

HOTS IN EXERCISE OF ENGLISH TEXTBOOK AT SMPN 24 KOTA BENGKULU

¹Novia Eka Pangesti, ²Alamsyah Harahap, ³Erni Sukesi

University of Bengkulu

Corresponding email: ekanova160@gmail.com

KEYWORDS

Higher Order
Thinking Skills
English Textbook
Exercise

ABSTRACT

This research aimed at determining the distribution and the highest frequency of the Higher Order Thinking Skills (HOTS) based on the revised edition of Blooms Taxonomy in the exercises of English textbook entitled *Buku Bahasa Inggris “Think Globally Act Locally” SMP/MTS Kelas IX (Kurikulum 2013)* for 9th grade students that use at SMPN 24 Kota Bengkulu. The researcher used the descriptive qualitative method. The researcher used 106 exercises of the English textbook as the data sources and the checklist table for collecting and used the Miles and Huberman's theory for analyzing the data to find the result of the study. The result showed that the Higher Order Thinking Skills (HOTS) gained differently among skills of HOT and the English Textbook has no gradation or uneven, the author did not emphasize the distribution HOTS according to the students' level of thinking in each exercise in each chapter of the English book Furthermore the highest frequency of HOTS in this study belongs to the C6 (Creating). Therefore, it is suggested that teacher should choose the exercises in English Textbook that appropriate for the students' need and level. For the author of English Textbook, need to pay attention to the gradation of distribution for each cognitive level in order to produce English textbooks that are appropriate to the level of education and thinking level of students.

APA 7th Citation:

Pangesti, N.E., Harahap, A., Sukesi, E. (2026). HOTS in Exercise of English Textbook at SMPN 24 Kota Bengkulu. *Wacana: Jurnal Penelitian Bahasa, Sastra dan Pengajaran*, 24(1), 1-10

DOI: <https://doi.org/10.33369/jwacana.v24i1.29510>

INTRODUCTION

Connected with Kemendikbud (2013) Indonesia has been updated the curriculum from school-based curriculum into the 2013 curriculum. It changed the whole teaching and learning processes, syllabuses, goals, objectives, contents, and also textbooks. The Indonesian government and many publishers have published textbooks which based on the 2013 curriculum. According to Fatimah (2018) the textbook plays an important role in achieving the goal of the curriculum and the textbook is also required to contribute in developing the creativity in students' critical thinking.

There are a number of justifications for not using textbooks in educational settings. The textbooks provide insufficient information and are challenging or inappropriate for both students and teachers. Therefore, a review and evaluation of the textbooks are required. The textbooks have a number of sections that need to be examined. One of such elements is the exercise. Exercise is described as a collection of questions in a book that test a student's knowledge and competence in the order of words, according to the Longman Dictionary of Contemporary English (1985: 380). Exercise can also be referred to as a chore. Exercises should demonstrate various degrees of thought processes. Through the Educational Quality Insurance Institution (LPMP), instructors are required to emphasize critical thinking to pupils. It includes producing, analyzing, and evaluating. This is known as higher order thinking skill (HOTS).

According to Kuswana (2012), High Order Thinking Skills (HOTS) are analytical and creative thinking that is guided by truth notions and that each of which has importance. According to Slavin's (2000) citation of Vygotsky's Instructional Scaffolding theory, exercises in English textbooks were designed to support students in achieving higher learning goals by starting at a simpler level of understanding and progressively increasing the level of difficulty. The more advanced the education, the more complex the exercises presented in the book should be. However, many of the exercises in the English textbooks lack critical thinking skills. The Low Order Thinking Skills (LOTS) rather than the Higher Order Thinking Skills (HOTS) predominate in many of the challenges.

The examination of HOTS in the English textbook has been the subject of several investigations. One of them, Janah (2019), discovered that the English textbook for Junior High School pupils in the eighth grade fails to give tasks that need high order thinking skills. The lower order levels of the "Erlangga's English Textbook" textbook are more prevalent in the reading activity, according to Sari (2019). The exercises in the English textbook by Shalihah et al. (2022) demonstrated that fewer HOTS are issued than LOTS. Higher Order Thinking Skills (HOTS) are less prevalent in language skill tasks than Lower Order Thinking Skills (LOTS), according to research by Febriyani et al. published in 2020. Only 24% of HOTS percentages were scattered among all chapters of "When English Rings a Bell" for the 8th graders at Junior High School, according to Fahmi (2020).

It will be necessary to analyze the exercises in another English textbook in light of the aforementioned issues and earlier studies that confirmed that there are still a lot of exercises in the English textbook that need to be analyzed to determine how well they fit into the criteria relating to levels of thinking, particularly at Higher Order Thinking Skills (HOTS). The English textbook "Think Globally Act Locally" at SMPN 24 Bengkulu City is being studied by researchers. The reason SMPN 24 Kota Bengkulu was chosen for this study is because the institution employs curriculum-aligned textbooks. The distribution and greatest frequency of Higher Order Thinking Skills (HOTS) were examined in this study.

According to the justification given, the research questions of this research were: 1) What is the distribution of Higher Order Thinking Skills (HOTS) in the exercises of English Textbook entitled *Buku Bahasa Inggris* "Think Globally Act Locally" *SMP/MTS Kelas IX (Kurikulum 2013)* for 9th grade students of Junior High School at SMPN 24 Kota Bengkulu?, and 2) What is the highest frequency of Higher Order Thinking Skills (HOTS) in the exercises of English Textbook entitled *Buku Bahasa Inggris* "Think Globally Act Locally" *SMP/MTS Kelas IX (Kurikulum 2013)* for 9th grade students of Junior High School at SMPN 24 Kota Bengkulu?. The objectives of the research were to find out the distribution of HOTS in the English Textbook, and to find put the highest frequency of HOTS in the exercises of the English Textbook.

METHODS

Research Design

This study used a descriptive qualitative research approach. Statistical analysis or other quantitative techniques are not used in qualitative research studies, according to Moleong (2007, p. 6). Despite the fact that descriptive qualitative research aims to address a problem through data, the researcher also organizes, examines, and interprets the data (Narbuko and Abu Achmadi, 1997: p. 44). The researchers employed the cognitive level of Revised Bloom's Taxonomy to analyze the activities in the junior high school ninth grade textbook "Think Globally Act Locally." Only tasks in the English textbook that tested higher order thinking skills (HOTS) were examined in this study.

The Junior High School at SMPN 24 Kota Bengkulu's "Think Globally Act Locally" textbook for the ninth grade served as the focus of this study. English textbook "Think Globally Act Locally" is used in the 2013 Curriculum. This junior high school textbook is used for ninth-graders. The KEMENDIKBUD-published English textbook. There are 106 exercises altogether in this English textbook's 11 chapters. All of the tasks in the English textbook were examined by the researchers.

Instruments

The study used the checklist table. The six cognitive levels were listed in a table given by the researcher. After categorizing the data into several groups, the researchers marked each category in the corresponding column of the previously created table using the "Think Globally Act Locally" textbook activities. The researchers employed a checklist table for data collection that had been modified with the help of study (Pratiwi, 2014). The checklist table that was employed tries to streamline and accomplish the goals of this investigation. The activities from the 11 chapters of the English textbook "Think Globally Act Locally" were used by the researcher to gather data. The data were classified by the researcher using exercises to identify or codify them. By highlighting and recording the activities, the researcher formalized the exercises. The Checklist Table Instrument was then used to categorize the data, which was modified from (Pratiwi, 2014).

Data Analysis Procedures

There are various steps in this research's process after data collection to determine the outcomes. Data reduction, data presentation, and conclusion drawing are the three steps of data analysis, according to Miles and Huberman (1984). The researcher's initial goal is to evaluate the data from the English textbook "Think Globally Act Locally". The researcher divided the three cognitive levels of Higher Order Thinking Skills (HOST) based on an analysis of six cognitive levels. Second, the researcher presented data from the Exercises from the English textbook "Think Globally Act Locally" that addressed the distribution and the highest degree of Higher Order Thinking Skills (HOTS). Drawing conclusions is the final phase. The researcher concluded that the results relate to issue conceptualization.

Co-raters helped the researchers in this study to ensure the validity of the data findings. The analysis of qualitative data can be improved by arranging an independent evaluation of transcripts by additional skilled qualitative researchers and comparing agreement between the raters, according to Mays and Pope (1995:110). The data was evaluated and classified by the researchers and co-rater. The degree of agreement between raters is known as inter-rater agreement. The relevance of the analysis conducted by the researchers and co-rater on the study object is the key issue. The generated data was therefore reliable. A teacher of English at SMPN 24 Kota Bengkulu served as the study's co-rater. The researchers employed the inter-rater agreement using Cohen's Kappa value borrowed from Oktarini, et al. (2022) to determine the agreement between themselves and the co-rater. If the result falls between 60% and 90%, then there is an acceptable degree of agreement.

FINDINGS

Inter-rater Agreement

The Cohen's Kappa Value was used in this study to compare the analytical results between the researcher and co-rater. The table below displays a comparison of the two outcomes. It is possible to quantify the compatibility or consistency of the analysis results between the researcher and the co-rater.

The Comparison of Cohen's Kappa Values between the Researcher and Co-rater.

No		Cognitive Levels	Researcher	Co-rater	Score
1	L	C1 (Remembering)	42	43	0
2	O	C2 (Understanding)	3	3	1
3	T	C3 (Applying)	8	8	1
4	H	C4 (Analyzing)	15	15	1
5	O	C5 (Evaluating)	13	14	0
6	S	C6 (Creating)	25	25	1

No	Cognitive Levels	Researcher	Co-rater	Score
	Cohen's Kappa Value			0.65
	Percentage of Agreement			65%
	Interpretation			Good

From the table above, it can be concluded that there was a 0.65 Cohen's Kappa value between the researcher's and co-rater's analytical results. This result indicated that there was 65% agreement between the researcher's and co-rater's analytical results, which is considered to be a "Good" degree of agreement.

The Distribution of Higher Order Thinking Skills (HOTS) in Exercises of English Textbook

This stage consists of two parts. First, what is the distribution of Higher Order Thinking Skills (HOTS) in the exercises of English Textbook "Think Globally Act Locally". Second, what is the highest frequency of Higher Order Thinking Skills (HOTS) in the exercises of English Textbook "Think Globally Act Locally". This study had been analyzed the data obtained in the exercises in the English textbook "Think Globally Act Locally ". This study analyzed the data for each chapter in the textbook. The data obtained was totaled 106 exercises presented in the textbook.

Table.2 Distribution of the Cognitive Levels in Exercises Textbook

Chapter	Cognitive levels						Total	
	C1	C2	C3	C4	C5	C6		
Chapter: I	2	3	3	0	1	1	10	
Chapter: II	4	0	0	1	1	2	8	
Chapter: III	2	0	0	4	0	5	11	
Chapter: IV	3	0	1	3	1	5	13	
Chapter: V	6	0	1	0	3	1	11	
Chapter: VI	5	0	1	1	3	1	11	
Chapter: VII	6	0	1	1	1	1	10	
Chapter: VIII	5	0	1	1	2	1	10	
Chapter: IX	3	0	0	2	1	7	13	
Chapter: X	2	0	1	2	0	1	6	
Chapter: XI	2	0	0	0	0	1	3	
Total		43	3	8	15	14	25	106
Percentage		52/106x 100% = 49%		54/106x100% = 51%		100%		

The distribution of both thinking levels, including Low Order Thinking Skills (LOTS) and Higher Order Thinking Skills (HOTS), may be shown to be relatively comparable in the above table. HOTS features 54 exercises, compared to 52 in LOTS. C1 (Remembering), which has a total of 43 activities and may be found in each chapter of the English textbook, dominates the distribution of Low Order Thinking Skills (LOTS). According to table 4.1, the distribution of C1 (Remembering) in each chapter was not equal. Only 2 exercises were included in chapter 1, compared to more than 2 in previous chapters' C1 (Remembering) totals. With C1 (Remembering), some chapters have four exercises and others have six. On the other hand, another level of LOTS is C2 (Understanding), which is found at the lowest frequency, only in chapter I, with a total of 3 exercises. Additionally, another level, C3 (Applying), also shows uneven distribution in each chapter of the English Textbook.

The distribution of the higher order thinking level which consisted of C4 (Analyzing), C5 (Evaluating), and C6 (Creating) got 54 exercises out of 106 exercises. The analyze level or C4 (Analyzing) got 15 exercises where the distribution was not spread in all chapters, and the number of frequencies were not the same. While C5 (Evaluating) got 14 exercises that were not spread across the existing 11 chapters, only chapter III, X and XI that did not have exercises that belongs to the C5 (Evaluating). 25 exercises belong to the C6 (Creating) where the level of HOTS dominated and was spread throughout the chapters although the frequency of occurrence was not the same. It's mean that in general the distribution of six cognitive levels in each exercise in 11 chapters in the English Textbook has no gradation and or was not systematic.

The Highest Frequency of Higher Order Thinking Skills (HOTS) in Exercises of English Textbook.

No.	Cognitive Level	Exercise	Total Percentage
1	C4 (Analyzing)	15	15/106x100% =14%
2	C5 (Evaluating)	14	14/106x100% = 13%
3	C6 (Creating)	25	25/106/100% =24%
	Total	54	51%

After analyzed the English Textbook, the researcher found that the most dominating the three cognitive levels of Higher Order Thinking Skills (HOTS) among 106 exercises on the of English Textbook "Think Globally Act Locally" was C6 (Creating) level. It covers 25 exercises with frequency percentage 24 %. The distribution has been found in all the exercises in each chapter of the English Textbook. With fairly the same pattern of exercises, located at the end of each chapter.

C6 (Creating) exercises can be seen on the chapter II, II, II, IV, V, VI, VII, VII, VII, IX, X and XI. The exercises can be seen on page 16, 28, 32, 37, 47, 51, 65, 66, 69, 74, 78, 105, 130, 144, 164, 171, 174, 176, 180, 183, 189, 190, 202 and 208. In this exercise the students is required to Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing oral or written product.

On the other hand C4 (Analyzing) level achieved the second place. It covers 15 exercises with frequency percentage 14 % with 15 exercises. C4 (Analyzing) exercises is represented on the chapter II, III, IV, VI, VII, VIII, IX, and X. The exercises can be seen on page 31, 34, 43, 45, 48, 58, 62, 76, 128, 134, 153, 182, 187, 199, and 201. Those exercises leads the students to Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.

Meanwhile, C5 Evaluating covers 14 exercises with total percentage 13 %. The distribution of C5 (Evaluating) can be seen on the chapter I, II, III, IV, VI, VII, VIII. The exercises can be seen on page 10, 27, 42, 68, 88, 94, 99, 116, 119, 121, 139, 156, and 163. In this part the students are asked to making judgments based on criteria and standards through checking and criticizing. Therefore those exercises regarded as C5.

DISCUSSION

The results demonstrate that the higher order thinking receives a greater distribution than the lower order thinking skill after the researcher split the six levels into the lower order thinking (remembering, comprehending, applying) and the higher order thinking (analyzing, assessing, and inventing). It is demonstrated by the data analysis results, which reveal that the proportion for higher order thinking was about 51% while that for lower order thinking was just 49%. The English textbook has 106 tasks spread across 11 chapters, however only 54 of them are geared toward higher order thinking abilities and 52 are for lower order thinking.

It was also found that the frequency distribution of occurrence of each Higher Order Thinking Skills (HOTS) level was not the same. The appearance of HOTS occurs 54 times in 54 questions in this English textbook. All HOTS levels have appeared in several chapters with erratic numbers in each chapter. For example, in Chapter II, the emergence of HOTS has occurred four times, one exercise including C4 (Analyzing), one exercise including C5 (Evaluating) and two other exercises including C6 (Creating). Furthermore, in Chapter IV, HOTS appears 9 times. The three exercises in that chapter represent C4 (Analyze), one exercise includes C5 (Evaluate), and the other five exercises include C6 (Create). The appearance of all HOTS levels also occurred in Chapter VI where one question indicated C4 (Analyzing), one item included C6 (Creating), and most of the three questions included C5 (Evaluating) it could be concluded that the frequency of HOTS levels had appeared four times. In Chapter VII, all HOTS levels have appeared three times with one exercise occurring at each level. The next chapter is Chapter VIII with the emergence of HOTS levels four times with C4 (Analyzing) and C6 (Creating) one question each, and two other questions belonging to C4 (Analyzing).

Apart from the appearance of all levels of HOTS, there are also several chapters where one or more levels of HOTS are not present. For example, in Chapter I, none of the exercises that belong to the C4 (Analyzing) only C5 (Evaluating) and C6 (Creating) appeared with one exercise each. Chapter V is also missing the level of

C4 (Analyzing) only four times two levels of HOTS appear in this chapter, there are three exercises indicated as C5 (Evaluating) and another exercise belongs to C6 (Creating). Whereas in Chapter X level of C5 (Evaluating) which does not appear at all, there are only two exercises that belong to the C4 (Analyzing) and another one is C6 (Creating). Unfortunately, in the last chapter, Chapter XI, two levels of HOTS didn't appear. There was only one exercise belong to C6 (Creating) which means that C4 (Analyzing) and C5 (Evaluating) was missed.

It can be summarized that the distribution of Higher Order Thinking Skills (HOTS) in the English Textbook is not sufficient. There is no gradation, indicated by the frequency of occurrence which is uneven or does not show a clear pattern. What should be a good gradation or pattern is from increase to decrease. Because a good English textbook must have a pattern or gradation so that students have no trouble completing each exercise.

The distribution is currently insufficient. The computation of C6 is accurate in terms of HOTS. Because grade 9 is the highest level of junior high school and this English textbook is used for that level, C6 (Creating) may predominate. If the 2013 curriculum is being implemented at this level, students may practice more, develop new ideas, or produce written or oral products based on what they have learned. However, there are too many exercises and their distribution is uneven, especially when compared to the other HOTS (C4 and C5). For instance, while each chapter typically contains one exercise from the C6 (Creating), Chapter IX contains seven of them.

It would be preferable if the distribution and attendance rates for each Higher Order Thinking Skills (HOTS) Level were the same or graded either increasing or decreasing or according to their educational level, with the more complex exercises that should be presented in the English Textbook the higher the educational level. This is consistent with Vygotsky's thesis, which backs up the claim that the more educated a person is, the more sophisticated the exercises in the book should be. The distribution of this English textbook did not correlate to the thinking and academic levels of the students, thus the grade from the distribution of Cognitive Levels should be the primary concern for the instructors and the textbook's author. Success in learning is influenced by thinking complexity or grade levels. Students' progress in learning will be impacted if a book lacks gradations, whether they grow or decrease or go from basic to sophisticated or vice versa.

CONCLUSIONS

The textbook is a crucial teaching resource, yet criticisms arise about its alignment with the curriculum and the imbalance between Lower Order Thinking Skills (LOTS) and Higher Order Thinking Skills (HOTS) in English exercises. HOTS are essential for critical and logical problem-solving, aligning with the 2013 curriculum's scientific approach. This study focused on HOTS distribution in the English Textbook "Think Globally Act Locally" for 9th graders at SMPN 24 Kota Bengkulu, using a checklist table to analyze exercises. Results indicated good HOTS distribution (54 out

of 106 exercises, 51%) compared to LOTS (52 exercises, 49%). Notably, C6 (Creating) had the most HOTS exercises (25 exercises, 24%), while C4 (Analyzing) and C5 (Evaluating) had 15 (14%) and 14 (13%) exercises, respectively. However, the distribution lacked systematic progression from LOTS to HOTS, indicating the author's oversight in catering to students' thinking levels. This study highlights the need for more balanced distribution to enhance students' cognitive development across exercises and chapters.

ACKNOWLEDGMENTS

The researcher expresses her highest gratitude and appreciation to Dr. Alamsyah Harahap., Dip TESL. M. Lib. as supervisor and Dr. Erni Sukesi, M.Pd. as Co-Supervisor who generously dedicated their time, shared their valuable ideas, and offered valuable suggestions during the process of writing this thesis. Indah Damayanti, S.S., M.R.S. and Azhar Aziz Lubis, M.Pd. as the examiner who has provided valuable suggestions which are very useful for this thesis.

REFERENCES

Ahmadi, Abu and Cholid Narbuko. 1997. Research Methodology. Jakarta : Bumi Aksara.

Fahmi, N. I .2020. Higher Order Thinking Skill Question in Reading Comprehension Exercise of "When English Rings a Bell" Textbook. *Studies in English Language*, 10(1), 1-18. <https://doi.org/10.24815/siele.v10i1.26052>

Febriyani, Yunita, and Damayanti. 2020. An Analysis on Higher Order Thinking Skill (HOTS) in Compulsory English Textbook for the Twelfth Grade of Indonesian Senior High School. *English Education Journal*, 4(2), 1-14. <https://doi.org/10.33369/jeet.4.2.170-183>

Janah, N.F. 2019. LOTS and HOTS Items Analysis Based on Bloom's Taxonomy Revision in Exercise of English Textbook Entitled Bahasa Inggris: When English Rings a Bell for SMP/ MTS Kelas VII. *E-Journal IAIN Surakarta*.

Kementerian Pendidikan dan Kebudayaan. 2013. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 70 tahun 2013 tentang Kerangka Dasar dan Struktur Kurikulum Sekolah Menengah Pertama/Madrasah Tsanawiyah. Jakarta: Kementerian Pendidikan dan Kebudayaan.

Kuswana, W. S. (2012). *Taksonomi Kognitif Perkembangan Ragam Berpikir*. Bandung: PT Remaja Rosdakarya Offset.

Mays, N. and pope, C. 1995. Rigour and Qualitative Research. *British Medical Journal* 311:109-12

Miles Mathew B; Huberman Michael A. 1984. *Qualitative Data Analysis a Sourcebook of New Methode*. London: Sage Publications.

Moleong, Lexy J. 2006. Metodologi Penelitian Kualitatif. Bandung : PT Remaja Rosdakarya.

Oktarini, Dewi, and Putra 2022. Analysis of the Positive and Negative Impacts of Using Tiktok For Generation Z During Pandemic. *Journal of Digital Law and Policy*, 1(2), 3-4. <https://doi.org/10.58982/jdlp.v1i2.167>.

Pratiwi, N. 2014. Higher Order Thinking Skill in Reading Exercise (An analysis of reading Exercise in Pathway to English textbook for the Eleventh Grade of Senior High School Students). Dissertation, The Department of English Education. Jakarta: The Syarif Hidayatullah State Islamic University.

Richards, Jack. 1985. Longman Dictionary of Applied Linguistics. London: Longman Group, Ltd.

Robert E. Slavin. 2000. Educational Psychology: Theory and Practice. Pearson Education. New Jersey.

Shalihah, Fikri, and Mustofa. 2022. Analyzing Higher Order Thinking Skills (HOTS) Questions OF Reading Essay Tasks in Senior High School English Textbook. English Education Journal. Syiah Kuala University, 13(1), 1-16, <https://doi.org/10.24815/eej.v13i1.23956>.