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 integrated material reading and writing using multimedia applications.

3.1 Research Design

This research is undertaken to develop integrated materials of reading and writing using multimedia applications. According to the aim of this study, Research and Development as the research design of this study.

Borg and Gall (1983, pp. 772), Education research and development (R & D) is a process used to develop and validate educational products. The steps of this study refer to the R & D cycle, which consist of ADDIE models; analyze, design, develop, implement and evaluate.

The researcher uses ADDIE models according to Borg and Gall (1983) in this study. Borg and Gall have ten steps in their ADDIE models, but researcher modifies based on her product as follows; analyze (preliminary field testing; questionnaire and interview), design (plan or make draft of instructional material), develop (create the draft become authentically flipping book using multimedia application), implement (main field testing), evaluate (revision of product as suggested by main field testing).

According to Borg and Gall models' and Candra Hadi Asmara model (modified), the researcher modifies which related to her study become as follows:
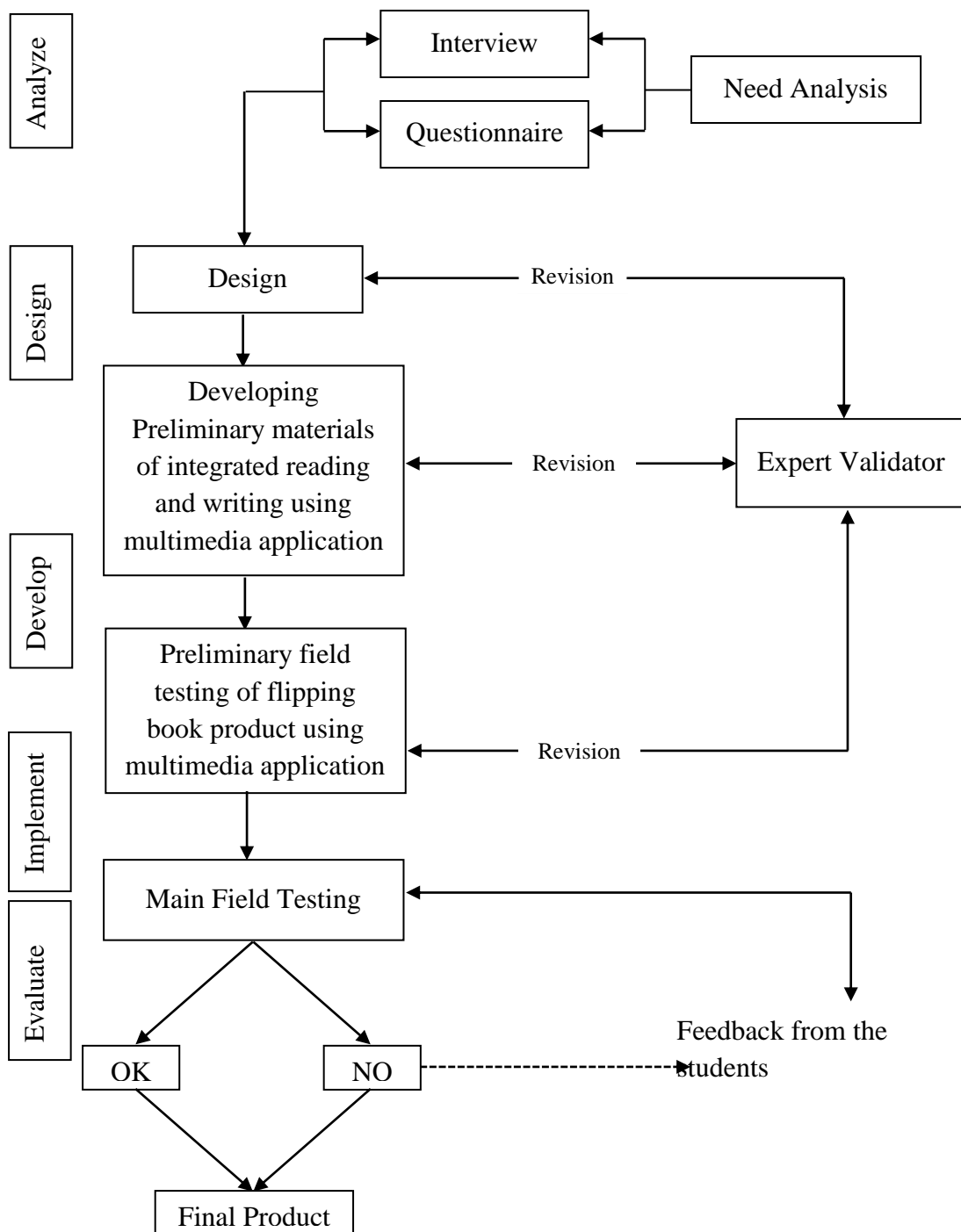
Figure 3.1: ADDIE Model modified from Borg & Gall Model and Candra Hadi Asmara Model

3.2 **Procedure of Developing Integrated Material Reading and Writing Using Multimedia Application for junior high school**

3.2.1 Analyze

In this phase, the researcher uses two instruments to collect data; interview and gives questionnaire. To reach students' need, researcher creates those instruments to develop her product. Those are done to know target need and learning needs about reading and writing materials.

3.2.1.1 Interview

The researcher interviews the English teacher of SMP N 4 Gresik on eight grades. The researcher gives twelve questions for interview (see in the appendix). According to the interview, researchers found that students do not really understand how to create a good paragraph because they have a problem about translation. Although they have known the generic structure of both of short functional texts, but they have a problem to create sentences become good paragraph. In reading materials, they have difficulties to understand well in every paragraph that they read (short functional text). Students understand only on some vocabularies of the story that they have read.

3.2.1.2 Questionnaire

The researcher gives questionnaire to 61 students of eight grades; 27 boy students and 34 girl students. They are from 8A and 8B class. The researcher gives 30 questions on the questionnaire (see in the appendix).

The questions contain about target and learning needs which focus on reading and writing, what materials do students want in learning reading and writing, what students' difficulties through learning reading and writing.

3.2.2 Design

The researcher has three steps to create a flipping book; those are developing integrated materials of reading and writing according to result of need analysis in analyzing phase before and syllabus, create the prototype, then create integrated materials in CorelDraw X7 and Adobe Illustrator CS3 software, and make a flipping book on every page from CorelDraw X7 in Adobe Flash CS6.

a. First step

According to the syllabus and need analysis, the researcher arranges integrated materials of reading and writing for one semester; short functional text (Invitation, Announcement and Advertisement), Descriptive text and Recount text.

b. Second step

Based on the integrated materials above, the researcher creates it become some pages using CorelDraw X7.

c. Third step

In the last step is group all the pages of integrated materials for reading and writing become flipping book using Adobe Flash CS6.
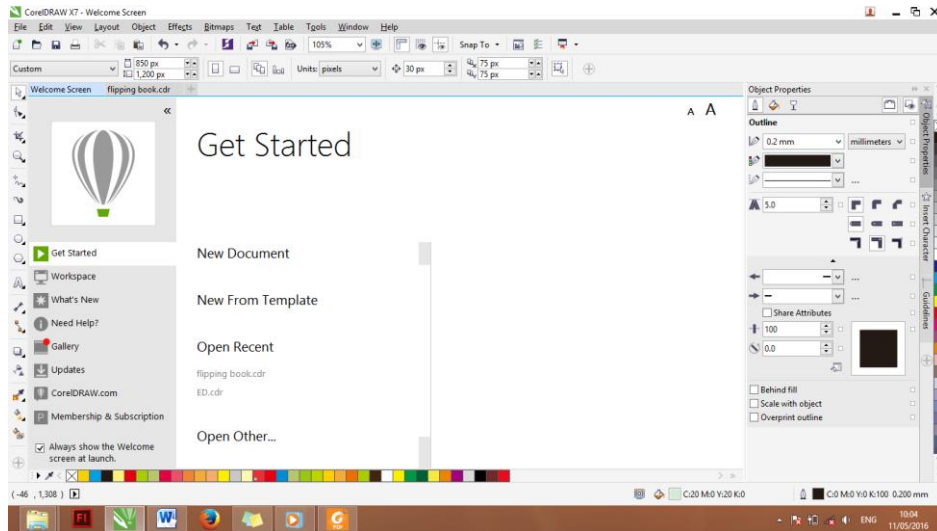
3.2.3 Development

Chart 3.2: Main page of CorelDraw X7

The researcher creates the cover of the books using CorelDraw X7

software and gives the name of the flipping book "Beyond Your Dream".

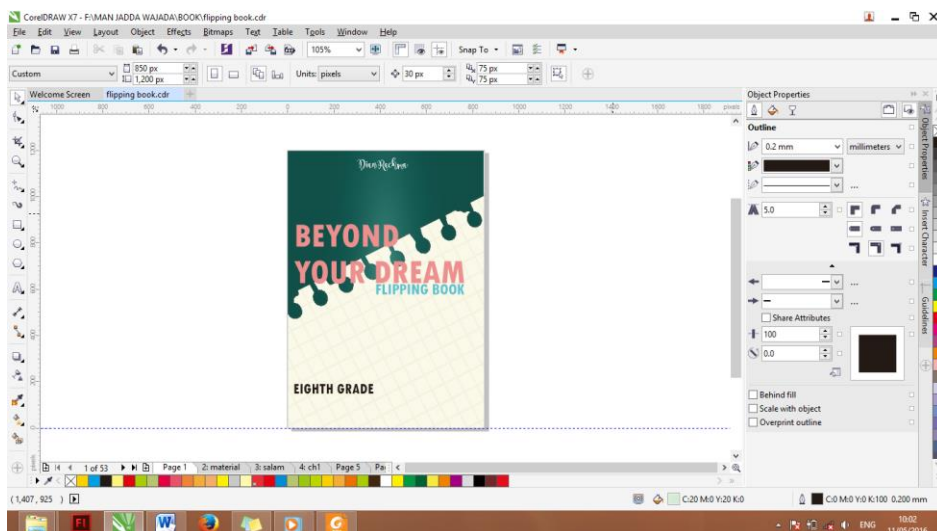The researcher has described that this flipping book uses for eight graders.

Chart 3.3: Design of cover of book

The first page is a menu that flipping book gives to the user; name of materials which in flipping book. The contents of the menu will be created in Adobe Flash because the researcher creates it in button which must give action script. The users of flipping book can choose the button as they want.
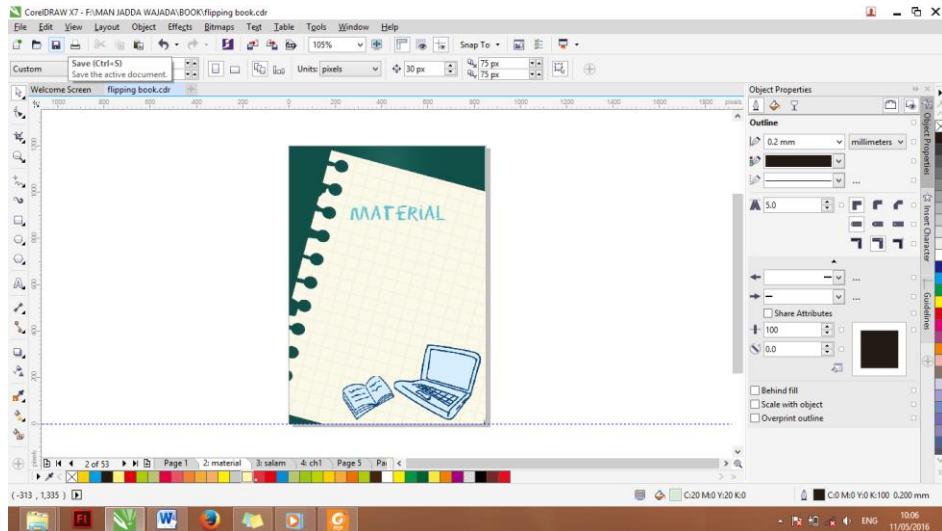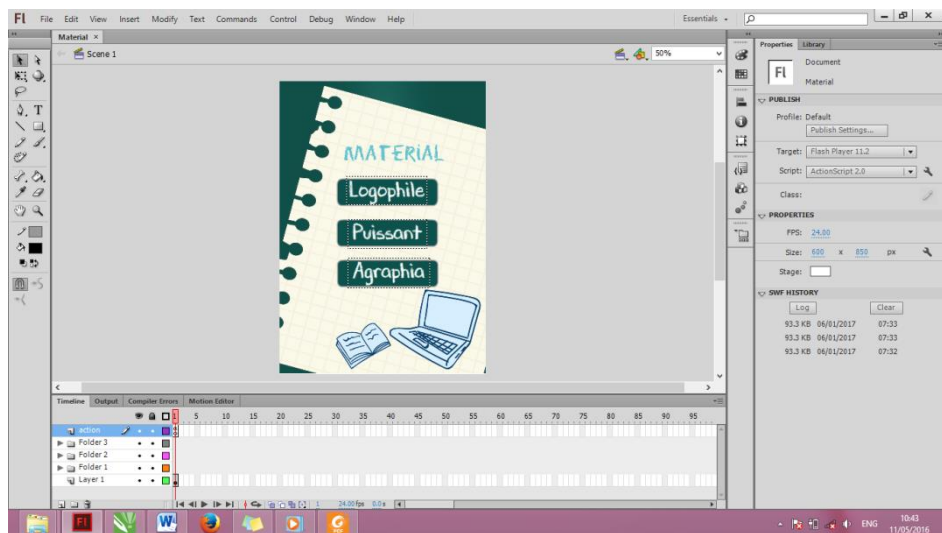

Chart 3.4: Design of material page

Chart 3.5: Designing material page in Adobe Flash

According the previous page, the users will face three buttons which named of the chapter. The materials are made for one semester. The users can choose what chapter they will choose as they want and will face some exercises in every chapter. The materials are; Short Functional Text (Invitation, Announcement and Advertisement), Descriptive text and Recount text.

The researcher arranges pages of books in a flipping book using Adobe Flash CS6. The previous frame is opening slide.
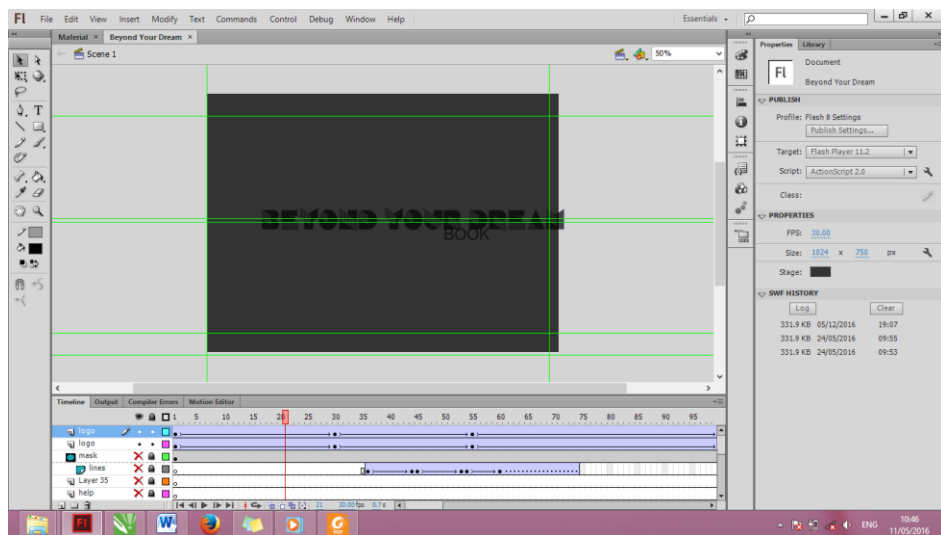

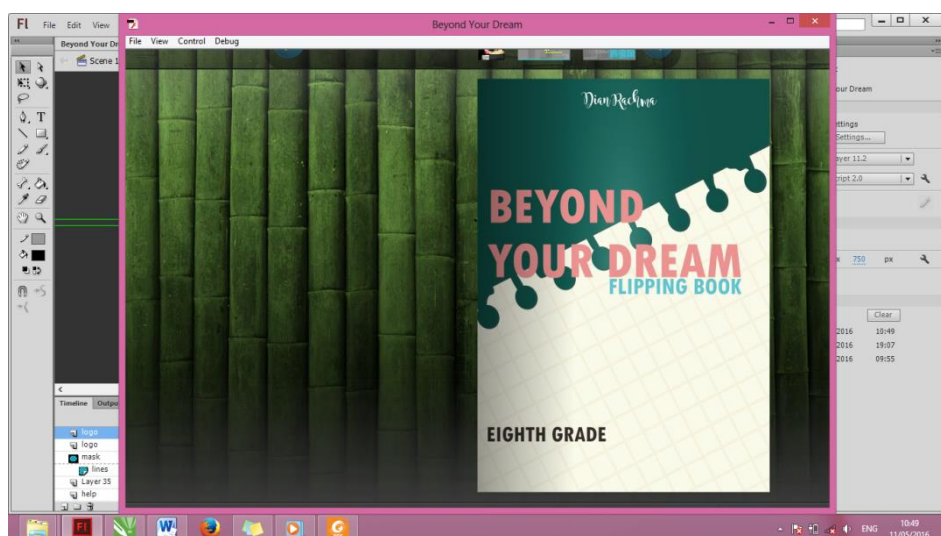*Chart 3.6: Creating digital flipping book in Adobe Flash*

Chart 3.7: Digital flipping book application

The page that researchers' arranges in Adobe Flash CS6 becomes a flipping book. The user can flip pages by page also can direct page that the user wants by click the button on the page.

3.2.4 Expert Validation

After developing integrated materials of reading and writing using multimedia application, it should be validated by some experts. This validation is done two experts; first, validate about the content of flipping book application by the English teacher. Second, validate the digital flipping book application which is made in Adobe Flash CS6. Those experts are from SMPN 4 Gresik and University of Muhammadiyah Gresik from Informatics' Engineering Department.

3.2.5 Implementation

The researcher checks the flipping book application to some experts then researcher tests flipping book product to students of eight grades in SMPN 4 Gresik. The researcher comes to the class, then presents this flipping book in the classroom.

3.2.6 Evaluation

According to try of product to students before, researcher revises the product as students' need; the content of the materials, exercises, content of flipping book and another. Those revisions are needed by researchers to improve

in order to make flipping book product can be used well for students. The revisions will be done in accordance with the experts' suggested.

3.3   Final Product

This is the final stage of developing material. After completing the revision, this final product is in the form of flipping book application for junior high school. The application is created with interactive application which has an interesting design and pictures according to the material about narrative and recount text.

At the beginning of the application, there are three buttons of chapter's name; Logophile, puissant and agraphia. In every chapter includes some integrated material and exercises too.