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Analysis of Teachers-Construct Reading Comprehension Revised Based on Taxonomy Bloom of English Textbook for Junior High School

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Abstract

The purpose of this study was to examine the six upper levels of the cognitive domain of Bloom's revised taxonomy used in the textbook titled Bahasa Inggris SMP/MTS Grade 7 Second Semester, namely memory level (C1), comprehension level (C2), Applied Level (C3), Analytical Level (C4), Assessment Level (C5) and Creative Level (C6). Using descriptive qualitative methods and content analysis, this study examined questions in reading comprehension tasks to determine the extent to which reading comprehension questions emphasized higher thinking skills (HOTS) and lower thinking skills (LOTS). The focus of this study is the analysis of the 7th second semester of the Bahasa Inggris SMP/MTS class. The researchers collected and listed questions on the reading comprehension task, then calculated the percentage and frequency of each cognitive level in each individual book chapter and in all four book chapters.

Keywords: Teachers-Construct reading comprehension, Taxonomy Bloom Revised.

Abstrak

Tujuan dari penelitian ini adalah untuk mengetahui enam tingkat domain kognitif Taksonomi Bloom revisi yang digunakan dalam buku teks Bahasa Inggris SMP/MTS kelas 7 semester kedua, yaitu tingkat mengingat (C1), tingkat pemahaman (C2), tingkat menerapkan (C3), level analisis (C4), level evaluasi (C5), dan level penciptaan (C6). Dengan menggunakan metode deskriptif kualitatif dan analisis isi, penelitian ini menguji soal-soal dalam tugas membaca pemahaman hanya untuk menentukan sejauh mana perluasan soal-soal pemahaman bacaan yang menekankan pada keterampilan berpikir tingkat tinggi (HOTS) dan keterampilan berpikir tingkat rendah (LOTS). Penelitian ini difokuskan pada analisis Bahasa Inggris SMP/MTS kelas 7 semester dua. Peneliti mengumpulkan dan membuat daftar pertanyaan dalam tugas membaca pemahaman dan kemudian menghitung persentase dan frekuensi setiap tingkat kognisi di setiap bab buku terpisah dan di keempat bab buku gabungan.

Kata Kunci: Guru-membangun pemahaman bacaan, Taksonomi Bloom Revisi.

1. Introduction

Textbooks play an important role in education and learning. Some teachers use textbooks as additional material, but textbooks help teachers teach the learning process. It helps teachers develop teaching materials and facilitates student learning. You can also

deepen the understanding of the students in the classroom. Almost all learning processes are supported by textbooks. Textbooks usually provide appropriate ideas, readings, exercises, and activities on the topic (Jobrack, 2012). It is one of the key components of a language program. In some situations, it serves as the basis for learners' language input to receive and practice language in the classroom (Richards, 2010). In addition, Depdiknas (2004) defines textbooks as a collection of materials systematically edited by the author to follow the current curriculum. In other words, a textbook is a set of educational and learning content that includes lessons, skills, and related or ongoing topics written or organized by the author to follow the current curriculum that meets the needs of teachers and students. is. It is an instruction.

Studies show that new textbooks from some publishers improve students primarily with HOTS questions (Assaly & Smadi, 2015; Damanik & Zainil, 2019; Febrina et al., 2019). HOTS questions are more commonly used in assessment forms, but LOTS questions will continue to be used in textbooks as both levels have a positive impact on student skills. Hutchinson and Tores (1994) believe that textbooks are an almost universal element of ELT teaching. Meanwhile, Sheldon (1988) states that textbooks symbolize "the visible spirit of any ELT program" and bring great benefits to both students and teachers. In his view, students are more likely to rely on published material (textbooks) than on their own copies and are considered less effective. Therefore, the effectiveness of using a particular textbook depends not only on the approach, method and content promoted, but also on the learner's expectations and the general view of the textbook in the learning culture.

In addition, the use of textbooks is considered useful because most goals have already been prepared in a series of exercises based on student needs (Cunningsworth, 1995). A good textbook should be a useful resource as a teacher, a course designer, or a student learning English (Gak, 2011). Textbooks are very helpful to teachers when planning lessons. Many teachers use textbooks as a source of activity for all students, so you need to make more choices when choosing a student's textbook. According to Assaly and Igbaria (2014), textbooks provide a framework for activities to develop students' thinking and are an important resource covering the activities. It not only provides knowledge and information, but also promotes and stimulates higher thinking processes.

The Ministry of Education and Culture argued that textbooks are worth using in the context of education and learning. This has made textbooks a primary support for teachers in communicating the learning process. To meet the needs of textbooks for students, the government distributes textbooks to all provinces of Indonesia. These books were created according to the 2013 curriculum and published by the Ministry of Education, Culture, Sports, Science and Technology. They were created in all subjects, including English subjects. There are some criteria that authors should consider when writing a textbook. Usefulness for students and teachers, eye-catching accuracy and format. Textbook authors should also consider LOTS and other criteria related to HOTS dealing with memory, comprehension, application, and analytical skills to evaluate and develop textbook activities to elevate students. Issue LOTS and HOT.

Saville (1982) points out that textbook content analysis is objective and reliable. The analysis consists of a limited number of questions that require students to use LOTS

and HOTS, especially in reading comprehension tests. Reading is one of the four English skills that language learners should acquire, so the author chooses and examines this skill. Reading allows students as language learners to recognize the meaning of words and extract information from the text (Schultz, 1982). This skill is necessary for students as it can enrich and update their knowledge. Reading tasks can be used in many textbooks for students. There are different types of questions that take into account the different cognitive levels of the student. Researchers investigated the extent to which the six higher levels of the revised Bloom classification, namely the levels of memory, comprehension, application, analysis, evaluation, and creation, apply to textbooks. In addition, researchers can use this textbook to provide English teachers with positive suggestions for choosing the right textbook, and some good textbooks for textbook publishers to develop the right textbook for students. The analysis was then a consideration. Due to the importance of using textbooks, researchers began to analyze one of the elementary school textbooks.

2. Literature Review

2.1 Taxonomy Bloom Revised

Bloom's classification was developed in 1956 under the guidance of a PhD in educational psychologist. Born in Pennsylvania, Benjamin Bloom received his PhD. He was educated at the University of Chicago in 1942. According to Pratiwi (2014), classification refers to a hierarchy of classifications based on basic principles or rules. Bloom's classification is a classification system for cognitive reasoning skills developed by Bloom. It has had a major impact on education over the last 50 years (Krathwohl, 2002). In the 1970s, the Bloom's classification method was used as a goal-based assessment tool to develop models for measuring low-level and high-level skills (Marzano and Kendall, 2007). The 1980s were a time when the emphasis was on communicating higher ideas, and the validity of Bloom's classification was considered a revision.

In May 1984, the Director and Curriculum Development Association (ASCD) recognized the problem of poor student performance with high levels of brain teaser (Marzano & Kendall, 2007). Unfortunately, working with the club did not revise the Bloom classification. Then Anderson, Creswall, and some colleagues published a revised version of Bloom's classification in 2001. The result of the revision is called Bloom's revised taxonomy. The revised classification adds a two-dimensional framework, the cognitive process dimension and the knowledge dimension, to the original classification. The cognitive aspect is very similar to Bloom's original classification. There are few major changes. One of the most important changes is the use of verbs that describe actions (Stanley & Moore, 2013). Another change is the assessment (C5), which is the position of the cognitive level before creation (C6).

There are two revisions (Anderson & Krathwohl, 2001): Basically, the six categories of Bloom have changed from nouns to verbs. Anderson and Krathwohl (2001) define Bloom's new classification as follows:

• Memory: Acquires, identifies, and acquires relevant knowledge from long-term memory.
• Understanding: Build meaning from verbal, written, and graphic information through explanations, illustrations, classifications, summaries, inferences, comparisons, and explanations.

• Apply: Execute or use a method by executing or implementing the method.
• Analysis: Breaks down materials into their components and identifies, distinguishes, organizes, and classifies how these parts relate to each other and to the overall structure or purpose.
• Evaluation: Criteria and criteria-based evaluation by inspection and criticism.
• Create: Combines elements into a consistent or functional whole. Reorganize elements into new patterns or structures by generating, planning, or creating. From the cognitive part of Bloom's revised classification above, the three higher levels are called Higher Thinking Skills (HOTS). Students using HOTS get new information from the text, correlate and rearrange it, and then extend that information to achieve specific goals. According to Lopez and Whittington (2001), HOTS receives new information and information stored in memory, and uses that information to achieve goals and find possible answers in confused situations. Occurs when linking and / or relocating and expanding.

2.2 Reading Comprehension

Reading comprehension is the process of fully understanding the meaning of a text. Our background knowledge also plays an important role in reading. Millrood (2011) discovered that reading is a process of cognitive and visual activity aimed at extracting meaning from written text and processing information using existing experience. Reading comprehension involves not only reading the written text, but also the cognitive and metacognitive processes for retrieving the target message from the text. It is not only understanding the words on the page, but also understanding the concepts and references that occur while reading. Reading is one of the important activities in trying to learn a particular language. Richard and Renandia (2002: 273) state that reading is particularly focused in many second and / or foreign language learning situations. In other words, reading is an important activity as it allows people to find information from different texts, have fun, get a job, and engage in several research objectives. Reading is a language activity, as language is a means of communication, and communication involves both receiving and expressing ideas, and the act of reading is not completed until understanding is done.

Reading comprehension is the ability to understand what is read, seek understanding, and interpret what has been studied. In the context of school, reading comprehension can mean research efforts to find yet unknown answers to what is read, especially in the context of communication between students and teachers when dealing with learning activities. In his book, Mayer (2003) argues that reading comprehension is "a technique for improving student success in deriving useful knowledge from understanding." In addition, reading comprehension is a new skill for learning to understand text from both a content and context perspective until the learner or reader understands all the details and ideas of the content that led to the understanding. Miller (2010) argued that reading comprehension is the ability to understand the meaning of all kinds of written material. That's the reason for reading and it's an important element of all content learning. The main purpose of reading comprehension is to understand what is being read.

Anderson (1984) states that reading comprehension is the process of using prior information, especially language skills, to significantly develop the author's message. It

means that reading comprehension is the process of understanding and negotiation between the reader and what is written. All of the above definitions of reading comprehension can be inferred to understand what is written in textbooks and other sources. Therefore, the goal is to have a comprehensive understanding of what is explained in the text, not to determine the meaning of individual words or phrases.

3. Method

Researchers use qualitative methods. This qualitative and descriptive study is a research approach that facilitates the study of phenomena in that context using a variety of data sources. This allows the problem to be investigated with different lenses rather than one lens, revealing and understanding multiple aspects of the phenomenon (Baxter & Jack2008).

The data from this study were analyzed using descriptive studies. Content analysis is also used to identify the data. Content analysis is a method that can be applied to a variety of text sources (Rose et al., 2014). Researchers used Bloom's revised taxonomy-based descriptive study to analyze Bajasine Gris's second semester SMP / MTS7 questions. Brown and Rodgers (2002) pointed out that some studies used descriptive methods of numerically describing events and situations. They applied content analysis to identify problems with reading comprehension tasks. Content analysis is a simple research method for analyzing books and documents. According to Ross et al. (2015) Content analysis is a flexible research method that can be applied to a variety of text sources. It categorizes sections of text based on arrangements and systematic schemes that can elicit inference. It can be used with either qualitative or quantitative data. Cole (1988) states that content analysis is a way to analyze written, verbal, or visual communication messages in order to perform a detailed analysis of an object.

In addition, it is used to identify interpretations of text, images, and other representations (Krippendorff, 1980). Researchers have adopted a Platiwi (2014) content analysis checklist based on Bloom's revised classification. The data is from Sudjana (2002, p.43). Since the main data source for this study is the second semester SMP / MTS Grade 7 English textbook BAHASA ING GRIS, researchers focused on content analysis on all questions related to reading comprehension tasks. The analysis was performed individually by each researcher to prove the reliability of the data. Reliability among evaluators is such that information is collected in a consistent manner (Keyton, et al., 2004).

The data are qualitatively explained by descriptive studies. Data analysis requires researchers to reduce irrelevant data, select relevant data that occurs when reading the data, and outline the goals of the research question (Creswell, 2017). For the analysis of the data, we used the content analysis checklist adopted from Bloom's revised classification method (Febriyani et al., 2020). Each analysis is displayed as a percentage indicating the number of LOTS and HOTS displayed. Calculate the percentage using the following formula: $P = n / N \times 100$ P = Percentage n = Number of questions classified as HOTS or LOTS N = Total number of items.

4. Result and Discussion

The results of this study are shown in Table 1 which shows the level of the frequency and the percentage in the six levels of the cognitive dimensions in each of the four chapters of the textbook.

Table 1. Frequencies and percentages of the reading activities in the six level of cognitive dimensions

Chapter	Level Cognitive Dimensions						Total
	C1	C2	C3	C4	C5	C6	
I	4 44.44%	1 11.11%	1 11.11%	0 0%	2 22.22%	1 11.11%	9
II	2 18.18%	3 27.27%	2 18.18%	1 9.09%	2 18.18%	1 9.09%	11
III	3 25%	3 25%	2 16.66%	1 8.33%	2 16.66%	1 8.33%	12
IV	5 38.46%	3 23.07%	1 7.69%	1 7.69%	2 15.38%	1 7.69%	13
Total	14	10	6	3	8	4	45
Percentage	31,11%	22,22%	13.33%	6.66%	17.77%	8.88%	

After categorizing reading comprehension questions in every chapter based on taxonomy bloom. In the chapter I, remembering level (C1) was 4 questions and the percentage 44.44%, understanding level (C2) was 1 and the percentage 11.11%, applying level (C3) was 1 and the percentage 11.11%, analyzing level (4) was 0 and the percentage 0%, evaluating level (C5) was 2 and the percentage 22.22%, creating level (C6) was 1 and the percentage 11.11%. In the chapter II, remembering level (C1) was 2 questions and the percentage 18.18%, understanding level (C2) was 3 and the percentage 27.27%, applying level (C3) was 2 and the percentage 18.18%, analyzing level (4) was 1 and the percentage 9.09%, evaluating level (C5) was 2 and the percentage 18.18%, creating level (C6) was 1 and the percentage 9.09%. In the chapter III, remembering level (C1) was 3 questions and the percentage 25%, understanding level (C2) was 3 and the percentage 25%, applying level (C3) was 2 and the percentage 16.66%, analyzing level (C4) was 1 and the percentage 8.33%, evaluating level (C5) was 2 and the percentage 16.66%, creating level (C6) was 1 and the percentage 8.33%. In the chapter IV, remembering level (C1) was 5 questions and the percentage 38.46%, understanding level (C2) was 3 and the percentage 23.07%, applying level (C3) was 1 and the percentage 7.69%, analyzing level (4) was 1 and the percentage 7.69%, evaluating level (C5) was 2 and the percentage 15.38%, creating level (C6) was 1 and the percentage 7.69%. From the frequencies of cognitive domain above, it can be concluded that this book provides enough HOTS questions for the students. The HOTS percentages are described in the table below;

Table 2. The percentages of cognitive dimension distribution in the BAHASA INGGRIS for SMP/MTS grade 7th second semester textbook

No.	Cognitive Dimension Level		Frequencies	Percentage	
1.	LOTS	Remembering	14	31.11%	66.66%
2.		Understanding	10	22.22%	
3.		Applying	6	13.33%	
4.	HOTS	Analyzing	3	6.66%	33.31%
5.		Evaluating	8	17.77%	
6.		Creating	4	8.88%	
	Total			100%	100%

The table above shows that the English textbook consist of LOTS questions was 30 of 45 questions. The highest level applied was remembering level (C1) which reached 31.11%. Then followed by understanding level (C2), evaluating level (C5) 17.77%, applying level (C3) 13.33%, creating level (C6) 8.88%, and analyzing level (C4) 6.66%.

Discussion

According to data analysis of the SMP/MTS Grade 7 2nd semester textbook BAHASA INGGRIS, in the cognitive domain of Bloom's revised taxonomy used in the textbook, the lower order thinking skills (LOTS) level is more dominant than the HOTS level. It can be seen from the analysis result table that 30 of the 45 reading comprehension questions were rated as much level. The percentage is 66.66% of 100%. Furthermore, the researchers found only 15 questions, or 33.31% of the questions were classified as HOTS. Among the three levels of the LOTS cognitive domain, the memory level (C1) is the most important level, with a high frequency of occurrence, accounting for 31.11%. In the field of cognitive HOTS, the most important level is the rating level (C5), which occurs more frequently, accounting for 17.77%. This means that the textbook encourages students to judge, compare, or evaluate some of the ideas in the text about reading comprehension. As you can see from the percentages above, the authors of this textbook have asked enough and popular questions and provided some material that will engage and engage learners to make the most of all their mental processes. The number of questions requiring high cognitive coverage across all chapters of the textbook means that the authors take this into account when encouraging learners to use LOTS and HOTS. This means that the book asks students to think critically and prepares to solve some problems based on the ideas of the text. A good textbook should focus more on LOTS and HOTS. Freahat and Smadi (2014) investigated that reading secondary school textbooks contains higher-level thinking problems than reading Jordan University textbooks.

This result suggests that the textbook contains questions that promote students' higher thinking skills. These questions develop students' ability to distinguish, examine, or analyze problems from a given text. According to Brookhart (2010), analytical-level questions require (or prompt) students to find material, ask questions, or ask questions. The answer requires a reasonable way to differentiate or organize the sections. This means

that analysis is the ability to break down materials into components to understand organizational structure. Analysis at this level includes identifying components, analyzing relationships between components, and identifying relevant organizational principles. This is because the author's original intention is to raise the level of thinking to the level of evaluation. This includes the ability to judge the value of material for a specific purpose based on specific criteria established by the student or teacher. manner. These criteria can be internal or external criteria related to the target. The assessment category contains all previous thought processes and is therefore the highest level in the thought process hierarchy.

Results draw attention to detail, deepen understanding, and expand problem-solving skills. According to Brookhart (2010), to create means to reorganize an existing to create a new one. Current students have problems or problems that need to be solved, including creating multiple solutions, planning steps to achieve a specific goal, or creating new solutions. This result of this study supports previous studies by some researchers in several countries, such as Igbaria (2013) Freahat and Smadi (2014) Zaiturrahmi (2017) and Tangsakul (2017). Their findings showed that the textbooks they analyzed focused on a number of issues. That's because their target focus is somewhat similar to the textbook they analyzed. The results of these studies also showed that this textbook "SMP / MTS Grade 7 BAHASAING GRIS" is the prescribed curriculum in Indonesia. This book satisfies the requirements for an ideal book. Reading comprehension questions primarily emphasize LOTS and HOTS, which encourage students to engage in analytical and critical thinking.

5. Conclusion

Based on the findings, The questions in the reading comprehension tasks include lower order thinking skills (LOTS) and high order thinking skills (HOTS). We found that percentages of LOTS questions are more dominant than HOTS questions. It accounts for 66.66 percent of the total number of questions. Besides, 33.31% percent of the questions in the HOTS category. It means that the writer of textbook expects the students of seventh grade second semester can expert in remembering level (1), understanding level (2) and applying level (3) more dominant than analyzing level (4), evaluating level (5), and creating level (6).

We hope analyzing teachers-construct reading comprehension based on taxonomy bloom revised in the textbook grade 7th second semester will be better for future. The English textbook for reading comprehension should have more HOTS and LOTS.

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