

Analysis of Higher Order Thinking Skills (HOTS) in Online Learning by English Teacher

Nabila Maratus Salihah,

University of Bengkulu

Email: nabilamartus@gmail.com

Joko Prayudha S,

University of Bengkulu

Email: jokoprayudha@gmail.com

Journal History

Accepted: June 2023

Published: June 2023

Keywords:

Higher order thinking skill
(HOTS), online learning, English

DOI: [10.35719/jlic.v5i1.114](https://doi.org/10.35719/jlic.v5i1.114)

Abstract

HOTS is a skill that is needed in the 21st century in developing students' critical thinking skills in solving a problem. This skill requires students to be able to think creatively and think critically in facing future challenges in the world of work and in social life, so teachers must be able to teach students through asking questions that demand HOTS skills, but during pandemic covid 19, face-to-face learning has shifted to online learning which makes teachers have to be able to change learning to online mode. This study aims to analyze the HOTS question and task in English textbook and material that English teacher given to students during English online learning, especially in writing skill. The method used in this research is qualitative by using a descriptive approach. Data is obtained through analyzing documentation some questions and tasks in the English textbook used by the English teacher given during online learning. The data were analyzed through three stages, namely data reduction, data display and data conclusion. The results of the study show that the application of HOTS in learning has a significant impact on providing students' critical reasoning and creativity abilities. In addition, during online learning the teacher provides a number of questions related to HOTS which are at C4, C5 and C6 levels so that students are expected to have better abilities during English learning. The result of this study can provide information to readers about the need for the application of HOTS-based learning in order to support students' critical thinking skills to be better.



Authors retain copyright and grant the journal right of first publication with the work simultaneously licensed under Attribution-ShareAlike 4.0 International (CC BY-SA 4.0), that allows others to Share — copy and redistribute the material in any medium or format. Adapt — remix, transform, and build upon the material for any purpose, even commercially.

INTRODUCTION

Today, learning requires students to become individuals who can have the ability to think critically and think creatively (Djami & Kuswandono, 2020). This learning is very important so that students are able to implement their abilities to become better individuals. Therefore, it is necessary to have learning that can improve higher-order thinking skills. In addition, to support learning that is in accordance with the needs of the times, it is necessary to emphasize learning on the 4C skills, namely critical thinking, communication, creative and collaboration. This skill requires students to become individuals who have abilities that are in accordance with the times. Currently the development of the situation requires students who are able to think critically and creatively, one way to develop this is through HOTS learning (Sonia, 2022). Besides that, Suardamayasa (2022) stated that the HOTS ability requirements are very useful in helping students become more sensitive to the issues currently being discussed, so that they better understand what is needed to develop their abilities. Thus, teachers should have good abilities in providing teaching that is in accordance with HOTS abilities to develop students' critical thinking abilities. In practice the implementation of learning in the classroom the teacher should have implemented HOTS learning at school, but there are still many teachers who have not maximized HOTS learning at school. It is similar was conveyed by Setyowati & Sarwanto (2021) in his research which stated that the higher-order thinking skills of students at the elementary school level using e-learning during the covid-19 pandemic are still not optimal and only half of the population had the expected abilities. This is a problem that must be addressed by most teachers in order to be able to create students who have high-level abilities. However, in reality the learning that is given while in the classroom through face-to-face must change to online learning because of a dangerous virus attack that attacks humanity. The corona virus, which spreads so quickly and creates concern, has caused many schools and other educational institutions to close.

As a result of the spread of the virus, education systems around the world have turned online. In line with research conducted by Destianingsih & Satria (2020) stated that in order to have an effective online classroom the teacher should consider the students' needs, and their language proficiency in choosing numerous learning material activities and appropriate media. Good internet access, media and convenience environment are also considered important to hold an effective online classroom so that online learning can be carried out effectively based on the characteristics and conditions of students (Singh et al., 2020). Teaching and learning activities are carried out using the help of communication and information technology, teachers provide instruction through computer screens

and students listen to explanations through the gadgets they use. In the implementation of online learning, sometimes there are distractions that cause learning to be ineffective, such as two-way communication that doesn't work well, inadequate online learning facilities, low mastery of technology, and other factors that hinder the learning process. Rahmayanti (2020) stated that the Indonesian students' HOTS and environmental education model during covid-19 had a very low score. So the teacher who acts as a driving force in online classes should be able to bring out the creativity of students to answer the questions given. Putri & Sulityaningrum (2021) stated that in the current situation it is necessary for teachers to provide higher level thinking skills so that students are better prepared to face the future. Critical thinking skills will also train students to be braver in finding solutions to the problems they face and students will be braver in expressing the opinions they have in solving a problem. Armala et al. (2019) said that HOTS would train students to be more confident in expressing their opinions on an issue they studied. Besides that, Narwianta et al. (2019) also added that there needs to be a good way to develop students' communication and critical thinking skills so that students are more open and able to channel their ideas and creativity in a group discussion through HOTS learning. This shows that HOTS skills need to be immediately given to students in order to be able to train students to think more critically.

In its implementation, it will definitely face several challenges so teachers need to prepare HOTS learning readily and appropriately. Hemas et al. (2021) said that teachers need to find out the types of questions that have elements of high-level thinking so that students can think more deeply. In learning that allows the teacher to provide higher-order thinking questions, there may be obstacles that must be overcome. With these obstacles, of course, it will add to the teacher's burden in carrying out online learning activities. Plus, the teacher must provide HOTS teaching in online learning so that it causes the teacher's performance to increase. This sometimes makes teachers only give mediocre teaching to students because the obstacles that occur make them overwhelmed in giving good teaching (Prayudha, 2021). As long as online learning provides HOTS-based teaching it is very necessary so that students even though they are studying from home can also hone critical thinking and creative thinking skills to avoid low-level learning. Prayudha (2023) states that teachers must be able to develop materials and tasks using the HOTS question criteria and be able to ensure students can answer every question given during online learning. Apart from that, the provision of material that can invite students to think critically is also very necessary so that students do not feel bored when learning online, because as we know that online learning which has been carried out for more than two years has caused many students to

feel bored in carrying out online learning. So, teachers should be able to ensure and use fun learning methods and strategies so they don't get bored quickly while in the virtual class. The importance of providing interesting learning in order to increase student learning motivation (Prayudha, 2022). By providing interesting teaching, it will definitely invite students to learn to be more active and be able to invite students to interact more in online learning. Teachers can take advantage of online learning resources, for example with the help of learning videos in providing and explaining material. Prayudha (2021) also stated that online learning requires teachers to be able to find new ways to learn, one of which is by using video. Using videos that are appropriate to the character of students is very effective in attracting their interest in learning so that they can reduce feelings of laziness and boredom when carrying out online learning. With the help of creative media, it can also encourage students to think creatively and get them actively involved in the virtual classroom teaching and learning process.

Thus, this study tries to analyze the questions and tasks given by the English teacher on teaching online through the use of Google classroom to determine the cognitive level given by the teacher when giving questions and questions to students. By knowing the cognitive level of learning English, the teacher can further improve students' critical thinking skills for the better so that students are able to develop their skills in facing the challenges of future work and society. In addition, the results of the HOTS analysis will also provide an overview of the importance of giving high-level thinking assignments to students to prepare creative and critical generations.

METHODS

In conducting this research, researchers used qualitative methods with a descriptive approach in conveying research results. Qualitative research is used to find out the social phenomena that occur in more depth (Cresswell, 2013). In this study, qualitative research was used to find out the HOTS in questions and tasks in English materials that given by English teachers during online learning. Sugiyono (2014) explained that the qualitative descriptive method can be used to see the situation or condition of the object being studied naturally without data manipulation and also in qualitative descriptive research, the researcher has a key role in conducting research. Next, this study was conducted at senior high school number 09 Bengkulu city. The research subject was an English questions and tasks given by the English teacher to students during online learning. The research did at eleventh class. The material given for the whole class was similar. The researchers try to analyze the task and question 5 online meetings using the Google classroom application. The researcher only analyzed HOTS questions at five

meetings because they were already at the core of learning which emphasized HOTS learning. Those five meetings covered 2 chapters, chapter 1 about “offer and suggestion”, chapter 2 about “opinion and thoughts”. The researchers only focused on HOTS implementation in online learning processes during a pandemic situation. In addition, the data in this study were obtained through online learning documentation which was carried out for about two months by analyzing questions or questions related to HOTS in English subjects.

In the implementation of the research, content analysis was used in order to find out to what extent the questions made by the teacher contained HOTS learning. (Anderson, 2007) states that a content analysis was applicable to various studies including language studies, which concern with analyzing the content of certain matter through classification, tabulation and evaluation. Miles, Huberman & Saldana (2013) stated that content analysis in which research aims to identify meaning from a certain document, text or archive. A broad based definition dealing with content analysis is present in (Krippendorff, 2004) text: it defined content analysis as a technique that aims for replicable and valid inferences from texts as to the contexts of their use. The data source of the research is analyze document of conversations, passages, images, task or activity that teacher deliver in online classroom related to HOTS.

The content analysis card was used as the research instrument for this study. The items of the content analysis card was divided into three aspects of higher order thinking skills (HOTS) by Anderson, L., et. all (2001) (c4 (analyze), c5 (evaluate), c6 (create)). The limitations of the analysis were: The analysis of image, passages/sentences and conversations, task and activity the teacher give to students during online learning related to HOTS learning.

RESULTS AND DISCUSSION

Learning with an emphasis on HOTS skills does require more effort in order to make students understand the material being taught and thereby prepare students with the ability to think critically and think creatively. The teacher must have a good understanding and knowledge of HOTS skills so that he can invite and shape students to be more active and more creative in classroom learning (Prayudha, 2022). In this research related to HOTS-based English learning which is carried out online regarding questions or questions given by the teacher whether they contain elements of understanding c4, c5 and c6, the results of the research can be seen as follows:

Taxonomy is a classification of science, rules and principles that include the classification of objects. Taxonomy is a tool that teachers use to measure learning content and efficacy. Operational verbs that define the type of action to be

accomplished through learning found in every element of the taxonomy. The teacher needs operational verbs to prepare the activities during teaching process. Taxonomies for educational purposes are the categorization of educational goals that are used to formulate curriculum goals and learning objectives. Anderson et al. (2021) speculates that the taxonomy of educational objectives is a system for the description of claims of what we expect or plan as a result of instruction to students. The system was conceived as a way to facilitate the exchange of test items between faculties at different universities to establish banks of objects, each measuring the same educational target.

Bloom's Taxonomy refers to taxonomies produced for the purposes of education. Bloom's taxonomy itself is one of Benjamin S. Bloom's most popular taxonomies in the field of education (Anasy, 2016). Benjamin S. Bloom first developed this taxonomy in 1956. Educational priorities are divided into several domains, according to Bloom, and each domain or area is re-divided into more comprehensive hierarchy-based divisions. Brookhart, (2010) remarks that Bloom's taxonomy is a skeleton built to categorize any curriculum's objectives in terms of explicit and implicit cognitive abilities. This taxonomy is considered one of the primary models leading to the growth of the curriculum in the 21st century.

Anderson, et all (2010) mentions that for each of the six major categories in the cognitive domain, the original taxonomy included carefully defined descriptions. Knowledge, comprehension, implementation, analysis, synthesis, and assessment were the categories. With the exception of Implementation, each of these categories was divided into subcategories. The initial taxonomy's complete structure is shown in Table 1.

Table 1. Structure of the original Bloom's taxonomy

CATEGORIES & COGNITIVE PROCESSES	DEFINITIONS
KNOWLEDGE	Recall information: discovery, observation, listing, locating and naming
COMPREHENSION	Understanding, translating, summarizing, demonstrating, discussing
APPLICATION	Using and applying knowledge, using problem solving methods, manipulating, designing, and experimenting
ANALYSIS	Identifying and analyzing patterns, organization of ideas, and recognizing trends
SYNTHESIS	Using old concepts to create new ideas, design and invention, composing, imagining, inferring, modifying, predicting, and combining

CATEGORIES & COGNITIVE PROCESSES	DEFINITIONS
EVALUATION	Assessing theories, comparison of ideas, evaluating outcomes, solving, judging, recommending, and rating

The original structure of the taxonomy offered above provides an explanation of the definition of levels in carrying out HOTS learning. Teachers must understand the definition and meaning and criteria of HOTS learning that must be implemented in HOTS learning in order to be able to make questions that can provoke students' creative and critical thinking while learning English online. Bloom's Taxonomy refers to taxonomies created for educational purposes. (Krathwohl, 2002) insists that one of the most common uses of the original Taxonomy was to identify curricular goals and test items to demonstrate the scope, or lack of breadth, of goals and items across the category continuum. Nonetheless, it is objectives that include the comprehension and use of knowledge, those that would be categorized in the categories from understanding to synthesis, which are usually considered to be the most relevant educational goals. Therefore, such analyzes have repeatedly provided a basis for moving curricula and tests to goals that would be classified into the more complex categories.

Table 2. Cognitive Process Dimension by Anderson and Krathwohl (2001)

Categories & Cognitive Process	Alternative names	Definition and example
1. REMEMBER	<i>Retrieve relevant knowledge from long-term memory</i>	
RECOGNIZING	Identifying	Locating knowledge in long-term memory that is consistent with presented material (e.g., Recognize the dates of important events in U.S. history)
RECALLING	Retrieving	Retrieving relevant knowledge from long-term memory (e.g., Recall the dates of important events in U.S. history)
2. UNDERSTAND	<i>Construct meaning from instructional messages, including oral, written, and graphic communication</i>	
INTERPRETING	Classifying, paraphrasing, representing, translating	Changing from one form of representation (e.g., numerical) to another (e.g., verbal) (e.g., paraphrase important speeches and documents)

Categories & Cognitive Process	Alternative names	Definition and example
EXEMPLIFYING	Illustrating, instantiating	Finding a specific example or illustration of a concept or principle (e.g., give examples of various artistic painting styles)
CLASSIFYING	Categorizing, subsuming	Determining that something belongs to a category (e.g., classify observed or described cases of mental disorders)
SUMMARIZING	Abstracting, generalizing	Abstracting a general theme or major point(s) (e.g., write a short summary of the event portrayed on a videotape)
INFERRING	Concluding, extrapolating, interpolating, predicting	Drawing a logical conclusion from presented information (e.g., in learning a foreign language, infer grammatical principles from example)
COMPARING	Contrasting, mapping, matching	Detecting correspondences between two ideas, objects, and the like (e.g., compare historical events to contemporary situations)
EXPLAINING	Constructing models	Constructing a cause and effect model of a system (e.g., explain the causes of important 18 th century events in France)
3. APPLY	<i>Carry out or use a procedure in a given situation</i>	
EXECUTING	Carrying out	Applying a procedure to a familiar task (e.g., divide one whole number by another whole number, both with multiple digits)
IMPLEMENTING	Using	Applying a procedure to an unfamiliar task (e.g., use new ton's second law in situations in which it is appropriate)
4. ANALYZE	<i>Break material into its constituent parts and determine how the parts relate to one another and to an overall structure or purpose</i>	
DIFFERENTIATING	Discriminating, distinguishing, focusing, selecting	Distinguishing relevant from irrelevant parts or important from unimportant parts of presented material (e.g., distinguish between relevant and irrelevant numbers in a mathematical word problem)
ORGANIZING	Finding, coherence, integrating, outlining,	Determining how elements fit or function within a structure (e.g., structure evidence in a historical description into evidence for and

Categories & Cognitive Process	Alternative names	Definition and example
	parsing, structuring	against a particular historical explanation)
ATTRIBUTING	Deconstructing	Determine a point of view, bias, values, or intent underlying presented material (e.g., determine the point of view of the author of an essay in terms of his or her political perspective)
5. EVALUATE	<i>Make judgments based on criteria and standards</i>	
CHECKING	Coordinating, detecting, monitoring, testing	Detecting inconsistencies or fallacies within a process or product; determining whether a process or product has internal consistency; detecting the effectiveness of a procedure as it is being implemented (e.g., determine if a scientist's conclusions follow from observed data)
CRITIQUING	Judging	Detecting inconsistencies between a product and external criteria, determining whether a product has external consistency; detecting the appropriateness of a procedure for a given problem (e.g., judge which of two methods is the best way to solve a given problem)
6. CREATE	<i>Put elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure</i>	
GENERATING	Hypothesizing	Coming up with alternative hypotheses based on criteria (e.g., generate hypotheses to account for an observed phenomenon)
PLANNING	Designing	Devising a procedure for accomplishing some task (e.g., plan a research paper on a given historical topic)
PRODUCING	Constructing	Inventing a product (e.g., build habitats for a specific purpose)

The table above shows the dimensions in the process of forming students' cognitive intelligence based on the distribution of HOTS learning levels. Where the teacher can see the distribution of HOTS learning and generate it into making questions based on the cognitive level of students. The division of cognitive categories and processes is intended so that educators know which intelligence

limits need to be improved in learning so that students can achieve HOTS learning goals.

Table 3. Cognitive processes according to the cognitive level of Bloom

Cognitive Process		Definition
C ₁	L O T S H O T S	Remember
C ₂		Understand
C ₃		Apply
C ₄		Analyze
C ₅		Evaluate
C ₆		Create

The table above shares intelligence levels by level. As can be seen in the table that c₁ (remember) is the ability to remember the learning material that is given or explained, c₂ (understand) students are only able to understand and understand the material being studied, c₃ (apply) students are able to apply the knowledge or knowledge they have obtain in learning to practice in their daily lives, c₄ (analyze) students are able to think rationally by analyzing problems to solve a problem in learning, c₅ (evaluate) students are able to assess and study and review what they have learned based on original standards learning, c₆ (create) students are able to form, create and create a product based on the material they have learned. Based on (Widyastuti, 2022) stated that HOTS materials become the essential aspect in current learning. So that teacher has to master to make the content or question to push students' creativity and critical skill. Thus, the teacher in giving questions must see how a question is made based on the level of cognitive expertise in order to form students who have a creative attitude and a critical

attitude. The more students have critical thinking abilities the more they are ready to face and solve the future (Margana, M., & Widyantoro, 2017).

Next, this study conducted at senior high school number 9 Bengkulu city. The research subject was an English teacher recommended by school's public relation due to teachers' quality and capability. The teacher taught eleventh class. The material given for the whole classes was similar. The observation took 5 online meetings using Google classroom application. Those five meetings covered 2 chapters, chapter 1 about "offer and suggestion", chapter 2 about "opinion and thoughts". The researcher only focused on HOTS implementation in online learning process during pandemic situation. Based on collected data through observation of five online meetings, the researcher found some questions on the assignments that HOTS-based which presented in the table below.

Table 4. HOTS-Based Questions

Note : M : meeting, Q : Question. HOTS questions in this table are obtained from the questions and assignments given by the teacher when students learn English online. The results of the analysis of these questions are as follows:

Questions	C4 (Analyze)	C5 (Evaluate)	C6 (Create)	Note
In what forms can "suggestion" be given?		Critiquing		M1Q4
Write some examples of "suggestion"!			Constructing	M1Q5
In what terms can "offer" be given?		Critiquing		M1Q8
Write some examples of "offer"!			Constructing	M1Q9
Write your own dialog about "Suggestion and Offer" into the table below!			Designing	M1Q10
Choose the best option for each sentence given below.				
1. Hey Siti, _____ go star-gazing tonight? a. Are you b. How about c. Shall them d. Would you like to	Organizing			M2Q1-8

Questions	C4 (Analyze)	C5 (Evaluate)	C6 (Create)	Note
There are some grammatical errors in the sentences given below. Circle the mistake in each sentence, then rewrite the sentence. If there aren't any mistakes, put a tick mark next to the sentence.	deconstructing			M3Q1-10
Fill in the blanks using the opinion expressions given in the box below	organizing			M4Q1-6
Below are several opinions. Some of them are polite and some impolite. Highlight an opinion with : Red : impolite way of disagreeing Blue : polite of disagreeing Green : polite giving opinion Yellow : impolite giving opinion	distinguishing			M4 Q1-10
Girl : I think we should buy a new car Boy : Why? Our old car is fine and functional Girl : Boy : Girl : Boy :			Designing	M5 Q1-3

The table above describes the distribution HOTS-based question in online learning process implemented by English teacher. As shown in the table, there were 36 questions out of 47 which integrated HOTS in five meetings. In those five meetings, the teacher implemented HOTS in various ways during teaching English. The teacher implemented C4 (analyze) in the second, third and fourth meetings, C5 (evaluate) only in first meeting, and C6 (create) in first, fifth, and sixth meetings. Then, Pratama & Dewi, (2022) states that in order for HOTS to be achieved, it is necessary for teachers to use interesting learning methods or models, for example by using the RADEC learning model. Therefore, to enable students to

learn actively, it is necessary to have encouragement from the teacher's own teaching style.

1. The implementation of HOTS in 1st meeting

The first meeting employed two kinds HOTS-based question in the level of C5 (evaluate) and C6 (create). There was no question related to C4. The most dominant employed was C6 (create) with the terms mostly constructing new sentences. In this meeting, the questions were essay forms.

Table 5. HOTS-Based question at 1st meeting

Question	C5	C6	Note
In what forms can "suggestion" be given?	Critiquing		Question number 4
Write some examples of "suggestion"!		Constructing	Question number 5
In what terms can "offer" be given?	Critiquing		Question number 8
Write some examples of "offer"!		Constructing	Question number 9
Write your own dialog about "Suggestion and Offer" into the table below!		Designing	Question number 10

The table shows the pattern implemented on the first meeting. The level of C5 (evaluate) there was employed the terms of critiquing. The level of C6 (create) the terms employed was varied. Those are constructing and designing. The level of C5 (evaluate) implemented at question number 4 and 8. The questions were "In what forms can "suggestion" be given?" and "In what terms can "offer" be given?". In these questions, the students led to give their critique opinion about the proper condition in giving offer and suggestion. It means the students have to think critically about the implementation of the material in their real life. The emphasis located at the sentence of "in what forms...be given" on number 4 and "in what terms...be given" on number 5. Thus the implementation of C5 (evaluate) implemented with the terms of critiquing.

The level of C6 (create) implemented in this meeting appeared at question number 5, 9 and 10. Questions number 5 and 9 had similar instruction. Number 5 "Write some examples of "suggestion"!" and Write some examples of "offer"!" for number 9. The emphasizes placed at the word "write some example of...". These questions indicated that the students directed to construct new sentences. In constructing new sentences, students need to think critically according to material they have learned. Therefore, construct belong to C5 (evaluate).

On the other hand, the implementation of C6 (create) at question number 10 had different terms with previous questions. In this question, the students directed to design a dialogue. The question was “Write your own dialog about “Suggestion and Offer” into the table below!”. The emphasize saw at the word “write your own dialogue...”. In making dialogue the students not only asked to construct sentences but also asked to design the pattern. In designing dialogue the students ought to think critically the plan and the pattern for the whole sentences. Thus, the terms of design belong to C6 (create). The variation of HOTS was consistently implemented on the assignment. The pattern of HOTS was employed C5 (evaluate) followed by C6 (create) at the next question. In question number 4 the students trained to give argument then asked to construct sentences on the following question, question number 5. The pattern repeated on question number 8 and 9. The last question, question number 10 was about designing a dialogue using students’ own words. Based on the explanation above, it can be concluded that the teacher already implemented HOTS in the first meeting. The precise arrangement from C5 to C6 in this meeting stimulates students’ critical thinking gradually. Thus, in this meeting HOTS already implemented properly.

2. The implementation of HOTS in 2nd meeting

The second meeting consisted of 8 multiple choice questions with the same instruction. Unlike the first meeting, the second meeting only retained category C4 (analyze). The complete descriptions were shown on the table below.

Table 6. HOTS-Based question at 2nd meeting

Question	C4	Note
Choose the best option for each sentence given below.		
1. Hey Siti, _____ go star-gazing tonight? a. Are you b. How about c. Shall them d. Would you like to		
2. Sam: “Would you like to go watching a movie this weekend?” Carly: “I can’t, I am low on cash right now. _____ stay at home and watch TV instead” a. How about b. Let’s c. What about d. I think	organizing	Question number 1-8

Question	C4	Note
3. What shall we do today? ____ we go to the library? a. Shall I b. Let's c. Why don't Would you		

The table shows in this meeting implemented HOTS in level C4 (analyze) with the term organizing. For example, in question number 1 “Hey Siti, ____ go star-gazing tonight?” the students ought to choose available choices “a. Are you, b. How about, c. Shall them, d. Would you like to”. In this question, the students directed to pick suitable choices which match the question. The process of identifying suitable word to match the sentence related to the term organizing. In organizing, the students build systematic and coherent connections among pieces of presented information. The students identify the relevant element and determine the overall structure within which elements fit.

3. The implementation of HOTS in 3rd meeting

The third meeting only employed HOTS-based question in the level of C4 (analyze) with the term examine. In this meeting, the questions were 10 essay forms. The example of the questions was presented on the table 7.

Table 7. HOTS-Based question at 3rd meeting

Question	C4	Note
There are some grammatical errors in the sentences given below. Circle the mistake in each sentence, then rewrite the sentence. If there aren't any mistakes, put a tick mark next to the sentence.		
1. Let's to go to the sushi of restaurant for lunch	Deconstructing	Question number 1-10
2. Shall we do have a meeting on afternoon Saturday?		


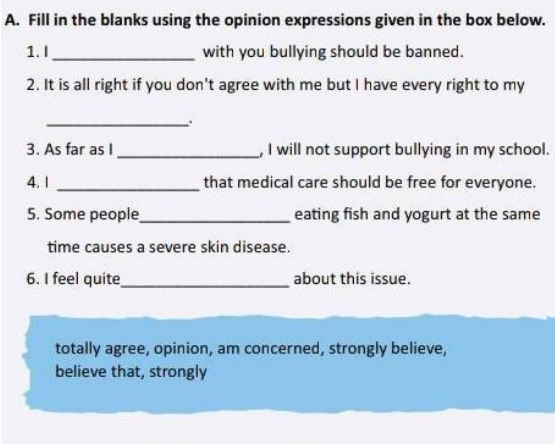
The table shows that HOTS implemented in this meeting. The category employed was C5 (evaluate) with the term deconstructing. First, the students directed to determine incorrect grammar in each sentences then have to re construct it with the correct sentence pattern. The emphasizes saw at sentence “Circle the mistake in each sentence, then rewrite the sentence”. In this assignment,

the students trained to analyze by deconstructing the error of each questions There was only one instruction for the whole questions in third meeting. The instruction pertained to C4 (analyze). In this meeting, there was no HOTS variation implemented.

4. The implementation of HOTS in 4th meeting

The fourth meeting employed two sections. First section was filling blanks which consist of 6 questions. Second section was highlight opinion for question number 1-10. The full description presented on the table 8.

Table 8. HOTS-Based question at 4th meeting

Question	C4	Note
	distinguishing	Question number 1-10
	organizing	Question number 1-6

The table shows that there are two terms of HOTS implemented related to C4 (analyze) in this meeting. Those are organizing and distinguishing. First section was “Fill in the blanks using the opinion expressions given in the box below”. In this section the students directed to organize incomplete sentences by choosing the available options. As well as the second meeting, in this section the students also identify the relevant element and determine the overall structure within which elements fit. Thus, the first section used the term organizing.


The second section used the term distinguishing. In this section, the students were directed to distinguish whether the expressions are polite or

impolite by marking it with different colors. The suppression was at “...*Highlight an opinion with: Red: impolite way of disagreeing, Blue: polite of disagreeing, Green: polite giving opinion, Yellow: impolite giving opinion*”. It means, to answer the questions involved critical thinking in discriminating the whole sentences before stating whether the sentence was polite or impolite. Thus, the implementation of HOTS in this meeting was only C4 (analyze) with the term organizing and distinguishing.

5. The implementation of HOTS in 5th meeting

The fifth meeting was the last meeting of observation. There was only one section which separated to three parts of dialogues. There was no instruction for the questions. The complete description presented on the table below.

Table 9. HOTS-Based question at 5th meeting

Question	C6	Note
	Designing	Question section 1-3

The implementation of C6 (create) at the fifth meeting was designing dialogues. In this assignment the student led to fulfill incomplete conversations using their own words. There are four blank conversations for each section. In completing blank conversations involved critical thinking in devising. It was devising the pattern and word choice to produce a commonsensible dialogue. As well as the question number 10 at the first meeting, terms of design in this meeting belong to C6 (create). There was no variation in HOTS implementation. Faradella, (2022) says even though the learning situation has changed to online learning, teachers should create exercises and materials that can encourage students to get hot skills properly. Then, by implementation HOTS will promote students' motivation to be more creative and critical.

CONCLUSION

HOTS teaching is a learning that is needed today because it can prepare students with the critical and creative thinking skills needed in the 21st century. Therefore, teachers must always provide HOTS-based teaching in learning, including providing interesting questions or exercises to improve students critical thinking skill. In this study, the limitation of the research focus on the analysis of kind of HOTS questions gave by the English teacher during online learning, especially in the English textbook used. English learning was carried out online due to restrictions on human movement space due to the spread of the covid 19 virus. This resulted in teachers having to be able to provide teaching using the assistance of communication and information technology so that the teaching and learning process could continue. However, in fact online learning that is carried out sometimes makes teachers overwhelmed in providing teaching to students, especially in providing HOTS-based teaching. In its implementation the teacher has tried to provide teaching using HOTS questions so that students are able to think creatively and think critically. Online learning makes it difficult for teachers to control students while learning is taking place, so teachers need to provide HOTS questions so that students are better able to improve their critical thinking skills in doing English assignments. Through HOTS-based question analysis, it provides information to teachers and readers regarding several types of HOTS questions in textbooks used when studying, so that they can provide clear information on examples of the use of HOTS questions in learning English. In conclusion, teaching English which is carried out online at SMAN 09 Bengkulu City has been carried out by emphasizing HOTS learning at levels c4, c5 and c6.

REFERENCES

- Anasy, Z. (2016). Hots (Higher Order Thinking Skill) in reading exercise. *TARBIYA: Journal of Education in Muslim Society*, 3(1), 51–63. <https://doi.org/10.15408/tjems.v3i1.3886>
- Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Pintrich, P. R., Raths, J., & Wittrock, M. C. (2001). *A taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. Addison Wesley Longman, Inc.
- Anderson, B. (2007). Pedagogical rules and their relationship to frequency in the input: observational and empirical data from L2 French. *Applied Linguistics*, 28(2), 286–308. <https://doi.org/http://dx.doi.org/10.1093/applin/amm015>
- Armala, I., Fauzia, E., & Asib, A. (2019). Pre-service English teachers' perception on higher order thinking skills (HOTS) in English language teaching. *Journal of*

- Language Intelligence and Culture*, 1(01). <https://doi.org/10.35719/jlic.v1i01.16>
- Brookhart, S. M. (2010). *How to asses high order thinking skills in your classroom*. ASCD Member Book.
- Cresswell. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publication.
- Destianingsih, A., & Satria, A. (2020). Investigating students' needs for effective English online learning during covid-19 for Polbeng students. 7(2), 147-153. <https://doi.org/https://doi.org/10.31849/elt-lectura.v7i2.4657>
- Djami, C. B. N., & Kuswando, P. (2020). Teachers' strategies to implement higher-order thinking skills in English instruction. *Metathesis: Journal of English Language, Literature, and Teaching*, 4(1). <https://doi.org/10.31002/metathesis.v4i1.2048>
- Faradella, N. E. (2022). Students' higher-order thinking skills: constructing best practices in teaching English during online learning. *Erudita: Journal of English Language Teaching*, 2(1), 38-49. <https://doi.org/10.28918/erudita.v2i1.5350>
- Hemas, M. D. A., Wedhanti, N. K., & Juniarta, P. A. K. (2021). Analysis of higher order thinking skills in English lesson plans. *Thinking Skills and Creativity Journal*, 4(2). <https://doi.org/10.23887/tscj.v4i2.36999>
- Krathwohl, A. and. (2002). (*A REVISION OF BLOOM ' S TAXONOMY*). *Theory into Practice*, 41(4), 212-219.
- Krippendorff, K. (2004). Reliability in content analysis some common misconceptions and recommendations. *Human Communication Research*, 30(3), 411-433. <https://doi.org/https://doi.org/10.1111/j.1468-2958.2004.tb00738.x>
- Margana, M., & Widyantoro, A. (2017). Developing English textbooks oriented to higher order thinking skills for students of vocational high schools in Yogyakarta. *Journal of Language Teaching and Research*, 8(1), 26. <https://doi.org/doi.org/10.17507/jltr.o801.04>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2013). *Qualitative data analysis: A methods sourcebook*. Sage Publications Incorporated. <https://doi.org/https://doi.org/10.1080/10572252.2015.975966>
- Narwianta, N., Bharati, D. A. L., & Rukmini, D. (2019). The evaluation of higher order thinking skills in English school nationally standardized examination at state senior high school 6 Semarang. *English Education Journal*, 9(3). <https://doi.org/10.15294/eej.v9i3.30937>
- Pratama, Y. A., & Dewi, L. (2022). Online learning through the RADEC model to increase HOTS of elementary school students in the time of the covid-19 pandemic. *PrimaryEdu: Journal of Primary ...*, 6(2), 18-19. <http://ejournal.stkipsiliwangi.ac.id/index.php/primaryedu/article/view/3034%0Ahttp://ejournal.stkipsiliwangi.ac.id/index.php/primaryedu/article/viewFile/3034/1462>
- Prayudha,S, J. (2023). The use of TPACK approach in learning process. *2nd International Conference on Education Faculty of Education and Teacher*

- Training UIN Sulthan Thaha Saifuddin Jambi, 2, 66–69.
- Prayudha, J. (2022). EFL students' perception on the use of social media platforms as learning tools. *JETLi: Journal of English Teaching and Linguistics*, 3(1), 1–9. <https://doi.org/10.55616/jetli.v3i1.226>
- Prayudha, J. (2022). Using voice note media to build Efl students' confidence in English speaking skill. *The 4th TEYLIN International Conference, August*, 180–189.
- Prayudha, J. S. (2021). Students' problems face in online learning amidt pandemic *Acitya: Journal of Teaching & Education*, 3(2), 2021. <http://journals.umkt.ac.id/index.php/acitya>
- Prayudha S., J. (2021). Video based learning as a media for teaching English during pandemic covid-19. *Journal of Language Intelligence and Culture*, 2(1), 1–11. <https://doi.org/10.35719/jlic.v2i1.53>
- Putri, R. N., & Sulityaningrum, S. D. (2021). Incorporating higher-order thinking skills in English lesson plans for senior high school. *Celtic: A Journal of Culture, English Language Teaching, Literature and Linguistics*, 8(2).
- Rahmayanti, H., Ichsan, I. Z., Azwar, S. A., Purwandari, D. A., Pertiwi, N., Singh, C. K. S., & Gomes, P. W. P. (2020). Difmol: Indonesian students' Hots and environmental education model during covid-19. *Journal of Sustainability Science and Management*, 15(7). <https://doi.org/https://doi.org/10.46754/jssm.2020.10.002>
- Setyowati, R., Sarwanto, & M. (2021). How students's higher order thinking skills through e-learning during the covid-19 pandemic? What does it have to do with university? *IOP Conference Series: Earth and Environmental Science*, 18(8). <https://doi.org/https://doi.org/10.1088/1742-6596/1808/1/012032>
- Singh, C. K. S., Singh, T. S. M., Ja'afar, H., Tek, O. E., Kaur, H., Mostafa, N. A., & Yunus, M. M. (2020). Teaching strategies to develop higher order thinking skills in english literature. *International Journal of Innovation, Creativity and Change*, 11(8).
- Suardamayasa, P. (2022). Teachers' ability to apply higher-order thinking skills in English lesson plan. *Journal of Educational Study*, 2(1). <https://doi.org/10.36663/joes.v2i1.254>
- Sugiyono. (2014). *Memahami Penelitian Kualitatif*. Alfabeta.
- Widyastuti, N. W. S. (2022). The implementation of HOTS-based English learning in junior high school during online classes. *Journal of Educational Study*, 2(3), 215–225. <https://doi.org/10.36663/joes.v2i3.381>