

## THE THINKING SKILL LEVELS IN INDONESIA ENGLISH TEXTBOOK

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### **Abstract**

*Textbook as a source of learning enables students to practice and develop their thinking ability through exercises which are designed in a different level of thinking. This research aims to analyse the most frequent thinking skills in WH-Questions and to examine the extent to which the WH-questions emphasize high-level thinking. This research uses a descriptive quantitative research. The writer first collects the WH-questions taken from an English textbook entitled “Buku Bahasa Inggris Kelas X”, and then classifies the data based on its level of thinking. This research uses Bloom’s Taxonomy revised by Anderson & Krathwol. The finding shows that the most frequent thinking skill is remembering with 49.65%, the understanding level is 24.13%, applying level is 1.39%, analysing is 17.94%, evaluating is 6.89%, and creating is 0%. Based on the result, the researcher concludes that the book which is issued by the Ministry of Education focuses on the lower level of thinking skills. This research is expected to give contribution in textbook evaluation.*

**Keywords:** *textbook, thinking skills, content analysis*

### **INTRODUCTION**

Textbook plays significant role in teaching and learning process. As stated by Grave (2000 p. 175) “textbook is employed as a typical source of data for a proper learning of a topic and in teaching”. Textbook contains material of the lesson that is designed in such way to fulfil learners need. It helps them to review or redo previous lesson in order to deepen their understanding. Moreover, it also contains tasks/exercises enabling learners and teacher determines how well they have grasped the lesson. As well as for teachers, it potentially guides teachers to communicate knowledge in various activities such as role play, drilling, chant, and so on. It also facilitates inexperienced teachers to plan and teach lessons.

Cunningsworth (1995 as cited in Luluk (2015 p. 13) allocated some roles of textbook. The first role is as a source of presentation material. Textbook could help teachers to present their spoken or written materials during the teaching process. It could not be denied that teachers are also responsible for teaching administration such as syllabus, lesson plan, teaching kit and so on. Those are sometimes time consuming. Therefore, textbook save their time to prepare the

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material. Second, textbook is as a source of activities for interactive learning. In order to achieve the goal of learning, teachers apply various and interesting activities such as role play, group work, or whole-class work. Those activities also challenge both teacher and learners to be creative. They are encouraged to modify activities so that it is enjoyable. Fortunately, textbook provide them all. Therefore, textbook is extremely beneficial. Third, textbook is as a reflection of learning objectives. Textbook provides exercises which sharpen learners' understanding towards topic of learning. In addition, it also provides essay questions for critical thinking. Those questions can be used as a measurement of the learning objectives.

Richard (2001) proposes seven advantages of English textbook for teachers. It can be seen as follow:

- (1) Providing a structure and the syllabus description of the program,
- (2) Ensuring similar content by standardise the instruction,
- (3) Maintaining the quality of the materials,
- (4) Providing a variety of learning resources,
- (5) Helping teachers to be efficient in teaching
- (6) Supporting teaching with effective language models and input,
- (7) Training limited teaching experience in teaching.

Although textbook provides exercises to sharpen learners' understanding, some teachers think that the exercises do not improve higher order thinking. Teacher then needs to evaluate whether or not the book has covered all the skills needed. The layout, the exercise, or the instructions are some aspects of the book that can be evaluated. As well as question because it opens opportunities to explore cognitive ability. The harder the question, the deeper the understanding towards the topic. In reverse, the easier the question, the basic the understanding needed. Questions in lower thinking skills are useful to check understanding during explanation and in recap sessions. It needs factual knowledge which can easily found in the text or discourse. In contrast, questions in higher order thinking allow learners to explore their response based on their understanding.

These kinds of questions develop critical and reasoning skills. Moreover, they open to variety acceptable response.

In line with the questions, Bloom taxonomy is one of the taxonomy used to clarify the level of educational objectives by which questions are posed. He provides six domains of cognitive skills such as knowledge, comprehension, application, analysis, synthesis, and evaluation. In 2001, Anderson & Krathwol revised Bloom taxonomy into verb form. They are:

### **1. Remembering**

Remembering is when the students are able to recall or recognise the previous knowledge or information given. By remembering the students able to define, list, tell, name a particular topic. Model of questions: Who? Where? Which One? What? When?

### **2. Understanding**

Understanding is the stage when the students are able to form same meaning through different types of functions. The activities can be summarising, interpreting, classifying or explaining the message. Model of questions: Which are facts? What does this mean? What expectations are there? What are they saying?

### **3. Applying**

Applying occurs when the students are able to use a procedure to a given situation. It occurs when the students recognise pattern and implement it to unfamiliar situations Model of questions: What would result? Tell what would happen?

### **4. Analysing**

Analysing is the ability to break the concepts or component into parts and determine how the parts are related or not to one another or how they those components relate to the concepts. Model of questions: What ideas apply...?, What ideas justify the conclusion...?, Whats the relationship between...?

### **5. Evaluating**

Evaluating happens when the students give judgement to a particular topic. Giving suggestion, recommendation, critique and reports are the products of

evaluation. Model of questions: What fallacies, consistencies, inconsistencies appear? Which is more important moral?

## **6. Creating**

Creating needs most critical thinking skill. It is the stage when the students are able reorganize elements or components into new form or structure. This is the difficult stage in cognitive domain. Model of questions: How would you test . . .? How else would you . . .?

## **RESEARCH METHOD**

In this research, the writer uses Quantitative content analysis since it is a “systematic, objective, quantitative analysis of describing message characteristics” (Neuendorf, 2002, p. 1). The data source is *Bahasa Inggris Kelas X*, a textbook that is used in secondary level particularly public school. The textbook is a government book which is published by The Ministry of Education and Culture in Indonesia. It is designed to build students creativity in line with the goal of Curriculum 2013.

In collecting data, the writer provides a guide for the levels of questions based on the Cognitive domain in Bloom’s taxonomy revised. This guide includes a description of the level of the questions together with its criteria. This tool is designed to help the writer and the second analyst to classify each level of the questions in the textbook *Bahasa Inggris Kelas X*. The data is taken from the English textbook entitled *Bahasa Inggris Kelas X*. It consists of six chapters including reading, speaking, writing and listening skill. The data is all the question which is started with WH-word and ends with the question mark. The writer also provides a table consisting of four columns consisting of number, chapters, WH-questions, Thinking skills level, and page of questions.

The validity of the research is done by presenting it to an English education lecture who are expert in designing and developing English textbook. The writer asked the lecture to examine the definition of the levels according to the skills and behaviours demonstrated for each level. After examining, the report will determine the validity of this research. The reliability of the research uses inter-rater reliability which is done in two stages:

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**The first stage:** the writer is helped by the second analyst to establish the reliability of the research. The writer and second analyst categorise the questions according to level in Bloom's Taxonomy Revised. The writer then chooses 50 random questions as a sample. The sample will be analysed by both the writer and the second analyst and the frequency of agreement and disagreement between them is calculated. This is the way the writer examines the consistency coefficient between the writer and the second analyst. The writer chooses Holsti's equation to calculate the reliability coefficient (Holsti, 1969):

$$\text{ConsistencyRatio} = \frac{\text{Number of Coincident answers}}{\text{Number of coincident answers} + \text{Number of different answers}} \times 100$$

$$\text{Consistency Ratio} = \frac{35}{30+15} \times 100 = 70\%$$

**The second stage:** In this stage, the writer calculates the agreement coefficient between the findings of two analyses. It is found that the total number of the agreement is 73 out of 100 questions. The percentage can be seen as follows:

Percent of Agreement =

$$\frac{\text{Number of coincident answers}}{\text{number of coincident answers} + \text{Number of different answer}} \times 100$$

$$\text{Percent of Agreement} = \frac{73}{73 + 27} \times 100$$

$$\text{Percent of Agreement} = \frac{73}{100} \times 100 = 73\%$$

According to the findings above, the agreement of the coefficient is 73%, which is acceptable. The reliability is high in relation to the categorization of the questions according to Bloom's taxonomy revised.

## RESEARCH FINDING AND DISCUSSION

The results are obtained by studying and learning all the contents of the textbook *Belajar Bahasa Inggris Kelas X* and listing all the WH-questions which are appeared on each page. The analysis of the book was begun from page 8 to

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page 198. The writer collected 144 questions and used the research tool to analyse the research questions and calculated its percentage from each chapter. In this stage, the writer presents the general finding of the questions based on its thinking skills level as can be seen in table 1. The result can be seen from the table below.

*Table 1. Frequencies and Percentage of the WH-Questions in the Six Levels of the Cognitive Domain in Bloom's Taxonomy in each chapter in English Textbook*

Level of Questions	Number of frequency
Remembering	72
Understanding	35
Applying	2
Analysing	26
Evaluating	10
Creating	-
Total	145

After analysing the data, it was found that there are fifteen chapters in the textbook *Bahasa Inggris Kelas X*. The amount of total questions as well as the cognitive levels in each chapter are varied. As could be seen from the table above, it is only chapter 4 has the amount of questions from all of the chapters. Moreover, the categorization of the questions is in analysing which is regarded as questions in higher order thinking. These total of frequency of questions from each chapter were then sum up in order to find the most dominant cognitive skills. It can be seen as follows:

*Table 2. Frequencies and Percentages of the WH-Questions in the six Levels of the cognitive domain in Bloom's Taxonomy in English Textbook*

Level of Question	Frequencies	Percentage
Remembering	72	49.65%
Understanding	35	24.13%
Analysing	26	1.39%
Evaluating	10	17.94%

Applying	2	6.89%
Creating	-	0%
Total	145	100%

The table showed that questions in the textbook *Bahasa Inggris Kelas X* dominantly apply lower thinking skills. The answer to the questions are mostly salient where learners could easily find in the previous text, dialogue, or conversation. On the other hand, question which can deeper understanding is not found in the textbook. It is assumed that the authors of the book tries to develop learners' understanding step by step. In other words, questions with higher thinking skills might be found in twelve grade as the highest grade in secondary level. Explanation of each thinking skills are as follows:

### **1. Remembering**

The most frequent thinking skill in the textbook *Bahasa Inggris Kelas X* is remembering level. It appeared 72 times in the WH-questions. The questions posed response which could easily found in the text. Questions such as, "What are Bayu, Riri, and Santi discussing? Who already have the plan for the weekend? What are their plans? Who doesn't have the plan? What does s/he finally decide to do on weekend? What are dominantly found in the textbook. The answers to these questions can vividly be found in the previous text. It implies that the authors of the book focus more on memorisation rather than critical thinking.

### **2. Understanding**

Understanding means that the ability to grasp the meaning. In the textbook *Bahasa Inggris Kelas X* it was found that understanding comes as the second dominant skills. Questions in understanding level need learners to understand certain condition in order to be able to answer the questions. For examples: "When do we congratulate people? When do people use those expressions? What is the announcement about? In these case, learners only need to understand the meaning of congratulation in an expression. As well as the question "How long does the term last?" Even though it is not explicitly answered but learners got to count the duration of the exam or test.

### 3. Analysing

Analysing is categorised as the most dominant skill in higher order thinking. The author of the textbook provided 26 questions which need learners' capability to break down the concepts and figure out the relation among them. This result shows that the authors put consideration in designing questions. They gradually develop learners' cognitive skills through breaking down the concepts. For instance, what is the most dominant tense used in this text? This question shows that learners need to have the concept of text type and grammar in order to be able to answer the question correctly.

### 4. Evaluating

Evaluating questions emerges ten times in all the chapters of the book. Questions in evaluation permit learners to explore their understanding about certain topic being learned. It allows various acceptable answers which is beneficial for their cognitive development as well as appreciation towards others' point of view. The examples of evaluating questions are as follow:

- a. What do the expressions mean?
- b. What do you think is the most interesting scene in Tanjung Puting National Park?
- c. When do you think is the best time to see Taj Mahal?
- d. Why do think so?

### 5. Applying

Questions in applying is the least from all lower thinking skills. It emerges two times in the textbook *Bahasa Inggris Kelas X*. It shows that questions are focused more on remembering and understanding instead of applying question. It is assumed that it is better for learners to practice the knowledge directly in real situation so the knowledge is easily understood.

To simplify, the range of the first and the second dominant level is significantly different. The researcher presumes that the author considers remembering skill is more important than understanding. Moreover, the author of the book might assume that remembering skills enables the students to understand the material or knowledge. The third dominant level is analysing level rather than



applying level. It shows that the authors of the book only concern on two levels in the lower level of thinking skills. The same case also happens in higher order thinking skills. The author of the book mostly creates WH-questions on analysing and evaluating skills. The highlight of this finding that creating level has no frequency at all. It is known that the purpose of curriculum 2013 is to develop students' creativity. In contrast, the book which is issued by the government does not reflect the purpose of the curriculum. Supposedly, the questions should be created to enhance students' creativity. The writer assumes that theoretically the name of the curriculum is changed but practically it is still the same as the previous curriculum.

The result shows that the authors of the book put concern mostly on lower order thinking skills especially remembering and understanding. This implies that the author still relies on the old English curriculum which focuses on grammar and vocabulary. The result indicates that the thinking level is low. The WH-questions mostly in the lower level of thinking skills. Higher order thinking skills might be improved on the next grade.

## **CONCLUSION AND SUGGESTION**

The researcher comes up to the conclusion that, the book which is issued by the government tries to develop learners' higher thinking skills. However, the content of the book especially the WH-questions mostly focuses on developing students lower thinking skills: remembering and understanding. Moreover, in creating WH-questions, the author of the textbook emphasis four out of six skills in Bloom taxonomy cognitive domain.

The researcher recommends that questions which develop higher thinking skills should be encouraged and the order of thinking skills should be started from the lowest to the highest thinking skills level. Seminar about formulating questions covering all level of thinking skills is given to the authors thus they get insight in formulating the questions. Writing the textbook is not only the author but also educators who are expert to formulate questions should be involved.

The researcher also recommends the next researcher to conduct the same research topic but in different grade to find out whether there is an improvement

regarding the level of thinking skills. In addition, the textbook *Bahasa Inggris Kelas X* should be analysed regarding the level of questions in relation to affective and psycho-motoric domains. Moreover, other research should be conducted to analyse the level of questions given by the teachers and how extent questions from textbook and teachers impact students' higher thinking skills.

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