AN ANALYSIS OF READING QUESTIONS
IN ENGLISH TEXTBOOK ENTITLED “INTERLANGUAGE: ENGLISH
FOR SENIOR HIGH SCHOOL STUDENTS XI” BASED ON RBT

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ABSTRACT: This study was conducted to describe reading question forms, the
RBT categories of the reading questions and the frequency of each RBT category
found in the English textbook “Interlanguage: English for Senior High School
Students XI”. The design was descriptive qualitative. The subjects were post-
reading questions within the textbook. The main instrument was Taxonomy Table. The findings were: first, there were 13 reading question forms which were
dominated by wh-questions; second, out of 24 RBT categories, there were 13
categories that could be found in the reading questions; third, the category that
dominated the reading questions was Remember Factual Knowledge.

Key words: reading questions, RBT, Taxonomy Table

In line with the literacy level set by the government, the focus of teaching
reading for students of senior high schools is to train students to get the meaning
of the texts. In other words, reading comprehension is the main concern for them.
In a process of teaching and learning reading comprehension, questions may play
an important role.

Questions lead students to the comprehension. Day and Jeong-suk Park
(2005) state that well-designed questions help students interact with the text,
create and construct meaning and begin to think critically and intelligently.

Questions are any statements which need answering. They help students
focus on the case and reactivate what is being known by the students. For
example, a study conducted by Sanders (Nuttal: 1985) was identifying questions
through Bloom’s taxonomy offering various kinds of hierarchical levels of
thinking. This study proved that questions could be a means of activating and
training the students’ level of thinking.

Bloom’s taxonomy offers six levels of thinking namely Knowledge,
Comprehension, Application, Analysis, Synthesis, and Evaluation. According to
Krathwohl (2002), these categories of cognitive domain are hierarchically
arranged which means that the achievement of a lower category is the prerequisite
to the higher ones.

The idea of Bloom’s taxonomy was revised in 2001 (Krathwohl; 2002).
The changes were on the terms used and the new concepts of two-dimensional
cognitive domain. The two-dimensional cognitive domain offers an idea that the
students’ level of thinking covers not only the thinking process but also the kinds
of knowledge. The revision as popularly called Revised Bloom’s Taxonomy
(RBT) offers almost the same categories as the original taxonomy.

English textbook which is one of the main instructional materials covers
all macro skills including reading. The textbook delivers reading materials
through kinds of reading texts and equips them with reading questions that aim at
checking students’ understanding toward the texts. Considering the importance of
both reading questions and English textbook in a process of teaching and learning reading, this study aims at describing kinds of reading questions appearing in one of English textbooks recommended by the government entitled “Interlanguage: English for Senior High School Students XI”. This study uses the idea of Revised Bloom’s Taxonomy to analyze the level of thinking required by the reading questions.

Based on the background of the study elaborated above, this study is attempted at describing kinds of reading question forms appear in English textbook “Interlanguage: English for Senior High School Students XI”, describing the RBT categories of the reading questions, and describing the frequency of each category of RBT found in the textbook.

METHOD

The design of this study was descriptive qualitative design in the form of case study that aimed at describing the variable or condition that really occurred in certain phenomena. The instruments of this study consisted of four identification sheets. The first instrument was table of question forms that identified kinds of reading question forms. The second instrument was identification sheet of knowledge dimension that identified kinds of knowledge of the reading questions. The third instrument was identification sheet of cognitive process dimension that identified the cognitive processes of the reading questions. The last instrument was Taxonomy Table that identified the RBT category of the reading questions.

The data were collected from English textbook “Interlanguage: English for Senior High School Students XI” for language study program. There were four steps of collecting the data. The first was selecting post-reading questions from the textbook and identifying their forms. The second was classifying the reading questions based on the Knowledge dimension and the Cognitive Processes of Revised Bloom’s Taxonomy. The third was coding the data to make it easier to analyze based the code provided by RBT. The last, the data were analyzed based on Revised Bloom’s Taxonomy.

With regard to the two-dimensional RBT that was used to analyze the reading questions, there were 24 categories involving both the Cognitive Process and the Knowledge dimension. The data were analyzed based on those 24 kinds of categories presented by Taxonomy Table. The steps of analyzing the data were counting the total number of reading questions based on their forms, identifying the categories of RBT of the reading questions, and dividing the total number of each category by the total number of questions and multiplied by 100% to know the percentage of each category.

FINDINGS

Based on the objectives of the study elaborated before, the findings can be classified into three parts. The first finding deals with kinds of reading question forms. There are 53 reading texts in the textbook. The kinds of reading question forms are presented in the table on the next page.

<table>
<thead>
<tr>
<th>No</th>
<th>Questions Forms</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Yes/no question</td>
<td>9</td>
<td>3.2%</td>
</tr>
<tr>
<td>2.</td>
<td>Wh-question</td>
<td>128*</td>
<td>45.8%</td>
</tr>
</tbody>
</table>
Within 53 reading texts, there are 279 post-reading questions and 13 reading question forms. The table shows that the questions are mostly in the form of *wh*-questions and some others are in forms of multiple-choice, true-false, yes/no questions, summarizing, and ordering. Besides the six forms, there are some other forms that less frequently occur within the textbook. They are analyzing, fill in the blank, identifying, completing chart, acting out and writing a short essay.

The second finding deals with the RBT categories of the reading questions. Out of 24 RBT categories, there are 13 categories that can be found in the reading questions. They are *Remember Factual Knowledge, Remember Conceptual Knowledge, Understand Factual Knowledge, Understand Conceptual Knowledge, Apply Factual Knowledge, Apply Procedural Knowledge, Analyze Factual Knowledge, Analyze Conceptual Knowledge, Evaluate Conceptual Knowledge, Create Factual Knowledge, Create Conceptual Knowledge, and Create Procedural Knowledge.*

The third finding deals with the frequency of each RBT category of the reading questions. The table below presents the frequency of each category.

<table>
<thead>
<tr>
<th>The Knowledge Dimension</th>
<th>The Cognitive Process Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Factual Knowledge</td>
<td>133</td>
</tr>
<tr>
<td>B. Conceptual Knowledge</td>
<td>19</td>
</tr>
<tr>
<td>C. Procedural Knowledge</td>
<td>-</td>
</tr>
<tr>
<td>D. Metacognitive Knowledge</td>
<td>-</td>
</tr>
</tbody>
</table>

The table shows that out of 279 reading questions, there are 133 reading questions that meet the category of *Remember Factual Knowledge*, 19 reading questions that meet the category of *Remember Conceptual*, 77 reading questions that meet the category of *Understand Factual Knowledge*, 18 reading questions...
that meet the category of **Understand Conceptual Knowledge**, 9 reading questions that meet the category of **Understand Procedural Knowledge**, 8 reading questions that meet the category of **Apply Factual Knowledge**, a reading question that meets the category of **Apply Procedural Knowledge**, 4 reading questions that meet the category of **Analyze Factual Knowledge**, 5 reading questions that meet the category of **Analyze Conceptual Knowledge**, a reading question that meets the category of **Evaluate Conceptual Knowledge**, a reading questions that meet the category of **Create Factual Knowledge**, two reading questions that meet the category of **Create Conceptual Knowledge**, and a reading question that meets the category of **Create Procedural Knowledge**.

**DISCUSSION**

The first research finding shows that there are various forms of reading questions. It is necessary for the textbook to have various activities that interest the students. However, the number of each form of the question is not balance. The reading questions are mostly in form **wh-questions**.

**Wh-questions** are useful in helping students comprehend the text (Day, 2005). However, they should be arranged purposefully in order to really help students have critical thinking toward the text. The questions asking students to recognize or recall information which are derived from **wh-questions** should be worth remembering.

The other question form that also dominates the reading questions in the textbook is multiple-choice. Multiple-choice form seems easy to arrange. However, it needs careful consideration in determining appropriate options.

The other exercises or forms of questions also facilitate students in comprehending the text. For instance, true-false requires students to make a judgments whether the statement is true or false according to the text. **Yes/no** questions facilitate students not only to answer **yes** or **no** but, further, it is followed up by **wh-** questions that ask them to think more. In addition, ordering questions in form of jumbled paragraphs enable students to understand the idea of each paragraph and build unity of the idea of the text. In conclusion, various kinds of question forms presented in the textbook help students comprehend the text.

The second research finding shows that among the 13 RBT categories of the reading questions in the textbook, the categories that can be classified into higher-order thinking categories are **Analyze Conceptual Knowledge**, **Analyze Factual Knowledge**, **Create Conceptual Knowledge**, **Evaluate Conceptual Knowledge**, **Create Factual Knowledge**, and **Create Procedural Knowledge**. The classification is based on the Cognitive Process dimension which **Analyze**, **Evaluate** and **Create** are considered to be higher-order thinking while the rest are lower-order thinking. While considering both the knowledge dimension and the cognitive process dimension of the categories, the category that requires the highest order thinking is **Create Procedural Knowledge**.

Raths (2002) claims that in order to improve educational instructions, educators may use Bloom’s Revised Taxonomy that offers new idea about learning objectives. As well as the instructions, the reading questions may also be compiled to meet the higher categories of RBT that train students to have higher-order thinking.
The third finding shows that the category that dominates the reading questions is *Remember Factual Knowledge* which is considered to be the lowest order of thinking. Sanders (1966) used filling a pitcher with water as a metaphor for teaching approach that emphasized on filling students’ mind with knowledge to remember. The questions that meet the category of *Remember Factual Knowledge* are unsatisfactory since the students will easily forget knowledge they have and even it is useless when they are not motivated to use it.

Further, Mayer (2002) states that in order to have meaningful learning, students should deal with cognitive processes which go beyond remembering and beyond factual knowledge. Meaningful learning occurs when students actively construct knowledge and try to apply it for their life. Meaningful learning can be gained through transfer which means an ability to use what has been learned to solve new problems, answer new questions, or facilitate learning new subject matter (Mayer & Wittrock, 1996 as stated in Mayer, 2002).

On the other hand, the category of *Remember* facilitates students to achieve rote learning through retention which means they will remember all knowledge they have engaged with but they are not supposed to use it. Remembering knowledge is essential for meaningful learning when the knowledge is used to do tasks that are more complex. For instance, knowledge of correct spelling of English words is necessary when the students are given an essay-writing task. In other words, when meaningful learning is the goal, *Remember* is a means to achieve the goal rather than the goal itself (Mayer, 2002). Overemphasizing reading questions on *Remember Factual Knowledge* will not help students to be creative and to be critical thinking students.

The finding also shows that the category of *Understand*, for both *Understand Factual* and *Conceptual Knowledge* have the second highest frequency. When the frequency of *Understand* is summed, the result is 104. It is about 37.3%. The result is considered to be moderate since it is more than one-third of the whole questions. *Understand*, according to Bloom et.al (1956), is classified as lower-order thinking. However, it belongs to category that facilitates students to gain meaningful learning. Mayer (2002) states that students understand when they build connection between the new knowledge to be gained and their prior knowledge. Students are said to understand reading texts when they are able to relate what they read and the knowledge they already have. Further, they may construct meaning from what is being read. Dalton (2003) states that *Understand* has a strong correlation with *Conceptual Knowledge*. Reading questions are supposed to ask information which is not stated explicitly in the text. Instead, they facilitate them to do interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.

The frequency of *Apply* that is derived from category of *Apply Factual Knowledge* and *Apply Procedural Knowledge* is nine. It is about 3.25% and is considered to be low. Bloom (1956) classified *Apply* as lower-order thinking. However, it does facilitate meaningful learning outcomes. *Apply* involves using procedure to perform exercises or solve problems and is closely linked with *Procedural Knowledge* (Mayer, 2002).

The total frequency of *Analyze* category derived from *Analyze Conceptual Knowledge, Analyze Factual Knowledge* is 3.1%. It is considered to be low. *Analyze* is classified into higher-order thinking (Bloom, 1956). Analyze...
involves material into its constituent parts and determining how the parts are related each other and to an overall structure (Mayer, 2002).

The category Evaluate is found only once in the reading questions. There is no categories of Evaluate other than Evaluate Conceptual Knowledge. It is considered to be very low. Evaluate is classified into higher-order thinking. It is defined as making judgments based on criteria and standards. The criteria most used are quality, effectiveness, efficiency, and consistency (Mayer, 2002).

The frequency of Create is two that is derived from Create Factual Knowledge and Create Procedural Knowledge. It is considered to be low. Create is classified into the highest-order thinking. Create involves putting elements together to form a coherent or functional whole; that is, reorganizing elements into a new pattern or structure (Mayer, 2002).

In order to achieve meaningful learning outcomes, students should deal with leaning activities that deal with Understand, Apply, Analyze, Evaluate, and Create category (Mayer, 2002). Regarding reading questions as a means for students to have better comprehension toward reading texts, the questions are expected to meet those categories.

Besides, the third finding shows that kinds of knowledge that can be found within the reading questions are Factual Knowledge, Procedural Knowledge, and Conceptual Knowledge. Factual Knowledge dominates the reading questions. It has the highest frequency. This knowledge deals with any basic elements the students need to know in order to comprehend the text. Conceptual Knowledge has the second highest of the overall kinds of knowledge. Conceptual knowledge deals with any information related to the interrelationship among the basic elements. Procedural Knowledge has the lowest frequency. It deals with any methods or skills in doing something. Out of the four knowledge, only Metacognitive Knowledge that cannot be found within the reading questions.

In conclusion, Mayer (2002) states that in order to achieve meaningful learning outcomes, the students should be motivated to deal with any questions that go beyond Remember. The textbook is considered to overemphasize the use of Remember that the user or the teacher should facilitate the students to other questions requiring higher-order thinking. Besides, Dalton (2003) suggests that in order to improve students’ critical thinking, they should be trained to gain with more abstract knowledge. The book uses too much Factual Knowledge within the questions, while the other knowledge are less used. The teacher should modify or create more reading questions that deal with Conceptual and Procedural Knowledge or even Metacognitive Knowledge.

CONCLUSION AND SUGGESTION

Conclusions

After conducting the analysis and the discussion of the study, the researcher draws the results of the study. The first result is the kinds of reading questions forms appear within the English textbook entitled “Interlanguage: English for Senior High School Students XI”. The kinds of reading questions forms found in the English textbook entitled “Interlanguage: English for Senior High School Students XI” are yes/no question, wh-question, multiple-choice, true-false, ordering, summarizing, and followed by a few number of matching, analyzing, identifying, fill in the blank, completing chart or table, acting out and
writing a short essay. However, the numbers of the question forms are not balance. The form that dominates the questions is \textit{wh}-question.

The second result is the RBT categories of the reading questions. There are 13 categories that can be found within the reading questions. They are \textit{Remember Factual Knowledge}, \textit{Remember Conceptual Knowledge}, \textit{Understand Factual Knowledge}, \textit{Understand Conceptual Knowledge}, \textit{Understand Procedural Knowledge}, \textit{Apply Factual Knowledge}, \textit{Apply Procedural Knowledge}, \textit{Analyze Factual Knowledge}, \textit{Analyze Conceptual Knowledge}, \textit{Evaluate Conceptual Knowledge}, \textit{Create Factual Knowledge}, \textit{Create Conceptual Knowledge}, and \textit{Create Procedural Knowledge}.

The third result is the frequency of each category of RBT in the reading questions. The frequency of each category of RBT within the reading questions is not distributed in balance. The category \textit{Remember Factual Knowledge} that is considered as the lowest level-order thinking has the highest portion, while the other categories that are considered as higher-order thinking have low portion.

\textbf{Suggestions}

Based on the findings and discussion in, the writer would like to offer the following suggestions to English teachers of senior high school, textbook authors, and further researcher(s).

The English teachers may offer various kinds of reading questions that require students to practice higher-order thinking. Since the reading questions within the textbook overemphasize the category of \textit{Remember Factual Knowledge}, the teacher could modify or create reading questions which meet the other higher cognitive processes and the other more abstract knowledge. In order to achieve meaningful learning, the teacher should create questions which the cognitive processes go beyond \textit{Remember}, and the kinds of knowledge go beyond \textit{Factual Knowledge}.

The textbook authors may use the findings as considerations to revise the reading questions. They should write reading questions which lead the students to reach meaningful learning other than rotate learning outcomes. The idea of RBT may help them in developing such questions.

\textbf{REFERENCE}


