

HIGHER ORDER THINKING SKILL (HOTS) ASSESSMENTS ON LEARNING ENGLISH

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Abstract

HOTS stands for Higher Order Thinking Skill, which means it is a high level of thinking that is indicated by critical, analytical, logical, creative, and metacognitive thinking. The results of literature research show that students who are trained to think critically have a positive impact on the speed of successful learning in the development of individualized sciences. Furthermore, we can apply the art to one of the languages learning languages, namely English, so I write through research literature sourced from journals, reference books, modules, internet, and other sources, such as print media that are relevant to HOTS assessment topics. Data is collected through documentation and observation techniques. Research data were analyzed using descriptive exploration methods. Through some of the literature, the analysis can be obtained in the form of 1). HOTS assessment itself, 2). Steps in learning, 3). The advantage of HOTS.

Keywords: HOTS, Learning, English.

INTRODUCTION

In the current digital era English learning is very necessary for our students to be able to think critically, analytically, logically, creatively and innovatively or what we are familiar with High-Level Thinking Skills (HOTS), asked Bernie Trilling (2005) who was asked to help live 21st century (digital era) is divided into seven forms of Skills, namely: (1) critical thinking, (2) creativity, (3) communication, (4) collaboration, (5) career and learning independence, (6) cross understanding culture, and (7) ICT computing / literacy. Moreover Joke Voogt & Natalie Pareja Roblin (2010) suggest that as HOTS, can improve critical thinking skills, creativity and self-confidence (learning independence). The implication of the above policy is that the teachers encouraged to develop HOTS value instruments, both in the daily test, midterm (PTS), final semester (PAS), and school (US) examinations.

One way that can be applied to learning English is by reading books, articles, dictionaries, and so on. Based on several international studies, namely PISA (Program for International Student Assessment) shows the ability to read in the world. One example is for Indonesian countries that have not provided satisfactory reading skills. Related to Indonesia in PISA is a program that sees seeing which education programs in our country are developing compared to other countries in the world. This has become very important for the interests of children in the future so that they can compete with other countries in the digital era. PISA measures three basic literacy, namely: scientific literacy, reading, and mathematics. In 2015, Indonesian literacy students were only able to reach the 62nd place from 70 countries. When reading 64th rank from 70 countries and mathematics ranked 63rd from 70 countries (PISA, 2016). This rank shows that Indonesia's competitiveness at the international level is very low. Therefore, teachers need to be motivated and given extensive information about HOTS, so agree and be creative about HOTS.

The pattern of thinking in English language activities is divided into two if viewed from the level of mathematical activity in the activity, namely the level of low thinking and high level of thinking. However, Rajendran's (2008) thinking, high-level thinking skills (HOTS) is defined as the development of thinking about new challenges. Developing thinking must be done one must interpret, analyze, or manipulate information because the questions that must be answered or questions that must be solved cannot be solved by overcoming the previous problem. Meanwhile, low-level thinking has limited and weak meanings. This process is usually students through repetition of material such as the teacher answers the English vocabulary but students are not right in listening to it so the teacher repeats the material, high and low think this can happen to any managed student specifically in English language learning in a class compilation.

RESEARCH METHOD

This research includes library research, namely research on various literature obtained from journals, reference books, modules, internet, and other sources such as print and electronic media that are relevant to the topic of HOTS assessment in English learning. This research was conducted from May 16 to June 3, 2019. This research began by collecting various printed and electronic literature related to the HOTS assessment of learning English. Data is collected

through exploration and observation techniques. The research data were analyzed using the descriptive method of literature.

LITERATURE

English learning

English is an international language that is used and studied in general in the world, more specifically in the State of Indonesia. English is one of the general subjects taught at levels ranging from Elementary School to High School, even English is used as a nationally tested subject in Indonesia. Learning English has changed from KTSP 2006 to the present that K13 is used or we are familiar with KURTIAS (Curriculum 2013) where students are guided by student-centred learning activities, more teachers as inspiratory, generators and guiding students to find concepts. Therefore, HOTS (Higher Order Thinking Skill) can help students find new things. In learning there is an evaluation of learning, this evaluation is in the form of a teacher providing or presenting a question where the question makes students able to think critically. Learning English will be interesting and easy to understand by students when the teacher has creativity and innovation (Fajarani, 2015). In learning English has a target of five skills in the form of grammar, listening, reading, speaking, listening. However, this article focuses on reading or reading it, because reading many English-language sources can improve us to think critically, creatively and innovatively. Reading Skills helps students understand the content and draw conclusions. Students also have to make a point to familiarize themselves with new jargon and words by making reading habits both reading newspapers, articles, books, magazines etc. One of the tips for improving English language skills is by reading interesting things, as said Virginia Lang (An English teacher in Australia), namely by placing labels around your house (grammar or vocabulary), starting to create a blog, changing your cellphone settings in English, read interesting things, write conclusions.

Higher Order Thinking Skills

Higher Order Thinking Skills or what we know with HOTS has several definitions according to some experts including:

According to Bloom (1956), HOTS is an abstract ability that is in the cognitive domain of the taxonomy of educational goals which includes analysis, synthesis, and evaluation. According to Kuswana (2012: 200) HOTS is high-level thinking involving critical and creative thinking guided by truth ideas, each of which has meaning. Critical and creative thinking are interdependent, as are criteria and values, reason and emotions, and so on. Ridwan Abdullah Sani said that someone who has thinking skills will be able to apply new information or knowledge to manipulate information in an effort to find solutions or answers to a new problem. Whereas according to the Director General of Learning and Student Affairs of the Ministry of Research and Technology, Prof. Intan Ahmad, Ph.D (October 30, 2018), HOTS is one way to test whether one can analyze, compare, count, and so on. Based on some of these opinions, it can be concluded that HOTS is a thinking process of students who go through several stages of creative and critical thinking so that students can think and study information critically, creatively, can solve problems and produce a work of learning.

HOTS-based English learning activities can be distinguished from LOTS-based learning, among others, as described in the following table.

Table I Learning Differences LOTS and HOTS

Student activities in LOTS learning	Student activities in HOTS learning
Passive in thinking	Active in thinking
Problem Solving	Formulate problems
Reviewing simple problems	Reviewing complex problems
Convergent thinking	Think divergent and develop ideas
Learning from the teacher as the main source of information	Finding information from various sources
Practice solving questions and memorizing	Critical thinking and solving problems creatively
Prioritizing factual knowledge	Analytical thinking, evaluative thinking, and making decisions

High-level thinking skills include the ability to think critically, logically, reflective, metacognitive and creative. Critical thinking skills are needed for solving problems and making decisions. Higher Order Thinking Skill (HOTS) will develop if individuals face known problems, challenging questions, or face uncertainty.

The Higher Order Thinking Skill (HOTS) was originally found in the book "Taxonomy of Educational Objectives: The Classification of Educational Goals written by Benjamin S. Bloom, et al (1956). Which concept is categorized into various levels of thought, namely: the lowest thinking and the highest thinking. This concept is learning goals in three scopes, in the form of Cognitive (mental skills around knowledge), Affective (emotional side around attitudes and feelings) and Psychomotor (physical abilities such as skills).

Next, I give the bloom taxonomy concept table:

TABLE II Sixth Bloom's Taxonomy

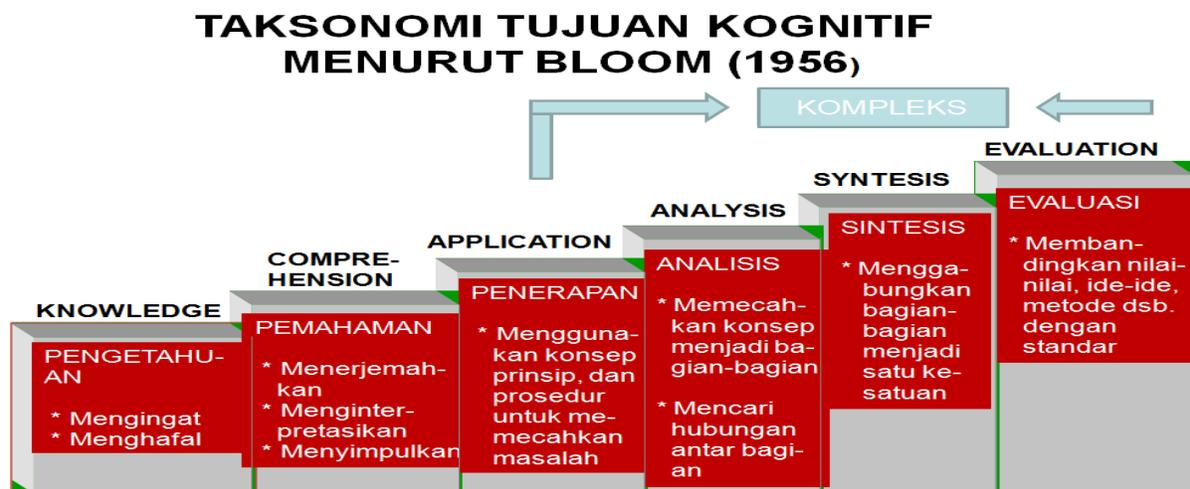


TABLE III HOTS in English

Bloom's Cognitive Levels of Taxonomy	Thinking Skills	English level	Description of Level
6 (Evaluation)	HOTS	6	Students can assess or compare the material taught
5 (Synthesis)		5	Students can combine several problems faced
4 (Analysis)		4	Students can analyze the environment
3 (Application)	LOTS	3	Students can apply or say in English
2 (Comprehension)		2	Students can quickly understand the material being taught
1 (Knowledge)		1	Students can remember and memorize the material taught by the teacher

In measuring the high-level thinking skills of students in learning English by using essay questions as Sugrue said (1994, 1995), namely collecting information from several studies in the study of problem- solving models, and identifying three formats used to measure Higher Order Thinking Skill (HOTS), namely:

1. Choose an answer (multiple choice questions or match questions)
2. Generating (questions with short answers, essays, and performance)
3. Explain (giving reasons for a choice or answer to a question)

Hecklau et al, (2016) stated that there are four competency categories that graduates need to have to be able to compete in the era of industrial revolution 4.0 or what we know of the digital era. The categories are 1) technical competencies, 2) methodological competencies, 3) social competencies, and 4) personal competencies. Which methodology competencies include the following:

- 1) Creativity

- 2) Entrepreneurial thinking
- 3) Problem-solving
- 4) Make a decision
- 5) Analytical skills
- 6) Research ability
- 7) Efficiency orientation

Note that the methodological skills include high-level thinking skills.

Parents in the 21st century have a lot to realize the importance of preparing young people who are creative, flexible, able to think critically, can take decisions properly, and are skilled at solving problems. Therefore, schools are expected to be able to produce graduates who have these abilities, coupled with social skills that are able to consult, can communicate ideas effectively, be reliable in collaboration, and be able to work efficiently both individually and in groups. Fadel (2008) states that the learning and innovation skills needed in the 21st century are: creativity (creativity), critical thinking skills (critical thinking), ability to collaborate (collaboration), and communication skills (communication). Critical thinking skills are also very important in the 21st century, namely in the information and technology era where various information must be filtered intelligently and critically. The impact of the implementation of high technology has penetrated various sectors of the creative economy, so businesses must be able to respond to various changes quickly and effectively. Therefore, human resources must be provided with intellectual skills that are flexible, able to analyze and integrate (synthesize) various information to solve problems faced. Critical thinking skills are also related to verbal and analytical skills. A person who has critical thinking skills will be able to think clearly and systematically, so that he can express ideas with good articulation. These skills are needed in analyzing the structure of the text logically, so that they can understand a text well.

Life and career in the 21st century require the ability to: 1) be flexible and adaptive, 2) take the initiative and be independent, 3) have social and cultural skills, 4) productive and accountable, and 5) have leadership and responsibility. Learners must also master information, media and technology, namely: 1) information literacy, 2) media literacy, 3) ICT literacy. Therefore, learning must be able to develop: 1) creative and information, 2) the ability to think critically to

solve problems, and 3) communication and collaboration. This 21st century competency framework (Partnership for 21st-Century, 2008) shows that having knowledge of core subjects is not enough, but must be equipped with:

- 1) Creative ability - critical
- 2) Strong character (responsible, social, tolerant, productive, adaptive, etc.), as well as
- 3) Ability to utilize information and communicate

Steps in learning

HOTS-based English learning can be carried out, Sani (2019) provides several steps for teachers to do so while teaching, including:

1. Create or make assignments that are in accordance with expectations or curriculum
2. Awaken curiosity to students
3. Provide assignments or questions that can make students actively think, for example, essay questions
4. Review the real problems experienced by students
5. Develop students' imagination through several learning media
6. Provide opportunities for students to do elaboration and divergent thinking
7. Provide opportunities for students to choose topics or ways of learning in class
8. Don't blame students, if they ask strange questions
9. Providing freedom of experimentation for students but still supervised by the teacher
10. Provide feedback and appreciation for student work
11. Train students to ask questions in an effort to solve challenging problems
12. Train students to think critically by analyzing and evaluating the data or information presented
13. Train students to make decisions related to a condition described

Benefits of HOTS Assessment

Susan M. Brookhart (2010) suggests that the benefits of HOTS assessment are as follows. 1. Increase learning motivation. HOTS assessment is usually in the form of cases, natural phenomena, or contextual problems in everyday life that show the relevance of learning material in the classroom to the real world context (students). Thus students can feel that learning in class is very useful for solving problems in everyday life. This is expected to increase the motivation of students. 2. Improve the achievement of learning outcomes. Achievement of learning outcomes is strongly influenced by the motivation of students. Marhaeni (2005) in his study, found that students who had the motivation to learn tended to have higher academic achievement as well. 3. Improve international competitiveness.

CONCLUSION

Assessment of Higher Order Thinking Skill (HOTS) in learning English can be considered very necessary by an English teacher. Teachers can assess Higher Order Thinking Skills (HOTS) on students through grammar, listening, speaking, reading, writing, but the teacher in assessing is more focused on assessing the reading of students because by reading a lot of English-language resources can increase students to Higher Order Thinking Skill (HOTS).

This assessment of Higher Order Thinking Skill (HOTS) has several steps in doing so including: (1) Creating or making assignments that are in accordance with expectations or curriculum, (2) Generating curiosity in students, (3) Providing assignments or questions that can make active students think, for example, essay questions, (4) Assess real problems experienced by students, (5) Develop students' imagination through several learning media, (6) Give students the opportunity to do elaboration and divergent thinking, (7) Give opportunities for students to choose topics or ways of learning in class, (8) Not blaming students, if asking strange questions, (9) Providing freedom of experimentation for students but still supervised by teachers, (10) Providing feedback and appreciation for student work, (11) Train students to ask questions in an effort to solve challenging problems, (12) Train students to think critically by analyzing and evaluating data or information presented, (13) Train students to make decisions related to the conditions described. And also provides benefits including (1) Increasing learning motivation, (2) Improving achievement of learning outcomes, (3) Increasing international competitiveness.

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