

CHAPTER III

METHODOLOGY

3.1. Research Design

The design of this study is Research and Development which is same with the purpose of the study to developing writing of English material using Hot Potatoes toward hearing impaired students. This research adopted research and development study, Richey and Klein (2007) which commonly use to describe the activities for the learners in order to create or develop the product and process in teaching and learning.

Beatrice (2011) states ADDIE procedure is a systematic study of design, development, and evaluation processes of the creation of instructional and non-instructional products and tools and new or enhanced models. This study applied in The ADDIE models can be described as follows; The first step is analysis continuous with is design development implementation evaluation. The first is Gordon Welty (2008) which is the steps are analyzed, design, develop, and pilot implementation – formative evaluation, and final implementation – summative evaluation.

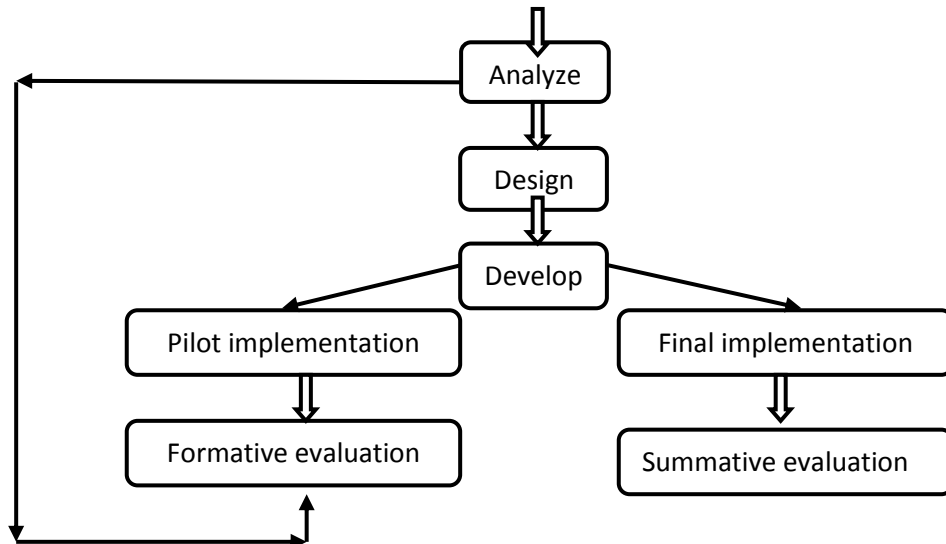


Figure 2 Two Part The ADDIE Model

The third is Dick and Carey (2005) model is the other influential instructional and well-known, their model as a system with input and output in each component. The phase re-identify goal, instructional analysis, analyze learner and contents, performance objective assessment instrument, instruction strategy, instruction material, revise instruction, formative evaluation and summative evaluation.

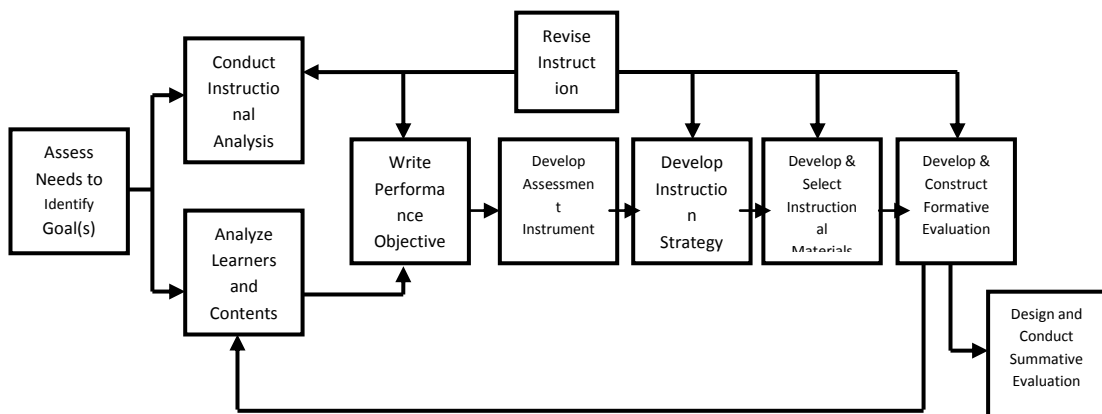


Figure 2: Dick, Carey et al. 2005 System Approach Model

From both of ADDIE model, the researcher chooses to adopt the ADDIE model and change in some terms based on the student's condition, in other word mix and matching according to the participant. The step of developing material:

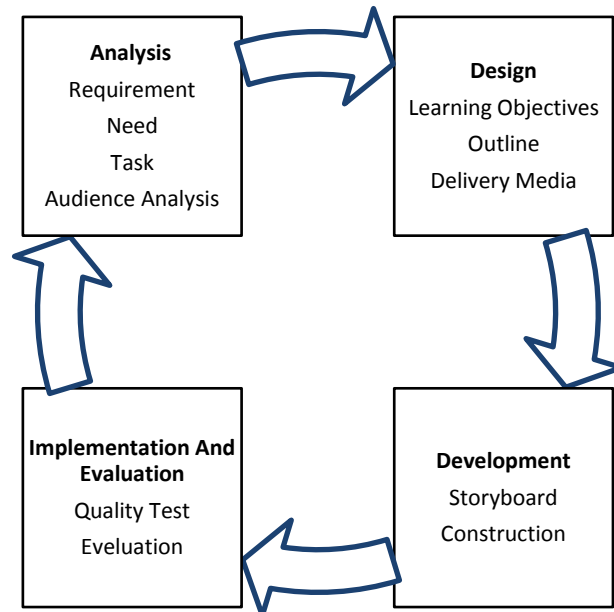


Figure 3. G.Muruganantham (2015)

The researcher chooses this model because the researcher is not an expert, so the researcher needs a validation from the expert to make sure whether the product is matching with the participant or not. This research uses for this study.

3.2. Subject of The Study

The researcher will use Hot Potatoes as utilize to support developing writing of English materials toward hearing impaired students. There will be 3 hearing impaired students in Senior High School level.

3.3. Instrument of The Study

The researcher uses some instruments to collect the data. First, the researcher will interview the students – hearing impaired students. Second, the researcher will interview the teacher who teaches English in class. If the first and

second step done, the researcher will know the target need and learning need in developing writing of English material. The next step is validation. There are two experts to validate the product who give comment and suggestion toward the product of Writing English material which is developed by the researcher before implementation. The researcher will revise the material after the validation. Next, the researcher will implement the material toward hearing impaired students using Hot Potatoes and for the last, the researcher will give questionnaires to know the comment of the students after practicing writing using Hot Potatoes.

3.4. Procedure of Development

3.4.1. Analysis

This part divided into two analyses, target need and learning need. Target need has relation with the content of the material while learning need has relation to the students learning writing. The researcher conducted questionnaires for hearing impaired students and interview the English teacher to get learning need for developing material.

First, the researcher gives questionnaire (appendix) to the students and directly chooses the appropriate answer. The questionnaire points are:

Table 3.4.1 the Organization of Questionnaires

No.	Dimension	Operational Definition	Indicator
Target Need			
1.	Necessities	To find out what hearing impaired students needed in writing	1. to know the goal of hearing impaired students in writing 2. to know whether writing is needed or not
2.	Lacks	To find out gap and required level of hearing impaired students in writing	To know out the difficulties hearing impaired students in learning writing
3.	Wants	To find out hearing impaired students' wants that can be include in writing	To know students interest in learning English, especially in writing
4.	Learning Need	To find out learning need of hearing impaired students in the classroom	To know the appropriate method and material include of task that hearing impaired students need

Adapted from Md. Jamal Hossein (2013) and LukmanHidayat (2013)

The second is interview the English teacher of SMALB-B Kemala Bhayangkari 2 Gresik, the points of the interview are:

1. Curriculum that uses in the school
2. The media that use the English teaching and learning process
3. The motivation of the students in learning English
4. The material of writing
5. The task of writing
6. The strategy that uses in writing

In this phase, the researcher also analyzes the syllabus to develop the material. As the result of analyzing syllabus and interview the teacher, the researcher will create the instructional goal and appropriate task for the hearing impaired students.

3.4.2. Design

In this phase, the researcher will design the prototype draft as the framework which is used in developing syllabus and application. From the framework, the

detail of the draft is task activity for the hearing impaired students. The researcher will make an activity would help students writing skill which is appropriate FOR target need and learning need of hearing-impaired students. There will learning activity a task for the students. A variety tasks will be provided for the students and the students can test their writing skill with the different task. And the research will seek the gap that need to be improved and full fill their need.

3.4.3. Development

From the design, the researcher will apply the design of the prototype to develop the material based on the syllabus which used by the school using Hot Potatoes. In this step is aimed to make a product that will test to the students using a computer to know whether the product is appropriate for the syllabus and their needs. The researcher develops writing test in form writing task using Hot Potatoes. Hot Potatoes will provides some material that consists of the syllabus. The students also get the feedback directly after filling the task.

3.4.4. Validation

In this phase, the product will be measured professionally by the expert to make the product more reliable. It includes the process of the product by checking error or mistake in the product. As the researcher, it's needed to minimize and avoid the error on the product. The expert wills get checklist courseware to fill with the evaluation, comment and suggestion related to the product. The researcher will find out the aspect that should be revised or develop until full fill the needed. The expert on the product is the English teacher and the Computer teacher of SMALB-B Kemala Bhayangkari 2 Gresik. Both of the expert will asses through courseware for the material, language and design (see appendix 2).

3.4.5. Implementation

In this phase, the researcher will implement the product to find out the product will work for English class of hearing impaired students which developed by the researcher. In the meeting, hearing impaired students will learn writing material, for the material that will be implemented in the class of hearing impaired students based on students need. The researcher will give questionnaire in order to know their response to the product.

3.4.6. Evaluation

After the implementation, the researcher will find the result and evaluate the learning process and outcome. The students are needed to achieve the instructional goal, it indicates the instrument is completed. There are possibilities to do a revision of the product when there is a lack of the point of the material and media. Revision might happen because writing material on the writing test doesn't cover all hearing impaired students needed. But when there isn't revision of the product, it's indicated that the product works properly and the researcher goes to the last phase.

3.4.7. Final Product

After completing revision, the product is the application form for developing material of writing English for hearing impaired students. To make the students interested in learning writing English the application will provide picture and text.