

## **CHAPTER II**

### **REVIEW OF RELATED LITERATURE**

This chapter contains the references from the experts which are useful to give relevant knowledge in the field of the study in the next chapter. The researcher is going to describe some theories and review some relevant research findings related to the research. This chapter will describe in depth of the variables exist in this study.

#### **2.1 Writing**

##### **2.1.1 The Nature of Writing**

Writing which is one of the four skills in English is commonly considered difficult for many students. Most students do not know what the meaning of writing is. The nature of writing is closely related to some definitions of writing suggested by some experts.

According to Rohman and McDonald (2002:7), writing is a process of putting thoughts into words and words onto paper. It is called as process because different things happen at different stages. Spratt, Pulverness and Williams (2005:26) elaborate the previous definition by stating that writing is one of the productive skills that communicate a message by making signs on a page by forming letters or words then joining them to make words, sentences or a series of sentences. It means that writing is not only writing sentences but also delivering a message that the readers want to know through them.

Brown (2001:335) points out that writing process focuses on generating ideas, organizing them coherently, using discourse markers and

rhetorical conventions to put them cohesively into written text, revising text for clearer meaning, editing text for appropriate grammar and producing a final product. In line with this explanation, there are four processes in writing namely drafting, revising, editing and making final product.

Therefore, generating ideas and organizing ideas in writing are difficult for most foreign students because those processes include the process of translating ideas into an acceptable and readable text Richards and Renandya: 2002, 303). Moreover, the teacher needs to help students to generate and organize ideas through writing exercises in the teaching and learning process. In conclusion, writing is a process of communicating ideas in the written forms by forming letters into words and joining them to make cohesive sentences and coherent paragraphs. It consists of four stages including drafting, revising, editing and making the final product in the form of a text or an essay.

### **2.1.2 Micro-skills of Writing**

When students learn writing, they also learn and acquire micro-skills of writing production. Those micro-skills will support them in producing texts and essays. Brown (2001: 343) proposes 12 micro-skills of writing. Some of them are:

1. Producing graphemes and orthographic patterns in English,
2. Producing writing at an efficient rate of speed to suit the purpose,
3. Producing an acceptable core of words and use appropriate word order patterns,

4. Using acceptable grammatical systems (e.g., tense, agreement, pluralization), patterns and rules,
5. Expressing a particular meaning in different grammatical forms,
6. Using cohesive devices in written discourse,
7. Using rhetorical forms and conventions of written discourse, and
8. Appropriately accomplishing the communicative functions of written texts according to form and purpose.

### **2.1.3 Writing for Senior High School Students**

Currently, Indonesia implements a School- Based Curriculum based on the government regulation No. 19 year 2005. This means that each school has the authority to develop and implement its own curriculum. However, the schools should develop their curriculum based on the government's curriculum. The curriculum now days should be achieved by the school, especially in learning English. English teaching and learning process in senior high school is aimed at helping student achieving functional literacy level. It means that students are expected to be able to communicate both in spoken or written form to solve problems in daily life.

The scope of English subject in senior high school consists of three competences. The first competence is discourse competence that is realized in four basic skills: listening, speaking, reading and writing. The second competence is the ability to comprehend and create various short functional texts, monologues and essays in the forms of procedure, descriptive, recount, narrative, and report supported by the use of

vocabulary, grammar, and the generic structure. The second competence is supported by the third competence that consists of linguistics competence (grammar, vocabulary, phonetic, morphology), socio cultural competence (the appropriateness), strategic competence (problem solving in communication) and discourse marker competence (BSNP, 2006: 124). In relation to this, the senior high school students is required master five kinds of text-types including procedure, descriptive, recount, narrative, and report.

The scopes of English subject above are realized into standard of competence and basic competence. Furthermore, the standard of competence of writing for eleven grade students in the first semester is “Expressing meanings in the short functional texts and short essays in the form of descriptive, and procedure text to interact with the environment”, while the basic competence is “Expressing meanings and the generic structure of short essays using written language in the form of descriptive and procedure texts accurately, fluently and appropriately to interact with the environment”(BSNP, 2006: 128).

Based on the statement above, there are two kinds of text-types namely descriptive text and procedure text that must be mastered by the eleven grade students of senior high school in the first semester. Students should learn how to write texts based on the general features accurately, fluently and appropriately.

However, the researcher will only focus on developing descriptive text materials for the eleven grade students.

## **2.2 Descriptive Texts**

### **2.2.1 The Nature of Descriptive Texts**

As stated above, there are two text-types that are taught in the seventh grade in the second semester. One of them is descriptive texts. There are some definitions of descriptive texts proposed by some experts.

Anderson and Anderson (1998:26), states that, a descriptive text is a text that describes a particular person, place, or things to tell about the subject by describing its features. Folse, Vokoun and Solomon (2010:135) elaborate the previous definition by stating that a descriptive paragraph gives an impression of something including its look, sound, smell and feel that create a sensory image for the readers.

Therefore, Knapp and Watkins (2005:27) propose that personal description and commonsense descriptions which are parts of descriptions genre describe appearance of a particular person or thing and may include the writer's relationship with that person or thing.

Based on the explanations above, it can be concluded that a descriptive text is a text that describes a particular person, place or things using sensory images such as its look, sound, smell and feel.

### **2.2.2 The General Features of Descriptive Texts**

Basically, there are three elements of the general features, namely the communicative purpose, generic structures and the linguistic features as well as in descriptive texts. The explanation of each element is as follows.

The communicative purpose of descriptive texts is to describe a particular person, place or thing. The generic structures of descriptive texts consist of two parts: (1) an identification that is used to identify a phenomenon that will be described and (2) descriptions that are used to describe items, qualities, subject features, whole attitudes, and adjectives.

According to Knapp and Watkins (2005: 98-100), the linguistics features used in descriptive texts are: (1) focusing on specific participant (e.g., my house, my cat, the museum), (2) the use of simple present tense, (3) the use of detailed noun phrase to inform about subject, (4) the use of relational verbs, action verbs and mental verbs, (5) the use of adjectives to add extra information to noun, (6) the use of adverbs to add extra information to verbs to provide more detailed description, (7) the use of adverbial phrases to add more information about the manner, place or time, and (8) the use of figurative speech such as similes, metaphors, personification and alliteration.

## **2.3 EGRA method**

### **2.3.1 Definition of EGRA method**

One of collaborative writing activity is EGRA. According to Brown (1994:51), method is any of a wide variety of exercises, activities, or devices used in the language classroom for realizing lesson objectives. In learning and teaching process, teacher must master some certain methods. A variety of methods will at least partially ensure that a maximum of students will be “reach”, Brown (1994:21). A good method is suitable for the student when the process of transferring knowledge is

effective and efficient or not. The method which will be used, must be suitable with the material will be taught in order to get good result.

EGRA is a shortened form of the term Experience, Generalization, Reinforcement, and Application. EGRA is one of the techniques which are effective in teaching.

By using this technique, the students are given opportunity to find out the form and function of the sentence by themselves. Brown (1994: 351) says that it is built more intrinsic motivation by allowing the students to discover rules rather than being told them.

EGRA's steps have each objective. Experience is aimed to exposure a particular structure item in use. The objective of generalization is that learners better remember conclusion about form and function, they make by themselves. Reinforcement helps the students to check or revise their generalization and Application is to apply the structure items learned in the previous stage to communicate information or messages (Adrian, 1998).

### **2.3.2 The Concept of EGRA method in teaching writing**

#### **a) Experience:**

The teacher tries to stimulate the student's interest in the lesson by giving some questions and showing the teaching aids, such as pictures, living objects of things which are related to the materials.

This learning experience makes the students more active from the beginning of the teaching process where they will come

into a great discovery. Wernon (1980) states that activity involving direct experience is highly inquiry oriented. The student here is an active participant rather than the passive observer of the teacher. The experience in this research refers to guiding the students to learn every element of writing for example content organization and the structure used in writing and so on.

#### **b) Generalization**

The teacher expects the students to have a special interest in the lesson and then gives a short explanation. The teacher expects his/her students to master the materials by giving some drills or task.

In this stage the students are led through tasks to discover form, meaning and function of a structure they have been exposed to. The rationale for the generalization is the learner better remember conclusion about the form and functions they make for themselves. Harmer (1991:113) says that the best way to ensure learning was for the students to work out the rule himself.

The generalization is the central of EGRA method where students are expected to make a discovery of language structure. Rivers (1968:77) says that generalization become more comprehensive as the students advanced in knowledge of language and is able to recognize characteristics feature of the language structure.



**c) Reinforcement**

The teacher intends to check the students understanding. The students are expected to master the pattern. The drills and the task given must reinforce the material. Alexander (1980:XXI) says that the aim behind all explanation should be to reinforce theoretically what the students has already practice.

Reinforcement is a learning stage where students are provided with correct and consious knowledge of the form, and functions of the structure item that they have been exposed to. The objective of this stage is to help learners to check or revise their generalization that students should have corrected and consiciousness of the form and function of a certain structure item.

**d) Application**

The students must be able to apply the pattern of the materials in real situations. By doing this activity the students will feel free to do what they want related to their daily activity.

In this learning stage where students given opportunities to use or apply the structure item that they have learned in communication either receptively or productiveley.

Based on explanation of EGRA above, the researcher thinks that every step of EGRA which stands for Experience, Generalization, Reinforcement, Application will lead the students to be better at writing skill.

EGRA is very motivating, challenging and great fun for students. While for teachers, it can ease them to introduce or revise new vocabulary and grammar to the students. It is also memorable and familiar context which will enrich student's idea.

In this activity, students can work interactively because they work together in group. Moreover, the students also can support to express themselves as individual. The greatest advantages of EGRA is interesting. From this activity, we can know the student's development in learning writing.

### **2.3.3 Procedure of the teaching writing descriptive text through Interactive EGRA digital course.**

#### **Pre- teaching activities**

Pre-teaching procedures include:

1. The teacher greets students
2. The teacher checks the students' attendance
3. The teacher prepares all materials for teaching
4. The teacher asks the student about the previous lesson that they have studied

#### **Whilst-teaching activities**

1. The teacher starts the lesson by asking the students to write their special thing on the paper. It is used to motivate the students to learn the new lesson.
2. The teacher asks the students some guided questions to build knowledge of the field. (**Experience**)

3. The teacher gives the Descriptive text to the students to read loudly. **(Experience)**
4. The teacher asks the students to look at the sentence and make conclusion in groups.**(Generalization)**
5. After finishing the exercise, the teacher asks each group to discuss his/her exercise in front of the class (starting from this step, the teacher is just a facilitator). She walks around the classroom to observe the discussion and helps the students if it is necessary. **(Generalization)**
6. If one group has finished reported their discussion, the other group may give question or comments. **(Generalization)**
7. The teacher asks students to make conclusion from they have discussed before. **(Generalization)**
8. Do the steps above for the next group. **(Generalization )**
9. Give them the best conclusion for their notes. **(Generalization)**
- 10.** The teacher offers the example of descriptive text, the students will analyze it. **(Reinforcement)**

#### **Post-teaching activities**

1. The teacher may ask the students to make summary of the text.**(Application)**
2. The teacher reviews and concludes the lesson together with the students. **(Application)**

3. The teacher gives homework to the students about the text.

**(Application)**

4. The teacher asks the students to submit the homework in the next session. **(Application)**

## **2.4 Interactive Multimedia**

### **2.4.1 The Nature of Interactive Multimedia**

Recently many English teachers integrate technology in the classroom by using interactive learning multimedia to support teaching and learning process.

The use of interactive multimedia is expected to be able to make the learning process more interesting and to motivate the students.

Multimedia and interactive multimedia can be defined in many of views.

According Reddi and Mishra (2003:4), multimedia is an integration of multiple media elements (audio, video, graphics, text, animation etc.) into one synergetic and symbiotic whole that is more benefit for the user than any individual media elements. Fenrich in Reddi and Mishra (2003:4) also state that multimedia is the combination of computer hardware and software that integrate video, animation, audio, graphics, and test resources to develop effective presentations.

Furthermore, Bhatnagar, Mehta and Mitra (2002) suggest that digital multimedia refers to interactive multimedia. They define digital multimedia as any combination of text, graphics (still and animated), sound, and motion video delivered by a computer that allows students to interact with the program and control the environment.

Mayer (2005:2) points out multimedia learning as learning from words(spoken or printed text) and pictures (illustrations, photos, maps, graphs, animation, or video). Mayer and Moreno (2002) add that computer-based multimedia learning environments that consist of pictures or animation and words supports students to improve their understanding.

From the views above, the term interactive multimedia can be concluded as the combination of various media such as text, graphics, animation, audio and video into single delivery system under computer in which students can control when and what elements deliver for the purpose of education.

#### **2.4.2 The Advantages of Interactive Multimedia.**

The use of interactive multimedia in teaching and learning process is closely related to its advantages for the teacher and students. According to Reddiand Mishra (2003:5), the benefits of multimedia to are: 1) it allows for creative work 2) it saves time 3) replaces ineffective learning activities and 4) increases student contact time for discussion. Lee and Owens (2004:123-124) state that one of the strengths of interactive multimedia is the interactivity that makes the interaction frequent and produces students' involvement.

Furthermore, Zhu (2010: 68) also mentions five advantages of using multimedia in the classroom. First, multimedia teaching increases the information volume, saved time and improved class efficiency. Second, it enables students to acquire feedback timely, to learn about their learning result and to adjust their learning steps, pace and difficulty

accordingly. Third, teachers can integrate teaching materials and display the same teaching contents with a variety of information under the help of multimedia. Fourth, it helps to cultivate student's associative thinking. Fifth, it provides a platform for the communication between teachers and students as well as students and students.

Dong and Li (2011:165-166) add some advantages of using multimedia in the classroom. First, it makes English class more vivid and interesting, which stimulate students' interest in learning, improve class efficiency and achieve more satisfactory teaching results. Second, it creates a lively and harmonious environment in the teaching of listening, speaking, reading and writing that increases the language practice and students' participants. Third, it creates practical English using environment to enhance students' ability to use English.

In summary, the application of interactive multimedia in the classroom affects the teaching and learning process in term of its efficiency, amount of information volume, interaction between teacher and students. Interactive multimedia also motivates students and engages students involvement so the teaching and learning process become more interesting.

### **2.4.3 The Elements of Interactive Multimedia**

As quoted above, multimedia are the combination of text, audio, images, animation and video into one package. The definition of each element is as follows.

## **1. Text**

Text and symbols are very important for communication in any medium as well as in multimedia. Text includes the font size, style and color. Bhatnagar, Mehta and Mitra (2002:140-141) mention some considerations of using text in multimedia: (1) It is easier to read text using mixed uppercase and lower case letters than in capital letter, (2) It is easier to read text using static text than moving text, (3) It is easier to read text using single-spaced text than double spaced text, (4) The type size is no more than three points, (5) Each line consists of 40-60 characters, (6) A simple typeface and the same font are used for the same type of information, and 7) The font size is between 9 and 12 points.

## **2. Audio**

Sound is perhaps the most important element of multimedia. It can provide the listening pleasure of music, the startling accent of special effects or the ambience of a mood-setting background. Audio is divided into three types; narration or voice over (VO), music (M) and sound effects (SFX) (Reddi and Mishra, 2003: 41).

Bhatnagar, Mehta and Mitra (2002:14) classified audio into two categories namely content sound and ambient sound. Content sound provides information to students in the form of narration. Meanwhile, ambient sound consists of an array of background and sound effects to reinforce the message, background music to set the mood for students to receive and process information by starting and ending a presentation with

music and sound effects to liven up the mood and add effects to the presentation.

### **3. Images**

Images or graphics play a vital role in multimedia. It is expressed in the form of still picture, painting or a photograph taken through a digital camera. The attributes of color, texture, pattern and animation enrich a multimedia presentation.

Lee and Owens (2004:127) proposed some considerations of using graphics in interactive multimedia. Firstly, graphics should not detract from textual information and should be similar in size and placement. Secondly, there should not be more than four colors on a screen, and the entire course should use a palette of not more than seven colors. Thirdly, the color also should be consistent so the color contrast must be managed appropriately.

### **4. Animation**

Animation is the rapid display of a sequence of images of 2-D artwork or model positions in order to create an illusion of movement. Weiss, Knowlton and Morrison (2002:467-468) propose five functions of animation in interactive multimedia. Animation is used to make instruction attractive to students (cosmetic function), to gain student's attention at the beginning of and to signal salient points such as switching topics (attention gaining function), to motivate students when an incorrect answer is given (motivation function), to provide a concrete reference and a visual context for ideas (presentation function), and to provide a conceptual



understanding without providing new information through visual (clarification function).

## **5. Video**

Video in multimedia is one of the presentation tools that illustrate ideas and concepts besides capturing real world events. Reddi and Mishra (2003:46) recommend two choices of video in interactive multimedia: very short video clips(not exceeding a minute or two) and highly compressed video files such as MPEG files.

### **2.4.4 Multimedia for Writing**

The development of information technology leads to the integration of multimedia into the teaching of English to create interesting learning environment. The use of multimedia in the teaching of writing is expected to change student's attitude toward English learning and teaching process and improve their writing skill and interest in writing.

Multimedia is commonly associated with CALL (Computer Assisted Language Learning). According to Warschauer (1996), multimedia refers to Integrative CALL which is the current approach of CALL. Integrative CALL is based on multimedia computers and the Internet that combine text, graphics, sound, animation and video that can be accessed from a PC, using CD-ROMs or the Internet.

Wah (2006) investigated the appropriate design of computer-based instruction (CBI) and the use of it to improve students' writing in the composing process. The sample was twenty students in a secondary school. Instructional design principles were based on the guiding

principles of a four-phase instruction including presenting information, guiding students, practicing by students, and assessing student learning. The term presenting information is similar to modeling and deconstructing the text in the genre-based approach while guiding students is similar to joint construction of the text. Meanwhile, practicing by students and assessing student learning are similar to independent construction of the text. Findings show that students considered the topics on writing skills, the language items, and the types of language lessons and practices as aspects of instructional process beneficial to their English writing process. The findings also show that guiding students is helpful for students in composing their writing.

Phinney in Wah (2006:28) argues that computer-based instruction make students' attitudes toward writing become more positive. The result in Sullivan and Pratt's study (1996) as quoted in Wah(2006) also suggests that it improves negotiation of collaboration on writing projects, increase informal peer-to-peer assistance in the writing process, and make revision more effective. More recent study examined the effects of CALL (Computer Assisted Language Learning) on EFL student's writing achievement (Jafarian, Soori and Kafipour: 2012). They explored forty students that were divided into experimental and control group squally. The result shows that CALL user's achievement in EFL is significantly higher than non-users. It indicates that CALL improved students writing ability.

In addition, there are numerous CALL programs which support L2 writing instruction that vary in their appearance, their effectiveness, and the teaching approach. A good example is Click into English developed for the Australian Adult Migrant Education Service (Hyland, 2003:162-164). In this study, there searcher will use this program as reference in developing the interactive multimedia as it follows the genre-based approach.

Click into English is a series of instructional sequences built around model texts from different genres. Each sequence highlights grammatical features of the genre and leads the learner through a series of screens with different practice and self test multiple choice, gap-fill, and drag and drop activities. This program allows students to recall the text at any time, get instant feedback on their answers, consult pop-up screens for genre information and usage advice, and access a dictionary through hyper links in the text itself. Click into English also provides an environment for students to work either alone or with teacher support (Hyland, 2003:164).

From the statements above, it can be concluded that the integration of multimedia in the teaching writing is beneficial on improving student's writing skills. It also changes student's attitude toward writing. The developed multimedia in this study is also expected to make the teaching and learning process of writing become more interesting and vivid. A good writing program also allows students to work cooperatively and collaboratively.

## 2.5 Developing material

The definition of materials in materials development is anything which is used to help teacher learners. There are many materials which are usually developed by the researcher. Based on Brian Timlison(2012) states that materials for language learning will be taken to be something that can be used to facilitate the teaching learning of a language, such as course books, videos, flash cards and games. The most of the literature focuses on printed materials.

Tomlinson (1998) states that “ Materials can be in a form of a textbook, workbook, cassette, CD-ROM, video, photocopied handout, newspaper, paragraph written on whiteboard or anything which presents or inform about language being learned”. Tomlison(2001) states that materials mean anything which can be used to facilitate the learning of a language (linguistic, visual, auditory or kinesthetic).

Many models exist, ranging from simple to complex. All provide step-by-step guidance for developing instruction” was pointed out by Suppasetsee (2005). In this study, some related instructional design models; including the ADDIE Model (Analysis, Design, Development, Implementation, and Evaluation), Dick and Carey Model, Kemp Model, SREO Model (Suppasetsee’s Remedial English Online), Lee and Owen and the OTIL Model (Online Instructional Model for Task-based Interactive Listening) are presented as follows.

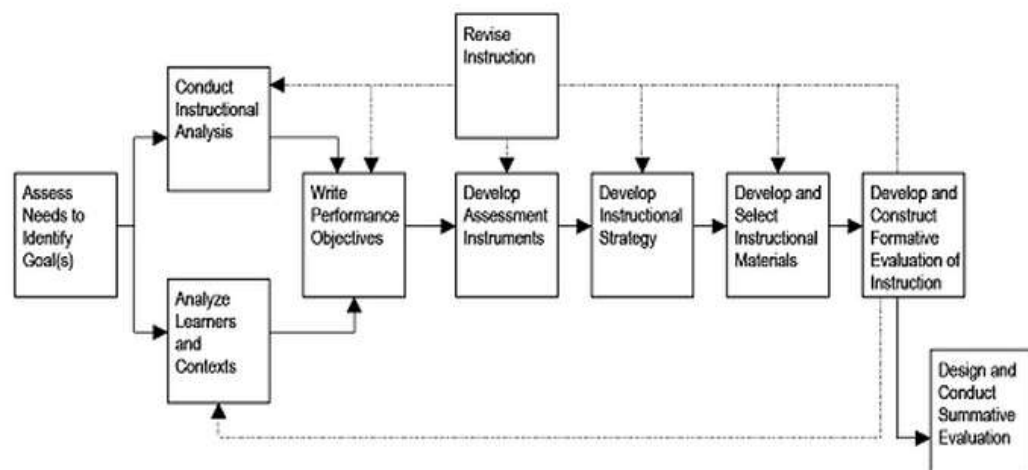
The ADDIE Model, which is the most basic and applicable is a generic and systematic instructional systems design model (Reiser and

Dempsey 2007). Among five core elements (Analysis, Design, Development, Implementation, and Evaluation) of the model, analysis is the most crucial element in the ID process (Sugie 2012). There are more than 100 different Instructional Systems Development (ISD) models, but almost all are based on the generic ADDIE Model (Kruse 2011). However, according to Molenda (2003), the original reference of the source for the ADDIE Model is invisible and he seems to be satisfied with his conclusion that “the ADDIE Model is merely a colloquial term used to describe a systematic approach to instructional development, virtually synonymous with instructional systems development (ISD). The label seems not to have a single author, but rather to have evolved informally through oral tradition. There is no original, fully elaborated model, just an umbrella term that refers to a family of models that share a common underlying structure”.



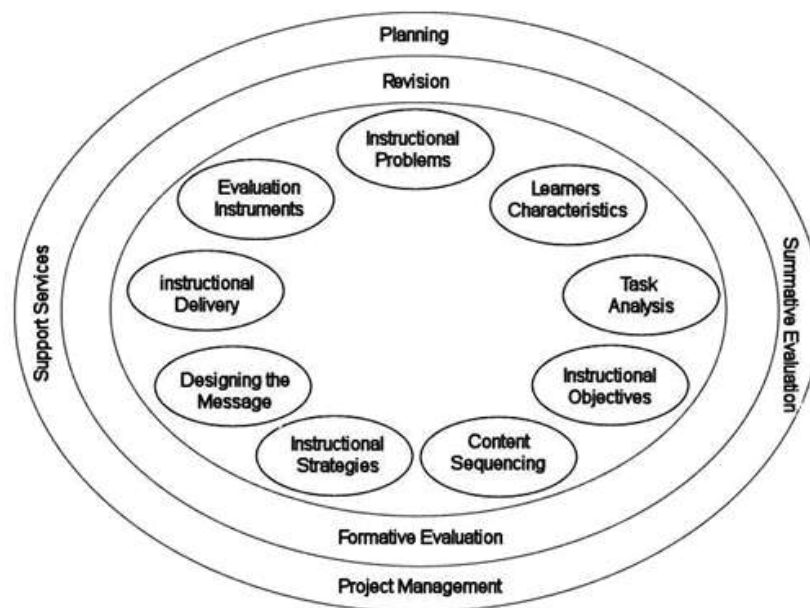
### 2.5.1 Dick and Carey Model

Dick and Carey Model (2005) is another well-known and influential instructional design model. Dick, Carey, and Carey (2005) consider this model as a systems approach because components of the system (i.e. teacher, learners, instructional materials and the learning environment) are important to the success of students' learning and are integrated to each other. They have an input and an output within each component of the process.



### 2.5.2 Kemp Model

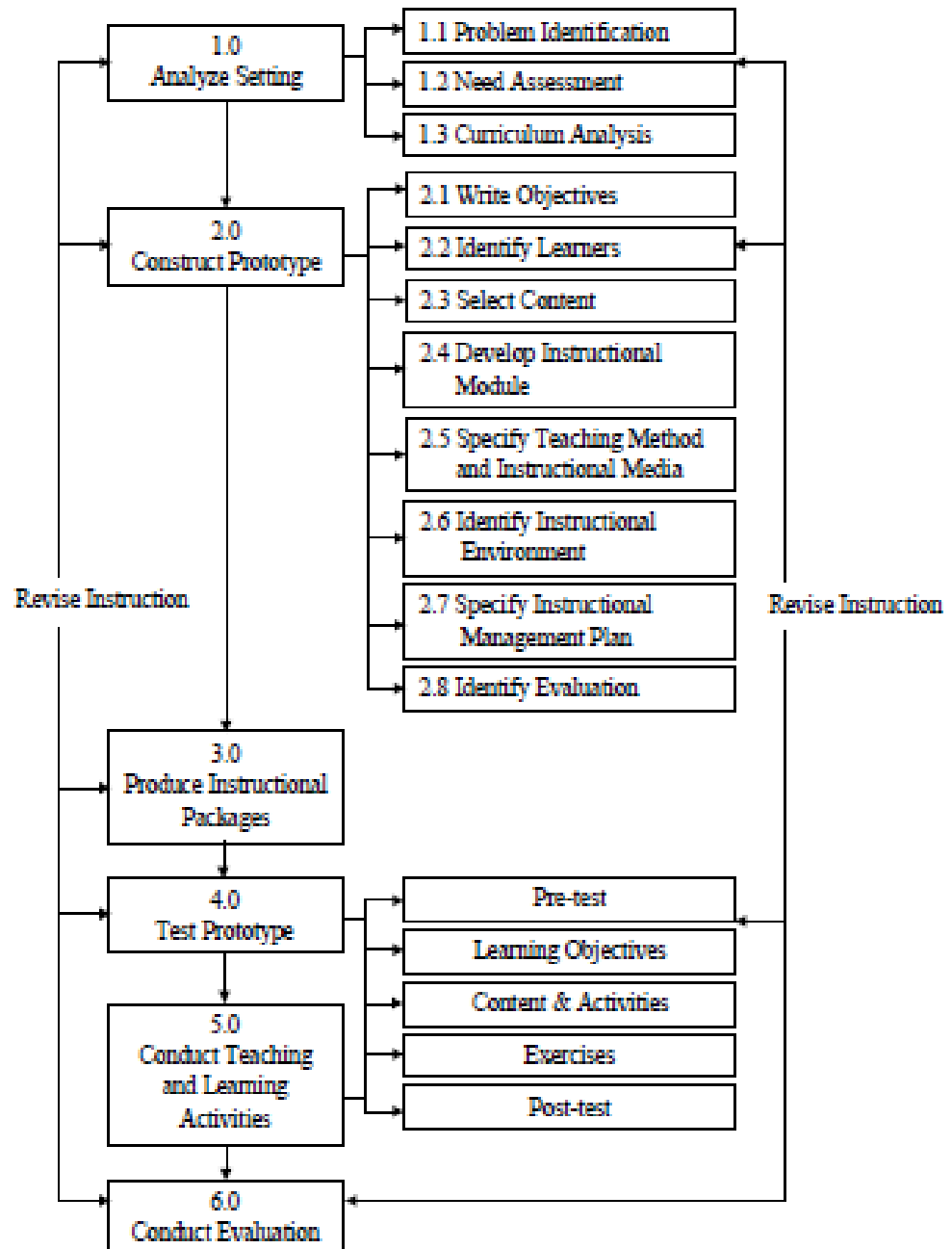
The Kemp Model is a comprehensive instructional design plan. This model describes the holistic approach to instructional design that considers all factors in the environment. The Kemp Model, which is extremely flexible, focuses on content analysis and appeals to classroom-based instructors. According to Morrison, Ross et al. (2010), this model has nine core elements to instructional design.



### 2.5.3 SREO Model

The SREO Model or Suppasetseree's Remedial English Online (SREO) was designed by Suppasetseree in 2005. It is an Internet based instructional system for teaching Remedial English to first year students at Suranaree University of Technology. According to Suppasetseree(2005), the SREO Model was developed from many instructional designers, such as Dick and Carey, the Kemp Model, Klausmeier and Ripple Model, Gerlach and Ely Model. The SREO Model comprised six major steps and 16 sub-steps.

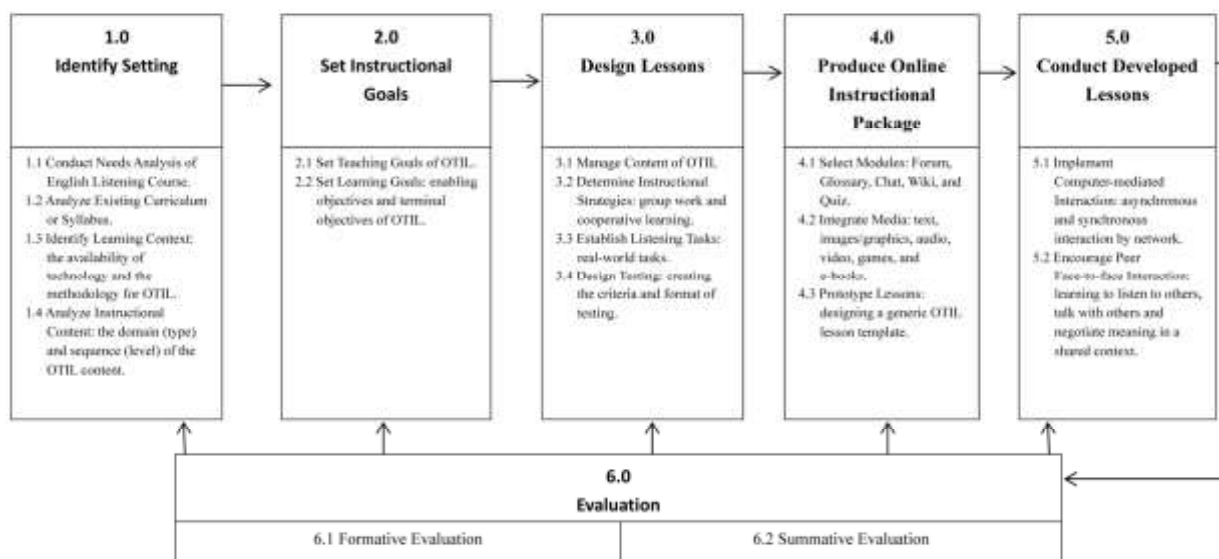
*SREO Model (Suppasetsree, 2005, p. 108)*





### 2.5.4 OTIL Model

The OTIL Model is short for the online instructional model for task-based interactive listening for EFL learners. This model is a set of problem-solving procedures which specify six phases and seventeen steps in the process.



### 2.5.5 Lee and Owen Model

The instructional design models are Need analyses (Need assessment and Frontend), Design, Development, Implementation and Evaluation. The differentiation between Lee and Owen model than others is on the need analyses. Lee and Owen divide their need analyses in two steps, first is need assessment and second is Front – end analyses to get the accurate Need analyses.

### **2.5.6 The researcher's Model**

The ADDIE Model is a fundamental and simplified instructional systems design model. Most of the instructional design models are based on this generic ADDIE Model (Kruse, 2011). All the five core elements of the ADDIE model are presented by Dick and Carey model but they use different terminology (Gustafson & Branch, 2002). The Dick and Carey Model is a systems-oriented instructional design while the Kemp Model is a classroom-based model that considers all factors in the environment. The first three models are based on traditional classrooms whereas the SREO and OTIL models are two online models for language teaching. The SREO Model is an Internet-based instructional design focusing on interactivity or interaction involving learners with the content. Moreover, the OTIL Model has online instructions and a systematic orientation that applies interactive listening teaching with a task based approach.

The ADDIE Model is a fundamental and simplified instructional systems design model and base on Sugie: 2012, Analysis is the most crucial element in the ID process. So the researcher adapted the Lee and Owens Model (2004) to develop the interactive multimedia that consists of five stages. Lee and Owen model will be appropriate and accurate to get the student needs, because to get need Analyses, Lee and Owen divide again in to two, Need assessment and Front-end analyses. In General, there are five stages here, almost similar with ADDIE concept. The Lee and Owens Model(2004), the step are Analysis, design, development,

implementation and evaluation. Here is the five steps which adopted by the researcher.

### **1. Needs assessment or Analysis**

There were two phases in this stage. The first phase was needs assessment while the second phase was front-end analysis.

#### **a. Needs Assessment**

The systematic process of determining goals, identifying discrepancies between actual and desired conditions, and establishing priorities for action ( Lee& Roadman, 1991)

There are six activities in the process of conducting a need assessment:

1. Determine the present condition. Identify the root causes of the expressed need.
2. Define the job. What knowledge and skill are required to successful complete the work?
3. Rank the goals in order of importance. Show how are interrelated.
4. Identify discrepancies. How do the expected performance and the actual performance encountered in meeting a goal differ?  
List all discrepancies, as well as missing task.
5. Determine positive areas. Identify areas related to the business issue in which the company is doing well, and document their existence.

6. Set priorities for action. Set them against the backdrop of the job goals, desired result, and other relevant factors.

### **b. Front-End Analysis**

Need assessment determines that training or performance support intervention is required, the next step is to obtain more detail information about exactly what is to be developed. There are ten types of front-end analysis. There are audience analysis, technology analysis, task analysis, critical-incident analysis, situational analysis, objective analysis, media analysis, extant-data analysis and cost-benefit analysis.

This analysis is used to know discrepancy of the real condition in school's environment, Danang (2015).

## **2. Design**

The design phase immediately follows the analysis phase, and information gained from the analysis phase is translated into a plan for the instructional program. This ensures that the focus of the instruction is on critical needs and conveys the essential knowledge and skills that people require to perform well. The outcome of the design phase for a multimedia program is a storyboard containing specific instructions for developing instructional material. The storyboard must include detailed information about the content to be communicated, the desired layout of information, and the functionality of the module.

### **a. Writing Course Grid**

To conduct the course grid, the researcher uses the way as same as conduct the syllabus. The aspect bellow must attend to conduct the course grid.

The first is related with the learning's objective. The Objective is a statement that describes an intended outcome of instruction (Mager, 1984). Objectives help to activate a mental set that focuses student attention and directs selective perception of specific lesson content (Gagné, 1985). Reiser and Dick (1996:48) state, "At a fairly early stage, learners should be informed of what it is that they are going to be able to do when they finish the instructional process. By knowing what will be expected of them, learners may be better able to guide themselves through that process".

Second is about Design Assessment Aligned with Objectives. Assessments are used to determine whether and to what extent learners have learned specific knowledge or skills based on the instructional goals and objectives of the lesson. The assessment should focus on outcomes of student learning, and should be aligned with the objectives and be meaningful. Herman, Aschbacher, and Winters (1992) indicate that learners perform better when they know the goal of the instruction, and can also compare their performance to the standard. Assessments should also be designed in such a way that they measure the learning of all the objectives in the instructional material.

The third is about Identifying Instructional Information. A significant part of the instructional process involves presenting students with the necessary information for learning (Reiser& Dick, 1996). All models of direct instruction include presenting information to students. Gagné (1985) stresses the importance of emphasizing the information presented to the learners. He mentions that distinctive features of what is to be learned should be emphasized or highlighted when the information is presented (Gagné, 1985). In addition, content presented should be chunked and meaningfully organized (Kruse & Kevin, 1999).

**b. Writing the draft of the material**

Identify Examples to Support the Instructional Material. Examples are verbal or graphical information that provides additional clarification of rules or information presented to learners. Kruse and Kevin (1999) include examples, non-examples, graphical representation, and analogies as guidance strategies that can be used to further clarify new content that is presented.

**c. Flowcharting**

The review process typically provides anflowchart of the key information that was presented to learners. It is intended to reinforce learning, at the end of the instruction, often just before students are tested. Reiser and Dick (1996) cite the value of reviews to bring closure to instruction and to help reinforce the skills and knowledge students should have acquired. Mattiske(2001) suggests that a review activity

immediately after participants have learned something new reassures them that they are learning. Klein, Spector, Grabowski, and de la Teja (2004) suggest that learners should be given time to reflect and review after new information has been presented to them. Gagné, Wager, Golas, and Keller (2005) indicate that spaced reviews should be given to learners to help them retrieve and use newly acquired information.

#### **d. Storyboarding**

Storyboards for the Multimedia Instructional Module. In this phase, storyboards were developed to depict screens from the multimedia instructional module.

### **3. Development and Implementation**

Whatever the type of multimedia product, the basic development principles remain the same:

1. First, establish a framework of development tool, develop specification and standards.
2. Next, develop the media elements that fit into the framework
3. Then review and revise the product.
4. Finally, implement the finished product.

Successful multimedia development methodologies tend to include these elements:

1. Design-time prototyping : creating early application-system prototype so as to review, test, and approve the interface design, media element, script, or map. This is an efficient method for rapid development.

2. Evolutionary development: using each stage of prototyping and development as the basic from which to evolve the next prototype. For this to be successful, design decisions that do not involve the content must be locked.
3. Use of rapid development tools (RDT): templates are useful for parallel development project. They are particularly useful in project where content is added in an iterative process, as it is made available. Templates are created and used as a framework for content as it is identified. For example, in a software development project we're familiar with, the instructional design, look and feel, and functionality were developed first so the content can be inserted when available.

#### **4. Evaluation**

Evaluation is typically what we do worst. The causes of poor measurement stem from lack of knowledge or lack of attention, or both. Knowing what to measure and how to do it to target the data that yield relevant information is a process requiring careful thought by person with highly specialized skills. The evaluation design may be very sound, but something as simple as choosing the wrong measure of what you are trying to prove may cause you to find significant levels of learning where there is none, or no learning where there actually is some.



## 2.6 Previous study

Review of previous study is made in order to avoid imitation. The researcher found some studies which have similar with researcher's studies, as follows: *Developing interactive multimedia for teaching writing descriptive texts for seventh grade students at SMP Negeri 2 Mertoyudan*. The study was conducted by SuliAfianain 2013. The objectives of this study are; to develop a suitable interactive multimedia for teaching writing descriptive texts for seventh grade students at SMP Negeri 2 Mertoyudan according to the students' needs and learning objectives and to find out the appropriate characteristic of an interactive multimedia for teaching writing descriptive texts for the seventh grade. The subjects of the researcher were thirty one students of class VII F. The instruments for collecting the data were questionnaires. The result of the study show that the appropriate characteristics of the developed interactive learning multimedia in writing descriptive texts work well.

Secondly, *improving the students' grammar mastery trough EGRA technique* as the title of study from FiaRennySyaharaand was conducted in 2012. The aims of this study are; to find out the whether EGRA techniques can effectively improve the students' grammar mastery and the strength and weaknesses of EGRA technique to improve the students' grammar mastery to the class VIII E of students of SMP N 1 JatenKaranganyar. This study was used Classroom action research. The researcher analyzed the quantitative data by using the mean score of the test and the qualitative data was analyzed by interactive approach. The result of the study shows that EGRA techniques can effectively improve students' grammar mastery and it has the strengths and weaknesses.

Thirdly, the title of the study is “Interactive multimedia learning: innovative classroom education in a Malaysian University” which was created by Fui-Theng LEOW and Mai NEO. The study was published in TOJET: The Turkish Online Journal of Educational Technology – April 2014, Vol. 13(2). The aim of the study was at enhancing the quality of classroom learning for University students with three important emphases: Gagne’s instructional model, multimedia, and student-centered learning. The impacts on student learning were investigated through pre-test and post-test, questionnaires, open-ended questions and interview. The results of the study were consistent with the literature review, where development of the Gagne-based ILM fulfilled the needs of supporting active learning and providing flexibility to enhance the quality for students learning in University classroom.

The next study, “A multimedia English learning system using HMMs to improve phonemic awareness for English learning” was the article of Yen-Shou Lai, Hung-Hsu Tsai and Pao-Ta Yu. This study was published in Educational Technology & Society, 12 (3), 266-281, 2009. This study is quasi-experimental design. The aim of this study is to enhance their English phonetic awareness and pronunciation. The results showed that the experimental group with low phonemic awareness performed significantly better than the control group in the English Achievement Test.

The differentiation from the researchers’ study above with this study are: first, The study was conducted by Suli Afianain(2013), she created the interactive multimedia in teaching descriptive text without teaching method include on her interactive multimedia, but the researcher in this study will deliver the interactive

multimedia by use EGRA method on this interactive multimedia. Second study was conducted by FiaRennySyahara (2012), she uses EGRA method to improve the students' grammar mastery while the researcher in this study uses the EGRA in interactive multimedia form. The last study was conducted by Fui-Theng LEOW and Mai NEO, his study uses interactive multimedia learning also for enhancing the quality of classroom learning, but in this study the researcher uses interactive multimedia to teach writing descriptive texts.

So in conclude, the researcher in this study will develop interactive course in writing discriptive texts by using EGRA interactive multimedia. Based on the studies above there was no study to develop interactive course in writing descriptive texts by using EGRA interactive multimedia.