

COGNITIVE DOMAINS FOUND ON SPEAKING SKILL QUESTIONS USED IN ENGLISH LANGUAGE TEXTBOOK

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ABSTRACT

This is a qualitative study of cognitive domains of speaking skill questions used in *Interlanguage: English for Third Grade Senior High School*. In this study, the writer observed the six categories of cognitive domains and the dominant order thinking skill applied in the questions on speaking skill. In order, to know the position of the student's proficiency in the speaking skill questions used in this textbook. The data were collected from the textbook. The theory used was from Anderson and Krathwohl (2001) about Revised Bloom's Taxonomy. This study showed that there were five from six categories of the cognitive domains applied in the questions on speaking skills used in the textbook, the dominant category was 'remembering' because in speaking skill students need to remember what they want to say and what people said. The writer found that the questions on speaking skill in this textbook belongs to lower order thinking skill because it was important for the students to master the lower order thinking skill before they achieve the higher order thinking.

Keywords: Questions, Textbook, Revised Bloom's Taxonomy

Questions are common in daily life, because people will ask questions when they do not understand or they want to know about something. In this world people will find questions about anything such as, politics, economics, social, education, and etc. In education, there are many kinds of questions, direct or indirect. Questions help students increase their understanding about lessons that they are studying because questions are always used as an instrument in gaining the student's knowledge and in building a process of thinking. At school students get questions not only from the teachers in the learning process, but also from the textbooks that they used. According to Day and Jeong-suk (2005), "well-designed questions help students interact with the text, create and construct meaning and begin to think critically and intelligently". Textbooks also have other benefits according to Parrish (2004, p.227). She mentioned that "there are some benefits of using textbooks: It assures a measure of structure, consistency, and logical progression in a class. It also minimizes preparation time for teachers. It allows learners to check material or preview other lessons. It meets a learner's needs or expectations of having something concrete to work from and take home for further study. It provides novice teachers with guidance in the course and activity design, and it may give multiple resources: tapes, CDs, videos, self-study workbooks etc". Textbooks will help the students in the learning process and questions help the students to improve their ability in analyzing, evaluating, and sharing their opinion. Both the questions and the textbook have important functions for students when they are not studying in classroom. The students can learn the material in the textbook at home without the questions or explanation from the teachers. They will get it in the textbook. In a textbook there are many kinds of questions based on the materials and skills which the textbook provided.

In this study, the textbook entitled "*Interlanguage: English for Third Grade Senior High School Students*." is chosen by the writer to be analyzed by the writer because first, textbooks are one of the important parts in the learning process for teachers and students nowadays. Second, almost every student has their own textbook in each subject. This means textbooks become the central of learning process, because students can use them in learning the materials and they can practice through the exercises provided in the textbook. This textbook has eight chapters; there are six sections A until F. In each section there are exercises for listening, speaking, reading, and writing skill. Every section consists of two or eight tasks. In general the purpose is to improve student's English ability in every skill and help them understand the materials without the teachers' explanation.

The analysis is focussed in the questions on speaking skill because in learning English language speaking skill plays an important role in helping students to be able to communicate in English. Questions on speaking skill can help students take part in discussions, presentations, and

share opinions. Another reason is that many people already analyze about the role of questions of other skills, but not speaking skill. Nowadays, people analyze questions on reading and writing. Therefore; besides questions on listening, reading, and writing skills; questions on speaking skill also help students in improving their ability. Furthermore, the writer chooses the third grade senior high school because the textbook consists of many exercises which help the writer analyze more questions, especially in questions on speaking skill.

To find out the cognitive domains on speaking skill questions in the textbook, the writer will answer some question; How many categories of cognitive domains are found and dominant in questions on speaking skill used in the textbook *Interlanguage: English for the third grade senior high school*? And what level of order thinking is found in the questions on speaking skill used in the textbook?

The writer uses the Revised Bloom's Taxonomy proposed by Anderson and Krathwohl (2001) as the theory to analyze the questions on speaking skill. The focus is in the six categories of cognitive domains. The writer used it because according to Bloom (1956, p.7) "The cognitive domains includes goals which deal with the recall and recognition of knowledge and development of intellectual abilities and skills". Moreover, the writer not only analyzes the six categories of cognitive domains but also she is going to find out the level of order thinking based on questions in speaking skill in the textbook.

According to Anderson and Krathwohl (2001), there were attempts to separate and categorize the varied domains of human learning such as, cognitive (knowing, or head), affective (feelings, or heart) and psychomotor (doing, or kinesthetic, tactile, haptic or hand/body). The result gave efforts yielded a various of taxonomies for every area. The word of taxonomy was just a word used to categorize the cognitive domains in the theory. "The aforementioned taxonomies deal with the varied aspects of human learning and were arranged hierarchically, proceeding from the simplest functions to those that are more complex" (Anderson and Krathwohl, 2001).

Krathwohl (2002) stated about Revised Bloom's Taxonomy "Like the original taxonomy, the revision is a hierarchy in the sense that the six major categories of the cognitive process dimension believed to different in their complexity, with *remember* being less complex than *understand*, which is less complex than *apply*, etc". This revision of Taxonomy gave must greater weight to teachers' usage; so, requirements a strict hierarchy relaxed to allow the categories to overlap one another. *The six categories of Revised Bloom's Taxonomy are, remembering, understanding, applying, analyzing, evaluation, and creating*. The writer used those six categories of cognitive domains to analyze the textbook.

METHODS

This research is done using a descriptive qualitative in discourse analysis. The writer focussed more on the process than a result, and it was an intpretation of the text. Description analysis is the exploration of existing of certain phenomom. Therefore, even when certain statistics were calculated, the writer used it to form a descriptive qualitative conclusion to describe the six categories of cognitive domains ocured in the textbook

Data Collection and Data Analysis

The data of this study was taken from English textbook namely *Interlanguage: English for Third Grade Senior High School*. The instrument of this study was the writer herself who collected the data and evaluated the data based on the theories provided in chapter 2. The focused was on questions on speaking skill used in this English textbook.

There were several steps that the writer used to collect the data. First, in March 2016, the writer printed the *Interlanguage: English for Third Grade Senior High School* which was already downloaded from the internet and the writer read the book. After downloaded, printed, and read the textbook, the writer indentified all speaking skill questions in the textbook. The processes of identifying the speaking questions on the textbook were as follows: a.) The writer read the instruction from the task (section). The writer chose the question as the speaking skill question if the instruction wanted the students to perform, share, and act something related to the materials they discussed in the classroom; b.) After identifying the questions, the writer gave marks to the questions that she analyzed in the next step.

The next step was giving a numbering system, which means the writer gave a number in each question on the textbook, for example; (1.1) means the questions from chapter 1 and it was the

first question in the textbook. There were two digit numbers in numbering system; the first number referred to the first question in the book, and the second number referred to the number of the chapter in the textbook.

The data was based on the tables developed by the writer. In order to answer the problem stated in research questions, the writer used one key terms and one formula. First, the writer made the key terms of six cognitive domains (table 3.1). Second, the writer made the table for analysis. After making the table for the analysis the writer retyped the questions in the table, and she analyzed each question then put the check in the one of cognitive columns which was appropriate with the question. For example: if the first question listed as remembering in the cognitive domains' columns, the writer checked (✓) in the cognitive domain in remembering column. The steps to classify the speaking skill questions belong to one category of the Bloom's cognitive domain; the writer read again the instruction in that section and compared the question in the key terms of Revised Bloom's Taxonomy. The explanation and example helped the writer to classify the questions in the textbook belong to which category. Next, the writer provided the explanation for the analysis in notes column (table 3.2).

Table Analysis of English Textbook for the Third Grade Senior High School

NUMBER	CONTEXT	QUESTIONS (English Text Book for third grade Senior High School)	COGNITIVE DOMAINS						NOTES
			R	U	Ap	An	E	C	
.....									
TOTAL									

Abbreviation:

R = Remembering

U = Understanding

An = Analyzing

Ap = Applying

E = Evaluating

C = Creating

After categorizing all the questions in textbook into each cognitive domain, the writer calculated the data. Then, the writer made the percentage of questions from the textbook for third grade Senior High School by used the basic formula below:

$$N \% = \frac{a}{\text{Total}} \times 100$$

Note:

N: The percentage of occurrence of questions in each cognitive domain.

a: The total of questions in the each cognitive domain.

Total: The total of the all questions in English textbook.

Finally, the writer made another table for the percentage. This table in terms of the data of each cognitive domain from the previous table, the purpose was to find out which cognitive domain is the dominant in the speaking skill questions based on six levels of Revised Bloom's Taxonomy.

FINDINGS AND DISCUSSION

In the analysis process of the textbook *Interlanguage: English for Third Grade Senior High School*, the writer find out that not all categories of the cognitive domains are applied in the 102 questions on speaking skill in the textbook. Only five categories of cognitive domains found by the writer, the explanation about findings is discussed below based on the analysis done by the writer. There are two categories applied in one question in the textbook. There are 102 speaking questions in the textbook.

Cognitive Domains Found on Speaking Skill Questions in Textbook

Based on the analysis done by the writer, the five categories of cognitive domains are: *remembering, understanding, analyzing, evaluating, and creating.*

Table 4.1: The Categories of Cognitive Domain Found in Questions on Speaking Skill Published in the Textbook.

COGNITIVE DOMAIN	THIRD GRADE SENIOR HIGH SCHOOL QUESTIONS ON SPEAKING SKILL IN TEXTBOOK
Remembering	76.47 %
Understanding	3.92%
Applying	0%
Analyzing	9.80%
Evaluating	0.98%
Creating	8.82%
TOTAL	100%

The table (4.1) shows that there are five categories of cognitive domains found in the questions on speaking skill in the textbook; the category which is dominant is remembering. During the analysis process, the writer finds that the dominant questions on the speaking skill in the textbook is remembering something they have already heard and usually they must share with their friends.

For Examples:

1. *What do Anita and Denias talk about?*
2. *Does Denias agree with Anita's decision?*

These examples of remembering questions require the students to remember the conversations they already heard before to answer the questions. Second, the questions on speaking skill in the textbook ask the students to remember some event or moment that they did in the past.

For Examples:

1. *Have you thought of great ideas for yourself or for people around you?*
2. *Have you ever travelled by plane?*

Those two examples are remembering questions because to answer those two questions, students have to remember the moment when they did it. After the analyzing process, the writer found that the remembering questions on speaking skill are the dominant category of cognitive domains because in the learning process remembering can become the basic point. In the speaking skill also remembering becomes the most important category, the students must remember what they want to say or what tenses they want to use. This reason why in the textbook remembering of the cognitive domain is the dominant category.

The Cognitive Domain Dominant to Lower Order Thinking Skill

The writer find in the data analysis that the dominant category is from the lower order thinking skill because remembering is the first category in the cognitive domains. According to Bloom (1956) "the six levels of cognition, that is, levels of thinking often called Bloom's Taxonomy. This approach is to describe thinking behaviors delicated cognition into lower and higher-order thinking skills". Position of the half purpose to lower order thinking skill and the higher order thinking skill have purpose to describe the students thinking behaviour. Based on these two points people will think that the higher order thinking skill is more important than the lower order thinking skill. However, the lower order thinking skill is helpful to achieve the higher order thinking skill. The process in reaching the higher order thinking skill the first step that must fulfil is the lower order thinking skill.

CONCLUSION

This research is aims to find out the cognitive domains found on speaking skill used in English language textbook for third grade senior high school.

The findings in this research show that there are five from six categories of cognitive domains found on speaking skill questions used in this textbook. From the data also, the writer found that the dominant category of the cognitive domain is remembering which belongs to lower order thinking level. The writer already explained in chapter 2 that the lower order thinking skill is important, because to achieve the higher order thinking skill the students have to fulfil the lower order thinking skill. It means that the lower order thinking skill play an important role in improve the students skill in learning process. According to this textbook, the writer found that the dominant category belongs to lower order thinking skill because; this book designed for third grade senior high school students, which is good to fulfil their lower order thinking skill to help them later to achieve the higher order thinking level when they continue to the next educational level.

REFERENCES

- Amer, A. (2004). *A Lifelog Learning Approach tpPre-Service Teacher Education and In-Service Professional Development*. Paper Presented at: The Third International Conference: "Towards Better Education of Prospective Teacher" Sultan Qaboos University, College of Education, Muscat, Oman, 1-3 March 2004.
- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A Taxonomy for learning, teaching and assessing: A revision of Bloom's taxonomy of educational objective*: New York: Longman.
- Bloom, B. (1956). *Taxonomy of educational objective: The classification of educational goals, by a committee of college and university examiners (1st edition)*. New York: Longman.
- Day, R. & Jeong-suk, P. (2005). *Developing Reading Comprehension Questions*. (Online), (<http://nflrc.hawaii.edu/rfl>), accessed on September 24, 2015.
- Johnsen, W. (1993). *Textbook Purpose*. New York: Longman.
- Kerry, T. (2002). *Explaining and Questioning*. Cheltenham: Nelson Thomas.
- Krathwohl, D. R. (2002). A revision of Bloom's taxonomy: An overview. *Theory into Practice*, 41 (4), 212-218.
- Kerry, T. (2002). *Explaining Questioning*. Cheltenham: Nelson Themes.
- Krathwolhl, D. R. (2001). A revision of Bloom's taxonomy: An overview. *Theory into Practice*, 41 (4), 212-218.
- Parrish, B. (2004). *Teaching Adult ESL: A Practical Introduction*. McGraw-Hill Education.