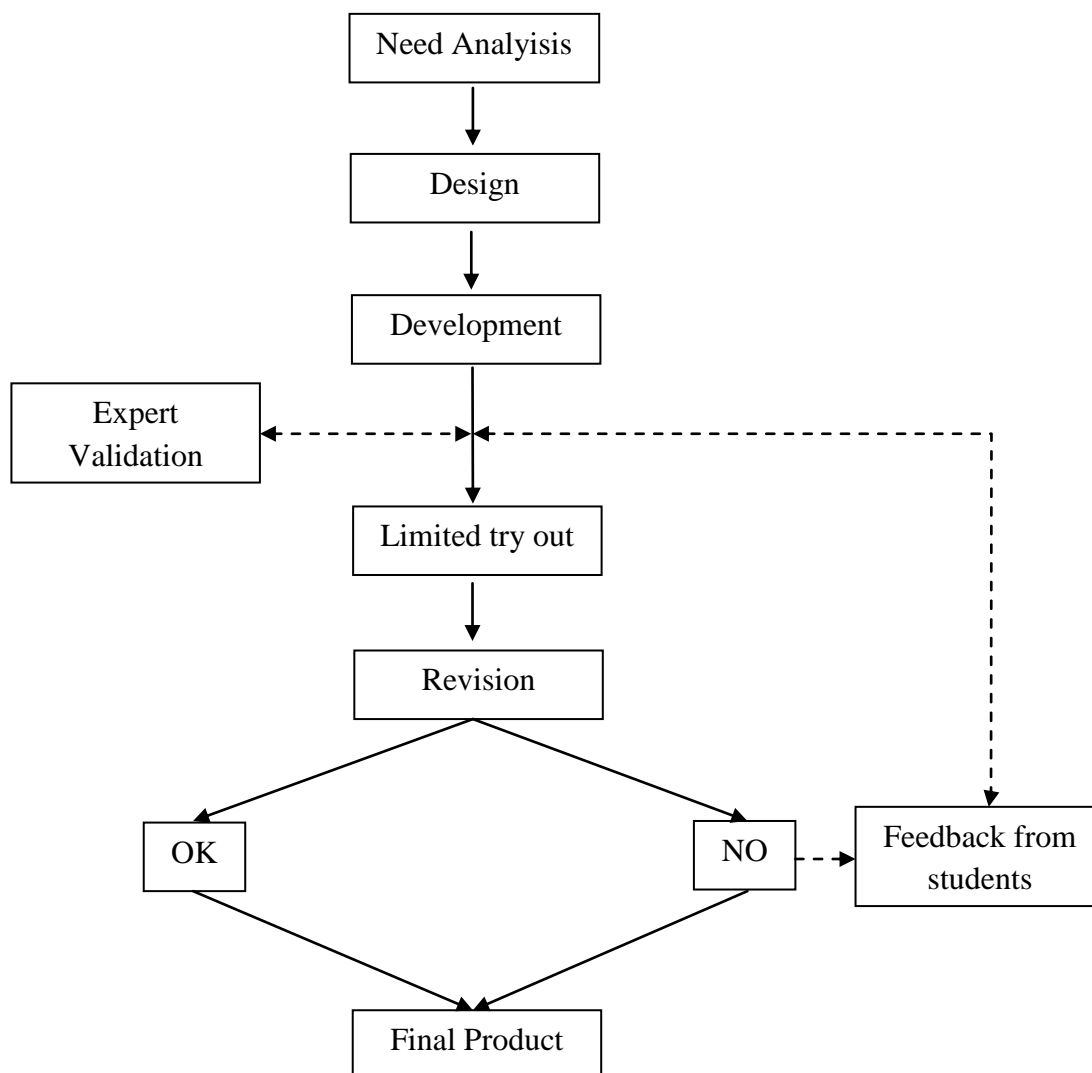
The research design of this study is research and development, or commonly abbreviated as R & D. It is because of this study is designed to develop English vocabulary material using adobe captivate application which can be applied on mobile technology, where the application is used as a media to improve the young learners' vocabulary mastery. This application can be used anytime and anywhere, such as at home. Students can learn English vocabulary via this mobile technology application. This application is developed for young learners. To undertake the development of this material, the researcher should complete several steps. There are several models of learning development that could be used. One is ADDIE development model. In this study, the researcher uses ADDIE model. Steven J. McGriff states that ADDIE model is a process of interactive instructional design, where the results of the formative evaluation of

each phase may lead the instructional designer back to any previous phase. The product result of one phase is the initial product of the next phase. ADDIE model consists of analysis, design, development, implementation, and evaluation. Here is a chart of the ADDIE model.



*Figure 3.1.1 Steven J. McGriff's ADDIE Model  
Instructional Systems, College of Education, Penn State University*

In this study, the researcher tries to find other modified ADDIE model which is more appropriate for this study. That is Asmara(2012) modified ADDIE model.



*Figure 3.1.2 Candra H. Asmara's ADDIE model*

The researcher chooses this model because she thinks that she is not expert. Therefore, she needs experts to validate her learning products and she has found it in this modified model.

This research model will be used to develop this study, it will be presented further in the procedures of developing English vocabulary materials using adobe captivate application for young learners.

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

The researcher uses several instruments to collect the data. First, the researcher gives questionnaire to young learners who aged 9-10 years old or categorize as students of 4<sup>th</sup> grade. This is done to know their target need and learning needs about English vocabulary material.

Besides, at the last activities after young learners got and used electronic vocabulary learning media, they will be given questionnaire too. It is done to know their comments about the application of English vocabulary material that has runned by them.

Second, the researcher will conduct an interview to the English teacher. This is done to find out the target need and learning needs

The last, the researcher provides courseware checklist for the experts. Here, the experts duty is given scores, comment and suggestion toward the English vocabulary material which is developed by the researcher.

### **3.3 Procedure of Developing English Vocabulary Material**

In procedure of developing English vocabulary material, there are several procedure that should be obeyed by the researcher. They are need analysis, design instruction, developing material. In developing material, there is a sub-procedure, that is expert validation. Furthermore, after done with developing material and expert validation. The next procedure does try out of the material, revision of the material and final product.

### 3.3.1 Need Analysis

Before starting to develop English vocabulary materials, the researcher will conduct analysis of young learners' need and teacher's need. First, the researcher will conduct analysis toward young learners' need who aged 9-10 years old or categorized as students of 4<sup>th</sup> grade of elementary school who will be the subject of the study. This is done, to find out what is needed by young learners so that the material will be developed in accordance with their need.

When analyzing the young learners needs, the researcher gives questionnaire toward five young learners as the representation. It is done to determine the target situation include where did young learners learn English vocabulary, the difficulties that young learners meet when learning English vocabulary, how do the young learners' interest in learning English vocabulary via mobile device, and what part that make the young learners interest when learning English vocabulary via mobile device. While, learning needs is done to know what are the young learners likes in learning English vocabulary, what kinds of English vocabulary learning model that the young learners like, What kinds of pictures is preferred by young learners, and the exercise's form that is liked by young learners. (Hutchinson & Waters, 1987, p.55-56, p.62-63).

Next, the researcher is doing interview with the English teacher at 4<sup>th</sup> grade or students aged 9-10 years old. It is to know the target situation included why English vocabulary is needed to be learned since young learners, and how English lesson will be used. While, the learning needs is done to determine the material that should be taught to young learners, what resources are available, and

the teacher's opinion and expectation about English vocabulary learning media that run on mobile device. (Hutchinson & Waters, 1987, p.59, p.62-63).

In the last, the researcher makes a line toward those needs from young learners and English teacher to determine the English vocabulary material that should be taught and mastered by young learners aged 9-10 years old or categorized as students 4<sup>th</sup> grade of elementary school. Then, the researcher makes a list of the vocabularies that suitable for young learners.

### **3.3.2 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 swf format that can run in mobile technology. There are some types of activities in designing this English vocabulary material. First, there are introduction some vocabularies which are divided into several different topics. In each topic, young learners will see some pictures which are completed with the text and pronunciation too. Meanwhile, there is a simple sentence in each single vocabulary that has shown. For both pictures and sounds will be drawn from authentic material. Next, there is a video song. The song is related to the topic. And the last, there is an exercise as an evaluation after they learned those English vocabulary materials.

### **3.3.3 Developing Material**

After passing through design instructional phase, the researcher goes on to the next phase, that is developing material. In this phase, the researcher makes

syllabus that include standard competences, basic competences, major materials, indicators, and activities.

Then, the researcher tries to make an application of English vocabulary material using adobe captivate application by referring to the standard competences, basic competences, major materials, indicators, and activities that arranged before. The researcher focuses on English vocabulary material because the design is specifically to help the young learners at 4<sup>th</sup> grade or aged 9-10 years in mastering vocabulary. This application comes with texts, pictures and audio which is expected could make young learners interested in learning English.

Further, this English vocabulary material conveys successively, one after the material presents in depth then the next sequentially presenting the material in depth also (Perdana, 2013). Meanwhile, the researcher chooses to create an application that can run through mobile technology as a media because currently mobile technology are the most preferred and closed thing by young learners. In addition, the mobile technology is a tool that is common and easy to operate.

#### **3.3.3.1. Expert Validation**

Once English vocabulary material has developed, it should validate to experts. This validation is done twice. First, after the researcher developed the product. Second, after the researcher did the revision to some parts of the product based on the experts revision. Here, the experts will get checklist of courseware. There are four components in courseware which will validate: attractiveness, mechanics, content, and originality (Rachman, 2011).

The attractiveness assesses the form of the presentation including font, colour, pictures, effect, sound, and etc. Next, the mechanics is in the matter of evaluating the spelling and grammatical errors. Meanwhile, the content is to evaluate whether the product covers topic in depth with details and examples or not and also the subject knowledge. Further, the originality covers assessing the creativity and the idea of the product (Rachman, 2011).

There are two experts validations; the information and technology specialist and the English teacher of the school. The function of the first expert validation is to check the instructional of the application and English vocabulary material. Whereas, the second expert validation is to check the material with the syllabus and curriculum.

#### **3.3.4 Try Out of the Material**

After developing the English vocabulary material, the researcher tries to try out the product to young learners. Because of the time limits, the researcher invites five students who aged 9-10 years old of randuagung 4 elementary school to join in try out. This try out will be done three times. Previously, the application was installed to their mobile technology a day before doing the try out. In the first, second and third meeting, the students start by learning the introduction of vocabularies and combining the vocabularies into simple sentence. Then in the last activity, the researcher will invite the young learners to sing a song. The song is related with the topics that have learned. It is done to help them remain the vocabularies.



In the last activity from the third meeting, the researcher will do try out to young learners to test them after they were learning those topics. The questions appear in the vocabulary application that has installed in the young learners mobile technology.

At the end of the try out, the researcher will give young learners questionnaire. It is done to know whether the English vocabulary material application is interested or not. In addition, the questionnaire also uses as feedback for the researcher to improve the application that has been created by her.

### **3.3.5 Revision of the Material**

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 learners. The revisions will be done in accordance with the experts' suggestion. The revision will be considered by the expert's suggestion. There are four components which used for the evaluation; attractiveness, mechanics, content, and originality.

### **3.3.6 Final Product**

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

At the beginning of the application there are some menu. In each topic, there are some activities that present, including; introduction of the vocabulary

related with the topic, combining the vocabulary into a simple sentence.

Moreover, those are completed with the correct pronunciation too.

The next activity, after they learned the topic. There is a song, which is related with the topic. And for the last activity, there is an exercise. Here, the exercise stands as an evaluation after they learned those English vocabulary materials.