

**AN ANALYSIS OF HIGHER ORDER THINKING SKILLS
(HOTS) OF READING COMPREHENSION QUESTIONS IN
ENGLISH EXAMINATION FOR JUNIOR HIGH SCHOOL IN
BANDARLAMPUNG**

A Thesis

Submitted as a Partial Fulfillment of the Requirements for S1-degree

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ABSTRACT

The importance of Higher Order Thinking Questions (HOTS) as a way to support the process of teaching and learning process is highly recommended to be implied in school. HOTS could encourage students' cognitive skills; analyzing, interpreting, and problem solving. In fact, many previous studies stated that not many questions in school final examinations had HOTS. Thus, this study aimed to investigate the use of HOTS questions in English school examinations, particularly in reading comprehension. The researcher wanted to know the percentage of HOTS in the Reading Section of the English school examination. The purpose of this research was to analyze the proportion and how Higher Order Thinking Questions (HOTS) was implied in Junior high school English examinations in Bandar Lampung.

Qualitative research was used in this study with the Checklist table. The researcher used the English Final Examination in the 2022–2023 academic year from one of the public junior high schools in Bandarlampung as the main data. It is made up of 50 questions. The quality analysis sheet of HOTS and LOTS question categories from Anderson and Krathwohl's Revised Bloom Taxonomy.

These findings indicate that the Junior High School Examination in Bandar Lampung incorporates HOTS questions, with a 30% representation. The "analyze" category dominates, encompassing all cognitive processes, and fostering critical thinking and deeper understanding. In conclusion, HOTS questions have been integrated into the English School Examination in Bandar Lampung, comprising 30% of the exam. These questions primarily involve the "analyze" category, encompassing various cognitive processes. This indicates that the examination not only assesses reading comprehension but also fosters critical thinking and the ability to analyze, evaluate, and generate new ideas and knowledge, thereby enhancing students' critical thinking abilities.

Keywords: *English Examination, HOTS, LOTS.*

FREE PLAGIARISM LETTER

I hereby declare that this thesis, entitled “**AN ANALYSIS OF HIGHER ORDER THINKING SKILLS (HOTS) OF READING COMPREHENSION QUESTIONS IN ENGLISH EXAMINATION FOR JUNIOR HIGH SCHOOL IN BANDARLAMPUNG**” is entirely my own word and is based on my own research. I also declare that all material and source consulted in the preparation of this thesis, be the books, articles, and any other kinds of document, and are properly acknowledged in the footnotes and bibliography.

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ADMISSION LETTER

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MOTTO

لَا يُكَلِّفُ اللَّهُ نَفْسًا إِلَّا وُسْعَهَا

There is no exam that cannot be completed. There is no difficulty that exceeds the limits of ability. Because “God will not burden a person except according to the level of his ability.”¹

"Reading furnishes the mind only with materials of knowledge; it is thinking that makes what we read ours"

–John Locke



¹ Al-Qur'an, Surah Al-Baqarah : 286

DEDICATION

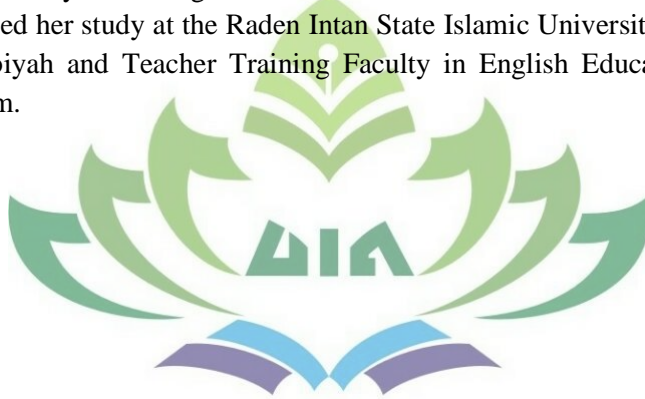
This thesis is dedicated to everyone who support and love me. I would like to dedicated this thesis to:

1. My God Allah SWT because Allah has given me health, strength, and opportunity to finish this thesis.
2. My beloved parents Mr. Muhammad Taufiq and Mrs. Astiowati who always tirelessly pour out prayers for their children who are struggling to win the title of S. Pd and never forget to always remind them that Allah is a good planner. As a sign of devotion, respect and endless gratitude, I dedicate this thesis to my father and mother who have given me love and all support. I hope this is the first step to making them happy. May Allah bless you all.
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6. Last but not least "Thank you myself you did well" for being able to try hard and fight this far. able to control myself from various pressures outside of circumstances and never decide to give up no matter how difficult the process of preparing this thesis.

CURRICULUM VITAE



The name of the researcher is Izza Khabila. She was born on March, 18th 2001 in Tanjung Karang. She is the last child of two children of a lovely couple Mr. Muhammad Taufiq and Mrs. Astiowati She has one older brother namely Chozinatul Ozza. The researcher began her study in the Kindergarten at TK RAPPI and finished in 2006. Then, she continued her study at SDN 1 Gisting Bawah in 2007 and finished in 2013. After that, she continued her study at Junior High School at SMP Muhammadiyah Gisting and finished in 2016. Afterward, she continued her study at SMA Muhammadiyah Gisting and finished in 2019. In the same year, she continued her study at the Raden Intan State Islamic University Lampung in Tarbiyah and Teacher Training Faculty in English Education Study Program.



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Bandar Lampung, 30 October 2023

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JHS



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CHAPTER I

INTRODUCTION

A. Title of Confirmation

To ensure clarity about the discourse of this study, the researcher deems it necessary to elucidate the objective of this proposal, as derived from the definition of the title, which serves to shape the readers' comprehension of the content expounded in this thesis proposal. The objective of this study is to examine the cognitive abilities involved in answering reading comprehension questions in English school exams. Thus, the following is a detailed explanation of each term included in the title of this proposal;

1. Analysis is the process of disassembling a complete entity to identify indications, their interconnections, and their individual roles as a unified entity.
2. Reading is a necessary skill that individuals must acquire in order to acquire knowledge from various texts and words. It entails comprehending written content. In order to fully comprehend a document, it is necessary to decipher individual words, phrases, and paragraphs. This talent is an essential element of the learning process, such as acquiring proficiency in a new language. Our ability to comprehend a language is contingent upon our proficiency in both letter recognition and text comprehension. Comprehending knowledge is also connected to the quantity of words we retain in our minds. Reading is intricately linked to an individual's knowledge and provides the reader with a vast array of information.
3. Advanced Level Cognitive ability refers to the capacity to utilize acquired knowledge and analyze the given information in order to effectively resolve issues within one's surroundings. Higher Order Thinking Skills encompass the most advanced cognitive abilities, which include the processes of analyzing, evaluating, and creating. The analysis involves decomposing the material into its fundamental components and ascertaining the interrelationships between those components. Evaluating involves making assessments using established standards and criteria. The capacity to integrate all the constituent elements into a tangible entity is encompassed under the domain of creation.
4. An English school examination is a method employed by educational institutions to evaluate pupils' proficiency in the English language. The outcome of this evaluation will determine whether the students are eligible to advance to the next level or not. During an English examination, three essential skills are assessed: reading comprehension, grammatical proficiency, and vocabulary knowledge. The majority of the questions pertain to reading comprehension. Reading comprehension refers to the capacity to fully comprehend and grasp the meaning of a text as a cohesive entity. Reading comprehension involves the cognitive process of deriving significance and understanding from written material. Comprehension questions are provided after the text to assist students in understanding the topic. The English school examination questions comprise both Lower Order Thinking Skills (LOTS) and Higher Order Thinking Skills (HOTS). The questions employed are formulated by the MGMP (Musyawarah Guru Mata Pelajaran) of a specific administrative district and are thereafter utilized across all educational institutions within such district.

B. Background of The Problem

Reading involves the act of examining textual content and comprehending it. In the reading activity, the reader attempts to comprehend the text by utilizing the information provided and connecting it with the reader's prior knowledge. Reading is the ability to understand a text using our

ability and reading is the approach of comprehending words and synthesizing their meanings in sentences and the reading recitation structure¹. During this activity, the reader will process the information that is being read. Reading allows readers to receive more knowledge, it's also known as receptive skill.

Reading is one of the receptive abilities that individuals must learn in order to gain knowledge from diverse letters and words. Reading is an essential component of learning, especially when learning a new language. We will not be able to learn a language until we can read letters and, even more importantly, text. Reading has two major components: word reading and language comprehension. Word reading is the ability to read each word individually, whereas language comprehension is the ability to grasp or understand the word, sentences, and text as a whole. As a result, these two components are interdependent². The number of words we store in our brains is also related to understanding knowledge. Reading is associated with knowledge and exposes us to a wide range of information. As noted by Grabe, reading is an essential language skill for students who are studying English as a foreign language (EFL) or as a second language (ESL)³.

Furthermore, Reading serves two crucial tasks. For instance, reading is a means of communication. Reading for communicative objectives is synonymous with reading for pleasure. This purpose is to support our daily lives rather than to fulfill a reading obligation. Reading material is considered authentic in this way. The second type of reading is for scientific purposes. Reading for education requires learning about a specific topic⁴. This type of reading is used to obtain more knowledge in a specific area. There is a lot of knowledge that we don't know for sure. By reading, a person can gain more knowledge. Therefore, by reading diligently we can gain a lot of knowledge and improve our skills. Research has shown that reading improves general knowledge and, more importantly, allows you to recognize patterns more quickly⁵.

Furthermore, reading comprehension is defined as the process by which readers become aware of their thoughts, understand certain aspects of their experiential background, and characterize it in relation to their objectives and necessity⁶. Therefore, by reading, students can gain more knowledge and increase their ability to comprehend the information they get. Through reading activities, it can help them increase the vocabulary they will use to communicate. However, there are difficulties experienced by students in reading comprehension. In learning reading comprehension, there are several causes of difficulties in reading comprehension. Difficulties experienced by students in understanding reading occur due to several factors, such as the learner's background, teaching techniques, and the learning environment.⁷

The first is the learner's background; the learner's background refers to something that comes from the student. Such include learners' attitudes toward reading, such as their enthusiasm and motivation to read and past knowledge. The second area of focus is teaching approaches. Teachers are one of the school environments that play a vital influence in boosting student achievement and interest in the

¹ Maria Melati Sitorus, Lauren Hotmauli Silalahi, Hana Rajagukguk, Netti Panggabean, Jamaluddin Nasution, *The Effect of Higher-Order Thinking Skill (Hots) in Reading Comprehension*. IDEAS Journal of Language Teaching and Learning, Linguistics and Literature, 9 no 1, 2021.

² Jane Oakhill, Kate Cain and Carsten Elbro. (2015). *Understanding and Teaching Reading Comprehension: A Handbook*. Routledge

³ William Grabe, *Fluency in reading—Thirty-five years later*, Reading in a Foreign Language, 22 no 1, 2010.

⁴ David Nunan. (2015). *Teaching English to Sepeakers of Other Languages*. New York: Routledge.

⁵ Anne Cunningham and Keith Stanovich, *What Reading Does for the Mind*, Journal of Direct Instructions, Vol 1 No. 2, 2001.

⁶ Khoiriyah. (2010). *Reading I*. Kediri: English Department Nusantara PGRI Kediri University Press

⁷ Westwood, P. (2001). *Reading and Learning Difficulties a Process to Teaching and Assessment*, Australia: Acer Press.

learning process. The final component is the learning environment. Their surroundings can also influence students' enthusiasm in the learning process.

As learners have trouble understanding and deriving the meaning of the material, clear instructions are required to grasp it⁸. Learners may struggle to understand the content in this case because they may not understand the definition of the word. As a result, students are unable to retain the information in the text they are reading. Students struggle to understand word meanings and cannot draw conclusions. Therefore, precise instructions are required to assist students in understanding the topic.

English is an essential language for communication and a crucial ability in the modern world. Human resources in the 21st century must have a variety of skills to be able to face various problems and challenges. Skills in the 21st century are divided into five categories: (1) ways of thinking, (2) skills to act and communicate (ways of working and communication), (3) skills to use supporting components (tools for working), (4) literacy and mastery of information technology/information communication technologies (ICT), and (5) skills related to global awareness (skills for living in the world)⁹. The Harvard Advance Leadership Initiative emphasizes the importance of incorporating critical thinking and problem solving, creativity and innovation, collaboration, question formulation, global awareness, communication skills, and technology skills into education in order to adequately prepare the younger generation for the challenges of this century¹⁰. A country's hope and dream are to have a country with good and quality human resources, which will lead to independence, prosperity, and the ability to compete with other countries in the world¹¹.

Education is a crucial component in the cultivation of highly skilled individuals. Therefore, the development of high-quality human resources can only be achieved through a deliberate and organized endeavor focused on the quality of education. In conclusion, these abilities are universally acknowledged as essential for addressing current global concerns. Hence, it is unsurprising that numerous educational plans incorporate 21st-century competencies. The incorporation of 21st-century skills into educational settings in Indonesia is seen in the adaptation of the 2013 curriculum, commonly referred to as K13. The Indonesian Government has established a standards-based curriculum that prioritizes communication and critical thinking abilities in order to adopt 21st-century competencies¹².

The Indonesian Government has elucidated that Indonesian pupils possess a limited proficiency in (1) comprehending intricate knowledge; (2) comprehending theories, scrutinizing, and resolving difficulties; (3) utilizing tools, executing procedures, and resolving problems; and (4) conducting an inquiry. For example, the Indonesian Ministry of Education and Culture attempted to incorporate Higher Order Thinking Skills (HOTS) into the curriculum of 2013. The Ministry of Education Regulation Number 22 was established by the Government in 2016 to outline the standardized procedures for elementary and secondary level education. The regulation states that knowledge is obtained by activities such as remembering, understanding, applying, analyzing, evaluating, and

⁸ Joseph, Laurice., M. (2001). *Best Practices on Interventions for Students' with Reading Problems*. The Ohio States University, Best practice in school psychology V, p.1172 chapter 71(4)

⁹ A.R. Wulan, A. Isnaeni and R. Solihat, "Penggunaan Asesmen Elektronik Berbasis Edmodo Sebagai Assessment for Learning Keterampilan Abad 21," Indonesian Journal of Educational Assessment, vol, 2, no. 1, 2018.

¹⁰ Harvard Advanced Leadership Initiative. *Education for the 21st century: Executive summary*. Cambridge, MA, (2014).

¹¹ Giri Sarana Hamiseno, Handaru Catu Bagus, Fahmi, Rahmah Zulaiha, Haryo Susetiyo, Abdul Rahman, *Processing National Examination Result for Junior High School, Senior High School and Vocational School in Indonesia*, Proceedings of the International Conference on Educational Assessment and Policy (ICEAP 2020), 2020.

¹² TJ Syarifah, B Usodo, Riyadi. *Student's critical thinking ability with higher order thinking skills (HOTS) question based on self-efficacy*. Journal of physics: conference series, 2019

creating¹³. Consistent with Widana et al., it has been asserted that integrating Higher Order Thinking Skills (HOTS) into the teaching and learning process can enhance the development of critical thinking. This is due to the fact that HOTS encompasses the necessary abilities for critical thinking.¹⁴

Integrating Higher Order Thinking Skills (HOTS) into reading comprehension can be utilized as an instructional activity to enhance students' cognitive abilities in the classroom. Reading comprehension is an essential talent that students must learn in order to achieve competency in reading. It is a skill that will be increasingly important for kids in the future. Proficiency in critical thinking and problem-solving is crucial for properly comprehending texts, both within and outside the confines of the classroom. This demonstrates the significance of comprehension and analytical reasoning in the advancement of students' reading abilities¹⁵. This is relevant because reading comprehension exercises can assist students understand texts and advance their cognitive abilities.

The new curriculum of the Indonesian educational program in 2013 stipulates that students should be strengthened in four key integrated parts of the lesson plan: character development, literacy, the 4C skills (creative, critical thinking, communicative, and collaborative), and higher-order thinking skills (HOTS)¹⁶. HOTS is defined in the revised Bloom's taxonomy as an incision between the three top levels of cognitive ability (analyzing, evaluating, and creating) and three levels of knowledge dimension (conceptual, procedural, and metacognitive)¹⁷. The main objective of HOTS is to cultivate students' advanced cognitive abilities, namely their capacity for critical thinking when processing diverse information, their aptitude for creative problem-solving based on their expertise, and their ability to make informed decisions in intricate scenarios¹⁸.

Integrating HOTS (Higher Order Thinking Skills) into the teaching-learning process can help teachers enhance students' critical thinking, problem-solving, and decision-making skills. The 2013 Curriculum maintains consistency in its approach, guidelines, and implementation for Higher Order Thinking Skills (HOTS). The concept is formally articulated in the graduation competency standard, which forms the basis for the 2013 Curriculum policy. The origin of it might be attributed to content standards. Process standards serve as the foundation for content standards. Assessment standards provide the basis for process standards. In essence, all of these Permendikbud regulations can guarantee that children possess Higher Order Thinking Skills (HOTS). As a result of this strategy, assessments in education, including the National Standardized School Examination, have been directed to be grounded on the Higher Order Thinking Skills (HOTS) paradigm.

Measurement, assessment, and evaluation are all interconnected components of the educational system. Each component plays a distinct role in the learning process. One of the indicators used to determine the success of a testing process is assessment¹⁹. Assessment is a data collection process used

¹³ Kemendikbud. Peraturan Menteri Pendidikan dan Kebudayaan Nomor 22 Tahun 2016 tentang Standar Proses Pendidikan Dasar dan Menengah (2016). Indonesia

¹⁴ Widana, I. W., Parwata, I., Parmithi, N., Jayantika, I., Sukendra K., & Sumandya, I. (2018). *Higher order thinking skills assessment towards critical thinking on mathematics lesson*. International journal of social sciences and humanities, 2(1), 24-32.

¹⁵ Susan Taylor, *Reading for Meaning: A guide to the research on best-practice teaching of comprehension in today's world*. 2018, Australia: Oxford University press.

¹⁶ Siti Musliha, Dadang Sudana, Yanty Wirza. *The Analysis of Higher Order Thinking Skills (HOTS) in the Test Questions Constructed by English Teachers*, Proceedings of the Fifth International Conference on Language, Literature, Culture, and Education (ICOLLITE 2021); Febrina, Bustami Usman, Asnawi Muslem. *Analysis Of Reading Comprehension Questions By Using Revised Bloom's Taxonomy On Higher Order Thinking Skill (Hots)*, English Education Journal (EEJ), 2019.

¹⁷ Anderson, O. W., & Krathwohl, D. R. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York, NY: Longman.

¹⁸ Saputra, Hatta. (2016). *Pengembangan Mutu Pendidikan Menuju Era Global: Penguatan Mutu Pembelajaran Dengan Penerapan HOTS (Higher Order Thinking Skill)*. Bandung: SMILE's Publishing

¹⁹ Aditya Nugraha Surya Saputra, Heri Retnawati, Eri Yusron. *Analysis Difficulties and Characteristics of Item Test of on Biology National Standard School Examination*. Proceedings of the 6th International Seminar on Science Education (ISSE 2020)

to make decisions about students or teachers. Stakeholders at the school use information from the assessment process to decide what students have learned, what and where they should be taught, and what types of related services (language service, psychological service) they require²⁰. Assessment is critical in education in order to determine educational success. A good assessment results in a high level of education quality. National Examination evaluation standards based on HOTS have been adopted by the government since 2017–2018. The Minister of Education and Culture claimed that the High Order Thinking Skills (HOTS) standard was applied in part of the questions on the 2018 Junior High School National Examination. Low Exam score is the outcome. Nevertheless, the government routinely conducted HOTS standard assessments that had been in line with the guiding principles and directives of the 2013 Curriculum.²¹

Previously, Indonesia used National Examination (NE) to assess student's abilities and determine whether they could graduate. According to Circular Letter (Surat Edaran) No 1, 2021, the National Examination, which serves as a means of evaluating the education system, has been eliminated. Students' graduation is contingent upon three criteria: (1) successful completion of learning programs throughout the Covid-19 pandemic, as demonstrated by report cards each semester; (2) attainment of a minimum satisfactory attitude/behavior score; and (3) participation in the examination administered by the Education unit. The school will organize and administer the exam. Although the school made preparations for the examination, it is still necessary for the questions to be composed of Higher Order Thinking Skills (HOTS) questions²².

In the previous years, when NE was still conducted, The Junior high school English National Examination questions solely of reading passages. The question's content is segmented into various sections, including Recount content, Procedure Text, Narrative Text, Descriptive Text, Report Text, and supplementary resources. Prior to this, a group of academics conducted a study on the implementation of Higher Order Thinking Skills (HOTS) in English Examinations. A study was conducted in 2019 to gather empirical evidence regarding the distribution of higher-order thinking skills (HOTS) questions in the National Examination for the English subject. The study also aimed to observe the progress of the National Examination in incorporating HOTS at the Junior High School level during the academic year 2017-2018. This study extensively utilized library research and document analysis to identify, evaluate, and categorize the quality of National Examination questions. Two documents from the field of NE, specifically from the academic years 2016-2017 and 2017-2018, were utilized as representative samples. The study's primary findings indicate that a mere 6 and 9 questions out of a total of 50, representing 12% and 18% respectively, from two distinct National Examinations, can be categorized as High Order Thinking Skills (HOTS). Meanwhile, the Lower Order Thinking Skills (abbreviated LOTS) consist of 44 and 41 questions, which account for 88% and 82% of the total questions in each school year, respectively. In conclusion, the authors determined that most NE questions at the Junior High School level can be categorized as LOTS (lower-order thinking skills). Moreover, according to the data, there was a mere 6% increase in the quality of questions over a span of two academic years²³.

²⁰ H. Retnawati, B. Kartowagiran, J. Arlinwibowo, E. Sulistyarningsih, *Why are the Mathematics National Examination Items Difficult and What Is Teachers' Strategy to Overcome It?*, International Journal of Instruction 10(3) (2017) 257–276.

²¹ Fransiskus Sawan, Esmi Tsalsa Sofiawati, Suryadi, and Nurhattati Fuad, "Higher Order Thinking Skill (HOTS): One of the Competencies Which Becomes the Purpose of Implementing the 2013 Curriculum (An Analysis of the Relationship between Philosophy, Policy, and Implementation)," The 2nd International Conference on Elementary Education 2, no 1 (2019): 529-597

²² Ibid.

²³ Astuti Widiyaningsih and Tri Ilma Septiana, "An Analysis of the Higher Order Thinking Skills (Hots) in the National Examination of English Subject at Junior High School Level," *ELT-Echo* 4, no 2 (2019): 138-146

The second research conducted in 2019 revealed an insufficient number of HOTS-based questions in the English National Examination in reading sessions for Indonesian students. This study aimed to pinpoint how HOTS-based questions were used in ENE and what specific talents fell into that group. From 2013 to 2018, one package of each English National Examination was examined. Only 53 of the 210 items in the English National examination from 2013 to 2018 are classified as HOTS items. This means that only 25.23 percent of the 210 items were HOTS, ranging from 6%-11% HOTS each year. Furthermore, the analysis of HOTS in English Examination 2019 conducted by Kartika and Abdullah showed that the examination only contained 14% HOTS or 7 items questions while the rest of the questions were in LOTS and the HOTS question is only centered on the level of Analyzing.

In contrast, the result of preliminary research completed on December 6, 2022 shown that there were 50 multiple-choice questions in the English school examination in Lampung in 2022. The questions only consisted of reading text. The question was divided into several sections; Greetings, Recount text, Procedure Text, Descriptive text, Narrative text, pronouns and several additional materials. These questions were prepared by teacher MGMP (Musyawarah Guru Mata Pelajaran) Bandarlampung and used by all Junior High schools in Bandarlampung. This school examination was created based on the curriculum used and guideline from the government.

As a result, it can be stated that the use of HOTS in the English National Examination has remained low in recent years. However, there is no NE in the current system, and school exams are used to assess students' abilities. As a result, the researcher aims to investigate the use of HOTS questions in English school examinations, particularly in reading comprehension. The researcher wants to know the percentage of HOTS in the Reading Section of the English school examination. There will be several differences between this study and the earlier studies. This study did not use NE, but instead examine the School Examination used for Junior High School in Bandarlampung in the academic year 2022/2023. Furthermore, the researcher solely concentrate on the examination's reading session.

C. Focus and Sub-Focus of the Research

After defining the mentioned issues above, it is essential to limit the scope of the problem in order to focus more attention on the specific issue. The researcher specifically examines the reading comprehension section of the 2022/2023 Junior High School Grade 9th English Final Examination Package in this study. There are 50 multiple-choice questions. As a result, these questions were assessed using the revised version of Bloom's taxonomy's higher-order thinking skill in the cognitive domain.

D. Problem Formulation

Based on the limitation of the problem mentioned above, the researcher formulated the problem in this research into;

- a. How does the proportion of Higher Order Thinking Skills in the final English examination reading section for Junior High School in Bandarlampung in the academic year 2022/2023?
- b. How does each HOTS implement in the Junior High School English final examination in Bandarlampung in the academic year 2022/2023?

E. Objectives of the Research

Based on problem formulation, the objectives of this research are;

- a. To know the proportion of High Order Thinking Skill questions in Junior High School English Examination in Bandar Lampung in the academic year 2022/2023.
- b. To examine how does each of the HOTS implement in Junior High School English Examination in Bandar Lampung in the academic year 2022/2023.

F. Significances of the Research

The significances of this research are;

1. For Test Designers

Hopefully, the result of this research could help test designers to make adjustments to the question items in the English Examination, incorporating a broader range of higher-order thinking skills. By doing so, the test can better assess students' critical thinking and problem-solving abilities.

2. For Schools and Teachers

The research hopes this study can encouraged school and teachers to create enrichment materials that offer teachers more opportunities to incorporate exercises focusing on higher-order thinking skills. These materials will help educators effectively nurture and cultivate students' ability to think critically and analytically. Additionally, schools may organize workshops to provide English teachers with the necessary training to develop and enhance their students' thinking skills, empowering them to deliver more engaging and thought-provoking lessons.

3. For the Researchers

The researcher hopes this research can be useful as a guide for other researcher in conducting similar investigations on different exam items. By examining various test formats, researchers can ascertain the extent to which higher levels of thinking are being reflected in diverse contexts. This broader approach will contribute to a more comprehensive understanding of the impact of higher-order thinking on students' academic performance and overall cognitive development.

G. Relevant Research

Several researchers have previously completed the same study topic with the researcher with different media. "An Analysis of The Higher An Analysis of the Higher Order Thinking Skills (Hots) in the National Examination of English Subject at Junior High School Level" is the title of the first research paper. This study was carried out to obtain empirical evidence on the distribution of Higher Order Thinking Skills in the National Examination of English subject based on the revised edition of Bloom's Taxonomy and to observe the development of the NE based on HOTS at the Junior High School level in the academic year 2017-2018. This study relied heavily on library research and document analysis to locate, analyze, and classify the quality of National Examination questions according to Bloom's taxonomy. Furthermore, the researchers used two NE documents from the academic years 2016-2017 and 2017-2018 as samples. The key results of this study show that only 6 and 9 out of 50 questions, or 12% and 18%, from two separate National Examinations, may be classified as HOTS. Furthermore, The researchers discovered that the HOTS were categorized as C4 or analysis ability. Meanwhile, the Lower Order Thinking Skills (abbreviated LOTS) contain as many as 44 and 41 questions, or 88% and 82% from each school year. Finally, the authors believe that the majority of NE questions at the Junior High School level can be classified as LOTS. Furthermore, based on the data, the improvement in question quality over two academic years was only 6%.²⁴

Other researchers which also analyzing HOTS questions in English National Examination in Indonesia. They research title was Higher-Order Thinking Skill (Hots) Questions in English National Examination In Indonesia; this research was done in 2019. This study was conducted to determine the level and specific characteristics of HOTS implementation in the Indonesia English National Examination (ENE). This study aimed to pinpoint how HOTS-based questions were used in ENE and what specific talents fell into that group. From 2013 to 2018, one package of each English National

²⁴ Astuti Widiyaningsih and Tri Ilma Septiana, "An Analysis of the Higher Order Thinking Skills (Hots) in the National Examination of English Subject at Junior High School Level," *ELT-Echo* 4, no 2 (2019): 138-146

Examination was examined. They examine 210 multiple-choice questions, 35 of which are reading comprehension questions. Utilizing content analysis and the features of HOTS in the Revised Bloom's Taxonomy, the items were quantitatively examined. The researchers discovered that the English National Examination lacked adequate HOTS questions. Only 53 (25.23%) of the 210 items classified as HOTS and 157 items were LOTS. The second finding would be that the Analyze level of HOTS was included in English National Examination 2013-2018. The subskills of the analyze element, differentiating and organizing, are the ones that are typically tested on all exams. Strong evidence exists to support urging the test designers to include enough HOTS-based items in the English National Examination.²⁵

The last previous study was conducted in 2020. This study aimed to categorize the items that met the criteria for HOTS items in ENE 2019 as well as their specific knowledge categories and cognitive process skills dimensions. The findings revealed that ENE 2019 has an adequate amount of HOTS items. Only 15 (42.86%) of the 35 questions were deemed to be HOTS items. The second discovery was that the cognitive process skills dimension was visible at the analyze and create stage. The results showed that there were already enough HOTS goods at ENE 2019. However, the cognitive process skills only included analysis and create capabilities; there were no questions that evaluated these abilities. It demonstrates how monotonous and unvarying the distribution of cognitive process abilities across HOTS items in ENE 2019 was.²⁶

Based on several previous studies, the proportion of HOTS on the National Examination was still low. From the first previous study, we can see that NE 2017 and 2018 only consisted of 12% and 18% HOTS, while from NE 2013-2018 there were 210 questions and only 53 of them were classified as HOTS. This means the LOTS questions still dominated in the NE from 2013-2018. Therefore, the researcher wants to conduct a research to find out about the implementation of HOTS in English Examination mainly in Junior High School Examination.

The different between this research with those previous researches is the object chosen. This research will analyze the examination paper that was created by province with national standard while the previous researches were examine the national examination questions. Furthermore, most of the research focus on Senior high school examination while this research focus on Junior High School examination which is English Examination question from SMP N 16 Bandarlampung in the academic year 2022/2023.

H. Research Method

This study utilized a qualitative research design. Qualitative research is a methodology used to explore and understand the meaning that individuals or groups assign to a social or human issue. The research process involves formulating inquiries and methodologies, gathering data within the framework of the participants, analyzing the data in a deductive manner, moving from specific instances to overarching patterns, and generating interpretations of the data's significance. The writing structure of the final written report is flexible²⁷. The findings of a qualitative research are descriptive. That is, rather than numbers, data are given in words (mainly the participant's words) or visuals. Therefore, the level of thinking in the questions on the 2022/2023 English School Examination will be described in sentences, this research is classified as descriptive research.

1. Research Design

²⁵ Tomy Kartika Putra and Debiga Fikky Abdullah, Higher-Order Thinking Skill (Hots) Questions in English National Examination in Indonesia," *Jurnal Bahasa Lingua Scientia* 11, no 1 (2019); 145-160

²⁶ Nurul Wahyuni Ilham, Baso Jabu and Chairil Anwar Korompot, "Analysis of Higher-Order Thinking Skills (Hots) Items in Senior High School English National Examination 2019," *ELT Worldwide* 7, no 2 (2020); 156-162

²⁷ John W. Creswell. 2014. *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*.

Qualitative research is a type of research that focuses on analysing the state of natural things, with the researcher playing a crucial role as the primary tool. The researcher serves as the principal instrument in qualitative research, with the outcomes of such study focusing on the significance of findings rather than making broad generalisations. This study is being undertaken as a descriptive qualitative research. Descriptive research is a type of research that does not require the formulation of hypotheses. The numerical data is collected and subsequently converted into percentages to assess the status of a certain variable. These percentages are then analysed and expressed as qualitative statements. In this study, the researcher employed a descriptive qualitative research approach. The research data consisted of written responses from the final examinations of Junior high school students in Bandar Lampung, specifically obtained from SMPN 16 Bandar Lampung.

This research employed a research design that utilised content analysis or document analysis. Document analysis, also known as content analysis, is a methodical research approach that involves studying records or documents as sources of data. The purpose of content or document analysis is to gather and examine official papers that are legally and policy-wise valid, as well as research findings. This study examined the test items in the official final exams for junior high school.

2. Research Subject

Investigation subjects can be seen as the objects or entities that are the focus of investigation. This study incorporates Higher Order Thinking Skills (HOTS) as the focal point in the English test items for the final examination of Grade IX in the 2022-2023 academic year in Bandarlampung. This research aims to determine the outcomes of an analysis largely focused on the higher-order thinking skills (HOTS) categories C4, C5, and C6. However, the lower-order thinking skills (LOTS) categories C1, C2, and C3 were also examined using the revised Bloom's taxonomy by Anderson and Krathwohl at the cognitive level.

3. Sources of Data

The researcher in this study utilises two types of data sources. The data sources used to obtain the outcomes of the research analysis are:

- a. Primary data refers to the specific type and origin of research data that is collected directly from the original source. The researcher employed test items from the SMPN 16 English Final Examination in the 2022/2023 academic year as the primary dataset to address the study inquiries. The questionnaire consists of 50 questions.
- b. Secondary data refers to information that is acquired or gathered through study from pre-existing sources. The data was acquired from the literature or prior study publications. Secondary data serves as a supplementary source of support in the research process. Examples of resources include books, journals, e-books, and other references that are relevant to Higher Order Thinking Skills (HOTS).

4. Technique of Data Collecting

In conducting this study, the researcher used the checklist table to collect the data. A checklist is a list where the respondent only places a checkmark in the relevant column. The quality analysis sheet of HOTS and LOTS question categories from Anderson and Krathwohl's Revised Bloom Taxonomy used in this study. The format of the question quality analysis sheet is as follows:

Table 1. 1 Question Quality Analysis²⁸

Question No.	Indicator						Description
	LOTS (Lower Order Thinking Skill)			HOTS (Higher Order Thinking Skill)			
	C1	C2	C3	C4	C5	C6	
1							
2							
3							
Etc.							

Explanation: Fill in the indicator criteria for the question above by giving a sign (√) along with the information

5. Research Procedure

In the data collection, the researcher categorized the selected items into three parts. Firstly, evaluate the items based on the two major Bloom's Taxonomy categories: LOTS and HOTS. Secondly, the items classified into the levels of HOTS, which consist of the level of analysis, synthesis, and evaluation. Thirdly, attempt discovered the subskills under each main skill; analysis, synthesis, and evaluation.

6. Trustworthiness of the Data

Qualitative research data can be accounted for by testing the validity of the data. The researcher used the validator to show the validity of the data in research. The validator in this research is the lecturer, Nunun Indrasari M. Pd.

7. Data Analysis

Data analysis is the process of systematically searching for and compiling data obtained from interviews, field notes, and documentation by categorizing the data, describing it in units, synthesizing it, arranging it into patterns, deciding which ones are important and which should be studied, and drawing conclusions.

After collecting the data, the researcher analyzed it. This is a qualitative study in which the data collected analyzed qualitatively and descriptively. In this study, data analyzed in two stages: the first was cognitive level, which analyzed using the table and the second cognitive stage, which calculated using a general percentage equation and conclusions were drawn.

Calculate the percentage of the cognitive level using the following formula :

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

P = The percentage of indicators of each characteristic of the HOTS and LOTS questions in the English School Examination in 2022/2023 academic year.

n = Number of questions classified as HOTS and LOTS in English School Examination test

²⁸ Anderson, O. W., & Krathwohl, D. R. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York, NY: Longman

$N =$ Total overall items test.

Meanwhile, the level of thinking can be determined from the percentage of stages cognitive.

I. Systematics of Discussion

- Chapter I : Present the introduction, which consists as follows:
- a. Title affirmation;
 - b. Background of the problem;
 - c. Focus and sub-focus of the research;
 - d. Identification of the problem;
 - e. The objective of the research;
 - f. Significant of the research;
 - g. Relevant of the research;
 - h. Research method;
 - i. Systematic discussion.
- Chapter II : Present the literature review, which consists as follows:
- a. Reading
 - b. Higher Order Thinking Skill
 - c. Examination
 - d. Higher Order Thinking Skill Question in Examination/Assessment
- Chapter III : Presents the description of the research object, which consist as follows:
- a. General description of the object;
 - b. Facts and data display.
- Chapter IV : Presents the research data and research findings.
- a. Research data
 - b. Research findings
- Chapter V: Present the conclusion and recommendation of the research.
- a. Conclusion
 - b. Recommendation

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

The analysis of Junior high school English Examination in Bandarlampung revealed that it primarily consisted of Lower Order Thinking Questions (LOTS), accounting for 70% of the questions, while only 30% were classified as Higher Order Thinking Questions (HOTS). The HOTS questions were exclusively focused on the analytical aspect, with no questions involving evaluation or creativity, possibly due to the multiple-choice format of the questions.

In the realm of LOTS questions, the majority centered on understanding (C2), with 23 questions requiring this skill, and 12 questions involved basic recall (C1). Notably, the application (C3) cognitive dimension was absent, as it is typically challenging to incorporate in multiple-choice questions. In contrast, the HOTS questions emphasized analysis, with 15 questions requiring students to delve deeper into the text, infer implicit information, and identify main ideas, purpose, and other analytical skills. These questions covered three cognitive processes: differentiating, organizing, and attributing, enhancing students' comprehension and critical thinking abilities.

The English Examination incorporated 30% of HOTS questions, specifically focused on analysis. These questions encompassed all cognitive processes related to analysis, including differentiating, organizing, and attributing. Specifically, 11 questions focused on the skill of attributing, 3 questions on organizing, and 1 questions on differentiating. As a result, the examination not only assessed reading comprehension but also fostered critical thinking, encouraging students to analyze, evaluate, and generate new ideas and knowledge from the text, aligning with the principles of critical skills development in educational assessments.

B. Recommendations

Based on the study findings, the researcher would like to give several recom:

4. For Test Designers

The test designers should make adjustments to the question items in the English Examination, incorporating a broader range of higher-order thinking skills. By doing so, the test can better assess students' critical thinking and problem-solving abilities.

5. For Schools and Teachers

Moreover, schools are encouraged to create enrichment materials that offer teachers more opportunities to incorporate exercises focusing on higher-order thinking skills. These materials will help educators effectively nurture and cultivate students' ability to think critically and analytically. Additionally, schools may organize workshops to provide English teachers with the necessary training to develop and enhance their students' thinking skills, empowering them to deliver more engaging and thought-provoking lessons.

6. For the Researchers

The study suggests that other researchers should conduct similar investigations on different exam items. By examining various test formats, researchers can ascertain the extent to which higher levels of thinking are being reflected in diverse contexts. This broader approach will contribute to a more comprehensive understanding of the impact of higher-order thinking on students' academic performance and overall cognitive development.

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