

## **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 product.

#### **3.1 Research Design**

The researcher is to develop interactive EGRA digital course method in teaching and evaluating writing descriptive text in his study. So the design of this study is Research and Development study. According to Seels & Richey in Richey, Klein and Nelson (2004: 1099), the purposes of R & D are designing, developing and evaluating instructional programs, processes and products that must meet the criteria of internal consistency and effectiveness. 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 adapted the Lee and Owens Model (2004) to develop the interactive multimedia that consists of five stages. Originally, the stages are; need analysis, design, development, implementation and evaluation. So, the researcher will follow the stages, here will be needs assessment or analysis, design, development, implementation and evaluation. The procedure will explain as follows.

### **3.2 Procedure developing digital course using interactive EGRA method in teaching writing descriptive text**

#### **3.2.1 Needs assessment or Analysis**

There were two phases in this stage. The first phase is needs assessment while the second phase is front-end analysis.

##### **a. Needs Assessment**

In this phase, the researcher decides the goal of this study and identified the research problems and ways to solve the problems using questionnaires.

In this phase, the researcher tries to find out the students problem in descriptive text material in their class. After that, based on those problems that carry out from the students, the researcher will identify and create the goal base on it.

The way to solve the problem is the researcher uses the questionnaires. The use of questionnaires as an instrument is appropriate because the researcher will know exactly what the respondents responds according to the answers. The whole questionnaire contents are about target need, learning need and teacher roles. First, some questions which ask about what the learning descriptive text style which they want and the important of multimedia application in studying process are include in learning need. Second Their difficulties in writing, questions related with descriptive text, and students respond about their writing ability are include in target need. Then the answers conducted in multiple choices, so the researcher will know what the students need and conduct the application and find the goal.

## **b. Front-End Analysis**

The researcher determined the subject, the authoring software used to develop the program and to deliver it, the environment in the school where the program was going to be used, the macro skills, the standard of competence and the basic competence, the appropriate delivery medium and available materials which were needed to be developed.

### **3.2.2 Design**

To make design, researcher analyses from need analysis result. The researcher will analyze finding in need analysis related with the syllabus that Muhammadiyah senior high school 1 Gresik used. The researcher will make this digital course which appropriate with target needs and learning needs to help students learn descriptive text. The material will be taken from the course books, and it will create in digital course by using interactive multimedia. In detail the steps of design will be explained bellow:

#### **a. Writing Course Grid**

After the competence standard and the basic competence were analyzed, the researcher writes the course grid that was used to develop the program.

#### **b. Writing the draft of the material**

Materials related to this study were developed. The researcher also classified the material presentation.

#### **c. Flowcharting**

After the draft of the material was created, the next step was making the flowchart. Flowchart is a symbol or picture which depicts steps

representing a processing activity of the server. Flowcharts serve as a roadmap of interactive multimedia. It usually links one page to another.

#### **d. Storyboarding**

After the flowcharts are created, the developer made the storyboard. It describes how every screen in the presentation would be displayed. They refer to the operation shown in the flowchart.

### **3.2.3 Development**

#### **a. Material Collecting**

The texts, pictures, animations, audio and videos were collected. In order to get the input, the developer analyzed the textbooks used in the Muhammadiyah senior high school 1 Gresik.

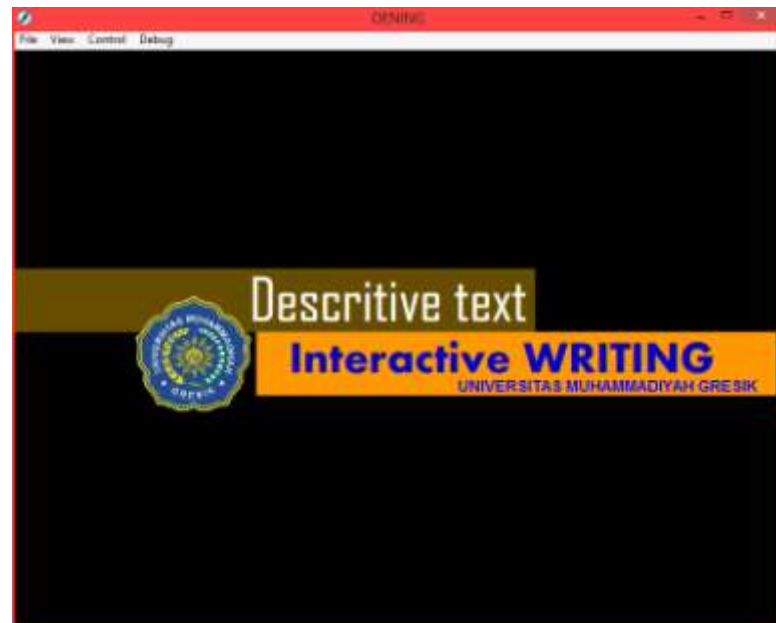
#### **b. Integrating the material into the program**

After the researcher created the course grid, the draft of the material, the flowchart and the storyboard of the program, the researcher collect the detailed materials including texts, audio, graphics, animation and video. After that, the materials are integrated into the program using Macromedia flash 8. The first design of the interactive multimedia consists of three main components. They are namely *Start Page*, *Home Page* and *Menu Page*. The followings are the detailed information of the first draft.

##### **a) Start Page**

The following picture shows the appearance of the *Start* page. It is the opening of the program which shows the title of the program, the developer, the institute and the year of developing the media. The students have to click the *Start* button to go the *Home* page. The

navigation system (*exit* button) is presented in the right upper corner of the screen.



**Figure 1.1 Start Page**

**b) Home Page**

The *Home* page consists of four menus. They are *Topics*, *About the Program*, *About the Author* and *references*. The navigation system (*exit* button) is presented in the right upper corner of the screen. There is also *Play* button to play the musical instrument in the left bottom corner of the screen. The students have to click one of the menus to see the content of each menu.



**Figure 1.2 Home page**

**c) Topics**

In the *Topics* page, there are three main menus: *Unit 1* “*Describing Places*”, *Unit 2* “*Describing People*” and *Unit 3* “*Describing Jobs*”. The title of the unit represents the topics of the unit. The students have to click the *Unit* buttons to go the main activities.



**Figure 1.3 Topic page**

**d) Indicators menu**

*Achievement Indicators* page provides the learning objectives of each Unit. There are some learning objectives related to writing descriptive texts about sub topic such as describing place, people, and jobs.



**Figure 1.4 Indicator page**

### e) Let's Study menu

This section provides three activities. Those activities aim at activating students' background knowledge and enriching students' vocabulary before they start writing. The detailed information of each activity is presented next.



Figure 1.5 Let's study menu

### f) Activities menu

The Let's Study button consists of three submenus: *activities 1*, *activities 2*, and *activities 3*. The descriptions of each submenu are presented next.





**Figure 1.6 Activity menu**

**g) Let's Write menu**

There will be a blank space or the paragraph box. So the student can write their paragraph related with the kind of descriptive text from each unit. Through with this exercise the students are expected to be able to write a descriptive independently.



**Figure 1.7 Activity menu**

### h) Evaluating menu

In this menu, There will be show the interactive rubric as the tool for evaluate the students' writing. So the teacher can directly to evaluate the students at that moment. Moreover, the teacher gives a score to the students according to the rubric which included in evaluating menu.



**Figure 1.8Evaluating menu**

### 3.3 Experts Validation

The product should be evaluated by a material expert and a media expert. The purposes were to revise the product. The revised product will be used as the final product. The researcher chooses this model because the researcher is not the expert. Therefore, the researcher needs expert to validate his learning product. This model will be used to develop this study. So it will be evaluated related with the content from the teacher as an expert and also the media expert as the one who know well about the

media that will be created. Finally, it will be presented further as a good product of developing interactive EGRA digital course method in teaching and evaluating writing descriptive text by using CALL.

### **3.4 Final Product**

This is the final stage of media development. After completing the revision, this final product is in the form of Interactive multimedia. The final format of this product is EXE file, so the format (.exe) is compatible with all computer systems. So the user will be easy to apply this product in their personal computer. The target of this product is for eleven grades of senior high school. Moreover, every students and people who want to learn the descriptive text are free to use this product.