CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter presents the references from the expert, which give relevant knowledge of the study for the next chapter. The researcher is going to describe and review the research findings. The explanation will be shown as follows.

2.1. Writing Skill

2.1.1. The Notion of Writing

According to Richards & Renandya (2002), the most complex skill that should be mastered by the learners in second and foreign language learning is writing. Writing is a complex process to put down ideas and convert thoughts into words (Brown, 2001). Rohman (cited in McDonald & McDonald, 2002) He illustrates writing as a process of putting thoughts interested in words and from words interested in papers. Since then ideas or thought is a conceptual item, which comes from our mind, which is difficult to convert into comprehensible or readable form.

Eric Lenneberg, (as cited in Brown, 2001) states speaking is a natural process such as learn to 'walk' in human behavior, while it is different with writing which is like learn to 'swim' in human behavior. It means that writing can be learned if there is someone who teaches them. Harmer (2007) states same as speaking; writing is well thought-out as a productive skill. When the students make an agreement with language production, it means that they are supposed to use their knowledge to produce the language in order to reach communicative purpose both of form written or spoken language. When writing seen as the product, the awareness is placed on the final product of writing such as the report, the essay, and the story or the product should 'look' like (Brown, 2001). Suleiman (2000) states writing is a central component of language, reading and language skill course must consider as

multidimensional nature of writing includes of instructional practices, procedures, assessments, and language expansion. The most important development in human history is writing, it provides a reasonably permanent documentation of information, arguments, explanations, opinions, beliefs, feelings, and theories.

2.1.2. The Process of Writing

While Nation (2009) points out there are seven subs in processes of writing. They are considering the goals of the writer, having a model of the reader, organizing ideas, turning ideas into written text, gathering ideas, reviewing what has been written, and editing.

There are three stages of process writing based on Rohman (as cited in McDonald & McDonald, 2002). They are pre-writing, writing, and re-writing. Pre-writing defined as the stage of discovery the writing process from thinking how it happened, such as developing ideas and designing the ideas and the person assimilates his "subject" as him. The second stage is writing which the writers put their ideas into means that the writers write down what they are going to say or write. The last stage is re-writing, defined as a process of making revisions or changes to what they have written.

From the analysis, there are two different, which is the product and the process of writing (Harmer, 2001&2007 and Brown, 2001). When writing seen as the product, the consideration is placed on the final product (Brown, 2001). It means that the writing should (a) gather certain standard of arranged English rhetorical style, (b) reproduce accurate grammar, and (c) be organized consistency with what the audience would be predictable. In other words, the value is at the end of the product is the most important thing to pay attention rather than the process of writing itself (Harmer, 2007). Writing is the creative process of accomplishment out of one's thought and discovering them.

2.2. Hearing Impaired

2.2.1. The Definition of Hearing Impaired

The definition of hearing impairment refers to covering all grades and types of hearing loss, which the function of hearing and understanding speech and language had a disorder (Dahl, 1994; Stach, 2010). Both of deaf and hard-of-hearing are include Hearing-impaired (Moores, 2001). A deaf student is unable to understand speech and process of linguistic information through audition, with or without hearing aids. A hard-of-hearing is the one who has left behind hearing and with the use of hearing aids can understand speech and process of linguistic information (Hallahan, Kauffman, & Pullen, 2012).

Students who are deaf or hard of hearing do not all have the same characteristics. Hearing loss is measured as the increase in decibels (dB) of a person's hearing thresholds (the softest sounds which can be detected) relative to normal hearing levels (0 - 20 dB). Thresholds are tested across the frequencies of speech.

2.2.2. The Characteristic of Hearing Impaired

Hearing-impaired student includes both the deaf and hard-of-hearing student (Moores, 2001). Northern and Downs (2002) maintain that deaf student as the one whose hearing is impaired to the extent of 70 dB and above, while the hard-of-hearing student is viewed as the one whose hearing is disabled to the extent of 16-69 dB.

There are three types of hearing impairments, the first is conductive hearing impairment and the second is sensor neural hearing impairment. A third type is a combination of the two-called mixed hearing loss. Hearing impairment is categorized by their type-conductive, sensor neural or both by their severity, and by the age of onset. Furthermore, a hearing impairment may exist in one ear (unilateral) or in both ears (bilateral).

The characteristics exhibited by the students depend on the degree of hearing loss and the onset of that loss. The difficulties of deafness involve not only the loss or impairment but also the loss or limitation of the ability to acquire language and speech naturally or spontaneously, (Kapp, 1991). According to Chimedza and Petersen (2003) the earlier, the

hearing loss manifests itself in a child, the more difficulty he or she will have in developing the spoken language. Hyjánková (2010) there are five types of hearing loss: 1. Mild, 2. Moderate, 3. Moderately Severe, 4. Deaf Severe, and 5. Profound Deafness.

2.2.3. English for Hearing Impaired

Process learns to write fluently and effectively for hearing impaired students is a great challenge because of the obstacle in linguistic (Albertini & Schley, 2003). It is different with sign language, which has unique grammar to express their idea. For example 'My flight from Tokyo to New York was extremely turbulence' become 'Tokyo' set on left, 'New York' set in right, 'Fly' body movement from beginning to the destination and 'Happen plane bump' an expression while movement. Between English and Sign language have a different way to express their writing, which if hearing impaired who use sign language L1 and develop their written English as L2 (Enns, 2006).

Wolters, Knoors, Cillessen, and Verhoeven (2011) states deaf students have severe language problems compared to their hearing classmates. Ramírez Moreno, Tapasco Castañeda, and Zuluaga Candamil (2009) states that hearing-impaired students face difficulties in understanding oral information and having natural and fluid conversations. Dimiling (2010) indicates that deaf and hard-of-hearing students may need special vocabulary intervention in order to improve their recognition, production, and comprehension of the words and phrases. Cawton (2001) also mentions that hearing impaired students' need to create an inclusive environment by means of pictures, posters, and other visual material to maximize opportunities for deaf learners to use their visual perceptions acquiring linguistic knowledge.

Hearing loss affects the reading and writing abilities even for communicating for their basic need such as food, shelter and health. As children with hearing impairment face difficulties to obtain information through printed materials which the application of teaching method and impact in their improvement of reading or writing skills. The use of technology such as videos, video disc, computers, or captioned programs on TV helps students' to develop the knowledge it is indicated when the teachers use instructional techniques based on knowledge model of vocabulary development, along with technology supports, would develop their depth knowledge of words M. Loeterman, P.V. Paul, & S. Donauhe (2002).

2.3. Developing Material

Nunan (1991) states developing material, basically dealing the teaching material with selection, adaptation, and creation. Tomlinson (2003) also stated material development refers to something, which is done by teachers, learners or writers to provide language input sources and to develop those in anyways, which take full advantage of the possibility of intake.

Tomlinson (2001) also states something, which can be utilized to assist language learning, is materials.

For developing a test, the researcher must observe instructional development models according to ADDIE model, which is adapted from some experts. It defines this study as the 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 ADDIE procedures in Beatrice (2011). The ADDIE models can be described as follows The First step is analysis and continuous with design, development, implementation, and evaluation. The second one is Gordon Welty (2008) which are the steps analyze, design, develop, pilot implementation – formative evaluation, and final implementation – summative evaluation.

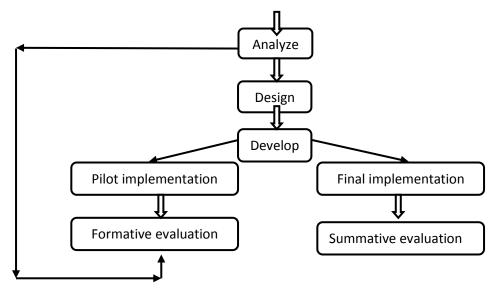


Figure 1: The Two Paths of the ADDIE Model

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 reidentify goal, instructional analysis, analyze learner and contents, performance objective assessment instrument, instruction strategy, instruction material, revise instruction, formative evaluation and summative evaluation.

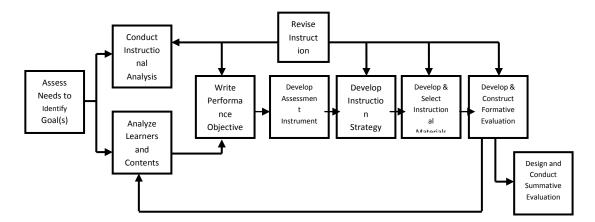


Figure 2: Dick, Carey et al. 2005 System Approach Model

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

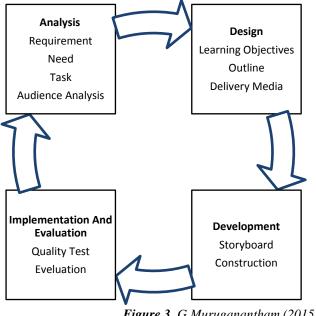


Figure 3. G.Muruganantham (2015)

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

2.3.1. ADDIE Model

2.3.1.1. Analysis

Analysis stage as the first is the central phase of the process. The researcher does the analysis phase before creating the plan, developing, or implementing. In order to carry out the analysis phase we have to analyze four things; lack, wants, needs (target need and learning need), like we have to analyze the learners (where they are at, their skills and needs). The first thing that researcher does is analyze the target need. The researcher needs to know the knowledge, skill, and needs of learners to build a plan based on they learned and information that they need.

Develop an instructional analysis (to provide the necessary steps and present opportunities to learn and use new information in an instruction). The second step is analyzing the necessities of the step that will take by the researcher to provide opportunities for the learners to learn. Create instructional goals aimed at specifying the result, and analysis's learning objectives how to measure the attainment of goals. That means you have to be clear about your goals and where you want your learners to be (Aldoobie, 2015).

2.3.1.2. Design

The design phase is the next step in ADDIE model. This phase is about applying the instruction. In fact, the instructional designer in this step thinks about how to design instruction facilitates people's learning and interaction with the materials you create and provide. Furthermore, in design phase the instructional designer evolves and focuses on designing assessment for (his/her) topic; select a form of the course, and creating their own instructional strategy (Aldoobie, 2015).

The researcher uses Interactive Writing strategy to develop the activities in writing task. Ashton-Warner (Collom, Tompkins 2004) developed from Moira McKensie's work with shared writing and from the language experience approach interactive writing.

Interactive Writing, both of the teacher and the students work together to compose a paragraph, calls it "sharing the pen". It is reported that there is increasing the students' level of participation and application of concepts during whole-group interactive writing sessions (Wall, 2008).

Interactive Writing is an instructional context in which a teacher shares a pen with a group of children they collaboratively compose and construct a written message. We want to help children learn how written language works so that they can become independent writers. There are five steps of Interactive Writing based on McCarrier, Pinnell, and Fountas (2000);

- a. Teacher selects teaching points
- b. The teacher decides on a purpose for writing
- c. Teacher and students share the pen, to create a message
- d. Teacher and students read the entire message and revise/edit if necessary
- e. Message is made available for independents practice

2.3.1.3. Development

This phase depends on the first two phases, which are the analysis and the design phase. In this third phase, the instructional designers integrate the technology with the educational setting and process. Moreover, the instructional designer starts to develop and create a good quality factual model for the instructional design, the materials of the course, and run through of the conduction of the course. Create a factual model for the instruction design through developing the materials of the course. From the activity, we decide to include our instructional strategy along with the model that we made before. After we are done with developing course materials we are ready to start this step, which is a run through of the design, like a practice run or a pilot test (Aldoobie, 2015).

1.3.1.3.1 CALL

Hubbard (2009) says, As computers have come more a part of our everyday livesand permeated other areas of education- the question is no longer whether to use computers
but how. As stated by Lee (2000) Warschauer and Healey (1998), CALL technologies can
support learning in a variety of ways, provide feedback, enable pair and group work, promote
exploratory and global learning, enhance student achievement, provide access to authentic
materials, facilitate greater interaction, individualize instruction, create opportunities to
benefit from a variety of sources rather than limiting oneself to a single source, and motivate
learners.

2.3.1.3.2. Hot Potatoes

The technology-based materials include media-enhanced activities, interactive activities and engaging learning environment for creating various activities in teaching and learning process (Frey, 2010). In addition, based on Birch & Sankey (2008), multimedia can be used to correspond to the content knowledge in ways that may interrelate with different learners' learning style that may appeal to difference modal predilection. Hot potatoes-based materials development applies research and development study based on Richey & Klein (2007).

Winke and MacGregor (2001) state Hot Potatoes can be evaluated according to the following three aspects. Firstly, trying to figure out whether or not the program allows for the construction of language learning exercises that are dependable with the theories of second language acquisition. Secondly, understanding the level to which the program is user-friendly, and finally, asking whether the program is attractive and appropriate for language testing. According to Cook (1996) and Kottler & Kottler (2002) in general, Hot Potatoes is easy to use and does not need procedural knowledge on the part of the users. In this vein, Hot Potatoes exercises could produce the same task-based model of exercises; meaning that if the program is enhanced so that a better variety of tasks could be generated it will be of better value to both the teachers and learners. Further Somekh and Davis (1997) observed the characteristics of Hot Potatoes which has the following:

- a) Facilitates extensive access to management in acceptable methodology. It does so by allowing self-determining access by students outside of formal instructional time.
- b) Promotes and supports a model of collaborative professional development, by presenting a standardized set of arrangement templates, which will encourage group work; and also allows for the creativeness and independence of content.
- c) Expands the goal of the instructor, to inculcate proper and desirable teaching practices, by the rigid nature of the given L2 methodology.

Harmer (2007) suggests it is necessary for the teachers to find alternatives activities outside the classroom to approach the practices of writing skills. Internet can be a good choice to create the activity, for an example of using blogs to encourage the students to get engaged in the writing exercises. Hot Potatoes is software which consists of several activities that enables the teachers to create interactive activities. In the case of writing classes, the teacher can use this alternative to make quiz for the students. There are six different activities that might be useful to create writing exercises or quizzes for the students:

a) JCloze

It is an activity which gives unlimited number of options for each gap. The teacher can also provide a hint for the students to help them choose the correct answer.

b) JMatch

JMatch provides matching or ordering alternatives. It can be used to match pictures, texts or the translation of vocabulary

c) JMix

JMix provides a jumbled-sentence exercise. Many varieties of sentences can be created from this exercise such as words and punctuation in the main sentence.

d) J Cross

This exercise allows the teachers to create a crossword puzzle. The puzzles can be written across or down. The hints to help the students solve the puzzle are also provided.

e) JQuiz

It is a question based exercise. There are four kinds of exercise categories can be chosen from JQuiz, they are multiple-choice, short answer, hybrid, and multi select. Each activity has their own types. JQuiz provides unlimited number of options with feedback of each option.

I. Multiple choice

In this type of question, the students have options to choose the correct answer. Every time the students choose the incorrect answer, in addition to the feedback, an X will appear. When the students hit the correct one, there will be aJ and the feedback as well.

II. Short answer

The students have to type the answer in the box, and click the 'Check' button to see whether their answer is correct. The page will match the students' answer and the correct answer. If the answer is incorrect, the feedback will come out. Hints are also provided to help the students find the correct answer.

III. Hybrid

It is the combination of the two. First the students will have to write down the question in the box and click the 'Check' button. When after several attempts they cannot get the correct answer, the question will change into a multiple-choice to make the students easier answering the question.

IV. Multi select

It gives the students opportunity to select the correct answers

2.3.1.4. Implementation

This phase is about converting plan into action. We have to consider three major steps, which are training the instructors, preparing the learners, and organizing the learning environment. With these three steps, we can display our course and authentic ways to achieve the implementation phase. (Aldoobie, 2015).

2.3.1.5. Evaluation

The final process in ADDIE model is Evaluation phase. It is very important to evaluate each step in order to make sure that the learners achieve the goals using the instructional design and materials to meet the learner needs. (Aldoobie, 2015).

2.4. Previous Studies

An Inclusive English Classroom Proposal for Hearing Impairments conducted by Juan Andreas Ducuara et.al (2015) analyze the extended learning activities assisted by visual aids and provide an opportunity to come into contact with the English language in the inclusive framework. The result is possible to demonstrate the provision of learning environment with visual aids and the use of technological tools contributed to learning Basic English vocabulary also the use of visual aids promoted higher intrinsic motivation which is an essential aspect when learning any language.

Developing Hot Potatoes-Based Materials For English Teaching and Learning at Smk, conducted by Fran Safer, Urai Salam, Ikhsanudin (2013) have a purpose to develop multimedia-based materials for teaching and learning English at SMK Negeri 1 Balai. Using ADDIE as the model of development material from the first step analysis needed multimedia in teaching and learning process. Design material based on the need analysis and English subject curriculum. Development ware includes Hot Potatoes. Implementation of the materials involved with 30 students' of SMK Negeri 1 Balai and the last evaluation involved two experts from media expert and language expert. The result of the study is hot potatoes-based materials are usable.

Putrid Maya Alimah (2004) conducted a study to test The Effectiveness of Using Hot Potatoes to Teach Students "Simple Present Tense" at SMP 1 NGUNUT TULUNGAGUGNG. There are three components in English pronunciation, vocabulary and grammar. From those three components, grammar has ruled in writing while learning

grammar is not easy. The researcher uses Hot Potatoes (cloze test) to test students' grammar, especially in simple present. The result of the study showed that hot potatoes cloze test was effective towards grammar achievement, especially in simple present tense.

Juan Pablo Zuniga Vargas and Giannia Seravalli Monge (2014) investigated the use of Hot Potatoes as the valuable tool to design customizes exercise and didactic units for reading comprehension course. The result of the study Hot Potatoes offers and is more appealing to and useful for the students.

Further, Mayiber Quintana Rodriguez (2010) investigated The Use of Hot Potatoes to Improve Paragraph Writing of fourth-grade students writing by identifying learning the rhetorical structure of paragraph in English and how it will help them to write paragraphs effectively. From the data analysis show, that Hot Potatoes sample could provide students with activities to learn and reinforce the rhetorical structure but learners' evidence very little improvement because they learned how to begin a paragraph but they do not consider the completely rhetorical structure.

G.Muruganantham (2015) conducted a study on Developing of E-content Package by Using ADDIE Model. E-content package create and provide independent learning for the students which involves five phase (Analysis, Design, Development, Implementation and Evaluation). The researcher discusses the development and validation of E-content package for higher secondary school students in learning history.

Sri Rejeki Murtiningsih (2009) demonstrates study using hot potatoes to empower student's writing. Hot Potatoes is a great way to provide the students with the activities which can improve the students' engagement on writing classes. Hot Potatoes provides various activities which can be done online or in the students own computer. In addition to use this software to writing class activities, this free software can also be used for other general purposes

The similarity from that previous study is the researcher use technology as the media in teaching and learning such as Hot Potatoes to develop students skill include writing skill through varieties of the task, which provided by the researcher in Hot Potatoes. While the differences on the subject f the study. From all, some subject of the study is non-disable students and the rest is disables students especially in hearing loss and non-writing skill.