# The Role Of Hots Learning As An Effort To Improve Critical Thinking On Students

## **In Communication Science Reviews**

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Abstract: Talking about HOTS is not just about subjects that students must master so they are able to answer questions that arise during exams. HOTS is the final goal to be achieved through approaches, processes and learning methods. Mistakes in understanding HOTS will have an impact on the ultimate goal to be achieved. In this case the teacher has a very important role in applying HOTS to students. This article will discuss how a teacher should be able to carry out his role so that the HOTS learning that is carried out can have an impact that is able to improve students' ability to think critically. And in the study of communication science, a teacher must really understand the communication process so that in the delivery of material can choose the appropriate approach so that it supports the learning process by using appropriate learning methods. So that when there is misunderstanding in students, the teacher can evaluate. Because in theory, the communication process is a systemic thing. That is, each component involved in communication has their respective roles which as a whole are a unity that cannot be separated from each other. And each component is also inseparable from internal and external factors that can influence when communication occurs, which is when the learning process.

Keywords: HOTS Learning, Critical Thinking, Communication Science

#### Introduction

Humans are thinking creatures. All actions taken by human beings tend to begin with thinking first. Humans will choose the process of thinking whether simple or complex thinking. It is also the ability to think of humans that can distinguish between humans and other creatures. With the ability to think, humans can produce findings that can benefit the world.

Education plays an important role in educating the next generation of the nation. Through education a nation will become characterized and have strong competitiveness from other nations. Education will also shape how future successors of the nation will act. Education is a very important spearhead to prepare reliable Human Resources, while teachers are the spearhead of that education.

One of the ways to prepare a better generation of the nation is to improve the quality of education. This is in line with the educational objectives stated in Law No. 20/2003, which is to

develop the potential of students to become human beings who believe and fear God Almighty, have noble, healthy, competent, creative, independent and become citizens of a democratic and responsible. To realize the ideals of these educational goals, as educators must have a breakthrough that can lead students towards a better direction (Arini Ulfah Hidayati, 2017). In this case, the lessons received by students should be able to increase students to think critically.

Education in schools as a process of guidance that is planned, directed and integrated in fostering the potential of children to master the values and skills greatly determines the pattern of the future of a nation (Mavianti, 2019). Effective learning is a learning process that is successful or that achieves the objectives as determined by utilizing existing learning resources. The teacher uses his professional ability to mobilize available resources to achieve the stated teaching objectives.

In increasing the activity of these students can be launched by creating learning situations that involve students. The teacher as a facilitator in learning should use a variety of methods / methods that are appropriate that involve students. The use of appropriate methods by adjusting them to the material being taught will make it easier for students to understand the lessons taught by the teacher while increasing the motivation and interest in learning of the students themselves.

The teacher has a very big role and responsibility in achieving the learning objectives that are formulated. The achievement of learning objectives is influenced by various factors, one of which is the learning method used. To realize the learning process that can improve students' mathematical problem solving abilities, a student-centered learning approach is needed (Feri Haryati, Ambar Wulan Sari, 2018).

To be able to realize successful learning with students having the skills to think critically, all elements of communication in education, whether teacher, student, material, method of suggestions and supporting infrastructure, must carry out their roles properly. The teacher as a communicator or messenger or subject matter must have the ability to convey the material well so that students are able to digest the material well as well. The material is also delivered using media that is able to foster student motivation so students can think critically about the material presented by the teacher. Although there are obstacles or obstacles it can be anticipated to be minimized so that learning objectives can be achieved.

Literature Review HOTS (High Order Thinking Skills) Thinking is part of the cognitive realm that Bloom classified into six levels of cognitive processes. These levels are knowledge about knowledge, recalling information stored in the long term, understanding (comprehension) about linking new information with existing knowledge, application (application) about the scope of application of the use of a procedure or principle, analyzing (analysis) ) about analyzing and understanding material, synthesis of the ability to produce and create (creat) about the ability to produce something new by organizing several elements. HOTS in it contains four elements, namely the ability to solve problems (problem solving); creative thinking (creative thinking); critical thinking (critical thinking); and the ability to make decisions (decision making). Cognitive dimensions according to Anderson & Krathwohl (Dewi Irmawati, Retno dkk, 2019).

TC Taksonomi Pengertian C4 Analyze Divide the material in several parts, determine the relationship between parts or as a whole by making a decrease, management, and recognition of attributes. Make decisions based on criteria and standards C5 **Evaluate** through checking and criticism. C6 Created Develop new ideas, products, or methods by combining elements to form an overall function and rearranging elements into new patterns or structures through planning, development, and production.

Table 1. Dimension of Kognitif Anderson & Krathwohl

HOTS is understood as a high-level thinking skill that requires students to think critically, creatively, and analyze information and data in solving problems. High-level thinking is a type of thinking that tries to explore questions about existing knowledge related to issues that are not clearly identified and do not have definitive answers. HOTS can be grown through four (4) conditions, namely:

- a. Learning situations that require specific learning strategies and cannot be used in other learning situations.
- b. Intelligence is seen as a unity of knowledge that is influenced by various factors consisting of the learning environment, strategies and awareness in learning.
- c. Landscape to multimedial and interactive.
- d. More specific higher-order thinking skills such as reasoning, analytical skills, problem solving, and critical and creative thinking skills.

HOTS thinking success rate is shown in the form of abilities that are equipped with valid explanations, decisions and performance, according to the rules of available knowledge. HOTS aims, among others, to improve students' ability to think through reason to answer more complicated questions and / or solve more complicated problems. Higher-order thinking skills are also in an important educational guideline namely a curriculum where students are required to be critical, creative, and innovative students (Ferina, A.dkk, 2017).

#### **Student activity**

Activity is an activity or everything that is done for activities that occur both physical and non-physical. Activity in the learning process can stimulate and develop the talents they have, students can also practice critical thinking, and can solve problems in daily life. The learning process is essentially an interaction process between the teacher and students which contains the activities of students through various interactions and learning experiences experienced by both.

Indicators of student learning activeness, namely student attention to the teacher's explanation, understanding the problem given by the teacher, the ability of students to express their opinions, discuss with the group, and present the results of the discussion.

Active learning provides benefits for students, such as students can find their own experiences, develop aspects of students themselves, practice cooperation, can work according to ability, social interaction, and academic achievement. Active learning also provides opportunities for students to be able to develop their potential.

Factors that influence student activity, as it is known that behavior as a result of learning is influenced by many factors, both for oneself (internal) and factors from outside the individual (external). Internal factors include physiological factors (physical and physical conditions) and psychological factors (attention, memory, and responses). External factors include non-social factors (places and facilities) and social factors (teachers and peers) (Maradona, 2016). Students can be said to be active in learning if there are characteristics that include frequently asking the teacher or other students, want to do the assignments given by the teacher, be able to answer questions, and like being given a learning assignment.

The Relationship Between HOTS (High Order Thinking Skills) and Student Activity in Learning

Active in learning, can stimulate and develop the talents they have. Students can also train critical thinking, and can solve problems in everyday life. In accordance with the aim of HOTS is to improve students' thinking skills at a higher level of understanding, especially those relating to the ability to think critically in receiving various types of information, think critically in solving a problem using the knowledge possessed and making decisions in situations complex situation. And improve students' ability to think reasoning to answer more complicated questions and or solve more complicated problems. Through HOTS, students can develop higher-order thinking skills and improve activity during the learning process. Students who have good high-level thinking skills are expected to have a good level of activity (Ferina, A.dkk, 2017). The following table explains the high order thinking skills and their relation to student activity.

Table 2. The Linkage between HOTS and Student Activity Indicators

High Order Thinking Skill		Taksonomi Bloom Anderson
(HOTS)		& Krathwohl
Problem Solving	The Linkage between	
	HOTS and Student	Created
	Activity Indicators	
Decision Making	Understand the	
	problem given by the	
	teacher	
Critical Thinking	The ability of students	
	to express their	Analyze
	opinions	
	Discuss with groups	
Creative Thinking	Student attention to	Evaluate
	teacher explanation,	

Based on the explanation above, the content of high order thinking skills is closely related to student activity indicators. Problem solving, students are invited to understand a problem and are asked to find solutions to a problem. Decision making is making a decision, students are asked to take a decision in solving a problem and present it in front. Critical thinking is inviting students to think more critically about their abilities in analyzing problems and expressing their opinions in a discussion forum. Creative thinking is inviting students to think creatively to process the information they get, then to apply it in their daily lives.

#### **HOTS in Communication Studies**

The skills students must have are critical thinking or high-level reasoning. Along with the development of the era in this digital age, humans must have good communication skills, the ability to collaborate, think critically and be able to solve problems and be creative and be able to innovate or known as 4C.

It is based on Bloom's Taxonomy which was expressed by Benjamin S. Bloom in 1956. Then it was revised by Bloom's student Lorin Anderson in 2001 who grouped the thinking skills or cognitive abilities of humans from the lowest to the highest level. According to him, there are 6 levels of thinking ability starting from the lowest namely memorizing, understanding, applying, analyzing, assessing and the highest level of creating.

At the level of memorization, the person concerned is not yet familiar with the concept and the concept will be learned by memorization. This condition is often found in children so sometimes the child can only say something without understanding its meaning. At the level of understanding, students understand a theory but they have not been able or willing to do a theory that has been understood. At the application level, students are able to apply theories that have been understood with full awareness of not only limited to the rules but understand why something is done and what the consequences will be if the action is not done. Then at the next level is analysis, at this stage students are able to think and explain why an action needs to be done so that students already know the causes and consequences of the actions taken. The next level is evaluation, at this level students are able to evaluate actions and start to think of other ways to improve actions taken if they have not received the expected results. The highest level of HOTS is creation. This is where humans are able to create new things that do not yet exist. Students are able to innovate to come up with new ideas to increase the wealth of scientific treasures in accordance with the knowledge that has been learned either through teachers or self-taught.

Based on the level of human ability to think it is clear that to be able to realize the ability of students to think critically then all elements of communication in the world of education must be fully involved so that what is aspired to be realized. With adequate synergy, it will further support the realization of students' ability to think critically so that the learning mission can be realized.

#### **Research methods**

This research is a qualitative approach, by conducting a literature study, which collects concepts from the results of previous studies to develop a halal destination model. Qualitative research itself is a process of collecting and analyzing textual data to gain insight into interpretations conveyed about a phenomenon that cannot be done with quantitative research (Askarzai & Unhelkar, 2017).

In writing this article, the author also uses the content analysis approach (content study), this research is in-depth discussion of the contents of written or printed information in the mass media. This analysis is usually used in qualitative research. Content analysis is generally interpreted as a method that includes all analyzes of the contents of the text, but on the other hand content analysis is also used to describe a specific analysis approach. Content analysis can also be used to analyze all forms of communication, both newspapers, radio news, television advertisements and all other documentation materials.

#### **Discussion**

Critical thinking skills in students do not grow by themselves. But motivated and stimulated so that they want to grow by the teacher. The teacher in delivering the material is certainly always trying his best so that the material can be well received by students. Material that has been well prepared should be able to foster high learning interest in students in other words students are able to encode messages from the teacher well. Furthermore, students are also able to prepare their conditions to be able to receive material from the teacher so that students are able to provide feedback back related to the material delivered by the teacher whether they understand or do not understand at all. When students have not been able to provide feedback on the material provided by the teacher, the teacher is obliged to re-understand the students. The teacher as a good communicator must really understand that when the material is not yet understood by students, it must be sought to know what is causing it or which part is being disturbed so that it experiences obstacles. Instead of just just that students are stupid, lazy or so forth.

Thus, when it can be identified which part of the communication element is experiencing interference then the interference will be quickly overcome. So that it will maximize the delivery of material and understanding of the material by students. The element of communication in

education is likened to a system that all are mutually integrated, and are a unity. And each element gives effect or impact to the other elements.

#### **Conclusion**

Critical thinking skills in students can be obtained easily if students are able to master thinking skills and are active in each of their learning. Through HOTS, students will be able to distinguish ideas or ideas clearly, be able to solve problems, and be able to increase their activity in the classroom. So it can be concluded that with the existence of these high-level thinking skills, students are able to study information and apply it in new situations, such as being able to solve a problem that is around and able to train their activeness in the lesson. From HOTS data and learning activeness, it can be concluded that HOTS has a close relationship with student activity while learning, because with this HOTS, students can be more active with critical and creative thoughts and are able to master learning material.

Based on the study of communication science, when students are able to think critically it can be concluded that students receive messages (material) delivered by the teacher. The message given can be encoded properly and there are no interruptions in its delivery. Students are also in a condition that does not experience interference so they can receive messages properly. In this condition all elements of communication are able to carry out their roles and functions properly so that students are able to improve their abilities and skills for critical thinking.

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