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An Analysis of Reading Tasks in "Pathway to English" Textbook: Bloom's Taxonomy Perspective

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Abstract
Task in a textbook plays a crucial role in learning process. The sufficient task helps students to practice their skills. The investigation of the cognitive levels of reading tasks and the form of higher-order thinking questions in the reading tasks within the Pathway to English textbook is the aim of this descriptive qualitative study. The data were collected through document analysis and expert judgment with one of the English teachers in Surakarta. Subsequently, the percentage and the frequencies of the cognitive level of questions were calculated and tabulated. Afterwards, the results showed that the reading tasks do not fully cover all cognitive levels, missing creating levels. It was also revealed that there are four forms of higher-order thinking questions. Even though there are various forms of higher-order thinking questions in the reading tasks, it still has a weakness. In addition, this study recommends that textbook authors advance the questions with higher-order thinking skills. It is expected that this study will be able to provide insight into textbook selection for English teachers and serve as a consideration for future researchers interested in the same topic.
Keywords: Bloom's taxonomy; higher-order thinking skill; reading task

INTRODUCTION

In EFL, teachers need some textbooks as guidance for their learners in achieving learning objectives. A textbook is seen as a published manuscript, usually developed to help learners develop language skills (Sheldon, 1988). It can also be seen as a book that provides instruction (Hornby, 1974). Since textbook helps to organize instruction by providing suggested activities and questions, the English textbook is essential in the teaching and learning process. Consequently, many teachers only rely on one textbook as a source of the material (Cunningsworth, 1995). However, not all textbooks have covered the need of the students. Therefore, teachers need to select a suitable textbook

for their students. One of the ways is by analyzing the content of the textbook, such as the task. The task in this study context refers to exercises that are usually in questions following the reading passages.

In curriculum 2013, teachers must provide students with the knowledge and teach them how to think. Therefore, Bloom's taxonomy will be used as a framework to classify the various levels of cognition. Taxonomy of educational objectives, often called Bloom's taxonomy, is commonly used in the academic field as a guide for developing assessment and curriculum (Anderson and Krathwohl, 2001). In this case, the taxonomy is used to determine the level of cognitive domains of the reading tasks. The levels of cognitive dimension are intended to provide a comprehensive set of classifications for students' cognitive processes included in the objectives (Krathwohl, 2002).

In Bloom's taxonomy, the dimensions of cognitive processes contain six levels, namely remembering, understanding, applying, analyzing, evaluating, and creating (Orey, 2010). The initial three levels are called lower-order thinking, while the remaining three levels are higher-order thinking skills. Therefore, higher-order thinking skills play an essential role in the demand of the curriculum 2013 that improves students' critical thinking. According to Krathwohl (2002), critical thinking entails analyzing, evaluating, and creating. Hence, improving students' higher-order thinking skills are beneficial for supporting their critical thinking.

Many researchers have explored the analysis of EFL textbooks, yet only a few studies focus on the form of higher-order thinking skills in reading tasks. Therefore, the researcher focuses on analyzing the level of reading tasks within the textbook in terms of the cognitive dimension and the form of higher-order thinking questions in the reading tasks. Thus, this study aims to explore and answer the research questions as follows:

1. What is the cognitive level of the questions in the reading tasks?
2. What is the form of higher-order thinking questions?

LITERATURE REVIEW

Reading Tasks

A task is assumed to refer to work plans aiming to facilitate language learning, starting from brief and simple exercises to the more lengthy and complex ones, decision making and group problems, for instance (Breen, 1987, in Nunan, 1989). Another idea is proposed by Kozak (2011), stating that a reading task is a group of written examples or passages to measure the students' competence in reading skill development. In this case, students are asked to read a text and answer a few questions to check their understanding of that text. In sum, a reading task is defined as a work plan in the form of a group of written examples or passages to measure students' reading skills.

A reading task usually consists of a text followed by comprehension questions (Ur, 1999). Nonetheless, reading has a variety of skills that need to be mastered. Hence, some types of questions in reading tasks may be used to develop reading skills, for instance, textual explicit, textual implicit, and scripturally implicit questions (Johnson in Alderson, 2000). In order to successfully answer the reading question, students are required to use their reading skills. Following White (2011), reading requires various skills such as basic reading skills, language comprehension skills, text search skills, inferential skills, and

application skills. Another expert (Grabe, 2009) adds that reading requires vocabulary knowledge, grammar knowledge, and background knowledge.

Bloom's Taxonomy

Benjamin Bloom was an educational psychologist at the University of Chicago in 1956 who proposed the taxonomy of educational objectives commonly known as Bloom's taxonomy. However, a revision of Bloom's taxonomy with significant changes such as verbs rather than nouns was produced in 2001 by his former student, Lorin Anderson. Such revision was proposed because different forms of thinking were reflected in the taxonomy whereas thinking is an active process. Moreover, the position of evaluating levels comes before creating (Anderson and Krathwohl, 2001).

Bloom (1956) considers the taxonomy as a hierarchy; mastering the simpler level was a prerequisite for mastering the next more complex level. It can also be defined as a framework for classifying different objectives and skills educators plan for students (Gordani, 2010). This framework is perceived as means for classifying an instruction of learning objectives (Krathwohl, 2002). In addition, it aims to inform or guide the development of assessments, curriculum, and instructional methods (Bloom, 1956). Besides, the most frequent use of Bloom's taxonomy has been to classify learning objectives and assessments according to the level of complexity (Brookhart, 2010).

There are three domains in Bloom's taxonomy: cognitive, affective, and psychomotor (Anderson and Krathwohl, 2001). The cognitive domain is concerned with knowledge and understanding of intellectual abilities and skills (Ulum, 2016). While affective domain deals with the attitudes, feelings, interests, values, and the development of appreciations and adequate adjustment that results from the learning process (Gordani, 2010). The last domain is the psychomotor domain. This domain is a physical skill-based domain that consisting of six levels (Orey, 2010).

In the revised version, the cognitive process dimension contains six levels, from recalling facts to more complex and abstract mental levels (Gordani, 2010). The six cognitive dimensions entail remembering, understanding, applying, analyzing, evaluating, and creating (Krathwohl, 2002). Anderson and Krathwohl (2001) described the levels of cognitive process dimension as follows:

1. Remembering involves retrieving relevant knowledge from long-term memory, such as recalling and remembering specific facts and details. Thus, the two associated skills are recognizing and recalling.
2. Understanding involves constructing meaning from instructional messages, including oral, graphic, and written communication. It requires the process of explaining and classifying information. The associated skills are classifying, comparing, exemplifying, explaining, inferring, interpreting, and summarizing.
3. Applying involves performing or utilizing a procedure in a given situation. It means executing the information in a new way. The two associated skills are executing and implementing.
4. Analyzing involves dividing material into essential parts and determining the correlation between them and an overall purpose or structure. The three associated skills are attributing, differentiating, and organizing.

5. Evaluating involves making judgments based on criteria and standards. Thus, the two associated skills are checking and critiquing.
6. Creating involves combining elements to form a coherent or functional whole, i.e., reorganizing elements into a new pattern. The three associated skills are generating, planning, and producing.

Higher-Order Thinking Skill

Higher-order thinking skill (HOTS) is a complex mental activity that involves making complex inferences, describing the given material, building representations, analyzing and constructing relationships (Resnick, 1987). Likewise, Newman (1990) argued that higher-order thinking skills challenge students to analyze, interpret, or manipulate information. In other words, HOTS occurs in the activity such as using text information and prior knowledge to make complex inferences where the students manage constructive and integrative processes (Afflerbach, 2015). HOTS is associated with the three top levels of Bloom's taxonomy in the educational field, namely analyzing, evaluating, and creating (Anderson & Krathwohl, 2001).

Each level of thinking has a different indicator of the question, including the higher-order thinking levels. For example, Anderson & Krathwohl (2001) mentioned the types or forms of questions that assess the indicators for higher-order thinking skills as follows:

1. Differentiating (asking to distinguish the components of the full structure in terms of their relevance).
2. Organizing (asking to identify elements of communication or situation then recognize how they fit together into a coherent structure).
3. Attributing (asking to ascertain the point of view, biases, values, or intention underlying communication).
4. Checking (asking to test for internal inconsistencies or fallacies in an operation or a product).
5. Critiquing (asking to judge a product or operation based on externally imposed criteria and standards).
6. Generating (asking to identify the problem and making hypotheses based on specific criteria).
7. Planning (asking to devise a solution based on the criteria of the problem or develop a plan for solving the problem).
8. Producing (asking to carry out a plan for solving a given problem).

Higher-order thinking skills can be assessed in formative and summative assessments (Brookhart, 2010). Formative assessment is primarily used for improving students' learning, such as providing information about students' current understanding and developing interventions to enhance students' learning (Dixson and Worrell, 2016). It can be in the teacher's feedback or activities such as quizzes and homework exercises or tasks. On the other hand, summative assessment is generally used to get information about the overall achievement of students in a systematic way. It is usually used at the end of a unit, chapter, quarter, or semester in the form of constructed response and essay questions (Brookhart, 2010).

RESEARCH METHOD

This study was a descriptive qualitative implementing documentary analysis or content analysis as the method of the study. According to Ary et al. (2010), content analysis is a research method for identifying particular characteristics of written or visual materials. It was chosen because its emphasis was on analyzing the textbook to understand a phenomenon. Therefore, the type of data in this research was qualitative data. Moreover, both primary and secondary sources of data were used in this research. The primary source of data used was an artifact, i.e., the reading questions within the textbook. At the same time, the secondary source of data used in this research was journaled articles used to support this study's data.

The primary data source was collected through document analysis, and the validity of the data was then examined using expert judgment from a teacher. The teacher giving expert judgment was a teacher who had in-depth knowledge of this research topic. Next, the data collected were analyzed using Miles, Huberman, and Saldana's (2014) interactive model covering data condensation, data display, and conclusion drawing or verification. In the last step, the study results were statistically calculated, interpreted, and concluded by the researcher qualitatively.

FINDINGS AND DISCUSSION

Cognitive Level of the Reading Questions

The results revealed that the reading task within the textbook covers five cognitive levels: remember, understand, apply, analyze, and evaluate. From all of those cognitive levels, it was found that the higher-order thinking level is less dominant than lower-order thinking level. For example, the lower-order thinking level category achieves 76.7%, while the higher-order thinking level category only gets 23.3%. In detail, the cognitive levels of the questions in the reading task can be seen in the table 1.

Table 1. *The cognitive levels found in reading tasks*

Cognitive Level of Bloom Taxonomy						
	Lower-Order Thinking Levels			Higher-Order Thinking Levels		
	Remember	Understand	Apply	Analyze	Evaluate	Create
Total	52	34	6	22	6	0
score	43.3%	28.4%	5%	18.3%	5%	0%
	92/120*100 = 76.7%			28/120*100 = 23.3%		

As the first level in Bloom's taxonomy, the remembering level, the questions are mainly about the direct referencing type, "What does Rosy do?" and "Where does Jack come from?" in chapter 1. This type of question requires students to recall information from the text. Another remembering question that requires students to recognize grammatical word classes is also found in chapter 5, asking, "Does the text use adjectives? Mention them". Moreover, the required skill for this type of question also corresponds to the sub-skill of remembering level that retrieves relevant information from long-term memory. The essence of this question is only to identify what is written

in the text, which is the process of remembering level. Hence, students answer the question based on explicit information that does not require additional complex skills. Therefore, this kind of question is categorized as the level of remembering.

As the second level in Bloom's taxonomy, the question type in the understanding level such as the topic or main idea type is found in chapter 5, "What is the text about?." It requires students to develop a single statement representing the presented material by skimming the text. Another type of question that asks students to find an example of a concept is also found in chapter 1, "Underline all the sentences that give information about personal information." This question requires students to identify relevant features and scan the key search features to locate specific information. Moreover, the required skills for those questions also correspond to the sub-skills of understanding level, namely abstracting a general theme and finding a specific example of a concept.

The essence of the questions above is identifying what is in the text, but students need to combine it with a theory they must remember. Students answer the question based on information in the text that requires language comprehension skills to understand the meaning of the text. Language comprehension skill is the ability to use knowledge of a language (i.e., discourse, semantics, syntax, and vocabulary) to understand text (White, 2011). Besides, when the questions ask more complex understanding, students need to use background knowledge because it helps get information essential to understand a situation or make sense of a new concept or idea. Thus, those kinds of questions are categorized as the level of understanding.

In the third level in Bloom's taxonomy, applying level, the type of question is asking the students to make a new text, "Write a reply to Suzan's letter. Agree to be her pen pal" in chapter 1. That question requires students to understand the problem encountered and construct knowledge from the text. The required skill for this type of question also corresponds to the sub-skill of applying level, using the understanding of a concept learned from the text. The essence of this question is using the information from the text to solve a certain problem, which is the process of applying level. The question may also be considered as creating level that is making something. However, this question does not require creative thinking to make something new because a template is provided in the question. Conversely, it needs students' application skill that is the ability of using new information from inferences or searches to accomplish goals (White, 2011). Therefore, that kind of question is categorized as the level of applying.

As the fourth level in Bloom's taxonomy, analyzing level, the questions that usually occurs is the type that asks students to determine how ideas are connected, such as "Where does the dialogue probably take place?" in chapter 2. This type of question requires students to draw inferences by breaking the material into parts and building systematic and coherent connections among parts of the material. Furthermore, the question asks the students to find the intention or message that the author wants to convey, "What does the writer means by this?" found in chapter 2. This type of question requires students to identify underlying assumptions and representing the logical argument. All the required skills correspond to the sub-skills of analyzing level parsing out the text into parts and figuring out how the related using background knowledge and logical reasoning. The essence of this question is organizing and concluding the implicit information in the text. Hence, students answer the question based on implicit information that requires further complex skills such as inferring skills, analytical skills,

and logical reasoning. Logical reasoning is helpful to form a thought and opinion based on the implied information. Therefore, this kind of question is categorized as the analyzing level.

As the fifth level in Bloom's taxonomy, evaluating level, all questions ask students to make a judgment about something, such as "What do you think of the end of the story?" and "What kind of a person do you think the receiver is?" in chapter 2 and 9. This question's type requires students to identify the relevance of the purpose of the text and the information validity and give a reason and use of evidence towards situations in the text. The required skill for this type of question also corresponds to the sub-skill of evaluating level that is judging a product or operation based on criteria and standards. The essence of this question is judging something based on criteria. Hence, students answer the question based on information in the text that requires students' critical evaluation of a text. It includes confirming the relevance of the purpose of the text and the information validity, accordingly making a thoughtful, evidence-based judgment. Hence, this kind of question is categorized as the evaluating level.

The analysis above shows that the reading task covers five cognitive levels of Bloom's taxonomy: remembering level, understanding level, applying level, analyzing level, and evaluating level. It is also implied that the textbook's author emphasizes lower-order thinking level, especially remembering level, because remembering level takes almost half of the total questions itself.

The Form of Higher-Order Thinking Questions

From the data analysis, the researcher indicates that there are 28 higher-order thinking questions; the analyzing level with 22 questions, evaluating level with six questions and creating level with zero questions. It is found that the higher-order thinking questions on the reading task have four forms. In which three forms belong to analyzing level, and one form belongs to evaluating level.

The first form is a differentiating type which only has one question. It appears in the question, "Find a descriptive text in Bahasa Indonesia. Compare the text with the previous text. Do they share the same text organization?" in chapter 5. Students needed to analyze the text and note the relevant parts, then detect the similarities and differences. This question demands students to answer the question based on information in the text that requires understanding the inferred meaning of the text.

The second form is the organizing type of question. It has 16 questions in analyzing level. This type of question asks students to determine how ideas are connected and use that information to get the conclusion. The questions are like "Where does the dialogue probably take place?" and "Was the story a tragic one? Why?" in chapters 2 and 9. The information to answer the question is stated implicitly. Therefore it requires students to draw inferences by breaking the material into parts and building systematic and coherent connections among parts of the material.

The third form is attributing type, and it has five questions in analyzing level. This question type asks the students to find the intention or message that the author wants to convey. It can be found, such as "What does the writer means by this?" and "What is the writer's purpose of writing the letter?" in chapters 2 and 7. This type of question requires students to identify underlying assumptions and represent the logical argument.

The fourth form belongs to evaluating level that is critiquing type, and it has six questions. It asked the students to judge something, such as "What do you think of the end of the story?" and "What kind of a person do you think the receiver is?" in chapters 2 and 9. It requires students to identify information validity or give reason and evidence towards situations in text. This question demands students to answer based on implicit information that requires students' critical evaluation of a text. However, even it only has one type of question, the complexity's level of the question is the most complex in evaluating level. As Bloom (1956) considers the taxonomy as a hierarchy, mastering the simpler level was a prerequisite for mastering the next more complex level. It means that students still take on a process that has lower complexity in evaluating level.

Additionally, the questions that assess the creating level are not found in the higher-order thinking tasks. It should be considered a matter since creating level is the most complex level in Bloom's taxonomy of cognitive domains. Hence, the missing creating level becomes the weakness of this textbook because it can be insufficient to encourage students to develop their higher-order thinking skills. Thus, the researcher thinks that the textbook author needs to provide questions that fully assess all the cognitive levels to support students' higher-order thinking skills.

From the analysis above, it can be summarized that the textbook provides four forms of higher-order thinking questions based on Anderson and Krathwohl (2001). In detail, the organizing form gains the highest portion among the other forms while critiquing form in the second place. Attributing and differentiating forms are in the third and fourth places, respectively, whereas the four other forms, namely checking, generating, planning, and producing, obtain zero questions.

In line with this study, several studies done by Ulum (2016), Atiullah (2019), Mizbani (2020), Bagheian (2020), and Sari (2020) share the same result with this study that is the majority of reading questions in the textbook is in the lower-level cognitive skills involved in the revised Bloom's taxonomy. On the contrary, the finding in this study is different from the study conducted by Febrina (2019), stating that the lower-order thinking skill is less dominant than the higher-order thinking skill. However, the findings of this research are in line with almost all of the previous studies. Therefore, it can be concluded that the results in the current study are still relevant, revealing that the questions belong to higher-order thinking skills are not more dominant than the lower-order thinking skills. Moreover, not all cognitive levels occur in the reading task.

CONCLUSION AND SUGGESTION

Based on the research finding and discussion, the researcher confirms that the reading tasks only cover five out of six cognitive levels of Bloom's taxonomy. In detail, remembering level gets the portion of 43.3%, understanding level with 28.4%, applying level with 5%, analyzing level gets 18.3%, evaluating level with 5%, and creating level with 0%. Moreover, there are four forms of higher-order thinking questions in the reading tasks. The analyzing level has three forms of questions, and the evaluating level has one form of a question. Aside from that, there is a weakness in the higher-order thinking questions that is the absence of creating questions. It seems that the textbook fails to fully support students in developing higher-order thinking skills.

In general, it can be concluded that the textbook provides reading tasks with more lower-order thinking skills than higher-order thinking skills. In which, remembering

level is the most dominant level with the portion of 43.3%. Besides, in form of the higher-order thinking questions, the author emphasizes analyzing level. The dominant question is organizing questions asking about how ideas are connected, which gets 16 questions.

By considering the conclusion, some suggestions are given by the researcher, such as textbook developers should devise tasks or exercises beyond lower-order thinking skills and formulate the reading task that fully covers each cognitive level included in Bloom's taxonomy. Besides, the teachers who use this textbook as the material for teaching should actively facilitate their students with supplementary questions to promote students' higher-order thinking skills. Moreover, the other researchers may conduct research on larger samples and in other areas to give more references for teachers or schools in selecting a good textbook since this research is limited in the reading task.

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