

## **CHAPTER III**

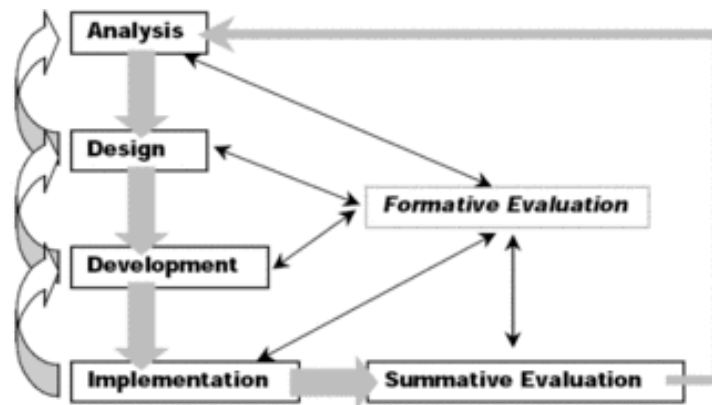
### **RESEARCH METHOD**

In this chapter, the researcher explains the aspect dealing with the methodology of the study, which is used to analysis. The aspects consist of design of the study, source of data, instrument of the study, and the procedure of developing English module for 10<sup>th</sup> grade of computer and internet networking engineering.

#### **3.1 Design of the Study**

The research design of this study is Research and Development study. The researcher chooses this research design since she would like to develop English Computer and Internet Networking Engineering material for 10<sup>th</sup> grade at SMK YPI Darussalam 1 Cerme Gresik.

In developing English material, the researcher needs to do such kind of steps in order to complete the development of English material. In the case of development model, the researcher attempts to adopt a model in developing the module. The adaptation model of research and developmental is from ADDIE model. According to Steven J. McGriff (2000) there are five steps in ADDIE model and they are analyze, design, development, implement, and evaluation.



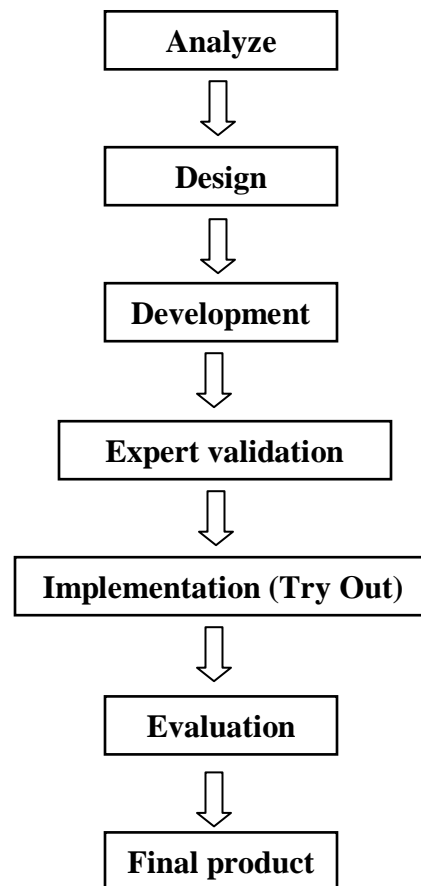
ADDIE Model, Diagram by: Steven J. McGriff, Instructional Systems, College of Education, Penn State University.

The ADDIE instructional design model is the generic process traditionally used by instructional designers and training developers. The ADDIE model is at the very core of instructional design and is the basis of instructional systems design (ISD). There are various adaptations of the ADDIE model but it generally consists of five cyclical Analysis, Design, Development, Implementation, and Evaluation. These processes represent a dynamic, flexible guideline for building effective training and performance support tools. In the analysis phase, the instructional problem is clarified, the instructional goals and objectives are established and the learning environment and learner's existing knowledge and skills are identified.

The design phase deals with learning objectives, assessment instruments, exercises, content, subject matter analysis, lesson plan and media selection. The design phase should be systematic and specific. The development phase is builds on both the Analyze and Design phases. The purpose of this phase is to generate the lesson materials. During this phase you will develop instruction, all media that will be used in the instruction, and any supporting documentation. During the

implementation phase, a procedure for training the facilitators and the learners is developed. The facilitators' training should cover the course curriculum, learning outcomes, method of delivery, and testing procedures. The evaluation phase consists of two parts: formative and summative. Formative evaluation is present in each stage of the ADDIE process. Summative evaluation consists of tests designed for domain specific criterion-related referenced items and providing opportunities for feedback from the users which were identified.

And in this research, the researcher attempts to adopt the ADDIE model with some changing which is matching with the condition of the participants. Here is the step of developing English material in this research:



### **3.2 Source of Data**

The participants of this study are female English teacher and the students of 10<sup>th</sup> grade on Computer and Internet Networking Engineering class. The researcher chooses the students of 10<sup>th</sup> grade on Computer and Internet Networking Engineering class which consist 30 students because the researcher wants to know what are their needs in learning English related to the English material that is given by the English teacher in English for specific purpose field. And for being the expert validation the requirement is having an experience in teaching learning.

The setting of this study is in SMK YPI Darussalam 1 Cerme Gresik.

### **3.3 Instrument of the Study**

There are some instruments used in this study with different purpose. And the instruments are as follows:

1. Questionnaire: The questionnaire is gives after trying out the material to know how the response of the students and to strengthen the result of previous instruments. In this study, the researcher uses structured item in close and open ended questionnaire based on type of need analysis.
2. Interview: The interview is conducted to English teacher and students. The researcher uses interview as one of the instrument of getting the deep information about what is the target and what is the learning need of Computer and Internet Networking Engineering at SMK YPI Darussalam 1 Cerme Gresik.
3. Validity checklist: The validity checklist is given the English teacher to give comment and scores toward the material which they have checked.

### **3.4 The procedure of Developing English Module for 10<sup>th</sup> Grade of Computer and Internet Networking Engineering**

#### **3.4.1 Need Analysis**

Need analysis is an important thing that should be done in order to get the information about what the need of Computer and Internet Networking Engineering class. In getting the idea of material, the researcher has to analyze the need and the target of the participants. Analysis is done by doing the interview to the students and the English teacher as well. By doing analysis, the researcher hopes to know what the need of Computer and Internet Networking Engineering class. By doing analysis, the researcher also can get the information about target needs and learning needs.

##### **3.4.1.1 Target Needs**

Target need is one of analysis should be investigates to understanding what the learners need do in target situation. The analysis of target need involves identifying of target situation included necessities, lack, and wants.

The researcher gives questionnaire to the students to know the target needs in English material. And hope although developing English material to make new book with the students become more interesting and easy memorizing also enjoy learning English material about Computer and Internet Networking Engineering.

##### **3.4.1.2 Learning Need**

Learning needs explain how students will be able to move from the starting points (lacks) to the necessities. The learning needs is concerned on things such as how learners learn the language, why they learn it and what resources are available to help them learn.

The researcher will develop the material based on the syllabus. The researcher develops the syllabus based on the need analysis and tries to analyze the needs of students to know their needs on learning about Computer and Internet Networking Engineering. And also the researcher gives the close and open ended questionnaire to know what the students learning needs.

### **3.4.2 Design**

After getting done with analyzing the need of the students, the researcher makes the syllabus based on the finding in the need analysis step. After making a syllabus the researcher continues the step by making the design of the material in the form of draft. The material consists of materials all about Computer and Internet Networking Engineering. There are also examples of the material, instruction and references in the last part of the book. Exercises are provided in every chapter with the purpose to check the understanding of the students.

### **3.4.3 Development**

After making a draft module design, the next step is developing English material by the guidelines from the draft.

The English material can make students more interesting to learning process and make students understanding to learn the content of book can students enjoyable, fun to learn English material with many activities in their book and also the example of an organized, and references in the last part of the material. Exercises are provided in every chapter with the purpose to check the understanding of the students.

#### **3.4.4 Expert Validation**

The researcher needs to check the validity of the material use the validation checklist by asking the expert or English teacher has been fulfilled the requirements of a good material.

There are two qualified experts validation: English teacher and major teacher. The first expert is an English teacher at SMK YPI Darussalam 1 Cerme Gresik, She is Durotull Milla, S.Pd. she will validate the content of English material and she was graduated from English language education department in 2011. Now she has been teaching in vocational school at SMK YPI Darussalam 1 Cerme since 2007 up to now.

The second expert is major teacher in Computer and Internet Networking Engineering class. The second expert is to check the content about Computer and Internet Networking Engineering whether it is needed by the students or not. Now he has been had of Computer and Internet Networking Engineering.

The researcher tries to evaluate which part is according to the expert need to be revised and which part need more improvement.

#### **3.4.5 Implementation (Try Out)**

After the materials has been checked its validity by the experts, then the researcher does some revision, the next step is doing a try out the materials to the participants. The 30 participants do the try out. The mechanism of doing the try out is first the participants read the selected chapter; the second mechanism is participants are asked to do the exercise in the materials to check their understanding and the last mechanism is answering the exercise together.

In the end of try out, the researcher also gives the questionnaire for the participants to know what the missing part of the material is. The important purpose of giving the questionnaire is to get the feedback from the participants toward the module and for the better improvement.

#### **3.4.6 Evaluation**

Based on the result of try out and questionnaire, the researcher does the evaluation. If there are some lacks based on the comment of the participants. There are any possibilities of doing the revision. The revision might happen because the materials may not fulfill the needs of students the materials may not cover all the wants of students, and any other reason of why the materials need to be revised. But if there is no part that should be revised, then the researcher goes to the next step that is final product.

#### **3.4.7 Final Product**

After the evaluation is done, the last step of developing English material is final product. The English material contains some materials all about computer and internet networking engineering. And the final product is book which implemented at SMK YPI Darussalam 1 Cerme Gresik.