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COGNITIVE ANALYSIS OF READING EXERCISES IN COMPREHENSIVE ENGLISH BOOK ONE FOR CLASS XI USING REVISED BLOOM'S TAXONOMY

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Abstract
The study aimed at analyzing the extent of cognitive levels in the reading exercises of Comprehensive English Book One for Class XI using revised blooms taxonomy. It also investigated if there is a significant difference between lower order thinking skills (LOTS) and higher order thinking skills (HOTS). Additionally, the study assessed the cognitive levels of the students. The study employed a checklist and a pre- and posttest as the data collection tools, based on the revised blooms taxonomy, using a purposive sampling technique. The study adopted quantitative research design, employing action research approach to assess the students' cognitive levels. The findings demonstrated that "Remember" (f=204, 44.54%), "Understand" (f=203, 44.32%) are the prominent levels followed by "Evaluate" (f=17, 3.71%), "Analyse (f=13, 2.84%), "Apply" (f=11, 2.40%) and "Create" (f=10, 2.18%). The results of chi-square test and fisher freeman halton test revealed a significant difference between (LOTS) and (HOTS) in the Comprehensive English Book One for Class XI. Moreover, the pre- and post-test results revealed that students' highest improvement was demonstrated at "Evaluate" (M=3.90) followed by "Remember" (M=3.60) and "Apply" (M=3.60) levels. However, the students' mean scores difference were moderate at "Understand" (M=3.00) and "Create" (M=2.97) levels. The lowest mean difference was recorded at Analyse (M=2.22), implying that the students exhibited limited higher order thinking skills at this level.

Keywords: Cognitive levels, Lower Order Thinking Skills, Higher Order Thinking Skills, Revised Blooms Taxonomy, English Textbooks, Reading Exercises, Reading Comprehension

1. Introduction

English serves as the avenue to educational resources and opportunities in the global community. Doraimon et al. (2024) suggest that English is crucial in building networks across cultures, industries and regions, optimizing interactions and collaborations. In education, English plays a significant role to the repository of knowledge such as scholarly researches, journals, and learning materials. Cunnigsworth (1995) advocates that textbooks are essential to students as they facilitate active and independent learning and serves as a crucial pedagogical tool for the naive educators. Razmjoo (2007) claims that students working with textbooks are confident and witness their growth and productivity through the learning process. Nuttall (1996) suggests that the reading exercises optimize students' comprehension and interpretation of the content given in the text which implies that it supports students' language learning, exposing them to wide range of cognitive processes. Sholihah (2018) highlights that majority of textbooks rely on conventional reading activities such as multiple type questions and true/false which inhibit students' motivation, resulting in disengagement with the reading material. Nurdiana et al. (2017:1) highlights that reading is a

complex process which involves deciphering the symbols to derive meaning from it and inferring the patterns, prompting their mental faculties to function in various ways.

Zimmerman & Hutchins (2003) stated that reading help learners to identify the ideas and concepts, interpret the texts, analyze the underlying patterns, assess and gauge the arguments and propose something new from the learned knowledge. These aspects stimulate learner's ability to switch from passive learning mode to active learning. Reading process involves various mental processes that employ different strategies to develop critical thinking which allows them to investigate, argue, propose and resolve the problem with planning. Students who build critical thinking skills have the competency to ensuring economic growth, intercultural collaboration, political stability, societal progress and technological advancement (Yamin, 2013). Curriculum is the key factor which informs what to be implemented, how to be applied and subsequently outline the learning objectives which leads to achieving the learning outcomes. It serves as a map resulting in proper operationalization of the educational institutions. It can be used to assess the quality of learning by comparing the resource material and its method to the curriculum standards. Curriculum and textbook designers have been incredibly endeavoring to enhance the quality of textbooks in order to promote critical thinking skills (Zohar, 2007). Helsa et al. (2022) highlightes that they provide students an opportunity to not only learn the language concepts but help them understand the pragmatic use of language in real-life situations. Besides, higher order thinking skills (HOTS) items shall be emphasized in assessment test which implies that these skills promote students' readiness to deal with the world problems. Blooms taxonomy was used to classify the behaviors in hierarchal order progressing from lower to higher skills. Krathwolf with his companions revised the original taxonomy, determining cognitive domain into two dimensions i.e. content and processes. The revised blooms taxonomy aimed at eliminating the deficiencies in the previous taxonomy and updated it as an alternative while it is founded on the original taxonomy. (Newton, Da Silva, & Peters, 2020) Widiastutu et al. (2025) state that lower order thinking skills (LOTS) are reinforced in the textbooks as they guide students' attention to grasp main ideas and concepts, and applying the text structures. However, higher order thinking skills (HOTS) promote strategic thinking and creativity which promotes students' ability to plan and implement the strategies in the given scenarios.

1.1 Research Questions

1. What is the extent to which cognitive levels are represented in the reading exercises of Comprehensive English Book One for Class XI?

a. Is there a significant difference between lower order thinking skills (LOTS) and higher order thinking skills (HOTS) represented in the reading exercises of Comprehensive English Book One for Class XI?

2. What are the cognitive levels of students engaged in the reading exercises of Comprehensive English Book One for Class XI?

2. Literature Review

2.1 Blooms Taxonomy

In 1956, Dr. Benjamin Bloom presented the classification of thinking behaviors. It was believed that thinking patterns are inherently involved in the learning process. Blooms taxonomy is the cornerstone in designing learning objectives and assessments, supporting teaching and learning process. Blooms taxonomy represented a hierarchal structure, representing lower thinking levels followed by higher thinking levels which consists of

knowledge, comprehension, application, analysis, synthesis, and evaluation. In 2001, Krathwolf and Anderson undertook a noticeable up gradation in blooms taxonomy to correspond with the contemporary theories and practices in educational field. The framework aimed at addressing the limitations and gaps in the previous version of the taxonomy. It exhibited observable revisions to the terminology and order of the cognitive processes. In 2001, Anderson introduced the revised version of Bloom's taxonomy making it relevant to 21st century students and teachers. It revealed a minor change in forms i.e. noun to verb, and a slight modification in the latter two levels of higher thinking skills with create following evaluate. The revised hierarchal taxonomy consists of remember, understand, apply, analyse, evaluate, and create levels. (Orey, 2010) The use of verbs implies to design the activities that encourage students to attentive and active learning making the learning experience meaningful. The revised version provides a flexible framework, guiding the instruction, assessment and curriculum designing.

2.1.1 Lower Order Thinking Skills (LOTS)

Lower order thinking skills are the foundation skills in the hierarchal structure of revised bloom taxonomy i.e. remember, understand and apply. Bloom (1956) proposed that developing lower order skills is equally important as higher order skills. This skill type does not address critical thinking skills and analytical skill. However, they encompass memorizing, recognizing, identifying, reorganizing, explaining, paraphrasing, applying etc. Learning begins with acquiring the small chunks of information which are to be processed through operating on lower order thinking skills. Revised Blooms taxonomy presents a hierarchy which initiates with the lower levels comprising of remember, understand and apply level which are believed to be the building blocks of the latter stages functioning as the initiation of the complex processes involved in acquiring language skills especially reading which involves various cognitive levels.

2.1.1.1 Remember

Remembering is defined as the knowing information or recalling the known from prior knowledge which refers to the act of identifying, recalling and recognizing from the learned knowledge. It involves recalling facts, concepts, ideas and relevant information from the reading text. It deals with the specific sequences, patterns, procedures, principles, facts and events.

2.1.1.2 Understand

It involves the comprehension of the literal meanings in interactions and the ability to show the interconnectedness of elements by organizing, structuring, describing or explaining. It requires students to gather data to and describe the relationship of the events, situations or ideas by translating, paraphrasing, comparing and summarizing or elaborating.

2.1.1.3 Apply

It refers to the implementation of the theory into the practice in the familiar but new context. It involves gathering the learned information and applying it to a given scenario. It requires the deep understanding of the ideas and events to implement it into a different context. It requires the use of abstract concepts, theories, principles, rules, methods and procedures to the new context.

2.1.2 Higher Order Thinking Skills (HOTS)

Higher order thinking kills (HOTS) are imperative to learn problem solving skills and finding out the solution when encountered with world problems. In the globalized era, students are

required to expose to higher cognitive process to enhance their intellectual abilities. In educational context, it is emphasized to integrate HOTS as they involve critical, reflective, metacognitive and creative abilities. These skills involve communication, collaboration and self-growth. Ganapathy & Kaur, (2014) suggest that HOTS are essential that shapes creative and innovative version of personalities. These skills enable students to understand the familiar or different situations and take an action accordingly. Astuti (2023) highlights that higher order thinking skills involve using the new information to manipulate it leading to solution of the challenge encountered. King, Goodson, and Rohani (2013) underscores that HOTS encompass abilities beyond simple memorization. Revised blooms taxonomy has classified latter three cognitive levels (analyze, evaluate, and create) which are referred to as HOTS and foster cognitive thinking abilities.

2.1.2.1 Analyse

It involves the ability to deconstruct the ideas, events, actions, situations to relate part with whole. It breakdown information to reveal the underlying intentions, motives, reasons and point of views. It requires to break down the essential whole into its components and identifying the relationships between the two ideas and concepts which highlights the underpinnings of the material read.

2.1.2.2 Evaluate

Evaluate is the second last highest level of the revised blooms taxonomy which precedes create level in the revised blooms taxonomy. The evaluative tasks demand students to make judgments on the given criteria, assessing the arguments with their strengths and weaknesses, investigating the validity of the concepts, making a decision on relevant justifications based on internal and external set evidences.

2.1.2.3 Create

Create involves reorganizing the ideas, concepts, thoughts to create a new product. It refers to the generating ideas, making predictions, assessing assumptions to promote decision making, meaningful insights and problem solving. It encompasses relating the learned knowledge which may be abstract and theoretical which allows functioning it and constructing a practical solution. Generating new ideas requires analytical, innovative and problem solving skills.

2.2 TEXTBOOKS

Mishan & Timmis, (2015) propose that textbooks guide students to internalize the language skills from basic to deeper learning of the concepts. Lamie (1999) suggests that textbooks are essential pedagogical resource to every educational institution. Textbooks assist English language educators to support students' learning, and optimizing their academic achievement and personal growth. Cunningsworth proposes that textbooks give syllabus which consists of set learning goals and objectives. It is stated that evaluating textbooks is an imperative as it informs upon the strengths and weaknesses of the textbook suggesting that if the textbooks are not effective then they can have serious repercussions resulting in demotivation of students and teachers. (Macdonough & Shaw, 2003) According to Richard, (2001) textbooks offer a structured content, supports teaching standardization, retains excellence, and assorts educational materials, instructing educators, and work coherently.

2.3 Reading Comprehension

Reading Comprehension is a significant skill in (English as a second language) ESL learning context. Reading comprehension is the ability to conceptualize the read ideas using the

cognitive thinking (Yousefi & Mohammadi, 2016). Gagne (1977, p. 167) argues that cognitive strategy is the internal skill that guides students' results shaping their achievement and success. Block (1986) explains that it evolves with the students' progress and their ability to manage the tasks with consistency and ensure structured learning experience, however, it may also impede the knowledge gains. Freahat & Smadi, (2014) Students suggests that to enhance students reading comprehension, students need to be engaged with the content that demand deeper analysis. Students should be asked to read the material, express their ideas about what they read and relate the read material to their real life experiences which operate their cognition to conceptualize the content turning them to a clear picture.

2.4 Reading Exercises

According to Longman dictionary a reading exercise consists of set of items that assess students' comprehension and skill. Reading exercises involve understanding content, inferring questions, identifying relationships and drawing conclusions. Sidek (2010, p. 83) suggested that secondary level students may not be competent enough to resolves higher order thinking skills based questions. In contrast, it is proposed that students with competent reading proficiency may demand higher order thinking skills to enhance their reading skill. Enabulele (2011, p. 7), In line with this, efficient textbooks are designed to make students actively comprehend the material, make connection and drive conclusions. Zulfa, (2022) argue that reading comprehension shall be coupled with reading exercises to stimulate students higher order thinking skills which stimulate their ability to use higher order thinking strategies to center their attention and reflection after reading the selected text.

3. Research Design

The study adopted a quantitative research design. Quantitative research involves gathering, analyzing and interpreting numerical data using reliable instruments. The study employed quantitative content analysis for analyzing the extent of cognitive levels in the reading exercises. Secondly, action research approach was employed, using pre- and post-test to assess the cognitive levels of the students engaged in the reading exercises of the Comprehensive English Book One for Class XI. Action research was used to assess the cognitive levels of students, following a complete cycle which involved plan, action, observe, reflect phases. The cycle of action research is illustrated below:

Plan

The planning phase focused on assessing the cognitive levels of students engaged with the reading exercises of Comprehensive English Book One for class XI. A total of 458 reading items from the textbook were selected, encompassing various exercise types, including true/false, matching items, question–answer, analytical questions, evaluation-based questions, and poem composition. The duration and structure of classroom practice were organized into 45-minute sessions conducted over a period of nine weeks. During this phase, pre- and post-test were also planned to measure students' performance at each cognitive level before and after their engagement with the reading exercises.

Action

During the action phase, the students were actively engaged in the reading exercises from Comprehensive English Book One during regular English periods. Each 45-minute session provided structured practice through different types of reading exercises, including remember, understand, apply, analyse, evaluate, and create tasks. Students were required to respond to all types of questions spanning the six cognitive levels. The pre-test was

administered before the intervention to determine students' initial cognitive levels, and the post-test was conducted after completing all the reading exercises to assess the improvement achieved through the intervention.

Observe

In the observation phase, data were collected from the pre- and post-test to evaluate the effect of the reading exercises on students' cognitive levels. The scores obtained from both tests were compared to identify changes in students' performance across each cognitive level of the revised Bloom's taxonomy. This phase focused on recording measurable differences between the pre-test and post-test results, providing evidence of improvement in students' cognitive skills after their engagement with the reading exercises of the Comprehensive English Book One for class XI.

Reflect

This phase focused on analyzing pre-test and post-test results to determine changes in students' cognitive levels after exposure to the textbook's reading exercises. The results revealed the highest mean gain at evaluate level, indicating improved ability to make judgments and provide justifications. Subsequent mean gains were recorded at remember and apply, suggesting improvement at recalling and applying the information. However, moderate mean gains at understand and create level imply that students may require additional practice. Low mean difference at analyse level suggests that students continued to face challenges in drawing connections and identifying relationships.

3.1 Sampling and Participants

The research employed purposive sampling which is a type of non-probability sampling. The study included 458 reading items relevant to the reading texts of Comprehensive English Book One for Class XI, which collectively span the six cognitive levels of the revised Bloom's taxonomy. In addition, 40 students enrolled in Class XI, who use this textbook as their prescribed course book, were purposively selected as the study sample.

3.2 Data Collection

The study used Comprehensive English Book One for Class XI as data collection source. The study selected 458 items from reading exercises, using revised blooms taxonomy checklist to determine the extent of cognitive levels. To assess the cognitive levels of students before and after the intervention, a 50-item pre- and post-test was administered to 40 students of class XI.

3.3 Validity

Construct validity involves measuring the theoretical concept as it intends to measure which is appropriately addressed in this research. The tools effectively aligned with all the constructs of the framework and ensured its practical use. The study employed a checklist adapted from Nurianti (2020) which was based on the revised blooms taxonomy. Besides, construct validity of the test items was ensured, adapting the items from various sources such as Gronlund, (1998) Comprehensive English Book One, (2022), Carneson et al, (2016), Zulfa, (2020) and Armala et al. (2022).

3.4 Reliability

To ensure the internal consistency of the test items, pilot test was conducted with 15 students. Based on the reliability test of 50 items, the obtained Cronbach's alpha value was 0.936 and standard Cronbach's alpha of 0.940 which confirmed the reliability of the test items.

4. Data Analysis

The present study employed quantitative content analysis which involved coding and classifying the reading exercises from the Comprehensive English Book One for Class XI, using the adapted checklist based on revised blooms taxonomy. The researcher categorized the data and calculated its frequencies and percentages. Secondly, the researcher analyzed the significant difference between LOTS and HOTS, applying chi-square test and fisher freeman halton test. For achieving second objective, the researcher assessed the students' cognitive levels. The researcher analyzed the data, obtaining the mean differences at each cognitive level using SPSS.

4.1 ANALYSIS OF COGNITIVE LEVELS IN THE READING EXERCISES OF COMPREHENSIVE ENGLISH BOOK ONE FOR CLASS XI

Table 4.1: Cognitive Levels Frequencies and Percentages

Level	Frequency	Percentage
Remember	204	44.54%
Understand	203	44.32%
Apply	11	2.40%
Analyse	13	2.84%
Evaluate	17	3.71%
Create	10	2.18%

Table 4.1 presents the results of the extent of the cognitive levels across 458 reading items in Comprehensive English Book One for class XI in frequencies and percentages. It represents the Remember (f=204, 44.54%), Understand (f=203, 44.32%), Evaluate (f=17, 3.71%), Analyse (f=13, 2.84%), Apply (f=11, 2.40%), Create (f=10, 2.18%).

4.2 ANALYSIS OF SIGNIFICANT DIFFERENCE BETWEEN LOWER ORDER THINKING SKILLS (LOTS) AND HIGHER ORDER THINKING SKILLS (HOTS)

Table 4.2: Cognitive_Level * Type Cross tabulation

Cognitive-Level			Type		Total
			LOTS	HOTS	
	Remember	Count	204	0	204
		Expected Count	186.2	17.8	204.0
	Understand	Count	203	0	203
		Expected Count	185.3	17.7	203.0
	Apply	Count	11	0	11
		Expected Count	10.0	1.0	11.0
	Analyse	Count	0	13	13
		Expected Count	11.9	1.1	13.0
	Evaluate	Count	0	17	17
		Expected Count	15.5	1.5	17.0
	Create	Count	0	10	10
		Expected Count	9.1	.9	10.0
Total		Count	418	40	458
		Expected Count	418.0	40.0	458.0

Table 4.3: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	458.000[a]	5	.000	.000
Likelihood Ratio	271.439	5	.000	.000
Fisher's Exact Test	254.854			.000
N of Valid Cases	458			

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .87.

Table 4.3 shows presents the results of chi-square test and fisher freeman halton test in SPSS, which demonstrated the p-value which is less than .001 (p <.001), showing a significant difference.

4.4 ANALYSIS OF STUDENTS TEST SCORES

Table 4.4: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Remember_Diff	40	-2.00	10.00	3.6000	2.60965
Understand_Diff	40	-6.00	10.00	3.0000	2.86446
Apply_Diff	40	-4.00	8.00	3.6000	2.48895
Analyse_Diff	40	-8.00	10.00	2.2250	3.21445
Evaluate_Diff	40	-2.00	12.00	3.9000	3.13622
Create_Diff	40	-2.00	10.00	2.9750	3.08418
ValidN (listwise)	40				

The highest mean score (M = 3.90, SD = 3.14) was obtained at Evaluate level, followed by Remember (M = 3.60, SD = 2.61), Apply (M = 3.60, SD = 2.49), Understand (M = 3.00, SD = 2.86), Create (M = 2.97, SD = 3.08), Analyse (M = 2.22, SD = 3.21).

5. Findings

The findings of the present study suggested that reading exercises of Comprehensive English Book One for Class XI indicated remember and understand as the dominant levels, followed by evaluate and analyze. However, apply and create levels approximately stand at the same point. The findings of the present study suggested that lower order thinking skills are dominant across the reading exercises. Additionally, the findings revealed that there was a significant difference between LOTS and HOTS. It indicated that the distribution of the LOTS and HOTS across the reading exercises of the Comprehensive English Book One for Class XI is significantly different and not occurred by chance.

The findings showed that students' highest improvement was recorded at evaluate level followed by remember and apply. However, the performance at understand and create levels showed moderate improvements. Whereas, mean difference at analyze level was low. Overall findings suggest that students have the ability to solve lower cognitive levels especially remember and apply. In addition, improvements at evaluate level indicated that students significantly improved at taking a stance, justifying it with evidence and examples. Meanwhile, students struggle is evident at analyze and create levels. Conversely, few students scored well on create level exercises, demonstrating their competence at creative

tasks. The low mean gain at analyse level show that students remained challenged at identifying relationships and drawing conclusions.

6. Discussions

The current study partially aligns with Stevani, M. et al. (2022), which revealed that English textbooks emphasized understand level (26%), remember (17%), apply (16%), analyze (13%), evaluate (11%), and create (3%). Nurianti, (2020) showed the similar results which demonstrated the prevalence of lower order levels with (77%), indicating understand level as the most prominent among other levels. Conversely, higher order levels occurred less frequently with (23%). The findings of the current study corroborate with Hutasuhut et al. (2022), revealing LOTS in 183 items. It highlighted remember level (100), apply (52), and understand (52), while HOTS levels included analyze (38), evaluate (13), and create (12).

The findings of the current study support Abdul rehman (2014), indicating a significant difference between the basic and complex cognitive processes, suggesting the difference was not by chance. On the other hand. The present study does not support Mizbani et al. (2023), as it found no significant difference across cognitive skills in reading, speaking, listening, and writing. It implies that LOTS can provoke complex thinking, and (HOTS) may result in simple responses, meaning task demands may not always match the cognitive intention. The present study align with Rebla et al., (2023) show similar, suggesting a significant difference between LOTS and HOTS.

The current study contrasts with Hamma et al. (2023), which focused on higher cognitive levels. It demonstrated that students scored excellent at analyse, well at evaluate, and poor at create. Digeyasa, (2021) partially aligns with the current study as it assessed the students' performance at cognitive levels and found that students obtained highest score at remember and understand level followed by analyze, apply, synthesis and evaluate level. The present study also aligns with Hayikaleng et al. (2016) and Armala et al. (2022), which showed that students performed better at lower cognitive levels items compared to higher cognitive level items. The findings revealed a wide difference in students' scores: 2 out of 18 students had constant scores, 8 scored lower, and only 5 improved.

7. Conclusion and Implications

The research study was conducted to analyze the degree of cognitive levels in the reading exercises of the Comprehensive English Book One for Class XI using the revised blooms taxonomy. The study found out that the lower order skills are heavily concentrated in the reading exercises, whereas, higher order skills are comparatively low in number. This suggests that the textbook have effective and ample reading exercises that stimulate students' memorization and practical applications. Besides, a pretest and post-test administered to 40 students from higher secondary school demonstrated highest improvements at evaluate level followed by remember and apply level, moderate improvements at understand and create level, and lowest improvement at analyse level. Students may not have developed the ability to deconstruct the concept and identify the patterns and synthesize the learned ideas into a meaningful whole.

8. Recommendations

For Future Researchers: Future researchers may include different textbooks from primary, secondary, higher secondary level textbooks, broader student populations and a range of learning environments such as private and public institutes, rural, urban.

For Teachers: Teachers may administer effects of intervention to keep the track of the students' cognitive development along with their pace of progress. Textbooks that lack HOTS shall be supplemented by additional activities to provide students an opportunity to engage with challenging exercises stimulating their critical thinking skills.

For Curriculum Planners and Textbook Designers: Curriculum planners and textbook designers shall include exercises and tasks that address deep-level processing, ensuring a balanced distribution.

References

Doraimon, Firdaus, M., and Yukamana, H., (2024) 'An analysis of reading exercises question inserted in English book oriented to hots for the tenth grade students of SMKN 1 Penukal Utara', *Esteem Journal of English Education Study Programme*, 8(1), pp. 73–82.

Cunningsworth, A. (1995). Choosing your course book. Oxford: Heinmann.

Razmjoo, S.A. (2007). High schools or private institutes textbooks? Which fulfill communicative language teaching www.sciedu.ca/wje World Journal of Education Vol. 1, No. 2; October 2011 Published by Sciedu Press 65 principles in the Iranian context? Asian EFL Journal, 9(4). 126-140.

Nuttall, C. (1996). Teaching Reading Skills in a Foreign Language. Oxford: Macmillan Heinemann English Language Teaching.

Sholihah, I. B. (2018). An analysis of readability level of reading texts in English Textbook entitled Bahasa Inggris for Senior High School Students Grade XII [Dissertation, UIN Sunan Ampel Surabaya].

Zimmermann, S., & Hutchins, C. (2003). 7 Keys to Comprehension: How to Help Your Kids Read It and Get It! New York: Three Rivers Press.

Yamin, T. (2013). Excellence, Innovation Education, and Nurturing the Gifted. The 6th International Conference on Teacher Education.

Zohar, A. (2007). Pedagogical horizons for learning. Retrieved from: http://tlc.cet.ac.il/CETHandler. ashx?n=CetEntities.FileViewer &i=7b6c26a9-ffd0-426d-b508-19d6c9d151f1&id=42650

Helsa, G., Chotrun, N., & Vinna, N. (2022). Integrating Project Based Learning (PBL) in Education 4.0 to Produce Higher Order Thinking Skills (HOTS) For Students in English Classes. Abdi Masyarakat UIKA, 1(1), 11-14.

Newton, P. M., Da Silva, A., & Peters, L. G. (2020, July). A pragmatic master list of action verbs for bloom's taxonomy. *In Frontiers in Education*, 5, 107.

Widiastuti, M. K., & Mbato, C. L. (2025). LOTS and HOTS reading questions in EFL textbooks (Kurikulum Merdeka): unveiling every learning process purposes. JOALL (Journal of Applied Linguistics and Literature), 10(1), 48–70

Nurdiana, Amelia, R. 2017. Interpretative Reading. Pekanbaru: Kreasi Edukasi Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). A Taxonomy for learning, teaching, and assessing: A revision of Bloom's Taxonomy of educational objectives. New York: Longman.

Orey, M. (2010) Emerging perspectives on learning, teaching and Technology. Create Space.

Astuti,Y.D. (2023). Analysis Of Higher Order Thinking Skills (Hots) In Reading Exercises Of An English Textbook Entitled English In Mind Second Edition For Grade Vii Of Junior High School Based On Bloom's Taxonomy Revision. English Language Education Study Program Faculty Of Cultures And Languages Raden Mas Said State Islamic University Of Surakarta.

Mishan, F., & Timmis, I. (2015). Materials development for TESOL. Edinburgh University Press.

Lamie, J. M. (1999). Making the textbook more communicative. The Internal TESL Journal, 5(1).

McDonough, J., & Shaw, C. (2003). Materials and methods in ELT: A teacher's guide (2nd ed.). London: Blackwell Publishing Ltd.

Richards, J. C. (2001). *Curriculum Development in Language Teaching*. Cambridge University Press.

Yousefi, S., & Mohammadi, M. (2016). Critical thinking and reading comprehension among postgraduate students: The case of gender and language proficiency level. Journal of Language Teaching and Research, 7(4), 802-807

Gagne, R. M. (1977). The Condition of Learning. New York: Holt, Rinehart, and Winston.

Block, E. (1986). The comprehension of second language readers. Tesol Quarterly, 20(3).

Freahat, N.M. and O.M. Smadi, 2014. Lower-order and higher-order reading questions in secondary and university level EFL textbooks in Jordan. Theory and Practice in Language Studies, 4(9): 1804-1814.

Sidek, H. (2010). An analysis of the EFL secondary reading curriculum in Malaysia: approaches to reading preparation for higher education (Dissertation). University of Pittsburgh.

Enabulele, A. (2011). A Critical thinking in secondary language arts: Teacher perception and relevant strategies (M.A. Thesis). Eric.

Zulfa N, 2020. Developing Higher Order Thinking Skills (HOTS) of Reading Assessment instrument of Analytical Exposition Text Using Google for the Eleventh Grada of Senior High School.

Nurianti, M., (2020). The analysis of Reading Comprehension Questions level in the English textbook for Senior high school of grade twelfth.

Gronlund, N. E. (1998). *Assessment of student achievement*. Boston: Allyn and Bacon.

Comprehensive English Book for Class XI (2022)

Carneson J, Delpierre G, Masters K. 2016. Designing and Managing Multiple Choice Questions, (2nd ed.).

Armala, I., Fauziati, E. and Asib, A. (2022) 'Exploring students' lots and hots in answering reading questions', *Journal of Education Technology*, 6(3), pp. 390–397.

Stevani, M., & Tarigan, K. (2022). Evaluating English Textbooks by Using Bloom's Taxonomy to Analyze Reading Comprehension Question. *SALEE: Study of Applied Linguistics and English Education, 4*(1), 1-18.

Hutasuhut, M.L. and Silalahi, R.S. (2022) 'Analysis of reading exercise questions in an English textbook for year X senior high school students based on BloomTMs', *LINGUISTICA*, 11(3), pp. 760–770.