



High Order Thinking Skill Questions in Reading Exercises (An Analysis of Reading Exercises in *Bright an English* Course Book for the Grade IX of Junior High School, Published by Erlangga in 2018)

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Abstract

High Order Thinking Skill (HOTS) is the ability to think in the complex process which useful for transferring the knowledge in real life, thinking critically, and solving the problems. Categories of HOTS level are analyzing, evaluating, and creating. To assess those abilities, HOTS can we find in reading exercises. This research is aimed to analyze the HOTS questions in reading exercises. This research is descriptive qualitative. Data was collected from *Bright an English* course book for grade IX of junior high school. This study using indicators in Revised Bloom's Taxonomy as instrument. The result showed that the the total of HOTS questions is 78 questions or 18,9% from 412 reading questions. The percentage of each HOTS category are 11,9% for analyzing level, 5,8% evaluating level, and 1,2% creating level. Nevertheless, HOTS questions is not the dominant level in this coursebook.

Keywords: High Order Thinking Skill, reading questions, revised Bloom'taxonomy

A. INTRODUCTION

Technological developments that are rapidly increased in the 21st century require various abilities of higher order thinking skills (HOTS) including in English language. The implementation of the 2013 curriculum is a means to prepare students to face competition in the era of globalization by prioritizing HOTS principles. The 2013 curriculum revision in 2017 mentions that the 2013 curriculum integrates four things and one of them is integrating higher order thinking skills in the learning process.

Higher order thinking skill is associated with the cognitive level of Bloom's taxonomy. This taxonomy is created by Benjamin Bloom in 1956. Bloom et al. (1956) defines six different levels in the cognitive domain. The cognitive domain is divided into two parts: lower order thinking skill (LOTS) which includes knowledge, comprehension, and application, and higher order thinking skill (HOTS) which includes analysis, synthesis, and evaluation. However, in this study the researcher uses the Revised Bloom's taxonomy by Anderson & Krathwohl

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(2001) with the cognitive process domain levels which are remembering, understanding, applying, analyzing, evaluating, and creating. The lower order thinking skills level are remembering, understanding, and applying. Next, the higher order thinking skills level are analyzing, evaluating, and creating.

Higher order thinking skill is the ability to think in a complex process which is useful for transferring the knowledge in real life, thinking critically, and solving problems (Pratiwi, 2014). Higher order thinking skill in learning process could improve students' ability in critical thinking skill to evaluate information. Having the higher order thinking skill is very important for preparing themselves to do their own thinking in the real world.

According to Anderson & Krathwohl (2001), they defines each categories of HOTS level. First, analyzing level is to assess the ability of learners to separate material or concepts into component parts so that its organizational structure may be understood. Second, evaluating level is to assess the ability of learners to make judgments about the value of ideas or materials based on the criteria and standards. Third, creating level is to assess the ability of learners to build a structure or pattern from diverse elements and to create something new by using a combination of ideas from different sources to form a new whole.

In each category of HOTS has key words which indicate the questions be categorized as HOTS level. First, some key words in analyzing level are analyze, assume, classify, conclusion, deconstruct, discover, inference, outline, and etc. Next, key words in evaluating level are assess, choose, conclude, opinion, evaluate, and etc. Then, key words in creating level in creating level are create, change, solve, modify, and etc.

Higher order thinking questions can be found in reading questions. Reading exercises contain various types in order to train the students in comprehending the text and the material of the language. Teachers usually use the course book to practice the reading activity because the book contains various kinds of reading task such as; matching item task, picture-cued item task, gap-filling task, multiple choice, open question, and etc. (Brown, 2003). There are three characteristics of HOTS assessments according to Widana (2017). Those are measuring the the ability of high level, based on contextual issues, and not routine or not familiar.

In the learning process, teacher needs English course book to give reading exercises. An effective English course book must have relevant reading perhaps followed by exercises and questions. One of the English course book which can guide teacher and students in learning process is "*Bright an English*" course book for grade IX of junior high school published by Erlangga in 2018. This book is used by most of teachers in junior high school because it is appropriate with the 2013 curriculum. It is very helpful in the learning process especially in reading activity. Reading activities in this book are in various kinds. Thus, this book can lead the teacher to improve students' level thinking skills by giving the reading exercises.

By using this book, it also can guide the students of grade IX in preparing themselves to face the National examination because according to the rules of National examination in *Buku Saku Ujian Nasional 2019* that National examination questions are oriented with higher order thinking skills. The policy from the

Ministry of Education about National examination is to introduce the model of assessment which tend to the ability of higher order thinking skills. They need to have critical thinking for answering the questions because in the National examination consists of higher order thinking skills questions (BSNP, 2018).

Some of researches which have correlation with this topic on investigating the higher order thinking skills. First, the research about assessing higher order thinking and communication skills through writing is conducted by White (1991). Second, the research which is conducted by Diputera, Setyowati, & Susilaningih (2018) is to determine the higher order thinking skills of junior high school students by using test. Third, Mahfuzah, Jufri, & Fitrawati (2019) conducted a research about describing the students' ability in answering reading questions with higher order thinking skill by using reading test. Those researches focused on testing students' ability with higher order thinking skills test.

Some researchers also discussed about the English course book. Fitria, Syarif, & Refnaldi (2014) analyzed the reading comprehension question in the English textbook entitled *English Texts in Use and Look Ahead* for senior high school students based on Barrett's taxonomy. Then, Desy Nur Fakhomah (2017) analyzed the English textbook entitled *Bahasa Inggris* based on Tomlinson's theory. Those researches are analyzed with Barrett's taxonomy and Tomlinson's theory. However, in this study, the writer focuses on analyzing the higher order thinking skill questions in reading exercises based on Revised Bloom's taxonomy.

Some other researchers conducted discussed about English course book with higher order thinking skills. The study from Pratiwi (2014) analyzed reading exercises in *Pathway to English* textbook for the eleventh grade of senior high school student. Then, Rahmawati & Prayogo (2016) analyzed reading questions in English textbook entitled "*Interlanguage: English for Senior High School Students XI*" based on RBT. The recent study is from Heriati (2017) about "The Relevance Analysis of "*Think Globally Act Locally*" book to 2013 English curriculum and Bloom's taxonomy."

Some of the researches mentioned above only focus on students' higher order thinking skills by using some tests. Then, the researchers also discussed the content of English course books based on Barrett's taxonomy and Tomlinson theory. While in this study, the researcher chooses the revised Bloom's taxonomy for analyzing the reading exercises in a course book. Moreover, some of researches which discussed about high order thinking skills from Bloom's taxonomy in some English course books are using books for senior high school students. Then, one research discussed the book from the Ministry of Education for junior high school but only focused on the relevance with 2013 curriculum. Thus, the analysis of higher order thinking skill in the English course books for junior high school is still needed. It is in consideration of the demand about the higher order thinking skills in the reading exercises since the students are in junior high school level.

Therefore, considering the importance of both reading questions and English course books in the process of teaching and learning reading, this study

aims to analyze the higher order thinking skill of reading exercise appearing in English course book entitled “*Bright an English*” for grade IX junior high school students published by Erlangga in 2018. This study uses the ideas of Revised Bloom’s taxonomy to analyze the levels of higher order thinking skills to make sure that the course book has supported the students in encouraging their analyzing, evaluating and creating level by providing the higher order thinking skill in the reading exercises.

B. RESEARCH METHOD

The design of this study is descriptive qualitative research. Brown and Rodgers (2002) state that descriptive method is used in some research which describes an event or situation in numerical terms. They applied content analysis to identify questions in reading comprehension tasks. Content analysis is a simple research approach that is used to analyze books, documents, and etc.

The source of data is the course book entitled “*Bright an English*” course for grade IX junior high school students. This book was published by Erlangga in 2018 and the author’s name is Nur Zaida. The editors of the book are Elisabet Tiyas Utami and Dwi Wahyu Priyanto. The book is already appropriate with the 2013 curriculum because there is a logo on the right top of the book cover, so it can be used in the new curriculum.

In this study, the researcher used the Analysis Card as the instrument. The analysis card contains the indicators to identify what kind of thinking level contained in each reading questions. The analysis card was created by combining and collecting the understanding about six levels of cognitive domain from the revised edition of Bloom’s Taxonomy. It was adapted from Anderson & Krathwohl (2001) and (Pohl, 2000).

The researcher collected and listed all reading exercises from each chapter. After that the writer will put all the reading exercise in the checklist table to identify the thinking level of each question based on the analysis card of Revised Bloom’s taxonomy.

After collecting the data, the researcher used the checklist table to analyze the level of thinking skills based on Revised Bloom’s taxonomy. Then the researcher counted the total of every cognitive skill from the reading questions and calculated the percentage of each thinking levels to know the distribution of the higher order thinking skill level in this course book. Lastly, the researcher interpret the result of the data analysis by descriptive analysis.

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

Notes:

P: Percentage

n: Number of question-based on revised Bloom’s taxonomy level

N: The Total number

C. RESULT AND DISCUSSION

From all reading exercises, the total of questions are 412 questions. These questions are classified into six thinking levels of revised Bloom's taxonomy. The total of questions for each level are 175 questions or 42,5% for Remembering level (C1); 74 questions or 18,2% for Understanding level (C2); 84 questions or 20,4% for Applying level (C3); 49 questions or 11,9% for Analyzing level (C4); 24 questions or 5,8% for Evaluating level (C5); 5 questions or 1,2% for Creating level (C6). Thus, the category of HOTS level are analyzing level (C4), evaluating level (C5), and creating level (C6).

Table 1. Key Words of HOTS level in reading questions

No.	HOTS level	Key Words	Total of Question	%	Total
1.	Analyzing level	Analyze	21 questions	5,1	11,9%
		Outline	12 questions	2,9	
		Deconstruct	4 questions	1	
		Differentiate	3 questions	0,8	
		Conclusion	2 questions	0,5	
		Inference	2 questions	0,5	
		Assume	2 questions	0,5	
		Discover	1 question	0,2	
		Examine	1 question	0,2	
		Identify	1 question	0,2	
2.	Evaluating level	Justify	12 questions	2,9	5,8%
		Conclude	5 questions	1,22	
		Criticize	4 questions	1	
		Decide	2 questions	0,5	
		Opinion	1 question	0,2	
3.	Creating level	Create	2 questions	0,5	1,2%
		Change	2 questions	0,5	
		Solve	1 question	0,2	

First research question is *how is the analyzing level question in reading exercises used in this course book*. Analyzing level (C4) ranked the first position of HOTS level application in reading question. The result showed that this book provides some analyzing level question. This level question encourages students to break down a concept or idea into parts and show relationships among the parts. According to Brookhart (2010), analyze means to break information into its parts, determining how the parts are related to each other and to the overall whole. This level involves differentiating, organizing, and attributing.

The questions categorized in this level are indicated by the presence of some key words. The key words which found are analyze, outline, deconstruct, differentiate, conclusion, inference, assume, discover, examine, and identify. These finding corresponds with statement from Brookhart (2010) that is analyze level in questions show the ability of learners to present ideas or issues that demonstrate the ability to compare parts with one another using logical arguments. It is seen in

questioning prompts that focus on the question or the main idea, analyze the arguments or conclusion, compare and contrast, and outline the purpose of the text.

Second research question is *how is the evaluating level question in reading exercises used in this course book*. Evaluating level (C5) ranked the second position of HOTS level application in reading question. This question asks students to make judgments about the value of ideas or materials by using standards and criteria to support opinions and views. Pohl (2000) also explained that this type of question asks students to make judgements about what they have analyzed and explain the reasons for those judgements.

The questions categorized in this level are indicated by the presence of some key words. The key words which found in these questions are justify, criticize, conclude, decide, and opinion. The questioning prompts focus on evaluating the credibility of a source of information, identifying the assumptions implicit in the information, and giving arguments by judging something in the text. It is in line with the statements from Widana (2017) that to assess the ability of the evaluation, justification, or making decision. Learners judge something based on a given criteria formulated by the learners themselves.

The last research question is *how is the creating level question in reading exercises used in this course book*. Creating level (C6) ranked in the last position of HOTS level application of reading questions. This question demands students to assemble parts of knowledge into a whole using creative thinking and problem solving in order to achieve a particular purpose or produce something new. It also encourage students to create something new by using a combination of ideas from different sources to form a new whole (Anderson & Krathwohl, 2001). Students are asked to write, compile, or compose the paragraph or any ideas according to the idea of the reading comprehension text in creating level (C6).

The presence of some keywords indicates the questions categorized in this level. The key words which found are create, change, and solve. These keywords demonstrate the questions focusing on solving problem by finding solutions and creating a procedure or producing something new. This is in accordance with Brookhart (2010) that creating level is to assess learners ability to solve that includes generating multiple solutions, planning a procedure to accomplish a particular goal, or producing something new.

This study has same results with the recent studies about HOTS question analysis in the course book. Those studies are from Pratiwi (2014), 'ilma (2018), and Damanik & Zainil (2019). Results from those studies showed that the total of HOTS question is lower than the LOTS questions. According to Damanik & Zainil (2019), the HOTS question found in the reading comprehension questions in English course book are almost reach the proportion but still under the criteria of good proportion.

However, the result of this study did not support the previous studies done by Febrina et al. (2019). Their studies revealed that in the *BAHASA INGGRIS for SMA/MA/SMK/MAK grade XI semester I* course book which they analyzed emphasized on HOTS questions. They found it concentrated more on higher-level thinking questions than lower level thinking. They revealed that a good textbook

should be more emphasizing on HOTS because that book contains more HOTS questions in order to prepare the students to think critically and make the solutions of some problem.

D. CONCLUSION AND SUGGESTION

1. Conclusion

HOTS levels are not the dominant level in this course book, so this course book does not fully provide HOTS questions. This study revealed that the author of this book provides the reading exercises with lots of LOTS questions. Most of reading questions in this course book ask students to recall the information presented in remembering level (C1) and to apply a procedure to a familiar task in Applying level (C3).

Based on the results of this study, it is found that in *Bright an English* course book grade IX has more dominant lower order thinking skill (LOTS) questions than higher order thinking skill (HOTS) questions. The total of HOTS questions is 78 questions or 18,9% from 412 reading questions. Then, total of each HOTS level questions are 49 questions or 11,9% for Analyzing level, 24 questions or 5,8% for Evaluating level, and 5 questions or 1,2% for Creating level. Besides, the rest of that is categorized as lower order thinking skill level which the total is 334 questions.

2. Suggestion

The researcher would like to give some suggestions about this study that might be useful for English teachers, the students or the researcher, and everyone who read this study. For the English teachers, they should choose a good course book for using in the teaching and learning process which can guide both of teacher and students in understanding the materials. Course book developers should try to devise exercises and activities that go beyond lower-order cognitive skills and to include higher-order ones. Then, the students or researchers are recommended that other research studies be conducted on larger samples and in other areas in addition to reading.

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