

# THE ANALYSIS OF ENGLISH TEST ITEMS BASED ON REVISED BLOOM'S TAXONOMY

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## Abstract

The objectives of this study were to reveal the types of English test items categorized in revised Bloom's taxonomy and to know the presentation of applying revised Bloom's taxonomy in the English test. This study applied a qualitative descriptive method to meet the objectives of the study. The English test was documented after getting permission from the English teacher of SMPN 1 Kefamenanu. Then, the English test items were analyzed based on revised Bloom's cognitive taxonomy. There were six levels of revised Bloom's cognitive taxonomy namely remembering level, understanding level, applying level, analyzing level, evaluating level, and creating level. The findings showed that there were four out of six levels of revised Bloom's cognitive taxonomy in that English test. The test had 26 items (52%) for remembering level, 12 items (24%) for understanding level, 5 items (10%) for applying level, and 7 items or 14% for analyzing level. However, there were no items categorized in evaluating level and creating level.

**Keywords: Test Items, Revised Bloom's Taxonomy**

## INTRODUCTION

A test can be defined as a method to measure someone's ability (Bachman, 1990 & Brown, 2004). When a person wants to know how far his or her ability, he/she can use a test. In learning, teachers use the test to measure students' abilities. Why did they do the test every time? Kamlasi & Sahan (2018) stated that "test is important for teachers in order to measure whether the objectives of language teaching and learning have been achieved or not". So, the test is important for teachers to know the achievement of their learning objectives. Furthermore, students need to know the level of their ability.

Constructing good test items is hard work, and creativity is necessary. The good quality of test items will affect learning objectives, so do the students' ability. There are technical considerations in preparing good test items. Some considerations are employing an appropriate item format and the level of vocabulary, determining the optimal number of response alternatives, and permitting negatively worded items (e.g., "which is not..."). So, the teacher must attend to them with care and skill (Osterlind, 2002).

The current curriculum (Kurikulum 2013) is characterized by three aspects of assessment. The aspects are cognitive, affective, and psychomotor. The cognitive aspect is about students' knowledge, the affective aspect is about students' emotion, and the psychomotor aspect includes physical movement, coordination, and use of the motor-skill areas. Education is a tool or a subject that produces a child to be a person that gives a contribution to other people who need something that they cannot do. So, teachers are working hard to prepare good learning objectives and do everything in producing good quality of students.

In an educational context, Bloom's taxonomy is considered as a standardized

categorization of learning objectives. It is a classification or degree in a level learning process. Bloom's taxonomy has three major parts such as the cognitive, affective, and psychomotor domains (Bloom *et al.*, 1956). The aim of the cognitive domain is to structure curriculum learning objectives and to assess students learning and learning activities. Then, revised Bloom's cognitive taxonomy is represented by six different domain levels. The domain levels are remembering level, understanding level, applying level, analyzing level, evaluating level, and creating level.

The studies on the revised Bloom's taxonomy had been conducted by some scholars. Zareian, *et al.* (2015) stated that "the textbooks fail to engage learners in the questions requiring higher levels of cognitive learning objectives". The result showed that between the two ESP course books that they were analyzed, most of the questions were aligned with remembering, understanding, and applying as the three lower-level categories, while analyzing, evaluating, and creating as the higher-level categories constituted the lowest frequency in the two textbooks. Another study was conducted by Gezer, *et al.* (2014). They found that the questions were represented at the highest level in the factual knowledge and the conceptual knowledge sub-dimensions of the knowledge dimension, while they were represented at the lowest level in the procedural knowledge sub-dimension of the knowledge dimension. It was revealed that no exam questions were prepared regarding the metacognitive knowledge sub-dimension. Kamlasi&Sahan (2018) analyzed the test items based on the revised taxonomy. The findings showed that the remembering level of taxonomy had 22 items or 44%. The understanding taxonomy presented 2 items or 4%. The applying taxonomy had 21 items or 42%. The analyzing taxonomy presented 5 items or 10%. Meanwhile, there was no item found in both evaluating and creating taxonomies. Auliyana (2019) also analyzed an English test and the results shown that the understanding level had 21 items (46.7%), the remembering level obtained 9 items (20%), and the applying level had 3 items (6.7%).

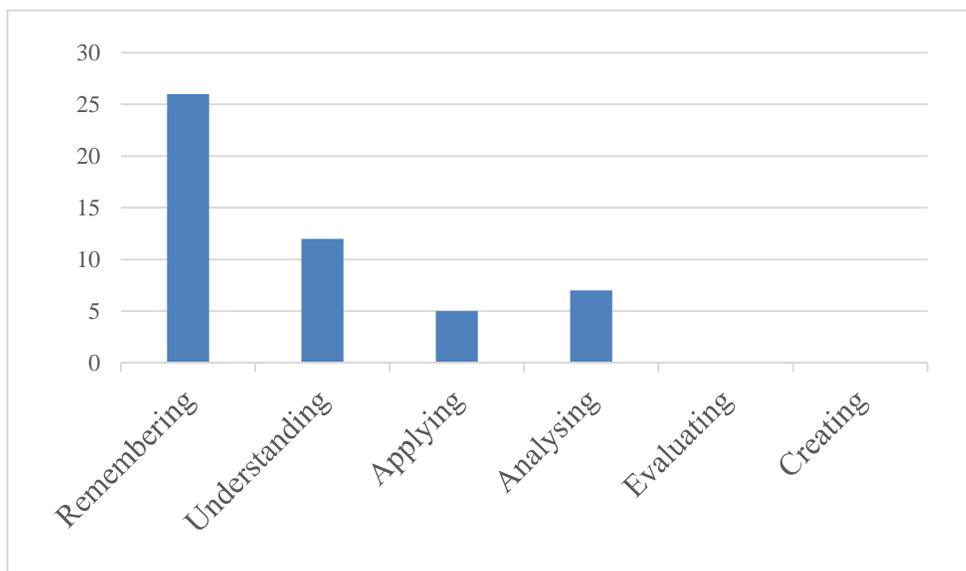
The previous studies showed different results regarding the domain level contain in the test. The domain levels are the degree to plan the learning objectives and assess students' learning in the classroom. Seeing the importance of a test, the researcher analyzed test items in an English test constructed by an English teacher in SMPN 1 Kefamenanu. Therefore, this study aimed at revealing the types of revised Bloom's taxonomy and the percentage of each domain level.

## **METHOD**

This study applied a descriptive qualitative design. According to Bogan and Taylor (1975), the qualitative design is a research procedure of descriptive data in the form of the written word and oral of people. This study analyzed the English items test based on revised Bloom's taxonomy used by the teacher to assess students' knowledge. The source of the data was an English test constructed by an EFL teacher of SMPN1 Kefamenanu. The test was multiple-choice questions, and it was used to assess the students' learning at the end of a semester. It consisted of 50 numbers of questions. Before analyzing the test, the EFL teacher had permitted the researcher to analyze the test. Then, the researcher did some techniques to analyze the data. First, the researcher gave codes for each item test. Next, the researcher categorized the verbs contained in the questions by using revised Bloom's taxonomy cognitive level. Third, the researcher used classification to group the data. Last, the researcher analyzed and discussed the results as the findings of the research.

## FINDINGS AND DISCUSSION

In this section, the researcher discusses findings based on the result of the test item classification. The test aimed at measuring eighth-grade students' achievement in learning English. It was used for the final semester test in the academic year of 2018/2019. The test contained 50 items and was in the form of multiple-choice. The findings are presented next:



**Figure 1.**the Presentages of Bloom's Cognitive Taxonomy

The findings showed four out of six levels of revised Bloom's cognitive level categorized in the test items. The four levels were remembering level, understanding level, applying level, and analyzing level. For more specific, the test had 26 items (52%) categorized in remembering level, 12 items (24%) categorized in understanding level, 5 items (10%) categorized in applying level, and 7 items (14%) categorized in analyzing level. Meanwhile, there was no item categorized in evaluating and creating levels. In the test, remembering and understanding levels were more dominant compare to other levels.

### Remembering Level

The remembering level is retrieving relevant knowledge from long-term memory. Anderson *et al.* (2001) stated that "to assess students' learning in this simplest proses category, the student is given a recognition or recall task under condition very similar to those in which he or she learned the material". The verbs of this level are: choose, define, find, how, label, list, match, name, omit, recall, relate, select, show, spell, tell, what, when, where, which, who, and how, and why. Therefore, there were 26 items (52%) of English test items that were categorized in this level. For example, item number 3 *What is the synonym of the word "wish"? It is .....* This question demanded the students recalled the synonym of the word *wish* that they had memorized. Item number 4 *What kind of text is it? It is....* This question demanded the students recalled the kind of text that they had learned. Item number 2 *Who is the sender of the card?* This question demanded the students recognized the sender of the card. The next question was item number 11 *There are some traditional transportation. What is the antonym word of "traditional"? It is....* This question demanded the students to find the antonym of the word *traditional*. Item number 37 *Who is Anas? Anas is....* This question type demanded the students

recalled the information that they had learned about Anas. And item number 46 *Where can you find this notice?* It demanded the students recalled the place of that notice. Therefore, these questions were rated as remembering level of revised Bloom's cognitive taxonomy.

### **Understanding Level**

The understanding level is to construct meaning from instructional messages, including oral, written, and graphic communication. The verbs of this level are: classify, compare, contrast, demonstrate, explain, extend, illustrate, infer, interpret, outline, relate, rephrase, show, summarize, translate. In this English test, there were 12 items (24%) of the test that were categorized in this level. The examples were item number 15 *What is the main idea of the last paragraph (paragraph 6)?* This question demanded the students to infer the main idea of a paragraph. Item number 7 *The dialogue above shows the expression of?* This question demanded the students understood the dialogue and shown what the expression was.

### **Applying Level**

The applying level involves using procedures to perform exercises or solve problems. It is closely linked with procedural knowledge. The verbs used in this applying level are: build, choose, construct, develop, experiment with, identify, interview, make use of, model, organize, plan, select, solve, and utilize. In this level, there were 5 items (10%) of questions. Some examples of those questions were item number 6 *What is the best suggestion for the dialogue above?* This question demanded the students to solve the problem by suggesting the dialogue. Item number 48 *The writer believes that love is in the heart of every person. This statement is reflected in the lyrics...* This question demanded the students to identify the lyrics of that song.

### **Analyzing Level**

The analyzing level involves breaking material into its constituent parts and determining how the parts are related to one another and an overall structure. It demands the students to assume, categorize, classify, compare, conclude, contrast, discover, dissect, distinguish, divide, examine, function, inference, inspect, list, motive, relationships, simplify, survey, take part in, test for, and theme. In the English test, there were 7 items (14%) categorized at this level. Items number 38-41 asked the students to fill in the blanks. This type of question demanded the students analyzed the suitable word that was a match with the sentence.

### **Evaluating Level**

The evaluating level is defined as making judgments based on criteria and standards. The criteria most often used are quality, effectiveness, efficiency, and consistency. However, no items were found at this level.

### **Creating Level**

The creating level is when the students putting elements together to form a coherent or functional whole. Objectives are classified as having students make a new product by mentally reorganizing some elements or parts into a pattern or structure not clearly present before. However, there were no items in the English test that were categorized as creating level.

## **CONCLUSION**

There were four of six levels of revised Bloom's cognitive taxonomy found in the English test items of SMPN 1 Kefamenanuin the academic year of 2018/2019. The levels were

remembering level with the total number of 26 items (52%). Then, understanding level with the total number of 12 items (24%). Next, applying level with the total number of 5 items (10%). And, the analyzing level with the total number of 7 items (14%). Meanwhile, there were no test items categorized in evaluating and creating levels. Out of the four levels of Bloom's cognitive taxonomy categorized in the test items, the remembering level was the most dominant.

Based on the result, the teacher is suggested to use the analyzing, evaluating, and creating levels as the higher-level of Bloom's cognitive taxonomy in language teaching and learning process. Furthermore, it will be better if the teacher applies the three higher-levels in the English test to measure students' abilities.

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