



Higher Order Thinking Skill (HOTS): One of the Competencies Which Becomes the Purpose of Implementing the 2013 Curriculum (An Analysis of the Relationship between Philosophy, Policy, and Implementation)

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Abstract. HOTS is one of the abilities that must be claimed by understudies to almost certainly have qualified aggressiveness in this worldwide time. This paper intends to investigate fundamentally and profoundly the connection between parts of reasoning, strategy, and usage of the 2013 Curriculum approach (K-13), particularly identifying with HOTS. This objective is accomplished by leading library look into (examination of library information as books, records, diaries, magazines, and so on.). The consequences of the investigation demonstrate that theoretically there is an association between logic, approach, and execution of HOTS. Rationally K-13 is viewed as a logical praxis that covers the cycle of setting, material, procedures, and items. The normal item is understudies who have HOTS. This theory is the premise of the plan of the 2013 Curriculum strategy as can be found in the Minister of Education and Culture Regulation Number 20-23 2016. The heading of its usage is following logic and strategy. The marker is HOTS preparing for instructors with the goal that they are equipped to complete HOTS arranged learning.

Keywords: HOTS, philosophy, policy and implementation, K-13

INTRODUCTION ~ Globalization presents free competition that requires everyone to possess higher-order thinking skills. With these skills, one can become more independent, easily adapt to situations that are fast-changing and competitive. In the cognitive process hierarchy, HOTS is the highest level of thinking (Yee et al., 2015). This competency is important for students to have and can have competitiveness that is qualified. The low ranking of Indonesia according to PISA shows the Lower Order Thinking Skills of Indonesian children (Apraldo, 2017). The birth of the 2013 curriculum is a solution to overcome this problem in addition to other educational problems. Research on HOTS has been done a lot.

Generally this topic is researched in relation to mathematics learning,

(Tanujaya, Mumu, & Margono, 2017); (Maharaj & Wagh, 2016); (Riyanto, Zulkardi, Putri, & Darmawijoyo, 2019), (Wahyuni, Johar, & Duskri, 2018); (Pratama & Retnawati, 2018) and other exact lessons (Yusuf & Widyaningsih, 2019); (Ramdiah, Abidinsyah, Royani, & Husamah, 2019). In the Indonesian context, there is no research on HOTS on the perspective of philosophy, policy, and implementation of the 2013 curriculum. This gap is to be filled through this research. It is important to see whether the 2013 curriculum as a public policy philosophy about HOTS and whether the policy conceptually guarantees the formation of HOTS in students if implemented according to their philosophy.

LITERATURE STUDY AND DISCUSSION



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HIGHER ORDER THINKING SKILL

According to Bloom's taxonomy introduced in 1956, there are 6 levels of human thinking in the lowest starting order, namely: knowledge, comprehension, application, analysis, synthesis, and evaluation. Then in 2001, Lorin Anderson revised it with several changes. He formulates the level of thought by using verbs to emphasize that thinking is an active process. The new levels of Bloom's Taxonomy include remembering, understanding, applying, analyzing, evaluating and creating. HOTS is the last three aspects of taxonomy bloom namely analyzing, evaluating, and creating. (Moore & Stanley, 2010). In other words, HOTS is the highest part of Bloom's taxonomy of the cognitive domain.

HOTS includes the ability to solve problems, make decisions, think critically and think creatively (Bissell & Lemons, 2006). The research shows that HOTS improves learning achievement (Tanujaya et al., 2017). Conversely students who do not have HOTS, show low achievement when they are dealing with HOTS questions (Abdullah, Abidin, & Ali, 2015). Thus in education will only be quality if oriented HOTS.

2013 CURRICULUM PHILOSOPHY RELATED TO HOTS

Theory is a structure of basic reasoning about something. The philosophical establishment of instructive arrangement is a presumption about the idea of the real

world, the nature of individuals, the nature of learning, and the idea of qualities which turn into the establishment of the introduction of training strategy. These philosophical presumptions have suggestions for the definition of the objectives of training (what sort of age is planned), the improvement of substance or instructive material, and the assurance of systems to accomplish the proposed instructive objectives.

The Deputy Minister of Education and Culture clarified that the item detailing depended on necessities. The necessities of understudies to be aggressive in this worldwide period are: (1) Attitude skills (people who are dependable, respectable, sure, and in charge of connecting successfully with the social condition, the earth, and the world and its human advancement) which is delivered by the exercises of tolerating, actualizing, acknowledging, living and rehearsing. (2) Skills capabilities (people who can think and act that are profitable and imaginative in the solid and unique spaces) delivered through watching, asking, taking a stab at, thinking, introducing and making. (3) Knowledge competency (people who ace science, innovation, craftsmanship, culture and mankind, nationality, statehood, and human advancement) are accomplished through exercises of knowing, understanding, applying, investigating, assessing and making). (Representative Minister of Education and Culture, 2014)



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**2013 CURRICULUM POLICY THAT
GUARANTEES THE CREATION OF HOTS**

**1. Graduates Competency Standards
(Permendikbud Number 20 of 2016).**

Each alumni of essential and auxiliary instruction units has capabilities in three measurements, in particular frames of mind, information, and abilities. Capabilities that obviously show HOTS are competency of learning and aptitudes.

HOTS is likewise identified with the elements of aptitudes. At all dimensions of instruction, understudies are relied upon to probably have considering and acting aptitudes: inventive, profitable, basic, autonomous, cooperative and informative with a proper dimension approach, specifically with a logical methodology as per the phase of kid advancement that is significant to the assignment given to the members primary school understudies; logical methodology as per those concentrated in instructive units and different sources freely; and logical methodologies as improvement from those concentrated in instructive units and different sources freely (Permendikbud No.20, 2016)

**2. Content Standards (Permendikbud
Number 21 the Year 2016)**

A few changes made to content norms in particular material that is insignificant to understudies is decreased; material important to understudies is developed and extended and enhanced with the necessities of understudies to think

fundamentally and logically following worldwide gauges.

**3. Process Standards (Permendikbud
Number 22 the Year 2016)**

Procedure Standards are criteria in regards to the usage of learning in instructive units to accomplish Graduates' Competency Standards in both attitudinal, information and aptitudes skills. Standard Process created alludes to Graduates' Competency Standards and Content Standards as directed in Permendikbud No.20 and 21.

**4. 2013 Curriculum Review Standards
(Permendikbud Number 23 of 2016)**

Instructive Assessment Standards are criteria with respect to scope, targets, benefits, standards, systems, methods, and instruments for assessing understudy learning results that are utilized as the reason for assessing understudy learning results in essential and auxiliary training (Permendikbud_No.23, 2016)

HOTS questions are estimation instruments used to gauge abnormal state thinking aptitudes, in particular reasoning capacity which not just reviews (review), restate(restate), or allude without processing(Recite). HOTS inquiries with regards to appraisal measure capacity: 1) exchange one idea to another, 2) process and apply data, 3) discover connections to different data, 4) use data to take care of issues, and 5) inspect thoughts and data basically. In any case, HOTS-based



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inquiries don't mean the issue is more troublesome than the subject of review.. (Ministry of Education and Culture, 2018)

This sort of appraisal is viewed as critical to quantify the dimension of reasoning aptitudes of understudies. The aftereffects of appraisals like this can be trusted as an outline of the quality and dimension of reasoning of understudies.

IMPLEMENTATION OF 2013 CURRICULUM

1. Teacher Readiness: Teacher training to provide HOTS oriented learning.

This movement depends on the familiarity with the key job of the educator. The job of educators in improving the nature of instruction is key. The World Teacher's Congress Resolution underscores, among others (Danim, 2010) that instructors have a key job, among others: (1) Universal access to all dimensions of training has been acknowledged as a thousand years improvement objective, are principal privileges surprisingly and the errand of government-funded training is straightforwardly identified with that; (2) Education is the way to battling destitution, empowering, harmony, social equity, human rights, vote based system, social decent variety, and social mindfulness; (3) Students today are future workforce, advanced education network level and progressively complex abilities, and progressively open challenge.

Efforts to improve students' thinking skills are impossible without the improvement of teacher quality. The teacher competency

test results show that even Indonesian teachers have met the required standard of qualification, but generally not competent enough. Data from Neraca Pendidikan Daerah (NPD) show that the average national teacher competency test results in 2016 were only 56.69 ("<https://npd.kemdikbud.go.id>," 2018). Teachers have not yet implemented HOTS-oriented learning (Ramdiah, Abidinsyah, Royani, & Husamah, 2019). Much effort can be made to improve the quality of teachers through training. Effective training is expected to enable teachers to plan, implement and evaluate HOTS-oriented learning.

2. The Assessment Model

HOTS standard assessment has been carried out in the 2017/2018 exam. The Minister of Education and Culture stated that some of the questions in the junior high school National Examination in 2018 used the High Order Thinking Skills (HOTS) standard. The result is a low Exam score. It caused controversy. The Indonesian Child Protection Commission condemns the use of HOTS in the 2018 National Examination questions. According to them, that cannot be done because learning is not HOTS oriented. However, despite the presence of controversy, the Government consistently carried out HOTS standard assessment suitable with the philosophy and policies of the 2013 Curriculum.

CONCLUSIONS



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There is a consistency between philosophy, policy, and implementation of the 2013 Curriculum specifically about HOTS. The revised 2013 curriculum at the conceptual level has a curriculum philosophy as a contextual praxis with a cycle of context, material, process, and product. The expected output is students who have HOTS. This philosophy which forms the basis for formulating the 2013 Curriculum policy is technically formulated in the Graduation Competency Standard. It is derived from content standards. Content standards are derived from process standards. Process standards are derived from assessment standards. All these Permendikbud conceptually can guarantee students have HOTS.

The government since 2017/2018 has implemented HOTS-based UN assessment standards. This caused controversy because the learning process was not HOTS oriented. This is caused by the competence of teachers who are still not qualified to implement HOTS-oriented learning. This is being tried to overcome with various training about HOTS-oriented learning.

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