

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

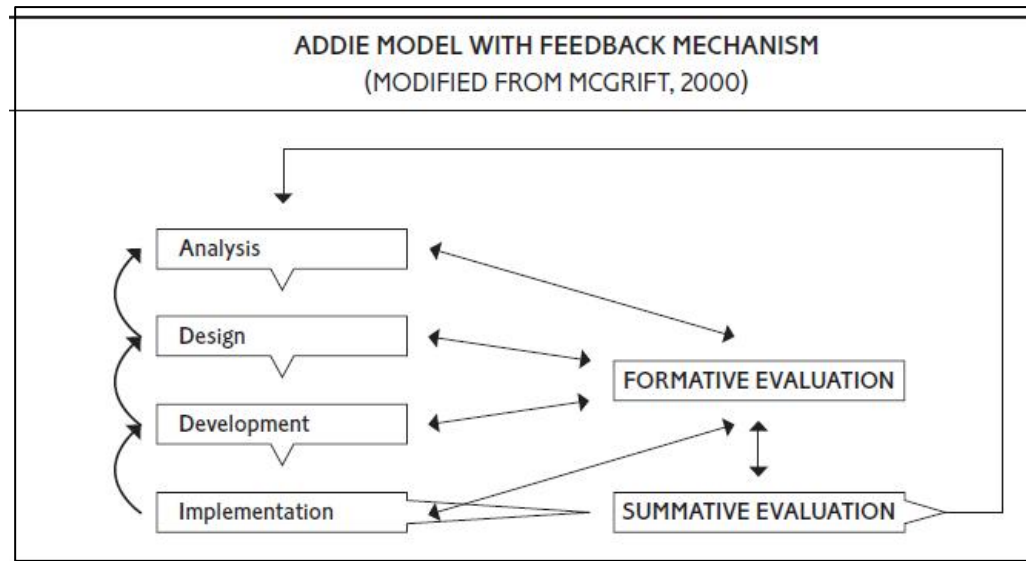
In this chapter, the researcher would like to describe the method of study, to guide achievement of the students. This chapter covers the research design, instrument of data collection, and procedure of developing English reading comprehension material.

#### **3.1 Research Design**

The design of this study is a research and development (R & D), this method used to produce or improve something becomes better. The researcher choosing this research method because of this study is designed to develop English reading comprehension material using an application in the form of a game which can be installed on Smartphone also computer or notebook, where the application become as a media to improve students reading comprehension. Because this is a portable game, so the player can play this game application every time. It can give advantages for the Students to learn English reading both in academic or non-academic because of the use of this software is very easy. The adolescence learner can play this game application while learning English.

This application is developed for adolescence learner. In developing the material of this research, the researcher using ADDIE development model that consist of some steps, it is: Analysis, Design, Development, Implementation, and Evaluation.

In this study, the researcher use modified ADDIE model which is more appropriate for this study. That is ADDIE model modified by McGrift (2000) .



The research model that modification of ADDIE model from Mc Grift will be used to develop this study, it will be described further in the procedures of

developing English reading comprehension materials using adobe captivate application for young learners.

### **3.2 Data Collection**

The researcher uses several instruments in collecting the data to measure the validity of the study. First, the step in collecting the valid data of this research the researcher doing interviews to adolescent learners in Junior High School of Islamic Qon that categorized in 8<sup>th</sup> grade. To gather student target need and learning needs about English reading comprehension material.

After interviewing the student, the researcher giving questionnaire about student difficulties in English reading activity also gathers student expectation towards the material or method in English reading activity.

The last steps, the researcher provides a checklist for the experts. In this case the experts' duty is given scores, comment and suggestion toward the English reading material which is developed by the researcher.

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

There are several procedures in developing English reading material. They are need analysis, design instruction, and developing the material.

#### **3.3.1 Need Analysis**

Before starting to develop English reading materials, the researcher doing analysis to investigate learners' need and teachers need. The researcher will conduct analysis toward adolescence learners' need who aged 13-18 years old or

categorized as students in 8th grade of junior high school who will become as the subject of the study. To find adolescent learners need so that the material will be developed according their need.

### **3.3.1.1 Reading need analysis**

In analyzing the adolescence learners' needs, the researcher gives a questionnaire toward five adolescence learners. To determine the target situation includes where did adolescence learners learn English reading skills, the difficulties that adolescence learners meet when comprehending English reading, how do the young learners' interest in comprehending English reading text.

After that, the researcher is interviewing the English teacher of 8th grade and students in the class. It is done by the researcher to gather the target situation about the necessity of English reading comprehension to be learned since adolescence learners, and how an English teaching learning process will be happening.

For the last steps, the researcher take a result toward the needs of adolescence learners and English teacher to determine the English reading material that should be taught and mastered by adolescence learners categorized as 8th grade students of junior high school. Then, the researcher makes a list of the text that suitable for adolescence learners.

### **3.3.1.2 Game need analysis**

After analyzing what the learner needs in reading comprehension, the researcher makes the visual design, and what part that make the young learners' interest when learning English reading with a portable device. After learning needs is done to know what are the adolescence learners interested in learning English reading, what kinds of English reading learning model that they like, What kinds of visual appearance that prefer by adolescence learners, and the exercise's form that's suitable for them.

The researcher makes the visual design of the game based on student needs and give simple quest to finish the game quickly to make them more intersted when playing the game and answering the question from the game. So, it will make the student not feel bored when playing the game.

### **3.3.2 Design Instruction**

After doing an analysis about adolescence learners' needs of reading text material, the researcher begins to make steps in designing the instruction.

#### **3.3.3.1 Game design**

The researcher designs the media of teaching reading by making an adventure game in the form of role play gaming in executable extension format that can run in portable mobile device technology also pocket computer.

#### **3.3.3.2 Reading design**

There are some types of activities in designing the material of reading English text. The first, there are introduction about the game instruction that

contain some text on the screen how to play the game and finish some stages or level in the game.

After that, the player of the game, especially for adolescence learners will see the non player character that give a quest and answer the question related to their ability in reading comprehension.

### **3.3.3 Developing Material**

After designing the instructional stages, the researcher doing the next stages, that is developing material.

#### **3.3.3.1 Developing reading**

In this stage, the researcher makes the game that related to the syllabus and textbook of the teacher in teaching reading for activities in the class.

#### **3.3.3.2 Developing game**

The next part of developing material, the researcher tries to make a game application as a media for teaching English reading material using RPG VX Ace. The researcher creates game application that can be running well in mobile technology as a media because in this era mobile technology is the most preferred thing by adolescence learners. In addition, the mobile technology is not become as a strange tool for them to operate and most of adolescence learner has mobile devices.

#### **3.3.3.3 Developing Reading Material in The Game**

The game that creates by the researcher refers to the standard of competences, basic competences, major materials, indicators, and activities that structured before. In developing the game itself, the researcher should focus on English reading text material because the design of this research is become as a media to help the adolescence learners at 8<sup>h</sup> grade students in mastering English reading comprehension.

This application comes with texts, and some character player which is expected it could make the adolescence learners feel comfortable in learning English and motivated to learn English reading more further.

#### **3.3.4 Expert Validation**

After English reading material has developed, it should validate with the experts. In validating the material there are two expert validations; First, after the researcher developed the product or application. Second, after the researcher doing revision to some parts of the product based on the experts revision. Here, the experts will get a checklist of courseware.

#### **3.3.5 Try Out of the Material**

After finishing the English reading text material, the researcher tries to try out the product to adolescence learners. In the progress of try out the product, the researcher invites six students in 8<sup>th</sup> grade of junior high school to join try out. The progress in try out will be done after the application was installed to the students' mobile technology a day before doing the try out. After installing the program or application to the student mobile devices, they

start by learning the introduction of the game and reading the text in the top of the non-player character in the game. Then, the student playing the adventure game to finish the quest from the non-player character to test student reading skills and going to the next level. The last activity, the researcher will invite the learners to give a response or feedback.

In the last activity of the third meeting, the researcher will do trial test or try out to adolescence learners and analyze them after they were learning those topics from the game. The questions will appear in the last stages of application that has installed in the their mobile technology.

At the end of the try out, the researcher will give the young learners questionnaire. It is done to know whether the English reading comprehension from application is suitable for the to learn or not. In addition, the questionnaire is also used as feedback for the researcher to improve the application that has been created.

### **3.3.6 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 adolescence learners. The revisions will be done according to the experts' suggestion. The revision will be considered by the expert's suggestion. There are four components which used for evaluating the data; attractiveness, mechanics, content, and originality.

### **3.3.7 Final Product**



This is a stage of final material development. After doing revision of the material, the final product of this research is reading comprehension learning applications for adolescence learners. The application contains colorful cartoon pictures, and texts that expected to make adolescence learners motivated to learn English reading activity.

At the beginning of the application, there are some parts of the menu. In each topic, there are some activities that present, including; introduction of the text related to the topic, comprehending the text and finishing the quest from the text.

The next activity, after they learned the topic from the application. That is in the form of an animated text, which is related with the topic. And for the last activity, there is an exercise. To evaluate the students' reading comprehension after they learned those English reading text materials from the application.