



## The Role of Thematic Learning Evaluation In Improving Students' High-Level Thinking Ability (HOTS)

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### ABSTRAK

Kementerian Pendidikan dan Kebudayaan pada tahun 2013 telah mengemukakan model pembelajaran yang diterapkan harus mengupayakan peserta didik untuk mencari tahu, menjawab sekaligus ikut andil dalam perumusan masalah, berpikir analitis atau mampu mengambil keputusan bukan hanya berpikir mekanistik, dan mampu bersikap kooperatif dan kolaboratif untuk memutuskan suatu pelajaran. Dengan menilik generalisasi tersebut, kebutuhan pada abad sekarang ialah suatu kemampuan yang dapat menjawab seluruh permasalahan yang timbul dalam berbagai elemen kehidupan manusia. Masyarakat dengan kecakapan sesuai dengan kebutuhan zaman dapat memberi ruang dan melebarkan jalan untuk berbagai sektor kehidupan. Melalui pembekalan berpikir kritis tingkat tinggi (high order thinking skills) dapat mencapai kapabilitas atau kemampuan sesuai dengan harapan perkembangan zaman. Permendikbud no 21 tahun 2016 tentang standar isi pendidikan dasar dan menengah menyatakan secara eksplisif bahwa capaian pembelajaran rana pengetahuan meliputi taksonomi bloom yang telah direvisi oleh lorin anderson dan david terdiri atas kemampuan: mengetahui, memahami, menerapkan, menganalisis, mengevaluasi, dan mengkreasi. Sesuai dengan taksonomi tersebut dimensi proses kognitif HOTS yakni menganalisis, mengevaluasi, dan mengkreasi. Soal-soal HOTS pada umumnya mengukur kemampuan pada rana menganalisis, mengevaluasi, dan mengkreasi

### ABSTRACT.

The Ministry of Education and Culture in 2013 has stated that the learning model that is applied must strive for students to find out, answer as well as take part in problem formulation, think analytically or be able to make decisions not just think mechanically, and be able to be cooperative and collaborative to decide on a solution. . By looking at these generalizations, the need in the present century is an ability that can answer all the problems that arise in various elements of human life. Communities with skills in accordance with the needs of the times can provide space and widen the path for various sectors of life. Permendikbud no 21 of 2016 concerning content standards for basic and secondary education Explicitly states that learning outcomes in the domain of knowledge include the taxonomy of bloom which has been revised by Lorin Anderson and David consisting of the ability to: know, understand, apply, analyze , evaluate, and create. In accordance with the taxonomy, the dimensions of HOTS cognitive processes are analyzing , evaluating, and creating. HOTS questions generally measure the ability to analyze , evaluate, and create.



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## Introduction

Permendikbud no 21 of 2016 concerning standard content education basic and middle state in a manner explicit that achievements knowledge shutter learning covers bloom's taxonomy that has revised by lorin anderson and david consists on ability : know, understand, apply, analyze, evaluate, and create. In accordance with taxonomy the dimensions of HOTS cognitive processes viz analyze, evaluate, and create. HOTS questions in general measure the ability on shutter to analyze, evaluate, and create. HOTS can be linked succeed if participant educate involved with what are they know in the learning process the then participant educate capable for distinguish ideas or idea in a manner clear, argued with fine, capable solve problem, and understand things complex become more clear. Where are the abilities this clear show how participant educate reasoned. In the 2013 HOTS curriculum, you can implemented, expected exists change paradigm on implementation learning. Early learning teacher -centered change Becomes centered to student.

Teacher is expected more creative and innovative in serve lesson. Of all many element source power education, curriculum 2013 added with approach application of HOTS in the learning process give significant contribution for carry out the development process quality potency participant learn 5 Can concluded that ability think level tall or high order thinking skills (HOTS) is something ability think in realm highest cognition. No only reserved for the process of understanding, but also arriving to create could based on object studies that have learned . in tune with that, Mulyadi ( in Jumiati , 2016, p . 19) put forward that Skills think level tall this expected capable realize role as well as participant educate in creating, evaluating, and analyzing. So no could denied again that 2013 curriculum with HOTS developed with competency - based is needed as instrument for direct participant educate Becomes more fine, capable compete in this world international as well as Becomes man capable quality answer always a challenge changed .

## Methods

The type of research used in this study is descriptive qualitative, using the literature review method. The subjects in this study were key informants or people who had in-depth information about a phenomenon being studied, such as the head of the library, while the object of this research was an article that contained the role of thematic learning evaluation in improving students' high-level thinking skills (hots). The instrument for collecting data is by searching for information from various sources such as journals and books that are relevant to the research title. Hope the author by applying about based high level thinking (hots) could Upgrade ability think student . The data analysis used is according to the theory of Miles and Huberman which includes the stages of data reduction, data presentation and drawing conclusions.

## Results and Discussions

### Application about HOTS in Learning

Curriculum (K-13) brings teacher consequence the more quality in carry out activity learning . K-13 mandated application approach scientific (5M) which includes observe, ask, collect information, reason / associate, and communicate . Then optimization teacher 's role in carry out learning 21st century and HOTS (Higher Order Thinking Skills). Next there is integration literacy and Strengthening Character Education (PPK) in the learning process

teaching (PBM). Learning is also necessary implemented in a manner contextual with using models, strategies, methods, and techniques in accordance with characteristics Basic Competency (KD) for the purpose learning reached.

Based on Bloom's taxonomy that has revised by Krathwoll and Anderson, necessary capabilities achieved student no only LOTS (Lower Order Thinking Skills), namely C1 ( knowing ) and C-2 ( understanding ), MOTS (Middle Order Thinking Skills), namely C3 ( applying ) and C-4 ( analyzing ), but also must there is enhancement to HOTS (Higher Order Thinking Skills), namely C-5 ( evaluating ), and C-6 ( creating ). Indicators Sub Indicators object Knowledge Analyze Differentiate Conceptual Procedural Metacognitive Organize Attributing Evaluate Check Criticize create Formulate / Create hypothesis Plan Produced 16 Deployments approach scientific, HOTS, and integration literacy and PPK in learning aim for Upgrade quality education in framework answer challenge , fine internal challenges framework achieve 8 ( eight ) SNP and challenges external , ie globalization .

For realize learning 21st century and HOTS, teachers must have good process skills in learning. Process skills can interpreted as deep teacher skills serve capable learning give experience meaningful and fun learning for student. Learning centered to students (student center ), and stimulate student for finish problem. The role of the teacher in PBM is not only as source learn, but also as facilitator. According to Azhar , process skills constitute ability student for manage ( obtain ) the obtained in activity study teaching (KBM) that provides opportunity widely to students for observe, classify, interpret, predict, apply, plan research, communicate results acquisition the. In implementation learning specifically for teachers at school base have implication Among lan :

1. Implications for teachers The implications of HOTS on the 2013 curriculum require somebody creative educator good in prepare activities / experiences study for son ., also in choose competence from various eye lesson and organize it for learning Becomes more meaningful, interesting, fun.
2. Implications for student Student must ready follow activity deep learning implementation possible for work good individually, in pairs, in groups small or classic. Students are also capable follow that lesson active for example do discussion group, held study simple, and solving problem.
3. Implications to facilities , infrastructure, resources learning, and learning media essentially thematic emphasis on students, either individually or group for active seek, dig, and find draft as well as principles 17 principles holistically and authentically. because it, deep implementation need facilities and infrastructure learn. Learning this need utilise source study good in nature designed in a manner special for necessity implementation learning. Learning this is also necessary optimizing the use of various learning media so that will help student in understand draft abstract concept . Application learning school thematic base still could use teaching materials already there is moment this for each eye lessons and it is also possible to use book supplement specially made integrated teaching materials.
4. Implications to Settings room In implementation activity learner thematic need do Settings room for atmosphere study fun. Arrangement room the includes : a. Space is necessary laid out in accordance with the topic being carried out . b. Arrangement seat participant educate could changed change in accordance with necessity moderate learning \_ going on. c. Participant educate no always sit on a chair but can sit on the mat / rug. b. Activity should varied and possible implemented good inside nor outside class. c. Wall class take

advantage for display results creation participant learn and use as source learn. d. Tools, advice and resources study managed so that make it easy participant educate for use and save it back .

5. Implications to election method In accordance with characteristics learner integrated, then in learning done need prepared various variation activity with using multiple methods. For example experiment, berman roles, questions and answers, demonstration, and speaking talk.

### Literature Review Study

<b>No</b>	<b>Author Name</b>	<b>Journal Name</b>	<b>Title</b>	<b>Results</b>
1.	(Sofyan, 2019)	<b>Journal Inventa Vol III. No. 1 March 2019</b>	<b>HOTS IMPLEMENTATION IN THE 2013 CURRICULUM</b>	With applying HOTS to the 2013 curriculum can simplify the process of learning and creating student more active and not stick to method lecture delivered by the teacher as well with use HOTS approach , situation the original class is increase motivation study siawa and improve achievement results learn .
2.	(Annuuru, T. et al., 2017)	<b>EDUTCEHNOLOGIA, Year 3, Vol 3 No. 2, August 2017</b>	<b>IMPROVING HIGH-LEVEL THINKING ABILITY IN ELEMENTARY SCHOOL STUDENTS' NATURAL SCIENCES LESSON THROUGH THE TREFFINGER LEARNING MODEL</b>	ability thought at first based on the classifying bloom taxonomy various type ability think from realm lowest ( knowledge , understanding , and application ) to with highest ( analysis , synthesis , and evaluation ). Also added that think level tall lead to something training ability think cognition for

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				<p>participant educate with integrate facts and ideas during the process of analyzing , evaluating , arriving to Step give evaluation of ideas or found facts _ even with hope capable create something from something works that have observed .</p>
3.	(Sakinah & Prihantini, 2022)	<b>Journal of Tampusai Education</b>	<b>Urgency Application Learning HOTS- Based in Elementary Schools</b>	<p>Application Skills think tall for students are very urgent , remember development with _various extraordinary challenge _ normal . The potential development of the digital world make dependence , maturity pseudo students and challenges globalization need answered with implementing HOTS in world of education . HOTS implementation requires involvement all parties in the environment education , and no only at the level concept , but also form practice real . School as formal educational institutions must capable Becomes initiator change .</p>

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			Enhancement the teacher's understanding of HOTS must be improved because with increasing teacher quality, quality education will increase.
4.	(Musrikah, 2018)	<b>Journal of Women and Children</b>	<b>HIGHER ORDER THINKING SKILL (HOTS) FOR ELEMENTARY SCHOOL CHILDREN IN LEARNING MATHEMATICS</b>
			Higher Order Thinking Skill (HOTS) or Skills Higher Order Thinking is part urgent in learning Mathematics. HOTS is combined from skills think critical and creative. combined from two aspect think this will optimizing work brain right and left. So that brain right and brain left will balanced it works. HOTS gets optimized through gift problem in form of problem solving or problem posing.
5.	(Bonifatius Sigit Yuniharto & Ana Fitrotun Nisa, 2022)	<b>Journal of Modern Education Volume 07, Number 03, 2022, 115-122</b>	<b>Implementation Learning HOTS and Creativity Oriented in Science Content Elementary students</b>
			As for the results research : 1) implementation learning load oriented HOTS science lessons for student SDNegeri Sariharjo grow ability creativity student in construct knowledge, think critical, and solve problem ;

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2) RPP basis systematic and careful especially in learning Science with the discovery learning learning model implemented no only not only oriented towards implementing HOTS, but also integrating education work character same , creativity , honest , scientific , constructive spirit student literacy , and develop prowess 21st century .

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From study studies literature about application HOTS questions in elementary school are very good impact positive to development participant educate in learn. Especially in development think level height , must have ability think high for finish something complex problem, no just memorize lesson but capable analyze and create . HOTS isn't it eye lesson, not a problem exam. HOTS is aim the end is reached through approaches, processes and methods learning. Mistake understand HOTS concept will be have an impact on the learning model errors are increasingly no effective and not productive. When the learning process designed for reach level think level high, then aim learn can adopt the recommended verbs in draft Bloom 's Taxonomy. Instrument evaluation or HOTS questions are demanding questions Skills think level high . In form quality more students OK, questions sort of this of course must developed by educators with good and applied in the class he was in. Currently this study about HOTS increasingly many done in accordance with field skill or eye lesson certain . HOTS can said succeed if participant educate involved with what are they know in the learning process the then participant educate capable for distinguish ideas or idea in a manner clear, argued with fine, capable solve problem, and understand things complex become more clear.

Where are the abilities this clear show how participant educate reasoned. In the 2013 HOTS curriculum, you can implemented , expected exists change paradigm on implementation learning. Early learning teacher -centered change Becomes centered to student . Teacher is expected more creative and innovative in serve lesson. Of all many element source power education , curriculum 2013 added with approach application of HOTS

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in the learning process give significant contribution for carry out the development process quality potency participant learn 5 Can concluded that ability think level tall or high order thinking skills (HOTS) is something ability think in realm highest cognition. No only reserved for the process of understanding , but also arriving to create could based on object studies that have learned. in tune with that , Mulyadi ( in Jumiati , 2016, p . 19) put forward that Skills think level tall this expected capable realize role as well as participant educate in creating , evaluating , and analyzing. So no could denied again that 2013 curriculum with HOTS developed with competency based is needed as instrument for direct participant educate Becomes more fine , capable compete in this world international as well as Becomes man capable quality answer always a challenge changed.

## Conclusions

High-level thinking or high order thinking skills (HOTS) is a thinking ability in the highest cognitive domain. Not only intended for the process of understanding, but also up to create can be based on the object of study that has been studied. The characteristics of HOTS questions include being able to measure higher order thinking skills, based on contextual problems, using various forms of questions. Several indicators in measuring higher order thinking skills include analyzing, evaluating, and creating. The steps in preparing the HOTS questions include firstly analyzing the KD that can be made into HOTS questions, secondly designing the item grid, thirdly selecting an interesting and contextual stimulus, fourthly Writing the question items according to the item's grid, and fifthly Create scoring guidelines (rubrics) or answer keys. Meanwhile, higher-order thinking skills or HOTS lead to idea training during the process of analyzing, evaluating, up to the stage of giving an assessment of the ideas or facts that are found even with the hope of being able to create something from a work that has been observed. Assessment instruments or HOTS questions are questions that require higher order thinking skills. In forming better quality students, questions of this kind must be properly developed by educators and applied in the classes they teach. HOTS can be said to be successful if students are able to think at a high level in problem solving. The use of HOTS in the 2013 curriculum also has implications for both the teacher and the students.

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