Journal of English Language Teaching Volume 8 No. 1
Journal of English Language Teaching
ISSN 2302-3198
Published by English Language Teaching Study Program of
FBS Universitas Negeri Padang
available at http://ejournal.unp.ac.id/index.php/jelt

THE ANALYSIS OF READING COMPREHENSION QUESTIONS IN ENGLISH TEXTBOOK BY USING HIGHER ORDER THINKING SKILL AT GRADE X OF SMAN 2 PADANG

Siti Nurul Hapizah Damanik[1], Yett Zainil[2]
English Department
Faculty of Languages and Arts
State University of Padang
email: nurulhafizah280396@gmail.com

Abstract

This research was a descriptive research that aimed to identify the reading comprehension questions in English textbook by using Higher Order Thinking Skill. This study also aimed to analyze and evaluate reading comprehension questions in English textbook. The data used in this research is reading comprehension questions of English textbook. The English textbook were from grade X of SMAN 2 Padang. This study used instrument in the form of indicators from HOTS criteria and Bloom's criteria. From the result of the reading comprehension question in English textbook by using Higher Order Thinking Skill at grade X of SMAN 2 Padang, it showed that the reading comprehension questions had used the HOTS criteria. As a result of the analysis in reading comprehension questions, 36 questions (9.7%) Higher Order Thinking Skill questions were found in the reading comprehension questions. The result of this research also found that mostly-used HOTS criteria in the reading comprehension questions is analyzing category. The knowledge dimensions found in the questions are factual knowledge, conceptual knowledge, procedural knowledge, and metacognitive knowledge.

Key words: Reading comprehension questions in English textbook, Higher Order Thinking Skill, Bloom's Taxonomy

A. INTRODUCTION

Nowadays, there are so many learning resources that can be used to help the students and teachers in the teaching and learning process. One of the ways to help the students and teachers are a textbook. Textbook is a tool of

[1] English ELTSP of English Department of FBS Universitas Negeri Padang graduated on....
[2] Lecturer of English Department of FBS Universitas Negeri Padang

teaching and learning process. According to Cunningsworth (1995) in Armina (2018:1) states that using a textbook aims to prepare a set of practices based on the teaching materials. Besides, a textbook also aims to help the students in achieving their goals and their needs.

The Ministry of Education and Culture in Indonesia has been implemented the curriculum 2013. The curriculum 2013 is designed to focus on the student-centered rather than teacher-centered. The implementation of the curriculum 2013 fell into the textbook. The reading comprehension questions in the English textbook will prove the implementation of the curriculum 2013 by using higher order thinking skill.

According to Vijayaratnam (2012) higher order thinking skill has become a major theme in education. It is considered to the information of the global era now, especially in the English language. In the learning activities specifically in the English language, the students are encouraged to think critically. They have to think more and to solve their own problems, whiles the teachers are demanding to facilitate the students by providing higher order thinking skill with reading comprehension questions.

There are some activities learned in the textbook Bahasa Inggris Siswa Kelas X SMA/MA, SMK/MAK involves warmer, vocabulary builder, pronunciation practice, reading, vocabulary exercises, text structure, grammar review, speaking, writing, reflection, and further activities. But, the researcher only focuses on the reading activity because the researcher wants to analyze and evaluate the reading comprehension questions found in the textbook. One of the ways to encourage learners to prove critical thinking is by using reading comprehension questions.

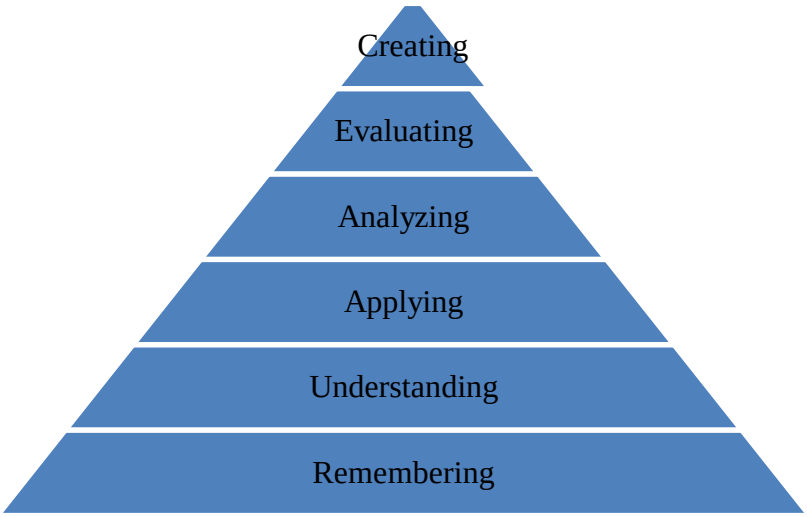
According to Bloom et al.(1956) defines six different levels in the cognitive domain. The Bloom's mentioned cognitive domain is divided into two parts, there is a lower order thinking skill (LOTS) includes remembering, understanding, and applying, and higher order thinking skill (HOTS) includes analyzing, evaluating and creating.

In the lower order thinking skill, remembering is the first stage of the thinking process. It can occur when the students describe, make a list, tell and name a sect of topics. In the understanding level shows that the students understand what they have read. The words used in understanding such as retell, infer, interpret, explain, predict, and outline knowledge. Applying is the stage of making use of knowledge in the new situation.

According to Heong, et al (2011) higher order thinking is using the thinking widely to find new a challenge. Higher order thinking also demands someone to apply new information and knowledge manipulates the information to reach the possibility of answer in new situations. Thus, someone is required to be able to find the right answer in a new situation both in terms of learning or outside learning.

The dimensions of the thinking process in Bloom's are perfected by Anderson & Krathwohl (2001), they provide a useful framework for identifying

and preparing instructional objectives, instructional activities, and assessment methods. The revised taxonomy has cognitive process categories, increasing in complexity, and four knowledge categories. The cognitive levels of thinking can be seen as the following table below:



Anderson and Krathwohl's (2001) revised Taxonomy of Bloom have two dimensions perspective for higher order thinking and classification of its operational verbs can be described as follows:

Table 1

The Knowledge Dimension	The Cognitive Process Dimension		
	C4 analyze	C5 Evaluate	C6 create
Factual Knowledge	Making structure, classifying	comparing, correlating	Joining
Conceptual Knowledge	explain, analyze	examine, interpret	planning
Procedural Knowledge	distinguish	conclude, resume	arrange, formulate
Metacognitive Knowledge	create, find	make, assess	realization

According to Anderson and Krathwohl (2001) there are four types of knowledge dimension:

1) Factual Knowledge

Factual knowledge is the basic level of study and basic to specific disciplines. This dimension refers to essential facts, terminology, details or elements students must know or be familiar with in order to understand a discipline or to solve a problem. The factual knowledge includes symbols, signs, the name of person and history. Furthermore, the conceptual knowledge refers to the interrelationship among basic elements within a larger structure and enables them to function together.

2) Conceptual Knowledge

Conceptual knowledge is knowledge of classifications, principles, generalizations, theories, models, or structures pertinent to a particular disciplinary area. Conceptual knowledge includes knowledge of categories and classification and the relationship between them. It includes schemas, mental models, or implicit or explicit theories represent the knowledge an individual has about how a particular subject matter is organized, the different, and the function.

3) Procedural Knowledge

Procedural knowledge refers to the information or knowledge that helps students to do something specific to a discipline, subject, or area of study. It also refers to methods of inquiry, very specific or finite skills, algorithms, techniques, and particular methodologies.

4) Metacognitive Knowledge

Metacognitive knowledge is the awareness of one's own cognition and particular cognitive processes. It is strategic or reflective knowledge about how to go about solving problems, cognitive tasks, to include contextual and conditional knowledge and knowledge of self.

As the process of dimension of thought that has completed by Anderson and Krathwohl (2001) the higher order thinking skill questions is really recommended for the use in various forms of the assessment in the class. To inspire the teacher to compile HOTS questions at the education unit level, the following are described the characteristics of HOTS questions

1. Measure the capability of the high-level thinking skills

The Australian Council for Educational Research (ACER) states that the Higher Order Thinking Skills is the process of analyzing, reflecting, reasoning, implementing the concept in different situations, arranging and creating. Besides, the HOTS questions include into the capability of problem solving, critical thinking, creative thinking, reasoning, and making decision. The capability of HOTS questions. The capability of the high-level thinking skills is one of the important competencies in the modern world, so it must be possessed by every student. The creativity to solve HOTS problems includes:

a. The capability to answer the unfamiliar questions.
b. The capability of evaluating the strategy that is used to solve the problems from a variety of different points of view.
c. The capability of finding the new solving method that is different from the previous method.

2. Contextual Based Problem

HOTS questions are assessments based on the real situations in everyday life. The HOTS questions are expected to be able to apply the concept of classroom learning to solve problems. In relations, the learners also able to relate, interpret, apply, integret the problem in the real context life. There are the characteristics of the contextual based problem namely as REACT:

a. Relating which connect to the real life situation.
b. Experiencing which is emphasized to exploration, discovery and creation.
c. Applying, which demand the student to implement the knowledge they get in school into the real life problems.
d. Communicating, which demand the capability of the students to be able to correspond the problem context conclusion.
e. Transferring, which demand the students' capability to transform the concepts of knowledge in class into new situation or context.

3. Using the Various Kinds of Questions
   1. Multiple choice

Generally, HOTS questions use stimulus that comes from the real situation. This multiple choice question consists of stem and options. These options contain the key answer which is the right answer and the distractors. These distractors of course are incorrect answers, however it will be a trap for the students if they do not master the material well. The expected answer or the key answer generally is not stated explicitly in stimulus or in the reading. Thus, the students are demanded to find the answer related to the stimulus using the concepts of the knowledge, logic and reasoning. Then, the correct answer will get 1 point, and the incorrect answer will get 0.

2. Complex-multiple choice (True/ False or Yes/No)

This kind of question aims to know the students' understanding towards the problems comprehensively between the statements of one another. The questions of complex-multiple choice also contain stimulus which come from the contextual situation. The students are provided some statements related to the stimulus/reading, then the students are demanded to choose true/false or yes/no. The statements given are related to one another. The arrangement of true statements and the wrong statements are put randomly and non-systematic following certain pattern. A well pattern arrangement will lead the students to choose the

right answer. Thus, if the students answer correctly for all the statements given, they will get 1 point, then if there is a mistake in a statement, they will get 0.

3. Short answer

The questions only need short answer like, word and phrase beyond the statement. The characteristics of short answer questions are:

a. Using the direct statement or command
b. Obvious question and command
c. The length of all answers in all question is expected relatively the same
d. Avoid using the text book's words, sentence or phrase because it will lead the students to only remembering what is written in the text book.

In relation to this, there are some researches that have been conducted by some researchers who take the same topic about HOTS. The previous study was coming from Siti, R.Y. (2018) did a research about higher-order thinking skills analysis of students in solving higher order thinking skill question in higher education. The preliminary study conducted on 100 students in January 2018 found that a majority (80%) of the students answered that they still did not know the whole concept of HOTS; most (95%) students do not have references related to HOTS; a majority (70%) of students answer lecture assignments given by the lecturers are only paper-based so students only take from internet sources without prior analysis (copy paste from the Internet); and a majority (78%) students want a learning source for the form of Instructional Evaluation courses that taught about HOTS. Based on the results of the study, it can be seen that HOTS that is owned by students seems to be less than optimal because in their daily routines just like in a lecture just sit, listen, and note. Analysis, evaluation and creation activities are rarely trained in students.

Based on the problems above, the researcher will analyze and evaluate reading comprehension questions found in the textbook "Bahasa Inggris Siwa Kelas X SMA/MA, SMK/MAK". To achive that, the researcher has built a check list based on Bloom's taxonomy and HOTS criteria as a criterion for the evaluation process

B. RESEARCH METHOD

This research was a descriptive research. This research looked for the reading comprehension questions found in English textbook. In this research, the data was reading comprehension questions in English textbook at grade X of SMAN 2 Padang. The English textbook that researcher used is Bahasa

Inggris Kelas X Siswa SMA/MA, SMK/MAK of SMAN 2 Padang. Which cover two semesters from the Ministry of education and culture based on the curriculum 2013.The indicators guided the researcher in evaluating the questions. Each tests were evaluated by the researcher by following the criteria that proposed by Bloom's Taxonomy and HOTS for formulating the principles of questions based on criteria or indicators. The criteria used are *Analyzing, Evaluating, and Creating,* The researcher counted all the evidence containing in the questions after filled in the criteria in the evaluation format. For example, answering the criterion *'Analyzing'* category, the researcher counted all contracted forms containing in the questions and then found the percentage of it. The formula of the percentage is:

$$P = \frac{n}{N} \times 100\%$$

P = the percentage
n = Number of question based on HOTS criterion found in the questions
N = the total number of questions

After the percentage of HOTS questions were found, the researcher described each criterion along with examples of questions that meet those criteria. For example, describing the questions of *Analyzing* criteria, the questions explained one by one along with the discussion based on the theory. The researcher also classified the HOTS questions into dimensions of knowledge by reviewing the knowledge dimensions based on Bloom's theory then analyzed each HOTS question based on the dimension. For example, describing the dimension of Conceptual Knowledge, the questions were classified based on the dimension into one part. The whole analysis was discussed based on the theory of HOTS and some previous study related to this research.

C. RESULT AND DISCUSSION

1. Research Finding

Based on the table above, it can be seen that the categories of High Order Thinking Skills are found in the reading comprehension question in english textbookThere are 3 categories of HOTS questions in the tests; *Analyzing, Evaluating, Creating.* Here are the description of each question:

a) Reading comprehension questions absed on HOTS

Table 5 : The total of HOTS in reading comprehension questions in scoring rubric

No	Level of Thinking	Indicators	Total of questions	Percentage (%)
1	Analyzing	Distinguishing Facts from hypothesis and Recognizing the Unstated Assumption	6	1.6 %
		Correlating the interrelationship among the ideas in the passage	10	2.7 %
		Inferring the Author's purpose and Point of View	4	1.1 %
2	Evaluating	Justifying/ Critiquing the information	10	2.7%
3	Creating	Producing Idea to Solve Problem	6	1.6 %
TOTAL			**36**	**9.7 %**

Based on the description above, In analyzing category, it consist of distinguishing facts from hypothesis and recognizing the unstated assumption are 6 questions with the percentages (1.6 %), correlating the interrelationship among the ideas in the passage is 10 questions with the percentages of (2.7 %), inferring the author's purpose and point of view is 4 questions with the percentages of (1.1 %). In evaluating category, there are 10 questions with the percentages of (2.7%) include into justifying or critiquing the information. In the creating category, there are 6 questions with the percentages of (1.6 %) include into producing idea to solve problem. So, the totally of HOTS questions are 36 questions with the percentage 9.7 % were found in the reading comprehension questions in English textbook.

b) The dimension knowledge of HOTS criteria in the reading comprehension questions

There are four kinds of knowledge dimensions, there are *Factual Knowledge, Conceptual Knowledge, Procedural Knowledge,* and *Metacognitive Knowledge*. The results showed that . There were 19 questions with the percentages 3,8 % for the factual knowledge, 23 questions with the percentage 4.6 % for the conceptual knowledge, 1 question with the percentages 2.0 % for the procedural knowledge, and 7 questions with the percentages 1.4 % for the metacognitive knowledge. Thus, the questions that mostly used here is the conceptual knowledge with 23 (4.6%). Here are the percentages of knowledge dimensions:

Table 6: The Total of Knowledge Dimensions

No	Categories	Total	Percentages
1.	Factual Knowledge	19	3,8 %
2.	Conceptual Knowledge	23	4.6%
3.	Procedural Knowledge	1	2.0%
4.	Metacognitive Knowledge	7	1.4%
Total		**50**	**11.8 %**

D. DISCUSSION

The findings that have been obtained from the analysis of reading comprehension questions in English textbook using Higher Order Thinking Skill categories show that there are 36 questions (9,7 %)found in English textbook. Based on the proportion of HOTS question, (30%), the HOTS questions found in the reading comprehension questions in English textbook are almost reach the proportion but still under the criteria of good proportion. From 172 questions, there were 36 questions belong to HOTS-based question.

Based on the knowledge dimension, the HOTS questions in these tests belong to *Factual Knowledge, Conceptual Knowledge, and Metacognitive Knowledge*. From 172 questions, it was found 3,8 % for the factual knowledge, 23 questions with the percentage 4.6 % for the conceptual knowledge, 1 question with the percentages 2.0 % for the procedural knowledge, and 7 questions with the percentages 1.4 % for the metacognitive knowledge. Thus, the questions that mostly used here is the conceptual knowledge with 23 (4.6%).

.

E. CONCLUSION AND SUGGESTIONS

This research focused on the analysis of reading comprehension questions in English textbook by using higher order thinking skill at grade of SMAN 2 Padang. The purposes were to identify the reading comprehension questions in English textbook based on the HOTS category and knowledge dimensions. The data were coming from the reading comprehension questions in English textbook at grade X of SMAN 2 Padang. In this research, the data used are the English textbook which cover two semester from two books that published by the Ministry of Education and Culture with curriculum 2013.

Based on the reading comprehension questions in English textbook had 36 question HOTS questions. Morever, there are mostly used analyzing catgory found in the reading comprehension questions in English textbook. Since the analyzing categories are mostly used, it can be said that the analyzing category have a high percentages rather than another categories of HOTS. Moreover, it also have the sense of the measuring HOTS, there are also four dimensions knowledge

involves: factual knowledge, conceptual knowledge, procedural knowledge, and metacognitive knowledge that used in this research.

The role of higher order thinking skill in the reading comprehension questions in English textbook are very important in order to increase and to prove critical thinking that applied by the curriculum 2013. In other words, the questions are not only measuring the capability in answering reading comprehension questions, but also the capability to analyze, evaluate, and create new ideas and knowledge. Thus, it builts the critical thinking through the questions.

Regardless of the findings of this thesis, there are some suggestions offered by the researcher to the following parties. First, the reading comprehension questions in English textbook should more have the characteristics of HOTS questions in order to improve the capability of logic thinking or critical thinking that prove the curriculum 2013 appliying in the English textbook. Second, the next researcher is expected that the result of this research can be used for the next researcher in order to improve the higher order thinking skill that has a similar research.

BIBLIOGRAPHY

Anderson, L.W. & Krathwohl, D. R. (Eds.) (2001). *A taxonomy for Learning, teaching and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Addison Wesley Longman.

Siti, R.Y. (2018). Analysis of Students in Solving Higher Order Thinking Skill Question in Higher Education. *(Thesis)*. State University of Jakarta. 32(2).

Tomei. (2005). Evaluating the Higher Order Thinking Skills in Reading of English for Palestine Grade Eight. *Asian Journal of Education and e-Learning.* 1(1). 2321 – 2454.

Richards. (2001). Textbook Selection, Evaluation and Adaptation Procedures. *International Journal of Language Learning and Applied Linguistics World (IJLLALW)*. 6(1). 2289-3245.

Alief. A . 2016. An Analysis on English Textbook "Pathway To English" for the First Year Student of Senior High School based on 2013 Curriculum. School of Teacher Training And Education Muhammadiyah University of Surakarta.