### **CHAPTER II**

### LITERATURE REVIEW

This chapter discusses theoritical frameworks that this current research underpin on which; Revised Bloom's Taxonomy, reading, reading comprehension, effective strategies for reading comprehension.

#### 2.1 Revised Bloom's Taxonomy

The origin of Bloom's Taxonomy is from a book by Benjamin S. Bloom, an education psychologist and his coleagues entitled *Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain* published in the year 1956. They introduced three kinds of thinking behaviors i.e. cognitive, affective, and psychomotor. Cognitive domain of thinking contains behaviors that emphasize intellectual elements such as knowledge and thinking ability. It has six levels from low to high namely knowledge, comprehension, application, analysis, synthesis, and evaluation.



**Picture 2.1 Bloom's Taxonomy** 

<u>skillcast</u>

The first three levels are Lower Order Thinking Skills (LOTS), while the three up levels are Higher Order Thinking Skills (HOTS). However, it does not mean that the lower levels are not necessary. Precisely, the students must first passed the lower levels in order to advance to the next level. This graph shows that the higher it is, the hardest it is to acquire.

Bloom's Taxonomy was created because a lot of evaluation of learning outcomes made by school were only ask the students to mention what they memorize. Memorizing is the lowest level of thinking ability and there is a lot of higher thinking ability that must be acquired by the students.

In 1994, one of Bloom's students, Lorin Anderson Krathwohl and a psychologist improve Bloom's Taxonomy to match the era's development. The revised version published in 2001 under the name Revised Bloom's Taxonomy. Several changes occured after the revision. The first change is in the keyword used in each level of cognitive dimension, from noun turned into verb. The second change is on the arrangement of the cognitive dimension level, evaluate located before create. The differences between the original Bloom's Taxonomy and Revised Bloom's Taxonomy illustrated below:



#### Picture 2.2 Revised Bloom's Taxonomy

# thesecondprinciple

Just like the old Bloom's Taxonomy, the Revised Bloom's Taxonomy classified into two categories namely Lower Order Thinking Skills (LOTS) i.e. Remember, Understand, Apply and on the other hand Higher Order Thinking Skills (HOTS) i.e. Analyze, Evaluate, Create. This revised version is often used in formulating learning objectives which mentioned as C1-C6. HOTS will be far different from LOTS, the following differences are proposed by Sani (2019: 62).

**Table 2.1 Differences in LOTS and HOTS Learning Activities** 

No	LOTS learning activities	HOTS learning activities
1	Passive in thinking	Active in thinking
2	Solve problem	Formulate problem
3	Assessing simple problems	Assessing complex problems
4	Convergent thinking	Divergent thinking and developing ideas
5	Learning from the teacher as the main source of information	Finding information from various sources
6	Practice solving problems and memorizing	Thinking critically and solving problems creatively
7	Prioritizing factual	Knowledge analytic, evaluative thinking and making decisions

# 2.2 Reading

Anderson et al. (1985) reading is a process of creating meaning from written text. It needs the conformity of so many related information resources. According to Wixson, Peters, Weber, and Roeber (1987), it implicates, a) the readers previous knowledge, b) the information of the text, and c) the context of reading. Grabe (1991) stated reading as an activity that generates fluency from an interactive process between readers and texts. Readers try to create meaning from the text when they interact with the texs and there are divers types of knowledge such as : bottom-up processing and top-down processing. The principal objective of reading is to obtain the valid message from a text that the author reckoned for the reader to take (Pourhosein Gilakjani & Sabouri, 2016).

Reading comprehension is the fundamental decoding ability that presents the meaning of the text. It is one of the major important factors in foreign language learning, especially English language for the students in all stages (Takaloo & Ahmadi, 2017). It is a method of creating meaning from a text that has been read carefully which involves language, word reading, word knowledge, and fluency. Another definition informed that reading comprehension is the process of combining the reader's knowledge and the knowledge of the text they read. In this case the readers interpret the text when they activated their background of knowledge.

In comprehending the written text, the reader interprets and combines words and phrases to form meaning. This meaning is continuously updated to maintain the coherence. Reading comprehension depends on how quickly the readers understand each word in the text. If the readers have difficulty in this matter, of course their understanding of the text will be impaired. The students could practice their understanding on the written text by answering questions related to the text given. Hence, it is important to use appropriate taxonomy level in the questions used to develop students reading comprehension (Ahmadi, 2017).

There are three models for reading process as follows:

2.2.1 Bottom Up

In bottom-up theories, meaning located inside the text. It means that this process is a passive process, where the reader interprets the message of the author by looking from the lowest level, such as letters and words, towards the higher level, such as clauses, sentences, and paragraphs. This means that the meaning comes from interpreting the letter, then the word, the sentence and finally the whole text. Simply put, the process understood as something unilateral in which the reader only has the role of extracting written information and constructs meaning from the particular text processed by ignoring the surrounding environment. Bottom-up model means that the reader starts with letters, which are detected by the scanner, and then the decodes changed the strings of letters into phonemes. The phonemes then enter to the recognition of a word. The reader then continues to start the process on the next word until every word in the sentences has been analyzed.

### 2.2.2 Top Down

In top-down theories, the reader has expectations toward the text and keeps on constructing predictions as he/she samples from the text, while he/she get rid of parts of the text which he/she thinks unimportant. If the predictions made look wrong, the reader continues to read the text more thoroughly to produce further predictions. Goodman declares reading as a process of hypothesis verification, whereby the readers apply the choosen data from the text to assure their predictions. The most pertinent charecteristics of top-down theory is that reading is noticed as a part of problem solving. The belief that both top-down and bottom-up theory are prominent characteristics of the attitude of a proficient reader lead to the development of interactive theories of reading (González, 2017).

Another top-down theory according to (PourhoseinGilakjani & Sabouri, 2016), readers use their prior knowledge to connect with a text and to relate these to recent information discovered in the text in order to comprehend the whole text. The readers do not read the whole word of a text. On the contrary, they focus on recognizing the subsequent words. They attempt to predict the meaning of words or phrases. Readers start predicting from the title of the text that allows them to limit the scope of their reading. Afterwards they guess the message the author tries to deliver and change or keep their hypothesis build upon what they read. Comprehension begins with higher levels then lower levels.

#### 2.2.3 Interactive

In interactive theories, bottom-up and top-down work together. Readers may use top-down to complete the goals of reading when using bottom-up and vice versa (PourhoseinGilakjani & Sabouri, 2016). Expert readers tend to use both bottom-up and top-down model (Ngabut, 2015). The word "interactive" was well known in the term of reading. The interactive model arises due to the fact that the meaning of the text is not contained directly yet it is a combination between the author thoughts and the reader's interpretation.

This process interpret the text and conclude it quickly by leveraging the text structure and the reader's background knowledge. This process has an important role to comprehend the text because this process enables the use of short-term memory to conclude the text in the meantime. Although the interactive process is a combination of top-down and bottom-up process, yet to construct the meaning of text using an interactive process still depends on the text's type and the reader's background of knowledge, the level of language proficiency, motivation, the use of the strategies, and the reader's attitude towards the text. This process trusted as the most effective way to comprehend the text. While this process encourage the students to construct the meaning of the text, teacher has to implement appropriate strategies to develop the students' reading skill.

# 2.3 Kinds of Reading Comprehension Assessment

According to Brown (2004) there are several kinds of assessments to measure the students' reading comprehension as follows:

# 2.3.1 Gap Filling

Words or phrase as the answer is the expected response

from the students. In short, this kind of assessment

# Picture 2.3 Gap Filling Assessment



2.3.2 Short Answer

A text is provided, and the students read questions that have

to be answered in less than three sentences.

### Picture 2.4 Short answer Assessment



Task 2: Answer the questions. Answer the following questions based on the text.

- 1. To whom is the letter sent?
- 2. Who wrote the application letter?
- 3. What is the purpose of writing the letter?
- 4. What position is being advertised?
- 5. How did Lilis Handayani know the vacancy?

2.3.3 Scanning

Scanning assessment is implemented by providing the students with a text and ask them to identify the specific information rapidly. The texts given to the students are usually in the form of no more than three pages of news article, an essay, a menu, a table of contents, and etc.

2.3.4 Information Transfer: Reading Charts, Maps, Graphs, Diagrams

Academic person must be able to read charts, maps, graphs, diagrams and the like. This skill involves a comprehension of the nonverbal, verbal conventions, and linguistic ability to transfer information.

# Picture 2.5 Information transfer Assessment

Task 2: Observe these pictures and photos.What are these pictures and photos tryingto say? Answer the questions to help youunderstand them better.

- Can you mention some attitude problems?
- What kind of personality is difficult to handle?
- 3. What kind of caption is it?



### 2.3.5 Skimming

Skimming assessment is implemented by providing the students with a text and ask them to find main idea and etc without having to read it in full.

# 2.4 Effective Strategies for Reading Comprehension

HOTS is proven to improve reading comprehension. According to Seif (2012, as cited in Thamrin & Agustin, 2019) there are three ways on how is the implementation of HOTS as follows:

# 2.4.1 Presenting High Questions Throughout Reading Activity

Deliver questions to the students is described as a method to develop students' reading skills by deeper thinking to comprehend the content of the written text. Therefore, the teachers are ecxpected to give Higher Order Thinking Skill (HOTS) questions related to the text during reading lesson in the classroom activity. The teachers could ask the questions made by themselves or choose the questions from the textbooks available by stopping at intervals and doing questions and answer directly with the students. This strategy is believed to be a way to develop students' thinking skills in reading class.

2.4.2 Making Inferences

Ask the students to make inferences after they read the text thoroughly. This method has powerful relation with reading between lines. Students can take the advantages of illustrations, graphs, and headline stated in the text to construct inferences.

2.4.3 Teacher's Role

Teacher's role is very important in teaching and learning process. Teachers are expected to stabilize the material being studied by the students using certain strategies and available media. Teachers need to take the advantages of various approach to build the students thinking skill and it could be done by questioning, distraction and reinforcement. Moreover, the questions gave by teacher should be in the level of Higher Order Thinking Skill (HOTS) questions and of course the teacher must wait for the students' response patiently.

#### 2.5 Previous Study

In order not to repeat someone else's research and to ensure that this research is a form of development from the previous research, it is needed to include previous study in chapter two. Previous research that discusses the same theme as this research as follows:

The first previous study was written by Kurnia, Sri, and Dwi in the year of 2019. The title of their research is "Using Revised Bloom's Taxonomy to Evaluate Higher Order Thinking Skills (HOTS) in Reading Comprehension Questions of English Textbook for Year X of High School". The purpose of this research is to see the existence of Higher Order Thinking Skill (HOTS) in reading comprehension questions in English Textbook for Year X. This research apply a descriptive qualitative research and content analysis research design.

Build upon the explanation above, there are similarities and differences between that previous study and this research. The similarities is from the research method applied and the use of Revised Bloom's Taxonomy to Evaluate Higher Order Thinking Skills (HOTS) in reading comprehension questions of English Textbook. The difference is from the object of the study.

The second previous study was written by Febrina, Bustami, and Usman in they year of 2019. The title of their research is "Analysis of Reading Comprehension Questions by Using Revised Bloom's Taxonomy on Higher Order Thinking Skill (HOTS)". The purpose of this research is to investigate High Order Thinking Skill (HOTS) questions in the textbook. This research apply a descriptive qualitative research and content analysis research design.

Build upon the explanation above, there are similarities and differences between that previous study and this research. The similarities is from the research method applied and the use of Revised Bloom's Taxonomy to Evaluate Higher Order Thinking Skills (HOTS) in reading comprehension questions of English Textbook. The difference is from the object of the study.

The third previous study was written by Rezita, Wisma, and Indah in they year of 2020. The title of their research is "An Analysis on Higher Order Thinking Skill (HOTS) in Compulsory English Textbook for the Twelfth Grade of Indonesian Senior High Schools". This research aimed to examine the use of Higher Order Thinking Skills (HOTS) in every questions of the English textbook "*Bahasa Inggris* SMA/MA/SMK/MAK kelas XII Edisi revisi 2018"; and to explain what is the most dominant level used in this textbook based on Revised Bloom's Taxonomy. This research apply a descriptive quantitative method.

Build upon the explanation above, there are similarities and differences between that previous study and this research. The similarities is from the use of Revised Bloom's Taxonomy to evaluate Higher Order Thinking Skills (HOTS) questions in English Textbook. The difference is from the research method and the object of study. The third previous study evaluated all of the questions stated in the textbook while this research only choose reading comprehension questions.