

A Content Analysis Of Blooms' Revised Cognitive Taxonomy in The Textbook Entitled "*Grow With English*" for The Sixth Grade of Elementary School

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Abstract: The Objective of this research is to get empirical evidence of the distribution of higher order thinking skill based on revised edition of Bloom's taxonomy in English textbook namely *Grow with English* Textbook. In this research, the researcher used content analysis method. In collecting data, the researcher used checklist table to collect qualitative data in form of words which were reading exercises. The researcher employed analysis card as the instrument to analyze the data. The researcher found that each textbook had different distribution of the HOTS. As the focus of this research, the HOTS consists of three skills namely; the create skill or C4, the evaluate skill or C5, and the create skill or C6. The results showed that the analyze skill in *Grow with English* textbook obtained 8,55%, then the evaluate skill obtained 8,17% and the create skill only obtained 1,85%. Finally, it can be said that the skills of the HOTS in the textbook provided in which the analyze skill or C4, the evaluate skill or C5, and the create skill or C6 were different and unequal to each other related to the distribution.

Keywords: Higher order thinking skill, Reading exercise, English Textbooks

INTRODUCTION

There are many factors that affected in learning English. They are the teachers' qualities, the atmosphere in the classroom, the facilities, the learning process and the textbook (Irwansyah & Azis, 2018). Those factors are related to each other in order to support the goals of teaching and learning. they are also expected to support the outcome in the teaching and learning.

The teaching and learning may not be separated from its important role of teaching material. According to Nurdiani (2014), teaching material is learning material that used to help the students in learning. By using the teaching material, the teaching process will be better, purpose of learning can be easier to be delivered by the teacher, and the students will understand the teaching material that be taught to them. Moreover, Lail (2020). stated that the good quality of learning in terms of teaching and learning English might not be separated from the role of all factors of learning. Sianipar et al. (2020) stated that the reason is they are combined in order to make the teaching and learning process running well and the goals of learning might be achieved by both the teacher and the students.

One of the factors is the textbook. According to Brown (2000), textbooks help the teachers to prepare the lessons. Moreover, Setiabudi (2010) stated that textbook is course book used by teachers and students in order to facilitate the teaching – learning process. As we know that textbook plays an important role in the teaching and learning process. It is very important to choose and evaluate the textbook whether the textbooks are relevant or not. According to Fatimah (2018), because of that, the textbook plays an important role in achieving the goal of the curriculum and the textbook is also required

in order to contribute in developing the creativity in the students' critical thinking. In addition, Kinasih (2014) stated that in terms of its role in learning, it is crucial in teaching and learning process. The students should read the lessons from English textbook first, before they are being taught by teachers. By doing so, they may have an understanding of what material which is going to be taught by teachers (Haerazi et al., 2019).

Related to teaching and learning English, there are four basic learning skills that are discussed. The skills are listening, speaking, reading, and writing. They are discussed in line with the aim in order to improve students' abilities in mastering English (Sianipar et al., 2020). As one of the four basic language skills, reading is considered as the complex skill among those four skills. It is because of many specific abilities that the readers need to do in the reading activity. Furthermore, the reading skill is difficult for Indonesian students who use English as their foreign language even it is also difficult for the students who use English as their mother tongue. It is because in the reading activity, they have to engage their cognitive skill. According to Harmer (1996), reading skill is difficult for people who use English as a mother tongue. It is because reading skill is a lot of complexity. The more students understand what is read, the more they get from reading. Harmer also added that reading is an important activity in life which one can update his/her knowledge, it is an important tool for academic success, and is the most important activity in any language class. It means that reading plays an important role in the activities where the students would gain the knowledge for the academic success. Furthermore, reading skill is a skill where the students may train their knowledge to have cognitive skill. One of the cognitive taxonomies is Bloom's taxonomy.

Bloom's taxonomy is one of the educational materials designed by Benjamin. S. Bloom. According to Musial et. al (2009), taxonomy has had an impact on education over the past 50 years. Therefore, bloom's taxonomy is a useful teaching tool. In this research, the researcher uses the theory of HOTS based on the revised edition of bloom's taxonomy by Krathwhol and Anderson which is divided into three skills, they are analyzing, evaluating, and creating.

The researcher believes that the analysis of HOTS in reading exercises in the textbooks is very important, it is because it can stimulate the students to have critical thinking skills. Therefore, the researcher would like to analyze the distribution of HOTS in the textbook entitled "*Grow with English*"

REVIEW OF RELATED LITERATURE

Previous Related Study

In this research, the researcher would like to provide some researches which are related to this research. First, the research was conducted by Faradina Ilma (2018). The title of her research was *Higher Order Thinking Skill Questions in Reading Exercise*. This research was to get empirical evidence of the distribution of three higher order thinking skills based on the revised edition of Bloom's taxonomy in the questions of reading exercises and analysis of reading exercises in *Bright* textbook in term of type of reading exercises, aim of exercises, presence of examples, and relevancy with 2013 curriculum. The researcher used the content analysis method because the researcher identified specified characteristics of the material in the course book. Furthermore, the

data collected were qualitative data because the data were collected in the form of words, which are the reading questions. The reading exercises in BRIGHT and the analysis card were used as the data. The results of the distribution of higher order thinking only obtained 8 out of 33 questions were analyze level. The result of reading exercises showed that all the type of reading exercises were covered in BRIGHT and the most dominant exercises were short-answer questions.

Second, the research was conducted by Igbaria (2013) .The title of his research was *A Content Analysis of The WH-Questions In The EFL Textbook Of Horizons*. The study attempted to examine the extent in which the WH-questions in the textbook emphasize high-level thinking according to Bloom's taxonomy. He used content analysis to conduct the study. The result showed that 244 questions emphasized levels of cognition representing lower order thinking skills, while only 137 questions emphasized the three higher order thinking skills.

Third, the research was conducted by Ayat Abd A-Qader (2012). the title of his research was *Evaluating the Higher Order Thinking Skills In Reading Exercises Of English For Palestine Grade 8*. The study aimed to evaluate the availability of higher order thinking skills (HOTS) in the reading exercises. He used two tools to collect the needed data, a content analysis card and a structured interview. The following findings showed that the reading exercises concerning the analysis skill got 51.92%, synthesis skill 41.35% and evaluation skill got 6.73%.

Related to those researches, the researcher only focuses on the analysis of the essay reading questions of reading exercises in three English textbooks namely *'Grow with English'* in order to check the distribution of the HOTS in the reading exercise because it could support students in improving students' critical thinking skills in every activity.

The Higher Order Thinking Skill

According to Brookhart (2010), there are three categories about the definition of the higher order thinking skill, they are; 1) transfer, critical thinking, and problem solving. The first category is the higher order thinking skill in terms of transfer. Brookhart believed that the teaching goal behind any of the cognitive taxonomy is equipping the students in order to be able to do transfer. Therefore, the higher order thinking skill is conceived the students to be able to relate their learning to other elements they have learnt before. Many teachers hope that form their job, they may be able to prepare their students to go into the world and be ready to do their own thinking without depending on their teachers. It is because life outside the school is better to give the students the opportunities in applying the knowledge they learnt from the school.

The second category is the higher order thinking skill in terms of critical thinking. Brookhart explained that in this case, in order to be able to think means the students can apply wise judgment or produce reasoned critique. One characteristic of an educated people is that they are reasoning, reflecting, and making decisions on their own. Furthermore, judgment is also important in higher order thinking tasks like judging the credibility of a source.

The third category is the higher order thinking skill in terms of problem solving. Brookhart added that a problem is goal that cannot be met with a memorized solution. It means that lower order thinking skill which forces the students to recall may not help the students in solving the problem. Problem solving is necessary for critical thinking and effective communication. It means

that being able to think, the students can solve the problem with their own solution in their school, work and life.

In addition, Philippot and Graves (2009) highlighted that higher order thinking skill to the forefront of your thinking. In today's world, they are crucial. They also explained that higher order thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and or evaluating. It means that the higher order thinking skill tends to be complex but important in today's world.

To sum up, the higher order thinking skill is the ability to think in the complex process which helpful in transferring the knowledge in real life, thinking critically, and solving the problems. The students who have higher order thinking skill are bale to examine assumptions and values, evaluate evidence, and present the conclusions by themselves.

Bloom's Taxonomy

Bloom's taxonomy is one of the educational materials designed by Benjamin. S. Bloom. According to Musial et. al (2009), taxonomy has had an impact on education over the past 50 years. Therefore, bloom's taxonomy is a useful teaching tool. Furthermore, Anderson a former student of Bloom and Krathwol with a group of colleagues published a revision of the Bloom handbook in 2001 and made some changes (Brookhart, 2010). The cognitive process dimension looks the same with the original Bloom's taxonomy except the order of the last two categories that is reversed rearranged. The last two orders are reversed from synthesis and evaluation into evaluate and create. Their meanings are the same but the order is slightly rearranged. Their differences of the original taxonomy and revised taxonomy can be seen as:

Table 1

The Difference between Original Taxonomy and Revised Taxonomy (Bloom (1956) in Brookhart, 2010)

Original Taxonomy	Revised Taxonomy
Knowledge	Remember – retrieved relevant knowledge from long – term memory (recognize, recall)
Comprehension	Understand – determine the meaning of instructional messages (interpret, classify, summarize, infer, compare)
Application	Apply – use a procedure in a given situation (execute, implement)
Analysis	Analyze – break material into parts and see how they related (differentiate, organize, attribute)
Synthesis	Evaluate – make judgments based on criteria and standards (check, critique)
Evaluation	Create – put elements together to form coherent whole or make an original product (generate, produce)

It shows the meanings of every domain are the same between the original taxonomy and revised taxonomy. The differences of them are only on the word used and the rearrangement of the last two domains. They are synthesis and evaluation which change into evaluate and create. Those two skills are arranged because it is said that the students are needed to be able to critique and check an idea before they produce and generate some results.

Higher order thinking skill consists of the three top ends of Bloom's taxonomy namely analysis, synthesis, and evaluation. However, the researcher uses the revised edition of Bloom's taxonomy which are analyze, evaluate, and create skill. Furthermore, the HOTS is related with the scientific approaches in the 2013 curriculum such as observing, questioning, associating, experimenting, and networking. Those approaches are related with the problem solving and critical thinking skill which belong to higher order thinking skill.

The HOTS is useful for creating meaningful learning in the teaching and learning process. It is because it gives broader vision of learning that may include not only acquiring knowledge but also being able to use the knowledge in a variety of new situations in the students' everyday life. It may enable the students not only to remember and understand the knowledge or information they got but also to use the knowledge in order to increase their complex way.

Hence, the researcher thinks that an analysis of Blooms Revised cognitive taxonomy on English textbook namely *Grow With English* for the 6th grade of elementary school students is important because it might be helpful and useful for the students in improving their ability in the higher order thinking skill (HOTS).

METHOD

Research Design

This research is about analyzing the content of the English textbook. It is classified as documentary analysis. Because the research is about documentary analysis, it would be conducted by using descriptive qualitative design. According to Bogdan & Biklen (2003) descriptive is the characteristic of data in qualitative research because it is taken from documents, audio-video recording, transcripts, words, pictures, etc. moreover, the research is included as qualitative research design because it is aimed to explore the content of the English textbook whether it has cognitive skill implemented in reading activities.

Samples/Participants

The sample of this research is an English textbook from Erlangga Publisher. The textbook is for the sixth grade of elementary school. The textbook entitled "Grow with English". It consists of six chapters and two review sections. The data would be collected from that textbook. Since the data is content analysis, then it would be arranged in form of document.

Instruments

In this research, the instrument used by the researcher is the checklist. The checklist is one of the instruments used to identify each material in the English textbook. By applying this instrument, it is intended to investigate the cognitive skill provided in each chapter of the textbook.

Data Analysis

In data analysis, the data are collected and analyzed by doing some steps: (1) the textbook Entitled "Grow With English" for The Sixth Grade of Elementary School consisted of 6 chapters and 2 Review Sections in which each chapter will be discussed differently on its topic to each other; (2) each chapter might be investigated properly whether every material includes reading skill on each chapter; (3) then finding out how each chapter implements HOTS based on Blooms cognitive taxonomy; (4) then, all chapters will be analyzed of how HOTS is integrated on each chapters; and (5) after getting the data, those data would be calculated by using a formula in order to help in showing the data in form of number (Creswell & Creswell, 2017). The formula is as followed:

$$P = \frac{n}{N} \times 100\%$$

Note:

P : Percentage

n : The number of Integrated skills in each chapter

N : The total of Integrated Skills

After calculating and exploring the data, the researcher would explain the results of data analysis in the form of qualitative.

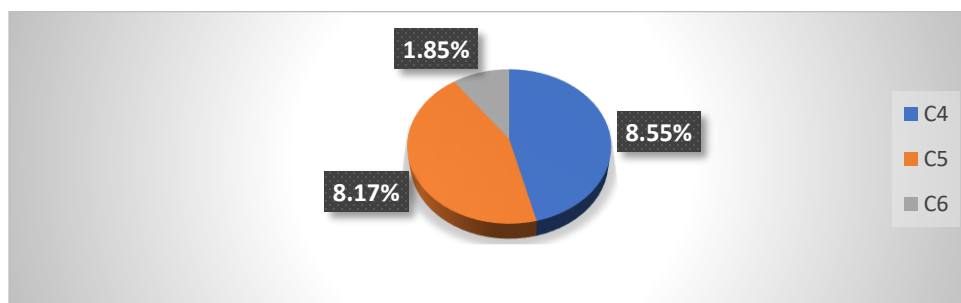
FINDINGS AND DISCUSSION

Findings

The research is carried out by analyzing the content of the English textbook entitled "Grow with English" for The Sixth Grade of Elementary School. The results of this research are about all HOTS on reading activities based on Blooms revised cognitive taxonomy. The percentage of HOTS can be seen as follows:

Chart 1

The Percentage of HOTS



Then, the summary of the distribution of HOTS would be shown as follow:

Table 3.1

The Distribution of HOTS on Grow with English Textbook

No	Chapter	Higher Order Thinking Skill (HOTS)		
		C4	C5	C6
1	I Had A Great Holiday	5	3	1
2	Goldilocks And The Three Bears	4	3	
3	Animal Stories	3	4	1
4	How Much Are The Oranges?	3	5	1
5	A Pencil Holder	4	3	1
6	What Is A Telescope For?	3	4	1
TOTAL		23	22	5
PERCENTAGE		8,55%	8,17%	1,85%

From the table above, it can be seen that in *Grow with English* textbook, C4 obtains 8,55%, C5 obtains 8,17%, and C6 obtains 1,85%. *Bahasa Inggris* textbook obtains 40%, and *Bahasa Inggris (Buku Teks Pendamping)* Textbook obtains 33.98%. Among those skills of HOTS, only C4 which obtains the highest distribution among the others.

Discussion

Based on the results of data analysis above, the results showed that the HOTS obtained lower distribution than the LOTS. It was proven by the results of data analysis which showed that the HOTS only obtained 18.59% while the LOTS obtained 81.41%.

There were 6 chapters in the textbook. From 6 chapters, there were only 18,59% HOTS in reading activities in the textbook from the LOTS that got 81,41%. furthermore, the researcher thought that there was inequality number in the distribution of the higher order thinking questions in reading activities.

Furthermore, the research also had similar result with Faradina Ilma's research which concluded that the distribution of the LOTS was higher than the HOTS. The researcher thought that it might happened because the LOTS was familiarly occurred in the lesson plan, the easiest to answer by the students and easier also for the teachers. These results also appeared frequently in almost all the researches discussed in the review of related literature.

In addition, it also showed unbalance number because the analyze skill obtained 8.55% and the evaluate skill obtained 8.17% while the create skill only obtained 1.85%. it was quite surprising if comparing to another research by Ayat's research which found that the analysis skill got 51.92%, the evaluate skill 6.73% while the create skill got 41.35%. it might happen because the author thought that the textbook was used for the class which there must be some students who were weak in HOTS and could not cope with those kinds of questions. However, the researcher thought that it could be better if the author of the textbook was

more concern about the distribution of the HOTS by modifying and enriching some questions into the create skill.

In the first skill in the HOTS, the analyze skill obtained 8.55%. it was the highest number among the three skills in the HOTS even though it was followed the evaluate skill which obtained 8.17% and the create skill which obtained 1.85%. Although if it was compared to the other six cognitive domains, it was still considered to have small distribution. It could happen because Brookhart (2010) pointed out that it is a must to create the questions that ask the students to describe and figure out how one thing to others is related. Thus, even though the questions that belonged to the analyze skill were few compared to the others but it had important role to train the students in analyzing some ideas and information.

Then, the second skill in the HOTS is the evaluate skill. There were 8.17%. This skill is said to be one of the most critical thinking skills in the reading skill. However, this kind of question might be modifying by requiring critical thinking about thing, asking about the quality of the text based on the readers, and asking the for reason. Thus, the evaluate questions might be more varied and might train the students to evaluate some ideas in different types of questions.

The last is the create skill in the HOTS. The create skill only obtained 1.85%. It is also one of the most critical thinking skills in the reading skill. It might happen because Daiek and Anter (2004) claim that the synthesis question or the create question had difficulty in answering. Furthermore, they added that the synthesis or create skill is important in college because the lecture would ask the students to think about discrete items of information in order to arrive at a deeper understanding. Hence, it would be better for the teachers and the authors of the textbook to pay more attention to the distribution of the higher order thinking skill in the essay reading questions.

CONCLUSION

Conclusion

As one of the teaching materials that used by the teachers and the students in the teaching and learning process, the textbook plays an important role in accomplishing the teaching and learning objectives. However, the textbook has some critics and suggestions of the textbook usage. Some of those critics and suggestions say that the textbook has too little material and less challenging, and difficult in choosing the textbook which is appropriate with the curriculum. The textbook also is said to have higher order thinking skill because it is relevant with the goals of the curriculum.

After doing the content analysis on *Grow with English* textbook, the researcher concludes that the distribution of the HOTS is lower than the LOTS. In the textbook, it was proven by the results of data analysis which showed that the distribution of the HOTS in the reading exercises obtained 18.59% while the distribution of the LOTS obtained 81.41%. It means that the ratio of the HOTS to the LOTS is far enough.

Furthermore, as the focus on this research, the distribution of the HOTS that consisted of the three skills looks like; the analyze skill got the highest number by obtaining 8.55%, the evaluate skill, in the second place, obtained 8.17%, and the create skill, the most critical thinking skill, obtained 1.85%.

Suggestion

The researcher suggests that the teachers should check the textbook that implements all cognitive skill before using it in the teaching and learning process. The textbook which provides all cognitive in every

chapter will make the students' learning skills improved especially in critical thinking skill. The researcher also hopes that may this research give the reader or the further researcher contribution in choosing a textbook.

REFERENCES

- Bogdan, R. C., & Biklen, S. K. (2003). Eleven Common Questions About Qualitative Research. *Qualitative Research for Education: An Introduction to Theory and Methods (4 Th Ed., Pp. 32-42)*. Needham Heights, MA: Allyn & Bacon.
- Brookhart, S. M. (2010). *How to assess higher-order thinking skills in your classroom*. Ascd.
- Brown, H. D. (2000). *Principles of Language Learning and Teaching (4TH Edition)* (L. A. Wesley (ed.); 4th ed., Vol. 4). longman New York.
- Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage publications.
- Haerazi, H., Prayati, Z., & Vikasari, R. M. (2019). Practicing Contextual Teaching and Learning (Ctl) Approach To Improve Students' reading Comprehension In Relation To Motivation. *English Review: Journal of English Education*, 8(1), 139–146.
- Igbaria, A. K. (2013). A Content Analysis of the WH-Questions in the EFL Textbook of "Horizons". *International Education Studies*, 6(7), 200–224.
- Irwansyah, D., & Azis, Y. A. (2018). Incorporating Intercultural Competences In Developing English Materials For Writing Classes. *Journal of Language Teaching and Research*, 9(3), 540–547.
- Kinasih, A. K. (2014). A Content Analysis on English Textbooks for the Tenth Graders: "Look Ahead" An English Course for Senior High School Students Year X and "Pathway to English" for Senior High School Student Grade X. *A Thesis*.
- Lail, H. (2020). Answering Reading Texts on English Tryout Test Based On The 12th Grade Students' strategies At Sma Negeri1 Kuripan Lombok Barat. *Journal of Languages and Language Teaching*, 7(1), 3–5. <https://doi.org/10.33394/jollt.v7i1.1434>
- Nurdiani, R. (2014). Analisis Buku Teks Pelajaran Bahasa Inggris Berdasarkan Standar Penulisan Buku Teks Pelajaran. *PEDADIDAKTIKA: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 1(1), 1–9. <https://ejournal.upi.edu/index.php/pedadidaktika/article/view/4694/3270>
- Philipot, Raymond and Graves, Michael F. (2009). *Fostering Comprehension in English Classes, Beyond the Basics*. New York: The Guilford Press.
- Setiabudi, I. (2010). *The Analysis of English Textbook "English on Sky 2" Used at the Second Year of SMP Dharma Karya, Pamulang*. Skripsi, English Education Department, Faculty of Tarbiyah and Teachers
- Sianipar, D. R., Ginting, R. L., & Saragih, E. (2020). Content Of Textbook Entitled "Pathway To English" For The Twelfth Grade Of High School. *Journal of Languages and Language Teaching*, 8(1), 60–71. <https://doi.org/10.33394/jollt.v8i1.2241>