

CHAPTER III

RESEARCH METHODOLOGY

This chapter discusses about the method that is used in the research. This chapter is consisted of research design, instruments of data collection, procedure of developing English vocabulary material (need analysis, design of the material, development of the material, expert validation, development of validation, try out of material, revision of material, final product). The explanation will be discussed below.

3.1. Research Design

The researcher used Research and Development (R and D) as the research design. Research and Development (R&D) is Systematic activity combining both basic and applied research, and aimed at discovering solutions to problems or creating new goods and knowledge. R&D may result in ownership of intellectual property such as patents. In accounting for R&D costs, the development costs may be carried forward but the basic and applied research costs are often written-off as incurred. R&D discover new knowledge about products, processes, and services, and then applying that knowledge to create new and improved products, processes, and services that fill market needs. Before developing the material, the researcher interviewed the teacher about the process of English learning and the problem that was faced by the students. So, the researcher would know the need of the students, then the researcher would try to develop the English material at 4th grade in second semester become a good material by using CALL . The researcher use Research and Development (R&D) as the research design. For the development model, the researcher used model as the model of Stefen J.

Mc Griff's "ADDIE" model, that is consist of : Analysis, Design, Development, Implementation, and Evaluation.

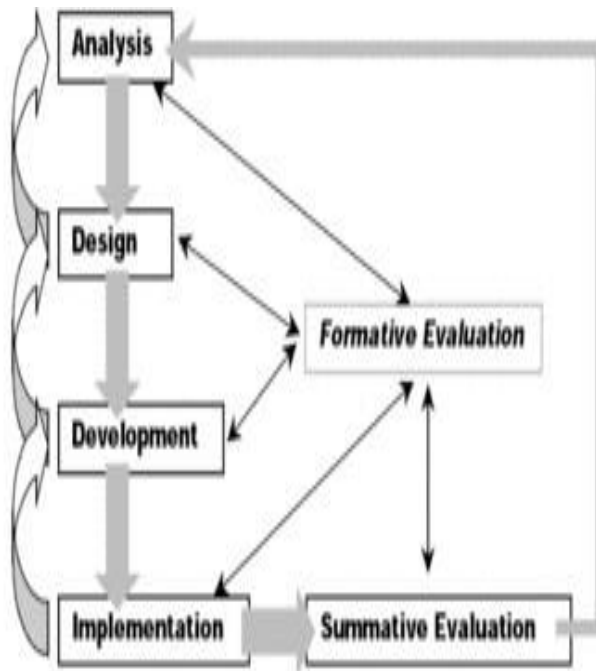


Figure 1. ADDIE Model, Diagram by: Steven J. McGriff, Instructional Systems, College of Education, Penn State University

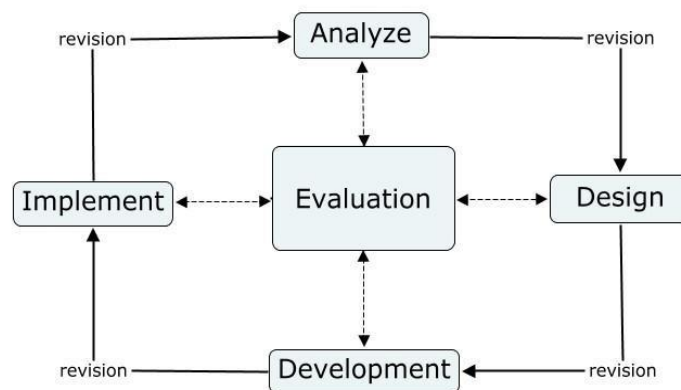


Figure 2. ADDIE Model, Diagram by: Steven J. McGriff, Instructional Systems, College of Education, Penn State University

The five phases are listed and explained below: *For analyze*, the first phase of content development begins with Analysis. Analysis refers to the gathering of

information about one's audience, the tasks to be completed, and the project's overall goals. The instructional designer then classifies the information to make the content more applicable and successful. *For design*, the second phase is the Design phase. In this phase, instructional designers begin to create their project. Information gathered from the analysis phase, in conjunction with the theories and models of instructional design, is meant to explain how the learning will be acquired. For example, the design phase begins with writing a learning objective. Tasks are then identified and broken down to be more manageable for the designer. The final step determines the kind of activities required for the audience in order to meet the goals identified in the Analyze phase. *For develop*, the third phase, Development, relates to the creation of the activities being implemented. This stage is where the blueprints in the design phase are assembled. *For implement*, after the content is developed, it is then Implemented. This stage allows the instructional designer to test all materials to identify if they are functional and appropriate for the intended audience. *For evaluate*, the final phase, Evaluate, ensures the materials achieved the desired goals. The evaluation phase consists of two parts: formative and summative assessment. The ADDIE model is an iterative process of instructional design, meaning at each stage, the designer can assess the project's elements and revised them if necessary. This process incorporates formative assessment, while the summative assessments contain tests or evaluations created for the content being implemented. This final phase is vital for the instructional design team because it provides data used to alter and enhance the design. Besides, the researcher tries to find the other model that is taken from the thesis of Asmara, (2012).

The researcher (Asmara, 2012) added the model to the research design, because the development material need to ask the experts as the support, suggestion, and also evaluation to make the completely in development material. Here is the model:

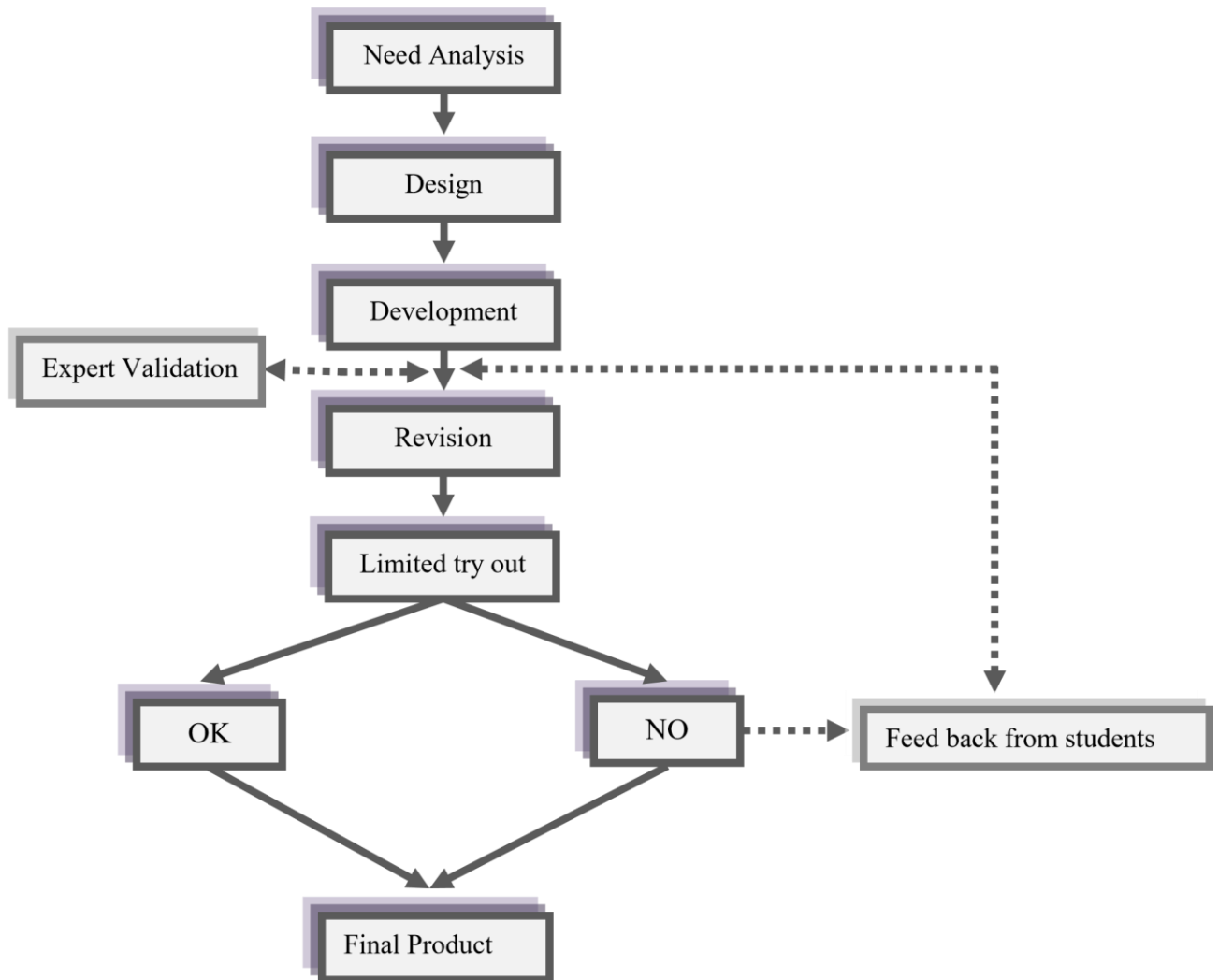


Figure 3. The modified ADDIE Model

3.2. Instruments of Data Collection

The researcher would use three steps for the instruments of data collection. Those are; interview, questionnaire, and checklist. The interview has been done by the researcher with the English teacher of the 4th grade at MI Al-Husnah Manyar Gresik. The checklist would give to the experts. The Questionnaire would be given to the students of the 4th grade at MI Al-Husnah Manyar Gresik after they has been doing the try out.

3.3. Procedure of Developing Vocabulary Material

In this side, the researcher explains about the procedure of developing vocabulary material that is consist of need analysis, design of the material, development of the material, expert validation, revision of material, try out of material, and final product.

3.3.1. Need Analysis

Before developing vocabulary material, the researcher did the need analysis. The need analysis divided into learning need and target need. In target need, the researcher asked the syllabus of the 4th grade at MI Al- Husnah Manyar Gresik in second semester to the English teacher. The researcher also asked the book “one stop English” that used the teacher to teach the students. It used to know what the topic and material that would be develop. In learning need, the students want to study vocabulary by using game and watch movie. So, the researcher would give some games and videos to develop the material. It would give to make the students more interesting to study English.

3.3.2. Design of the material

The researcher identified the need of the students at MI Al-Husnah Manyar Gresik. Then, the researcher designed the media and making a draft by using software of Ulead Video 11.0 and game maker . The researcher matched the material based on the students' need and also the syllabus to design the material. The syllabus comes from the teacher that is used in the school. The researcher is only focus on vocabulary (listening, reading, and writing). The researcher completes the product with the game, pictures, sound effect, animation picture, pronunciation, and video which can make the students more interesting in studying English.

3.3.3. Development of the Material

The researcher used Ulead Video and Game Maker to the media and put into multimedia CD-ROM by using Lontion Autorun Pro. The media was consisted of three parts, they were; Topics, Games, and Magic Questions.

The first slide was about topics, There were five topics that was related with the syllabus (Foods and drinks, Clothes and Color, at The Class, Kinds of Animals, and Parts of Body). The content of the topics were the video that support with the sound effect, pictures, animation, pronunciation, and written. The topic took from the authentic material.

The second slide was about games, there were three kinds of game here, such as; snake and leader, puzzle, and matching game.

The last part was about the "magic question". The magic questions was consisted of some questions to the students, and there were three kinds of the magic

question, such as; easy magic question, medium magic question, and difficult magic question.

3.3.4. Expert Validation

The product of developing vocabulary material should be evaluated and validated to the experts. The experts would give the scores by giving checklist to the courseware, comment and also suggestions. There were two experts here, they were Dian Kurnia Octaviani, S.Pd and Saiful Hadi, S.Pd. The checklist was consisted of 5 components, they are; attractiveness, requirements, mechanics, content, and originality.

3.3.5. Development of Validation

The researcher tried to find which component should be add or may be deleted. It was based on the checklist of courseware, comment, and suggestion from the experts. So, the product would be more better than before and would be applied to the students of 4th grade.

3.3.6. Try out of Material

The researcher tried the product out to the students after the product has finished for revision or development. Trying out of the material has been done to know and check the result of designing vocabulary material by using computer as the media at MI Al-Husnah Manyar Gresik that the media could be applied to the students of 4th grade or not. The researcher took eight students randomly for doing this try out. The teacher also helped the researcher.

3.3.7. Revision of Material

The researcher revised this product again after doing the try out. It might be the material still need to revise to make this product completely. The revision would be done based on the comment or suggestion from the experts. So, it could be applied for the 4th grade students in Elementary school.

3.3.8. Final Product

Final product is the last step of developing material. This final product put in the multimedia CD-ROM after having the final revision. Finally, it was ready to be applied for the 4th grade students in Elementary school.