### Chapter II

# **REVIEW OF RELATED LITERATURE**

In this chapter discusses the definition or textbook, Evaluation, Reading Comprehensio, and the principle of questions, Bloom's Taxonomy

## 1. Text book

Textbook is one of the instruments that used in teaching. There are a lot of discussion related to textbook. Moreover, the most important framework which is tied to this study are about the definition of textbook. In education system needed appropriate tool to convey or transferring knowledge to students. In Indonesia, emerge as one of the most essential tool for teaching and learning English is Textbook. As asserted by Syed Kazim, et al that textbooks are the main source of providing instructions to the teachers and students that's why it is stated that textbooks are the backbone of every educational system.<sup>1</sup>

So, teacher should make an interesting teaching. Teacher had to teach the material by using the intersting method and provide a good media based on the student capability. So many teacher use handbook or textbook to make it better. It is based on the curriculum development and also the syllabus, as Mahmood said that "Any textbook should have a characteristic of cognitive development and

<sup>&</sup>lt;sup>1</sup>Ibid, 104.

creative thinking. This characteristic refers to the nature, relevance and level of learning activities included in the textbook. Activities given in the textbook are according to students' developmental level and the content is helpful in developing thinking skills in the students."<sup>2</sup> It is mean that textbook here used to make clear the materials and can be used by student outside the class and also the teachet can be expected to the master of the textbook.

### 2. Reading Comprehension

Reading is the most important skill in learning language. Through reading we can extract a lot of information from unlimited writen sources to gain knowledge which useful in academic and daily lives. There are many definition of reading proposed by some linguist based on their own view. According to Urquhart &Wier in Liu, reading is the process of receiving and interpreting information encoded in language form via the medium of print.<sup>3</sup>Another definition is proposed by Nuttal that reading is the meaningful interpretation of printed or written symbol.<sup>4</sup>It can said that reading is the result of the between the perception of the graphic symbol that represent language and the readers language skill, cognitive skill, and the knowledge of the world.

Reading comprise a two braches process of decoding of words(word knowledge) and ability to understand the reading material

<sup>&</sup>lt;sup>2</sup> Mahmood, Khalid. (2011). Conformity to Quality Characteristics of Textbooks: The Illusion of Textbook

Evaluation in Pakistan. Journal of Research and Reflections in Education 5(2), 170-190.

<sup>&</sup>lt;sup>3</sup> Feng Liu, A Short Analysis of The Nature of Reading ,*ELT journal*, 3 (3),2010,152

<sup>&</sup>lt;sup>4</sup> Cristine nuttal, *Teaching English in Foreign Language*, (London: Heineman, 2007), 14

(topic knowledge).<sup>5</sup>It means that reading here passed two process the first is when we are read a text, the reader make decoding of the text that their read. And the second is the reader tried to understand the whole material that propossed in the text. In acquisition of reading, five process components are crucial: phonology, syntax, semantic, orhography, and working memory (see figure 1).<sup>6</sup>

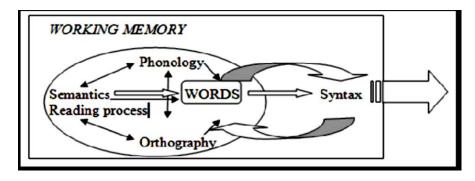


Figure 1. The Five Process Components of Reading (Siegel, 1993)

Mmoreover, reading is drawing process that ranges from discrete to abstract feature based on the extent of existing schema and life experiences. Several skills occur in reading procss, inclusive of word recognition to grasp the expected meaning of the text, and make simplicity of the text. Reading also include the reader's thoughts, feelings, beliefs, knowledge or lack of it and strategies for processing the data or text. We can conclude that reading is both a psycholinguistic process, where the mind actively processes what is read and sociolinguistic process, where several social related factors

<sup>&</sup>lt;sup>5</sup> Saranya Elangovan, A Cognitive Equation of Reading Process for Student with Autism. *Journal of Reading and Literacy, volume.* 4,2002,48

<sup>&</sup>lt;sup>6</sup> Alfassi, N.(2004) Reading to Learn: Effect of combined strategy instruction on high school students. *The Journal of Education Research*, 97(4), 171-184.

have an impact on what one reads, how one reads, how much one understands from reading and so on.<sup>7</sup>

Models of reading process show the relationships among the various elements of reading in component readers. A widely accepted reading model stemmed from cognitive psychology and schema theory. The reader in this instance is an active participant who background knowledge is used, all readers will naturally have different shaped by their respective cultural background and belief systems. This study based on the cognitive model of reading process which is encapsulated in a cognitive equation according to Chia RP =S  $\{B[T(D + Cp) + M] + P\} = RO.^8$ 

Where **RP** is reading process

S is Setting (where the reading text taken place) B is the background knowledge and prior experience of the reader T is thinking D is Decoding Cp is Comprehension M is Motivation P is Purpose RO is reading Outcome

<sup>&</sup>lt;sup>7</sup> Saranya Elangovan, A Cognitive Equation of Reading Process.... 51-52

<sup>&</sup>lt;sup>8</sup> Chia, N.K.H. (2007a). About reading and failure to read. *The Society for Reading and Literacy News Magazine*, *17*(*3*), 3-9.

As shown in the afore-mentioned equation, reading is complex process comprising many interacting components Chia states that the fundamental components of the cognitive equation of reading process is Thinking (Decoding + Comprehension), that is T (D + Cp). As shown in the afore-mentioned equation, reading is a complex

process comprising many interacting components. Figure 2 below shows the cognitive equation depicted in the form of a diagram.

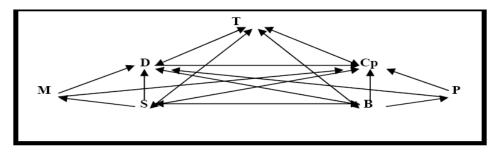


Figure 2. An Adapted Diagrammatic Representation of the Reading Process (Chia,2004)

# 3. The Principle of Questions

Questions are one of the contents in Textbook that openly interact with student. The question also one of instrument to measure the students cognitive. So, a good question will lead to have good understanding in the material provided. Underhill stated that questions serve as means of organizing knowledge, or correlating the results of educative experience.<sup>9</sup> In addition, it is not deniable that questions give performance as an important instructional method for teaching English

<sup>&</sup>lt;sup>9</sup> Nasser M. Freahat and Oqlah M. Smadi.(2014). Lower-order and Higher-order Reading Questions in Secondary and University Level EFL Textbooks in Jordan. *Theory and Practice in Language Studies*, 4(9), 1804.

in the classroom. Thus, teacher should select the best textbooks which include the various kinds of questions so that it can develop students' creative thinking. Moreover, in terms of the types, basically, there are two types of questions in English, namely : objective and subjective test.

a. Objective test

Objective test are test which consist of some short questions, each of them followed by a number of possible reponses. The students are only asked to give the mark or sign to the best answer and are not required to construct their own response. There are four types of objective test namely multiple choice, true-false, completion and matching. The explanation of each item as follow:

requiring the examinee to select the correct answer among a number of given alternatives

1.) Multiple choice

Multiple choice consists of some responses, which is one is correct and the others are incorrect. The studenst are asked to give mark to the best answer for the question provided. Moreover, Hibberd stated that high level of cognitive skill can be implemented to measure deeper understanding if questions are imaginatively constructed.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> Hibberd, S. (1996). The mathematical assessment of students entering university engineering courses, *Studies in Educational Evaluation*, 22(4), 377.

2.) True-false

True-false consists of the statements and some of them are true and the others are false. The students are required to give the mark whether it is true or not.

3.) Completion

Completion is a statement from which one or more key word has been eliminated. The students are asked to provide the statement or words that correctly complete the statement or answer of the questions.

4.) Matching

Matching provides a column of items on the left hand side of page and a column of options or response on the right side. The students are asked to match the question to the best response which are separated.

b. Subjective test

Subjective test which is commonly called essay is the question that require students to construct their own response, expressed in their own word.

# 4. Bloom's Taxonomy

When creating a curriculum, Bloom challenged teachers to categorize their current curriculum based on cognitive demands to reveal missing pieces; he stated that by "comparing the goals of their present curriculum with the range of possible outcomes this comparison]may suggest additional goals they may wish to include".<sup>11</sup> Moreover, Wowo Sunaryo said that bloom's taxonomy provides the way to categorize the classification of educational goals.<sup>12</sup> Bloom's initial taxonomy included six cognitive levels including knowledge, comprehension, application, analysis, synthesis, and evaluation, Bloom's taxonomy has several characteristics that make it the most commonly used taxonomy in the field of education:<sup>13</sup>

1. The taxonomy is educationally oriented and can be used to distinguish between groups of objectives that teachers use for writing curricula, study programs and lesson plans.

2. The levels are clearly and logically defined.

3. The taxonomy describes psychological phenomena.

4. The taxonomy discusses thinking processes ranging from the simple to complex with each level resting upon the previous one.

5. It is continuous, with each objective leads to the one following it.

6. It is comprehensive in that each behavioral objective can be categorized according to the taxonomy.

The six levels of what is commonly called Bloom's Taxonomy in terms of cognitive domain are:

<sup>&</sup>lt;sup>11</sup> Bloom, B. S. (Ed.). (1956). *Taxonomy of educational objectives handbook: Cognitive domain*. New York: McKay.p.2

 <sup>&</sup>lt;sup>12</sup> Wowo Sunaryo Kuswana, *Taksonomi Kognitif*, (Bandung; PT Remaja Rosdakarya, 2012), 6.
<sup>13</sup> Assaly, Ibtihal and Kareem Igbaria, Abdul. (2014). A content analysis of the reading and listening activities in the EFL textbook of master class. *Education Journal*, 3(2), 24.

# a. Knowledge (recalling information)/ C1

Knowledge is the lowest level of learning outcomes in Bloom's hierarchy. It is defined as the ability in remembering previously learned and saved in the brain starting from specific facts into complete theories. As Wowo said that knowledge is the level that can be described in the situation of examination which focus on the process of recalling information from idea, material, or facts that have been learned.<sup>14</sup> The knowledge saved is gained when it is needed by recalling or recognition the information. For example, students can remember scientific approach, preposition, the formula in the conditional sentences and verb conjugation. The key words (verbs) of this level are: state, label, describe, define, arrange, select, reproduce, relate, recognise, memorise, list etc.

b. Comprehension (translating, interpreting, or extrapolating information)/ C2

Comprehension level require that students gives an understanding the information that they have learned as well as to use it. At this level the learners may understand the meaning, interpret, the instructions and sate the problem in one's own words.<sup>15</sup> This level is higher than the fisrt level (knowledge). The key words (verbs) are explain, reference, paraphrase, theorise, interpret, estimate, re-write, discuss, report, review, translate,

<sup>&</sup>lt;sup>14</sup> Wowo, Taksonomi Kognitif, 32.

<sup>&</sup>lt;sup>15</sup> Syed Kazim Shah, *Textbook Evaluation*, 105.

illustrate, summarise, classify, critique, analysis, reword, repeat, reiterate, example etc.

 c. Application (using principles or abstractions to solve novel or reallife problems)/ C3

Application level requires students to use knowledge or principles to solve practical problems which are real and new. The ability is shown by the application of the formula to the problems that have not faced before or the application of a method to a new problem.<sup>16</sup> Moreover, this level is higher than two previous levels. The key words (verbs) to find this level in the book are: use, role play, respond, react, perform, conduct, prepare, change, construct, implement, produce, solve, execute, manage, discover apply etc.

d. *Analysis* (breaking down complex information or ideas into simpler parts to understand how the parts relate or are organized)/ C4

Analysis objectives require students to elaborate complex information into simpler parts so that the whole structure or organization can be understood well. In addition, at this level of cognitive process the students will relate the materials and the basic concepts which are given in the book so the students may be able to improve their basic skills regarding report writing and presentation.<sup>17</sup> The key words (verbs) to find this level in the book are: analyze, divide, value, infer, extrapolate, plot, diagram, graph,

<sup>&</sup>lt;sup>16</sup> W.S. Winkel, *Psikologi Pengajaran*, (Jakarta: PT Grasindo, 1996), 246

<sup>&</sup>lt;sup>17</sup> Syed Kazim Shah, *Textbook Evaluation*, 105.

relate, experiment, examine, test, measure, count, qualify, compare, catalogue, break down, etc

## e. Synthesis (creation of something that did not exist before)/ C5

Synthesis level requires students to create the information that they have learned into completely new product that did not exist before. Examples would include writing a composition, create a plan, writing a proposal of scientific research. Furthermore, this level is higher that analysis level because of the need to find new pattern or product. They key words (verbs) to find these levels of Bloom's taxonomy in the book are: develop, modify, re-arrange, integrate, assemble, establish, propose, formulate, revise, organize, design, create, build, plan etc

### f. Evaluation (judging something against a given standard)/C6

Evaluation level requires students to make a judgment based on some criterion or standard. Moreover, this level covered the ability to produce an opinion that followed by the responsibility and argument based on certain criterion. This level will lead students to evaluate the things and materials given in the book. Evaluation objective is the highest levels of Bloom's Taxonomy in terms of cognitive domain, because it includes all of ability from the fisrt to the fifth level.<sup>18</sup> For example, students might be asked to compare the strenghts and weakness of the implementation of

<sup>&</sup>lt;sup>18</sup> W.S. Winkel, *Psikologi Pengajaran*, (Jakarta: PT Grasindo, 1996), 247.

debate technique in English classroom. The key words are: review, project-manage, argue, appraise, direct, investigate, report on, defend, present a case for, assess, justify etc.

At first, Bloom described these six levels of cognitive domain which is arranged in the form of hierarchy from the low-order (knowledge, comprehension) to the high-order (application, analysis, synthesis, evaluation). Moreover, the high levels is built above the low-levels. In fact, teacher often neglect these levels and they only use this theori to examine different level of cognitive domain.<sup>19</sup>

Bloom's taxonomy can be describes as follow:

Type of objective	Definition	The key words (verb)
Knowledge	recalling	State, Label, Describe, Define,
	information	Arrange, Select, Reproduce,
		Relate, Recognise, Memorise,
		List, Mention, Make, Etc.
Comprehension	translating,	Explain, Reference, Paraphrase,
	interpreting, or	Theorise, Interpret, Estimate, Re-
	extrapolating	write, Discuss, Report, Review,
	information	Translate, Illustrate, Summarise,

Table 2.1: The types of Bloom's Taxonomy and the definition

<sup>&</sup>lt;sup>19</sup> John W. Santrock, *Psikologi Pendidikan, edisi kedua*, (Jakarta: Kencana, 2007), 467.

		Classify, Critique, Analysis,
		Reword, Repeat, Reiterate,
		Example, Etc <sup>20</sup>
Application	Using principles	Use, Role play, Respond, React
	or abstractions	Perform conduct, Prepare,
	to solve novel	Change, Construct, Implement,
	or real-life	Produce, Solve, Execute, Manage,
	problems	Discover, Apply, choose,
		demonstrate, dramatize, employ,
		illustrate, interpret, operate,
		schedule, sketch, solve, use, write,
		Etc. <sup>21</sup>
Analysis	breaking down	Analyze, Divide, Value, Infer,
	complex	Extrapolate, Plot, Diagram,
	information or	Graph, Relate, Experiment,
	ideas into	Examine, Test, Measure, Count,
	simpler parts to	Qualify, Compare, Catalogue,
	understand how	Break down, Etc.
	the parts relate	
	or are organized	
Synthesis	creation of	Develop, Modify, Integrate

 <sup>&</sup>lt;sup>20</sup> Syed Kazim Shah, *Textbook Evaluation*, 105.
<sup>21</sup> Mary J. Pickard, (2007), The New Bloom's Taxonomy: an Overview for Family and Consumer ciences, *Journal of Family and Consumer Sciences Education*, 25(1), 48.

	something that	Re-arrange, Assemble, Establish,
	did not exist	Propose, Formulate, Revise,
	before	Organize, Design, Create, Build,
		Plan, Etc.
Evaluation	judging	Review, Project, Manage, Argue,
	something	Appraise, Direct, Investigate,
	against a given	Report on, Defend, Present a case
	standard	for, Assess, Justify, Etc. <sup>22</sup>

<sup>&</sup>lt;sup>22</sup> Syed Kazim Shah, *Textbook Evaluation*, 106.