

## **CHAPTER II**

### **LITERATURE REVIEW**

This chapter discusses theories relevant to the cognitive levels of reading section in English textbook ‘Scaffolding’ for Junior High School. This chapter encompasses the nature of reading, reading materials, types of activities in reading section, tasks in textbook, textbook, Revised Bloom’s Taxonomy, the cognitive domain, lower and higher order thinking, previous related study and conceptual framework.

#### **2.1 The Nature of Reading**

In language learning, reading gives an important contribution to human. Reading enables people to get useful and new information or ideas which may enhance their knowledge. Through reading, people can also know about things currently happen in the world. Reading can help people to achieve broader mind and perspective in solving problems which occur in their life. Reading is one of four language skills; reading, writing, listening and speaking. Just like listening, reading is a receptive skill.

Reading skill is considered difficult in the context of Indonesian students who learn English as a foreign language. Supported by Harmer’s (1996) statement that state that even the reading skill is difficult for people who

use English as their mother language because of the many complex skills in reading skill. However, reading skill is useful for students' language acquisition since the more they understand what they read, the better they will be at it.

Urquhart & Weir (1998) define reading as an activity of receiving and interpreting information in the form of printed materials. Breznitz (2006) describe reading as interactive process between readers and writer. A process in which the writer put all the information he/she wants the readers to understand in the form of text. The readers then have to construct the meaning of the text by actively associating the information from the text with their wide range of knowledge.

Grabe (2009) perceives reading as a strategic process in which a number of skills and processes involved in reading activated by the reader to anticipate text information, selecting key information, organize and mentally summarize information, monitor comprehension, repair comprehension breakdowns, and match comprehension output to the reader goals.

Celce-Murcia (2000) describes reading as an interactive process which happen between the reader and the text. In order to understand a written text, the reader need to perform a number of simultaneous tasks, decode the message by recognizing the written signs, interpret the message by assigning meaning to the string of words, and finally, understand what the author's intention was.

In reference to Spratt, Pulverness, and William (2005), reading involves the activity of responding and making sense of a text. In order to respond and make sense of a text, readers must understand the meaning of words, sentences and text. To complete the process of reading, readers must associate the message from the text with their prior knowledge. For example:

“Mary was surprised to see that the turtle won the race against the rabbit.”

In order to comprehend this sentence, we are required to understand what the letters are and how it joins together to make words, what does the words means and the grammar of the words and the sentence. However we also make sense of this sentence at the same time by relating the sentence with our knowledge in which we know that a turtle is much slower than rabbit. Thus, with relating the sentence with our prior knowledge, we know why Mary was surprised.

In a nutshell, reading is a complicated process which requires reader not only to be actively recognize, understand, interpret, organize, summarize text and associate the information from the text with their prior knowledge, but also to understand each letters, words and sentences, the relations between sentences (coherence and cohesions), different types of text, and using the appropriate reading sub skill.

## 2.2 Reading Materials

Reading material in language classroom with no doubt is the most important element that will shape the teaching and learning process. A good reading material is demanded to stimulate lively interaction between students and teachers as well as the whole class in order to achieve a communicative language learning process. Therefore, teachers are called for effort on creating materials that will fulfil that expectation. Nonetheless, in reality, most teachers do not have enough time to develop their own materials. Thus, text book becomes the only remaining option. Yet, textbook is not designed with particular needs and characters for their students. This requires the teachers to wisely select and even modify textbook materials.

Harmer (1998) defines reading as a model of language, reading texts provide opportunities to study language such as; vocabulary, grammar, punctuation and the way to construct sentence, paragraph and text. This means, one the ways to study a language is through reading texts because there are many elements of languages (vocabulary, grammar, punctuation, etc.) that can be learned from reading text.

Clarke (1989) argues that communicative methodology is important to be involved in the learning materials and that there are several factors which influence the use of materials in learning and teaching process. This indicate that communicative aspect need to be embodied in the learning material in order to fulfill the role of the learning material in the learning process.

Furthermore, Clarke (1989) also explain that communicative methodology is based on the aspects of authenticity, realism, context and focus on the learner.

Reading generally perceived as an activity which requires reader to interact with text. Reading material refers to texts which contains certain message or information meant to be delivered to the reader through the reading activity. There are some aspects which are need to be considered in preparing the material, such as the readers interest, the objectives of the reading activity, the basic competence in reading materials (to understand the meaning) and the steps of rhetoric development in the written text (narrative, descriptive, recount, procedure, report, etc).

### **2.2.1 Types of Activities in Reading Section**

There are many kind of activities in a Reading section from various teaching materials sources, for example: true and false, fill in the blank, short answer tasks, multiple choices, etc. In reference to Brown (2004), there are four types of reading; perceptive reading, selective reading, interactive reading, and extensive reading.

Figure 2.1 presented the relationships of length, focus and process among the four types of reading.

	Length			Focus		Process	
	Short	Medium	Long	Form	Meaning	Bottom-up	Top-down
Perceptive	●●			●●		●●	
Selective	●	●		●●	●	●	●
Interactive		●●		●	●●	●	●●
Extensive			●●		●●		●●
●● strong emphasis ● moderate emphasis							

*Figure 2.1. Types of Reading by length, focus, and process.*

It is important to be noted that different reading type has different reading activities. Hence, type of reading activities given to the learners must match the reading type. For instance, in Perceptive reading, the learner is considered to just becoming “literate”. Thus, the kinds of task in this reading type are fundamental. The kind of tasks that may be implemented in Perceptive reading are Reading Aloud, Written Response, Multiple-Choice, and Picture-Cued Items.

### 2.2.2 Task in textbooks

Teaching and learning material are usually provided in a textbook. One of the materials is in the form of tasks, which provide the activities for students. Tasks taken from a textbook to be used as classroom activities might be in the form of fill in the blanks, conversations, match the pictures, reading stories, true or false, etc. Nunan (2004) argues that tasks enables the learners to do activities in their classroom. Hence, task is something which enables learners to do activities related with the subject matter they are learning.

Richards and Rodgers (2001) define task as an activity which is carried out by the help of language and might be in the form of puzzle solution finding, map reading, making a telephone call, writing a letter, and reading a set of instruction. Activity in a task must meet the need of the learners. Task might be designed to be done by more than one person, known as Non-individual task. Non-individual task may be helpful to accustomed students to do work together with others.

Nunan (2004) stated that a task is a classroom activity which is derived from real world. Thus, this means that most of teaching and learning activities in the classroom are taken from real situation. Nunan (2004) perceived tasks as “A parts of classroom activities which improve the learners in comprehending, manipulating, producing, or interacting in the target language but their attention is principally on presenting their grammatical knowledge to bring meaning rather than to manipulate form.”

Willis (1996) defined task as an activity in which the learner use target language for communicative purpose to attain an outcome. The objectives of the syllabus or instructional goals are resulting outcomes (e.g. the intended outcome of a particular task in reading skill is remembering information from a reading text and retelling the information to other students). In short, the outcome of the task demands learners to use the target language as much as possible by interacting with others.

In a nutshell, task is an activity with purposes. The purposes of task are determined in reference to the objectives of teaching and learning English that are stated in syllabus or lesson plan. Therefore, tasks for the first grade of junior high school students may be different with tasks intended for the second grade.

### **2.3 Textbook**

Teacher usually use media to help them explaining the teaching materials. The media which is used the most is a textbook. Textbook is one of printed learning materials that is commonly and frequently used by educational practitioners. Even though there are many kinds of media to be used as teaching material, textbook remains as the primary source in teaching practice. In reference to Thomson (2000), textbook act as some kind of a stimulus or instrument in teaching and learning practice. Other definition mentions that textbook is a manual or a standard book of any study matters which is designed and produced in reference to the need of educational institutions.

Richard (2001) states that textbook is used in various ways in language program. Textbook act as an assistance for students in order to acquire clear interpretation of a subject matter. Meanwhile, for inexperience educational practitioners, textbooks may act as a form of teacher training since textbooks provide ideas on how to plan and teach lessons as well as formats that teachers can use. Textbook also meant to assist teachers during the teaching and learning activities progress.



Textbook has many advantages in teaching and learning process. Richards (2001) mentioned the advantages of textbook. The advantages of textbook are (1) providing structure and a syllabus for a program; (2) helping standardized instruction; (3) maintaining quality; (4) providing a variety of learning resources; (5) being efficient; (6) providing effective language models and input; (7) training teachers; and (8) being visually appealing. These advantages thus perhaps are the reason of why textbooks often become the only teaching material in teaching and learning practice.

Therefore, it is important for teachers to use a textbook when they are conducting teaching and/or learning practice of a specific subject in order to assist them during teaching and learning activities as well as to fulfill the purposes of education.

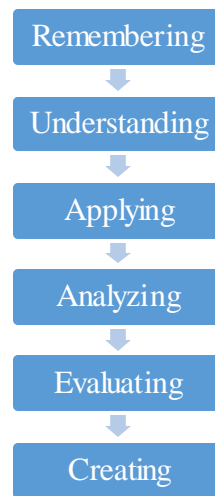
#### **2.4 Revised Bloom's Taxonomy**

In order for someone to assess something, there need to be a standard. In this context, the standard needed to measure the cognitive levels in textbook is the Bloom's Taxonomy. Bloom's Taxonomy is a terminology created by Benjamin Bloom back in 1956. However, when the framework of this taxonomy was revised by Anderson and Krathwol in 2001, it became Bloom's Revised Taxonomy (see Figure 2.1).

There are two major reasons behind the revision of Bloom's Taxonomy. The first one is because there is a necessity to refocus the concentration of

educators on the value of the original book, which is not only valuable in the education world but also “ahead of its time” (Rohwer and Sloane, 1994 in Anderson and Krathwol, 2004). Many people probably already know that educators nowadays are faced with issues related with design and implementation of accountability programs, standards-based curriculum, and authentic assessment. However, the original book possess helpful view and ideas regarding those concerns that may help educators today. Another reason that underlies the revision of the original book is that there are many changes since 1956 which may have impact on the way we view and practice education. There is an increase in our knowledge related to the way children learn, the way teachers prepare, teach, and asses students. Therefore, new knowledge and ideas are required to be incorporated into the original framework.

Krathwol (2001) mentions that the definition of this framework is that, it is a framework to classify statements which we expect the students to learn as the product of instruction. Callister (2010) states that the learning activities are leveled from level 1 (knowledge) to level 6 (evaluation) in order to increase the sophistication as one learns. These levels represent the levels of thinking skills and are organized from the low order to high order thinking skill. Low order thinking expect the students to recall and/or recognize a single fact, whereas high order thinking demand the student to understand and associate the information or knowledge with broader context. There are three levels under the low order thinking; remembering, understanding and applying.



***Figure 2.1 Bloom's Revised Taxonomy (2001)***

The first level is remembering. In this level, students are asked to recall or recognize the information retrieve from the lesson, for example, identifying information related to a text given during the teaching and learning practice. The second level is understanding. This level requires students to explain the concept with their own words. The third level is applying. Students are required to apply the knowledge they have got throughout the lesson, for example, writing their own personal past experience after they learn about recount text.

Moving on to the high order thinking, there are also three levels under this term; analyzing, evaluating and creating. The first level under this term is analyzing, this level expect the students to analyze the relation between one information with another. The second level is evaluating, this level call for the students to make judgment related to the value of ideas or materials. The third level is creating, which demands the students to create a new product or outlook.

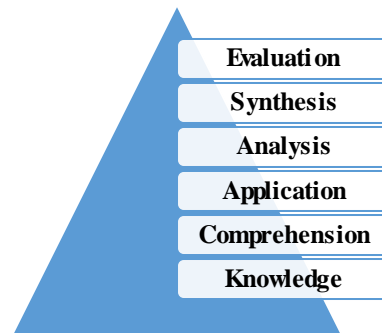
In brief, Bloom's Revised Taxonomy is a revised version of the original Bloom's taxonomy which act as a measurement of students' ability to reach the educational goals. There are total six levels in Bloom's Revised Taxonomy which are divided under two terms; low order thinking and high order thinking.

#### **2.4.1 The Cognitive Domain**

There are three domains in Bloom's Taxonomy; cognitive (knowledge-based), affective (attitude-based) and psychomotor (motor skill-based). Each domain has its own objectives. However, the one that will be the focus in this study is the cognitive domain. The cognitive domain objectives are to recall or recognize knowledge and also to develop intellectual abilities and skills. Cognitive domain is the domain where we can find the most explicit objectives phrased as the descriptions of student behavior. Cognitive domain also responsible for most of the work in curriculum development (Bloom, 1956).

In reference to Mager (1999), cognitive domain may be displayed through knowledge recall and intellectual skills such as comprehension, organizing, analyzing and synthesizing, applying, choosing and evaluating skill.

The cognitive domain of Bloom's Taxonomy contains six major classes which are put in hierarchical way (Figure 2.2).



*Figure 2.2 Bloom's Taxonomy (1956)*

The lowest level in the taxonomy is the knowledge and it ascend until the highest level, evaluation. The three lower levels belongs to the low order thinking. Meanwhile the three higher levels belongs to the high order thinking. In order to move on to a higher level, one must completely grasp the level below it. For example, one must understand the definition and characteristic of recount text before he/she can judge whether a passage truly belong to a recount text or just simply belong to the narrative text.

#### **2.4.2 Lower and Higher Order Thinking**

Cognitive process in Bloom's Revised Taxonomy comprises remembering, understanding, applying, analyzing, evaluating, and creating. The three lower cognitive process in Bloom's Revised Taxonomy; remembering, understanding, and applying are categorized as Lower Order Thinking (LOT) which act as a fundament for higher levels of learning. Meanwhile the three higher cognitive process; analyzing, evaluating, and creating are classified as Higher Order Thinking (HOT). In order to acquire

Higher Order Thinking, first, one must master the three lower cognitive process in Lower Order Thinking (Bloom, 1956; Kauchak & Eggen, 1998).

McDavitt (1993) stated that Higher Order Thinking involves analysis, synthesis, and evaluation. Higher Order Thinking related with transformation of information and/or ideas. Higher Order Thinking is also a useful way to inspire students to think deeper, broader, and critically, also to stimulate students to put on effort in order to acquire information.

Bloom's Revised Taxonomy presents a list of verb related with each cognitive process which function is to assist in identify and classify whether a particular activity or task in teaching and learning practice is categorized into Lower Order Thinking (LOT) or Higher Order Thinking (HOT). See table 2.1 for the cognitive processes and its relevant sample verbs.

When one has mastered the higher cognitive process in Bloom's Revised Taxonomy or the Higher Order Thinking, it can be said that the critical thinking process of that someone is activated. In one section of tasks, there might be at least one instruction which can trigger students' Higher Order Thinking.

Textbooks plays an important role in education. One of the basic aspects of textbooks is text. Tasks and activities that follow each text in a textbook should be written in a way that can stimulate and develop students' to think critically.

**Table 2.1 Cognitive processes and its relevant sample verbs**

<b>Cognitive Process (from the lowest to the highest)</b>	<b>Relevant Sample Verbs</b>
<b>1. Remembering</b> Retrieve, recall, recognize, and identify relevant knowledge from long term memory.	Memorize, define, recite, recall, cite, count, draw, recall, list, name, record, repeat.
<b>2. Understanding</b> Construct meaning from instructional messages, including oral, written, and graphic communication.	Relate, interpret, classify, summarize, discuss, describe, explain, conclude, compare/contrast.
<b>3. Applying</b> Carry out or use a procedure in a given situation.	Employ, execute, implement, practice, calculate, show, demonstrate, illustrate, model.
<b>4. Analyzing</b> Break material into its constituent parts and determine how the parts relate to one another and to an overall structure or purpose.	Distinguish, contrast, scrutinize, dissect, separate, discriminate, analyze, and examine, survey.
<b>5. Evaluating</b> Make judgments based on criteria and standards.	Argue, decide, validate, appraise, evaluate, judge, measure, rank, criticize, rate, select, consider
<b>6. Creating</b> Put elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure.	Generate, plan, produce, develop, construct, organize, propose, invent, formulate.

*(Bloom's Revised Taxonomy, 2001)*

English textbooks usually contain tasks at the beginning or at the end of each section, lesson or chapter. However, in reference to Collins, Brown, & Newman (1989), previous studies has shown that most textbooks do not contain materials, nor do they include questions that require critical thinking. As indicates in researches, most textbooks tasks emphasizes the lower-order

cognitive levels (Freatat & Smadi, 2015; Hasan AbdRabbeh Ali Al-hasanat, 2016; Ayaturrochim, 2014; Gordani, 2010; Assaly & Igbaria, 2014).

Consequently, it is considered important to analyze one of the textbooks used in teaching and learning practice in Indonesian Junior High School to find out to what extent current demand of developing students' Higher-order thinking is reflected in the reading tasks of the textbook, and accordingly assist teachers in choosing textbooks that might adequately facilitate the teaching and learning practice in preparing students for high cognitive demands of reading tasks in English as Foreign Language.

## 2.5 Previous Study

There are studies conducted in relation to identifying cognitive levels in textbook by the help of Bloom's Taxonomy. Freatat & Smadi (2015) conducted a study to evaluate the cognitive levels of master class textbook's questions by using Bloom's Taxonomy. Methodology used in this study is the descriptive qualitative research. The results of the study revealed that author of the textbook emphasized *Comprehension* for about 52% of the questions, and only 3.7% and 6% of the questions on the cognitive levels of *Knowledge* and *Application*. The results showed that around 40% of the questions in the textbook emphasized on higher-order thinking skills. Thus, the textbook analyzed is focusing more on the Lower-order thinking skill.



Another study conducted by Hasan AbdRabbeh Ali Al-hasanat (2016) related to analyzing the assessment questions in an Arabic textbook for eight grade in Jordan. Methodology used in this study is the descriptive qualitative research. In order to fulfil the aim of the study, the researcher designed an instrument of analysis which is then applied to 520 questions in the textbook for both first and second semesters. The results of this study showed that the questions in the textbook mostly emphasized on lower levels of thinking.

Ayaturochim (2014) also conducted a study to find out the dominant component of cognitive domain in the reading task of English textbook for Junior High School. The methodology used in conducting this study is descriptive qualitative research. The result of this study is that the dominant cognitive level of Revised Bloom's Taxonomy is remembering level which is considered not appropriate to develop students' critical thinking.

A study by Gordani (2010) explored different types of learning objectives exist in Iranian guidance school English textbooks by the use of Bloom's taxonomy. The primary data in this study were the English textbooks taught in Iranian guidance school. A coding scheme was developed in order to enable the researcher to use the Bloom's taxonomy to codify the data. The result of this study showed that of a total of 351 tasks and exercises, they were all concentrated in the first three levels of Bloom's taxonomy which were considered as the lower-order thinking skill.

More study conducted by Assaly & Igarria (2014) also conducted a study in this field. This study focused in analyzing the textbook 10th-grade students who are learning English at the 5-unit level. The method of this study is content analysis. The results of this study showed that 114 activities in this textbook are considered as lower-order thinking skill, and only 59 activities are considered as higher-order thinking skills.

In reference to the previous studies mentioned above, it can be seen that most of studies associated with analyzing cognitive level in textbooks used the assistance of Bloom's taxonomy. Bloom's taxonomy may be considered as an appropriate parameter to assess the level and quality of a textbook. Also can be seen from the previous studies that almost all the textbook analyzed are stressing more on the cognitive levels that belong to the Lower-order thinking skill.

## **2.6 Conceptual Framework**

English textbooks, in general, consists of the four skills that students need to master in learning English. The four skills are listening, speaking, reading and writing. Under the terms of Reading skill, there are reading materials that usually contain reading texts which are followed with some questions related to the texts. The tasks following the reading texts may be varied in the terms of level, from lower-order-thinking to higher-order-thinking of cognitive levels by revised version of Bloom's taxonomy (Edward &

Bowman, 1996). Good questions usually prompt to good understanding. According to Underhill (1991), questions are useful to organize knowledge or to correlate the results of educative experience. Thus, good reading activities are demanded to have good questions which may engage students thinking skills from the lower-order to higher order.

Higher-order thinking skill consists of analysis, synthesis, and evaluation of Bloom's Taxonomy. However, the one that is used in this study is the revised version of Bloom's Taxonomy as proposed by Anderson & Krathwol (2001), so the cognitive levels categorized as the higher-order thinking are analyze, evaluate, and create. Moreover, higher-order thinking skill is related with the problem solving and critical thinking skill.

Higher-order thinking (HOT) is also useful for creating meaningful learning in the teaching and learning process since it gives broader vision of learning that includes how to use knowledge in a variety of new situations in the students' everyday life not just merely acquiring the knowledge. On that ground, the researcher assumes that an analysis of the higher order thinking skill in the reading tasks of Junior High School English Textbook entitled Scaffolding for Grade VIII is crucial since it might help and support the teacher in choosing material that can encourages and fosters students' ability to think critically. Referring to the explanation above, the researcher will try to analyze the cognitive levels applied in the reading tasks of Junior High School textbook "Scaffolding for Eight Grade" by the help of Bloom's Revised Taxonomy.

Bloom's Revised Taxonomy is a parameter to measure the level of thinking in cognitive domain. Bloom's Revised Taxonomy classified the level of learning activities into six; Remember, Understand, Apply, Analyze, Evaluate, and Create. These levels of learning activities are then classified into two major levels of thinking skill; Lower-Order Thinking (LOT) and Higher-Order Thinking (HOT). The first three levels of learning activities are classified into Lower-Order Thinking (LOT). While the other three levels of learning activities are classified into Higher-Order Thinking.