

Spiritual Tasks of Teachers in Higher Order Thinking Skills-Oriented Learning

¹Abdul Karim, ²Wiwi Hartati

Abstract--*The 21st century learning has entered a disruption era. Such era demands the students gain more skill and effective learning to develop the knowledge. The teacher's position in contemporary learning is as facilitator rather than as instructor in mediating subject matter. This study aims to analysis the spiritual task of teachers in Higher Order thinking skills (HOTS)-oriented learning in education. Accordance with the object, the sort of inquire about utilized in this inquire about is descriptive qualitative research. The data is collected by researchers from online indexed-articles that are displayed and published in websites. The subjective information were analyzed through triangulation, categorization, decrease, classification, and translation. The findings of this research is spiritual tasks of teachers' learning of HOTS-oriented that are the roles of teachers' meditation, the roles of teachers' mediation, and the roles of teachers' reflection in learning of HOTS-oriented.*

Key words--*HOTS-Oriented; Spiritual Tasks; Teachers Learning Process*

I. INTRODUCTION

The world has entered 21st century as a disturbance era (Nagappan, 2001). This century learning demands the students to choose up more abilities in term of making and burrowing their information (Husamah, Fatmawati, & Setyawan, 2018). There are four main frameworks of this century skills which comprise of communication, collaboration, critical thinking, and creativity skills (Retnawati, Djidu, Apino, & Anazifa, 2018). One of the way to create intellectual and spiritual's person is learning skills in schools (Nagappan, 2001). In this way teacher's position in modern learning is as facilitator rather than as instructor (Yaniawati, 2013).

In this century, students will be confronted with an abnormal issue. They must be critical, reflective, and metacognitive (Widiawati & Joyoatmojo, 2018). This will be able to create a holistic child with qualities within the future (Nachiappan, Damahuri, Ganaprakasam, & Suffian, 2018). Students have to be able to create capacities of interpersonal competence (King, Goodson, & Rohani, 2011). Through this, they will be trained to solve the problems faced now or in the future (Widiawati & Joyoatmojo, 2018).

Creating the student's capacity to think at distant an improved level has been an crucial point for upgrading learning systems (Saïdo, Siraj, Bakar, Nordin, & Saadallah, 2015). Accomplishment within the appraisal reflects students' capacity in application learning measures cognitive abilities such as thinking and apply (Mohamed & Lebar, 2021). Students ought to reach the next arrange considering aptitudes (HOTS) (Kusuma, Rosidin, & Suyatna, 2017).

Other side, the current global paradigm shift from measuring a nation's quality of education based on Higher order thinking skills (HOTS) (Mary, Mitana, Muwagga, & Ssempala, 2018). HOTS is seemingly vital to outlive such era (Prayitno, Suciati, & Titikusumawati, 2013). HOTS are vital viewpoints in learning.

¹Primary School Teacher Education, Faculty of Teacher Training and Education, Universitas Muhammadiyah Cirebon, Cirebon, Indonesia, E-mail: karim_gml81@yahoo.co.id

²Department of Accounting, Faculty of Economy, Universitas Muhamadiyah Cirebon, Indonesia

Considering abilities are principal in instructive handle. A person's thought can impact the practicality of learning (Tanujaya, Mumu, & Margono, 2017).

The serious efforts are teachers and learning environment needs to put a better concerned towards students' HOTS (Yunistika & Juanengsih, 2018). The five essential HOTS are issue tackling abilities, asking aptitudes, thinking abilities, communicating abilities and conceptualizing aptitudes have been distinguished within the Syllabus (NCTM, 1989). Most teachers create students' HOTS with learning errands which surpass the moment level 'comprehension' in arrange to empower application, examination, and assessment exercises (Yen & Halili, 2015). Be that as it may, when HOTS does happen within the classroom, teachers once in a while make exertion to maintain students' stream of HOTS, maybe due to teachers' incompetency. It is fair that in terms of realizing the instructive perfect of having 'thinking' students in a 'thinking' classroom inside the 'thinking' curriculum where active cognition could be a schedule, we still got to work genuine difficult (Yen & Halili, 2015). Indeed so, teacher and student's considering aptitudes could be a need in deciding victory of instruction change (Nachiappan et al., 2018).

Problems and previous studies above guide this study to focus on the spiritual tasks of teachers in HOTS-oriented learning as an effort to the serious efforts and commitment towards unfamiliar, uncertainty, questions and dilemma.

II. METHODOLOGY OF RESEARCH

The object of this research is spiritual tasks of teachers' learning of HOTS-oriented. Accordance with the object, the sort of inquire about utilized in this inquire about is descriptive qualitative research (Myers, 2009). Agreeing to Whitney, the expressive strategy is the explore for actualities with the proper interpretation (in Mulyana, 2002). Clear investigate thinks about issues in society, as well as the strategies that apply in society and certain circumstances, states of mind, and impacts of a phenomenon (Nazir, 2005).

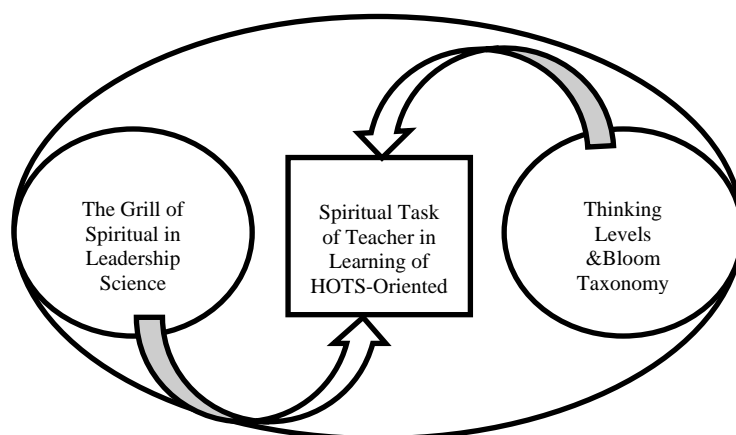


Figure 1. Theoretical Framework of Spiritual Tasks

The main data source in this study is text data that is evidences about HOTS in context of spiritual tasks as done by Karim & Wajdi (2019). The data is collected by researchers from online indexed-articles that are displayed and published in websites featuring about learning process of HOTS-oriented by investigation sheets (see table 1). In addition to the above, secondary data which is obtained from other sources such as journals and books were also utilized in this research. Information examination is aiming for the level of each

pioneer part (Miles & Huberman, 1994: 92), by utilizing incremental coding methods and frameworks of subjective information sorts. The subjective information were analyzed through triangulation, categorization, decrease, classification, and translation (Myers, 2009).

Table 1 Observation and Investigation Sheets

The Grill of Spiritual in Leadership Science (Karim, 2017)	Spiritual Task of Teacher in Learning	Thinking Levels & Bloom Taxonomy(Nachiappan et al., 2018; Yen & Halili, 2015)
Transcendent & endogen: sources & way of inspiration, value, norm, and about personality, continuity of inspiration of value, the protect the tradition, adjustments with the togetherness (no discrimination), discourse, valuable norm and culture, novelty (different & unique)	The Roles of Teachers' Meditation Tasks: use the values, make judgments and decisions using experience & values as well as justification, defend, convincing the information to a small section, to understand more deeply, criticize, propose, contrast, differentiate, construct, discuss, locate, define, identify, name, recall, reproduce, recognize,	Apply Verbs: use knowledge, skills and values in different situations to do things
		Analyse Verbs: convincing the information to a small section to understand more deeply and in the interrelationship between the section
		Evaluate Verbs: make judgments and decisions using knowledge, experience, skills and values as well as justification
Contemplative & Intuitive: implementation of faith, the understanding of an event, to connect with other person/thing & minds-feel-action, Developing relationships, optimism, equalization, communication, to handle differential-conflict-pressure, To run the vision, to develop intelligent-emotion-spiritual, to act and think, understanding the core, structured, neutralism, analyse,	The role of teachers' Mediation Tasks: use knowledge & skills in different situations to do things, make judgment and decision using experience & skills, generate creative or innovative ideas or products or methods, compile, develop, integrate, generalize, in the interrelationship between the section, support, compare, apply, demonstrate, operate, use, describe, distinguish, list, match, outline, select,	Creat Verbs: generate creative or innovative ideas or products or methods
		Evaluation Verbs: appraise, assess, criticize, defend, evaluate, justify, support
		Synthesis Verbs: compile, create, develop, generalize, integrate, propose Analysis Verbs: analyse, compare, contrast, differentiate

Reflective Verbs: Self-introspection, The understanding of benefit for others, Spirit in the profession, Self-confidence, The understanding of the experience, Making decision of tradition, Process of making the quick-policy, Many new ways & basis of solving (creativity)	The roles of teachers' Reflection Tasks: make judgments and decisions using knowledge, appraise, assess, evaluate, justify, create, carry out, produce, condense, comprehend, interpret, label, state.	Application Verbs: apply, use, construct, demonstrate, operate, produce, carry out,
		Comprehension Verbs: discuss, condense, interpret, describe, distinguish, locate, comprehend,
		Knowledge Verbs: define, identify, recall, label, list, select, match, name, outline, describe, recognize, reproduce, state.

III. FINDINGS

The Roles of Teachers' Meditation

The advancement of HOTS requires significant exertion on the teachers' errands. The common conviction among teachers is that assignments requiring HOTS are fitting as it were for tall accomplishing students (Zohar, 1999). They ought to utilize a assortment of learning approaches to create the students' capacities to exchange information and aptitudes, their basic considering (Hadzhikoleva et al., 2019). For enhancing HOTS: think with analogies, similes, and metaphors (Thomas, n.d.).

The importance of teaching HOTS effectively as a matter of fulfilling a national aspiration in education (Yen & Halili, 2015). The teachers' educational information and HOTS are the most concern for instructive headway (Retnawati et al., 2018). That HOT includes an individual's capacity to attain a given purpose to non-routine issues. This can be basic for instruction since school graduates require creative ability to overcome any developing generation (Mary et al., 2018). HOTS lessons in education should focus on activities that covers the key areas and should be systematically planned for, and taught to students (Chidozie et al., 2014).

HOTS securing can too be upgraded through subject matter instructor in-service proficient improvement programs to confer understanding of concepts and their applications in the life (Saido et al., 2015). Subsequently, the esteem of HOTS can be utilized as an pointer within the choice of unused students (Tanujaya et al., 2017). The HOTS's analyses in teaching and learning in the school is through spiritual & attitudes component (Nachiappan et al., 2018). Instructors are as of now mindful of the significance of HOTS for understudies. They as of now know that understudies can be prepared approximately HOTS by utilizing problem-based learning, project-based learning, request learning, and agreeable learning (Retnawati et al., 2018).

Teachers were way better arranged in terms of their information, academic abilities, and state of mind to educate HOTS. More critically, they are anticipated to educate both the substance and HOTS utilizing the implantation approach (Nagappan, 2001). The techniques are advertised for improving HOTS: 1) Instruct

students approximately HOTS and higher arrange considering qualities and challenges. 2) Instruct the concept of concepts: teachers ought to make beyond any doubt students get it the basic highlights that characterize a specific concept. 3) Students ought to be guided to distinguish imperative concepts and choose which sort of concept each one is (unique, nonverbal). 4) Educate steps for learning concepts (Thomas, n.d.).

Teachers got to realize that the viability of educating HOTS will materialize as to a more constructivist view which manages understudies dynamic learning that tackles meaning-making within the learning prepare (Yen & Halili, 2015). Down to earth teacher must have wide information through broad perusing in arrange to actualize the different exercises (Nachiappan et al., 2018). In addition, learning sources such as books, access to electronic media still need further consideration by education experts (Retnawati et al., 2018).

The students' attitude to subject matter e-learning was positive. The option of any subject matter learning model was the beginning effort key to develop the power of the student's knowledge. At this time the role of the teacher could not be fully replaced by technology. It is required to analyze the lack of this learning model or explore the other alternative learning model to increase the subject matter power. The importance of the socialization of the study culture is based on technology basis (Yaniawati, 2013).

Being learning to think, as normally, makes compelling instructing of HOTS basic in guaranteeing students' compelling learning as a entire, with faithful conviction and diligence toward the checked targets, we are going sooner or afterward hit "the bull's eye" (Yen & Halili, 2015).

Students should be explicitly taught at a young age how to infer or make inferences (Thomas, n.d.). When students are a small more seasoned, a educator may utilize well-known trademarks. The common issue fathoming procedures grasp formulating a arrange of tackling the issue, carrying out the arrange (NCTM, 1989). Students are emphatically empowered to analyze other people's contemplations and activities (Hadzhikoleva et al., 2019). The students may be further engaged through the current routine competitive based learning has driven to higher crevices of HOTS of students (Prayitno et al., 2013).

The Roles of Teachers' Mediation

HOT includes an individual's capacity to non-routine issues. Typically fundamental for instruction since school graduates require such aptitudes as development in arrange to overcome any advancement challenges in their lives counting the world of work (Mary et al., 2018).

The HOTS in learning in school through communication component (Nachiappan et al., 2018). The importance of the balance of the learning component is to create the learning effectiveness (Yaniawati, 2013). The taking after methodologies are advertised for upgrading HOTS: 1) Tell and appear. 2) Grow discourses. 3) educate question-answer relationship. 5) expound and clarify. 6) utilize agreeable learning regularly. And 7) utilize collaborative procedures perusing (Thomas, n.d.).

Teachers got to realize that the adequacy of instructing HOTS will materialize as it were when managing students dynamic within the learning handle (Yen & Halili, 2015). In spite of the fact that educator may be a key to the execution of learning handle, all instructive bodies have rise to duties for moving forward instruction. In any case, teachers' information approximately the significance of HOTS still needs great information on progressing HOTS (Retnawati et al., 2018). Viable educator must have wide information through broad perusing in arrange to execute the different exercises (Nachiappan et al., 2018). Teachers ought to make

beyond any doubt students get it the basic highlights that characterize recognize it from other concepts. Teachers ought to lead students through the method of interfacing one concept to another, conjointly putting concepts into a pecking order from little to huge. Compare the modern to the already known (Thomas, n.d.).

The teachers can receive in educating their students for the advancement of HOTS. HOTS lessons in instruction ought to center on exercises that covers the key ranges, by joining conceptualizing exercises, utilizing co-operative learning as well as other proposed procedures for educating HOTS. At that point the required comes about teachers look for would be slowly accomplished, and understudies who can inventively create modern bits of knowledge and workable arrangements in plan in innovation instruction would start to develop consistently (Chidozie et al., 2014).

Students may require offer assistance in highlighting key concepts. Begin by modeling ("I do"), at that point by doing a few as a entirety lesson ("We do") some time recently at last inquiring the students to undertake one on their claim ("You are"). With this sort of relationship, regularly the understudy will bring exceptionally down to earth and successful procedures to the table that the educator may not have something else considered (Thomas, n.d.). To unravel a issue, understudies create modern subject matter understandings. Fruitful issue understanding includes the method of planning past subjects information. Instinct may also be included within the considering prepare. In this manner, within the issue fathoming prepare, students may make guesses and attempt numerous diverse ways to handle the issue (NCTM, 1989). There had been developed an instrument assessment of HOTS with HOTS indicators in static fluid material based on cognitive dimension process in form of creating in form of factual knowledge (Kusuma et al., 2017).

For example, confirmation around learning of HOTS is INSTAD learning technique. The student might be encourage engaged, hence gotten to be rise to with other understudies, in the event that the educating procedure chosen is additionally supporting through viable peer-group instructional exercises. A solid cooperative learning strategy, ought to be considered by educator to raise students' HOTS (Prayitno et al., 2013). Other model, there is a significant increase of HOTS towards student ability categories from both guided inquiry and free inquiry learning model (Yunistika & Juanengsih, 2018). The students who learn using scientific approach in Problem Based Learning model integrated with the inculcation of 4C skills have higher HOTS than those learning using scientific approach in Think-Pair-Share learning model with the inculcation of 4C skills. Referring to the above, both skills are needed skill in the 21st century (Widiawati & Joyoatmojo, 2018). Currently: 1) OIIDE learning models has moved forward the students' HOTS (performed in: self-regulated considering expertise, basic considering aptitude, and imaginative considering ability), and 2) the all considering components are supporting each other and vice versa (Husamah et al., 2018).

The Roles of Teachers' Reflection

All teachers have break even with duties for making strides instruction within the nation. Government and instruction specialists ought to discover arrangements to fathom this issue (Retnawati et al., 2018). And this respectable duty slips upon the shoulders of none other than our individual teachers (Yen & Halili, 2015). The issue distinguishing proof comprises of knowing a issue after you see a issue and expressing the issue in its aggregate (Thomas, n.d.). The HOT involves an individual's ability to find solutions to non-routine problems (Mary et al., 2018). The all considering components are the more prominent the self-regulated considering aptitude, imaginative considering and vice versa (Husamah et al., 2018).

The teachers utilize as it were three levels of HOTS, i. e. application, examination and assessment in instructing. Learning that was carried out did not incorporate an alluring instructing help. As a way to overcome the issue of instructors in educating and learning, down to earth educator must have the different exercises and more curiously (Nachiappan et al., 2018). The taking after methodologies are advertised for improving HOTS: numerous understudies with HOTS challenges advantage from person assessment by profoundly qualified experts (Thomas, n.d.).

Given the significance of understanding the method of HOTS as well as their evaluation among students speaks to a central objective in instruction. The teachers may advantage in evaluating the students' cognitive aptitude level to that energize HOTS (Saido et al., 2015). Three task designs have been distinguished for utilize in surveying HOTS: (1) determination, which incorporates multiple-choice, coordinating, and rank arrange things; (2) era, which incorporates brief reply, exposition, and execution things or assignments; and (3) clarification, which includes giving reasons for choice or era reactions (King et al., 2011). One of the foremost critical things that can be done to move forward students' HOTS is by changing course readings utilized in subject matter learning within the schools (Tanujaya et al., 2017).

Educating that emphasizes student issue tackling requires more adaptable understandings of subject matter (Nagappan, 2001). Teachers ought to utilize a assortment of learning approaches to create the students' capacities to exchange issue fathoming aptitudes (Hadzhikoleva et al., 2019). Educate steps for learning concepts. Instructors ought to have students protect their reactions (Thomas, n.d.).

Peer assessment could be a strategy that's greatly suitable for this reason. There are numerous benefits: (1) students can legitimately assess their colleagues' work; (2) the mindfulness of impact and control in surveying a colleague increments the students' self-esteem and significance; (3) key aptitudes are created - to investigate, analyze and assess, talk about, protect an thought (Hadzhikoleva et al., 2019). The assembly point that shows the reasonableness of bona fide appraisal and HOTS can be utilized to define appraisal errands for the following ponder (Mohamed & Lebar, 2021).

Issue fathoming is a necessarily portion of all subjects matter learning. To fathom a issue, understudies draw on their information. They ought to moreover obtain ways of considering; create certainty and propensities of perseverance in new circumstances through the issue tackling handle. The common issue fathoming methodologies grasp understanding the issue, concocting a arrange of understanding the issue, analyzing the sensibility of the result and making assessment. Instructors ought to not dishearten a understudy just since his/her strategy is as well long or as well complicated. Instep, instructors ought to direct the understudy (NCTM, 1989).

IV. DISCUSSION

From the results above it can be simplified that the teacher's meditative role in HOTS 'learning consists of the teacher's readiness in the form of knowledge & attitudes, strategies offered in order to get rid of the mystery with confidence and persistence, planned self-development, and a learning culture based on technology. The challenge of characterizing "thinking abilities, basic considering, and issue of giving solution" has been alluded to as a conceptual overwhelm, and as a "century ancient problem" for which "there is no well-established typology." In expansion, clarifications of how learning happens have been seen as insufficient, with

no single hypothesis enough clarifying “how all learning takes place” (King et al., 2011). Thinking can be separated into lower arrange considering and higher arrange considering (Widiawati & Joyoatmojo, 2018). Making, presently considered the most elevated level of considering, is characterized as “putting components together to make an useful entire, recognizing components in a unused design through creating.” Inquiring students to think at higher levels past basic review is an great way to fortify students’ considering forms (Bloom, 1956). Thinking comprises of the utilize of cognitive forms; higher levels of Bloom's Scientific categorization comprise of analyzing, assessing, and making utilized to degree HOTS (Widiawati & Joyoatmojo, 2018).

Within the reexamined Bloom’s scientific classification, HOTS are characterized as an incision among the 3 beat levels of capacity within the cognitive measurement; analyzing, assessing, making, and 3 levels of information measurement: conceptual, procedural, metacognitive (Retnawati et al., 2018). HOTS are the capacity to think which is student’s capacities that are actuated when understudies experience new issues, instabilities, questions, or problems (Tanujaya et al., 2017).

The HOTS can be accomplished along these lines make decisions regarding a circumstance that's unprecedented (Mohamed & Lebar, 2021). The other definition of HOTS is the ability to apply values in creating something (Nachiappan et al., 2018). HOTS are the extended utilize of the intellect to meet modern challenges. HOTS is characterized by complex, self-regulative, important, nuanced judgments, vulnerability, numerous criteria as well as different giving arrangements (Chidozie, Libunao, Kamen, & Saud, 2014). HOTS requests somebody to apply modern information that he has got to reach plausibility of reply in modern circumstance (Kusuma et al., 2017). HOTS are the capacity to make meaning past what is expressly displayed, examine and develop connections. Thinking implies any profitable conduct in which an person is able to work out his/her creative aptitudes (Mary et al., 2018).

HOTS different with routine teaching in several characteristics are complex yields multiple solutions, involves process of making meaning, and it is effortful that requires mental work (Yen & Halili, 2015). HOTS are actuated when students experience new issues or situations. Fruitful application of these aptitudes within the classroom in clarifications inside the setting of available knowledge which development in mental aptitudes (Saïdo et al., 2015).

Many scientists share the view that HOTS include critical, logical, reflective, metacognitive, and creative thinking (Hadzhikoleva et al., 2019). HOTS counting basic considering, consistent, intelligent, metacognitive, and inventive considering (Hadzhikoleva, Hadzhikolev, & Kasakliev, 2019). In this manner, six aptitudes are considered to be accomplished by students: 1) the capacity to judge a source validity; 2) distinguish presumptions, generalizations and predispositions; 3) distinguish essence in dialect utilize; 4) get it the reason of a composed; 5) recognize the gathering of people; 6) make basic judgments (Husamah et al., 2018). The perspectives of HOTS incorporate the abilities of analyzing issues, of assessing issues, and of making contentions. The perspectives of analyzing are the capacities to break down the texture into parts and choose how the parts are interconnected (Prayitno et al., 2013).

In common, measures of HOTS incorporate all mental assignments that call for more than the recovery of data. Hence, in wide terms, HOTS can be considered as the abilities required for performing these assignments (NCTM, 1989). In particular, HOTS are measured by test, consisted of mathematical connection, mathematical communication, reasoning, and problem solving (Yaniawati, 2013).

From the results above it can be concluded that the mediating role of teachers in HOTS 'learning consists of teachers needing with HOTS socialization and training, developing HOTS by integrating activities, the ability of teachers to ensure students can distinguish concepts, and teacher guidance for students in connecting between concepts and hierarchy. Contemporary learning demands the learners to involve more actively developing their knowledge. The exercises of learners are the center of learning handle within the future (Yaniawati, 2013). Instructors in specific ought to prepare themselves with learning hones pertinent to 21st century improvements and needs, considering abilities over all disciplines inside children ought to be given need (Nachiappan et al., 2018). Teachers treat considering abilities that they are an inherent capacity like "common sense" which is actually molded by social values (Atkinson, 1997). It is common that numerous are still saved approximately the thought of educating considering as the idea of "thinking-as-a-skill" remains beneath investigation. Children's advancement of considering may be a organic handle and needs no express instruction (Fisher, 1999). Undoubtedly, considering abilities can be created, this appears that considering aptitudes are without a doubt open to instruction (Marzano, 1993). In spite of the conviction that to an degree the capacity to think is something we are born with, we don't precisely know the constrain of that thinking capacity; that's why considering can and ought to be created so that each understudy can accomplish their most noteworthy considering potential (Fisher, 1999)."

The essential look at teachers' point of view tells us that most instructors concur that it is significant to educate students HOTS, fundamentally to direct their thought era. The advancement of students' HOTS is complementary with the teaching of long lasting learning among them (Yen & Halili, 2015). Educating HOTS is right now at the center of instructive consideration. In specific, the changed educational modules has moved its accentuation to the cultivating of HOTS. In common, measures of tall arrange considering incorporate all mental assignments that call for more than the recovery of data (NCTM, 1989). Therefore, the need for HOTS in the teaching and learning cannot be over emphasized (Chidozie et al., 2014). A person's thought can influence the capacity, speed and viability of learning. Subsequently, considering aptitudes is related with learning prepare. Students who are prepared to think illustrate a positive affect on the improvement of their instruction (Tanujaya et al., 2017).

The valuable learning methodologies incorporate practice, elaboration, organization, and metacognition. Lessons ought to be particularly planned to instruct particular learning techniques. The instruction of teacher-centered introductions of data ought to be utilized sparingly. Earnest criticism giving prompt, particular, and remedial data ought to advise learners of their advance (King et al., 2011). The teachers can make strides the capacity by embracing learning exercises that empower HOTS; and educational programs architects will evaluate the degree to which the educational programs has accomplished its goals and planned arrangements to move forward HOTS. Hence, the learning chosen by the teacher will influence how tall and moo HOTS of the learners themselves are. Applying the correct learning demonstrate is required to overcome the issues that cause low arrange higher aptitudes; that's learning show which includes the usage of analyzing, assessing, and making (Widiawati & Joyoatmojo, 2018). These fundamental and intertwining ways of learning matter, thinking and using sources of knowledge are considered important in matter of education. In fact, many of students' problems in learning originate from their weaknesses in one or more of these skills. Students are expected to enhance the development of these skills and use them to construct their sources of knowledge, and hence engage in life-long learning (Yen & Halili, 2015).

Within the execution of learning, HOTS cannot be straightforwardly instructed to understudies. Understudies ought to be prepared almost HOTS, as a expertise, through learning exercises that bolster its advancement. Dynamic learning is exercises for preparing around HOTS. In expansion, tackling complex and intrigue issues within the learning prepare are vital exercises to prepare students' HOTS (Retnawati et al., 2018). The taking after are a few of the procedures that might be utilized in improving HOTS within the classroom: 1) Educate the concept. 2) Title and categorize concept. 3) Move from concrete to theoretical and back. 4) Instruct inference concept. 5) Instruct question-answer connections. 6) Incorporate conceptualizing exercises within the lessons. 7) Utilize educating strategies that incites higher considering levels. 8) Emphasize input era for understudies (Chidozie et al., 2014). The foremost critical, the suitable imaginative plan in learning forms can as it were be empowered by the imaginative instructors who have the great classroom administration aptitudes (Pukdeewut, Chantarasombat, & Satapornwong, 2013). Be that as it may, it is still a huge challenge for most teachers to discover a legitimate learning demonstrate to develop the HOTS in students. Not all of learning model can be implemented by teachers for all subjects (Hudha, Amin, Sumitro, & Akbar, 2016). Subsequently, it is imperative to select the right guidelines procedures to reinforce educator candidates' HOTS in terms of self-regulated considering, and inventive considering (Husamah et al., 2018).

From the results above it can be concluded that the reflective role of the teacher in HOTS 'learning consists of that the benefits in assessing that the teacher can know the weaknesses of themselves and students, students defend their responses as a form of way of thinking, teachers should not discourage students through the methods adopted, and teacher's ability to raise students' problems that are not routine become routine problems. The discourse concerning teachers' tasks for the most part alludes to manager's capacities (Fayol, 1949), but administrative, conviction, esteem, culture, worldview, suspicion, is still a subject of a discourse, especially on the off chance that the impact of culture and a way of considering in a specific nation are taken under consideration (Weber, 1958; Hofstede, 1993; Vickers, 2002; Mas'ud, 2004; Montambault, 2005; Bush & Coleman, 2012; Anderson, Baur, Griffith, & Buckley, 2017). As Mintzberg (1975) puts it, there's no hypothesis, counting teacher's task, that applies in all condition as the application for the most part depends on the circumstance, at that point he classifies the administrative parts are interpersonal, informational and decisional. Based on this interpersonal part, Karim (2017) extend the otherworldly parts which are meditation, mediation, and reflection. It is in these respects that the modern writing in administration presently incorporates a discourse on most profound sense of being.

Teacher's efforts of meditation, mediation and reflection, namely: (1) to get inspiration is from what they read and study, natural, ethic to others, environment & themselves, and understand the purpose of life and correct themselves; (2) to resemble ancestors from generation to generation, to cooperate with family in order to remind each other, along with the students in order to preserve studying and with the community in order to support each other. Teachers tries to be neutral in the school's community and to simplify the problem but do not underestimate all affairs; (3) to be a figure not just to give an example, but also to attend the kindness and ability of students, promote the unity and brotherhood, uphold the principle of practice, keep spirituality, and try to consistent with down-up equality principal (Karim, 2016; 2018).

The several activities such as meditations: transcendent and contemplation, then mediation such as intuitive activities are self-integration & social-interaction and endogen that are local wisdom, national culture,

and global trend, the last reflection activities are correction, detection & decision based on ancestral inspiration especially decisions about students, school, finances, alumni, tools, daily needs, and culture-political-economy (Karim, 2019). All ancestral order becomes norms that determine various postulates of beliefs, thoughts, actions, and interactions. (3) Ancestors as edicts maker become the norm and (4) ancestral habits become culture (Karim, Mardhotillah, & Samadi, 2019).

V. CONCLUSION

The studies interpretation meets the conclusion that: (1) The roles of teachers' meditation are use the values, make judgments and decisions using experience & values as well as justification, defend, convincing the information to a small section, to understand more deeply, construct, propose, define, identify, name, recall, contrast, recognize, discuss, criticize, reproduce, differentiate, and locate in the learning of HOTS-oriented. (2) The role of teachers' mediation are use knowledge & skills in different situations to do things, make judgment using experience & skills, generate creative or innovative ideas or products & methods, compile, develop, integrate, generalize, in the interrelationship between the section, support, compare, apply, demonstrate, operate, use, describe, distinguish, list, match, outline, and select in the learning of HOTS-oriented. (3) The roles of teachers' reflection are make judgments and decisions using knowledge, appraise, assess, evaluate, justify, create, carry out, produce, condense, comprehend, interpret, label, and state in the learning of HOTS-oriented.

REFERENCES

1. Anderson, H. J., Baur, J. E., Griffith, J. A., & Buckley, M. R. (2017). What works for you may not work for (Gen) Me: Limitations of present leadership theories for the new generation. *The Leadership Quarterly*, 28(1), 245–260. <https://doi.org/10.1016/j.leaqua.2016.08.001>
2. Atkinson, D. (1997). A basic approach to basic considering in TESOL. *TESOL Quarterly*, 31(1), 71–94.
3. Bloom, B. (1956). Higher Order Thinking Skills. *Every Student Learns*, p. 1(5): 1-2.
4. Bush, T., & Coleman, M. (2012). *Manajemen Mutu Kepemimpinan Pendidikan*. Yogyakarta, Indonesia: IRCiSoD Diva Press.
5. Chidozie, C. C., Libunao, W. H., Kamen, Y. Bin, & Saud, M. S. Bin. (2014). Implementing higher order thinking skills in teaching and learning of design and technology education. In *First Technical and Vocational Education International Seminar* (pp. 1–9).
6. Fayol, H. (1949). *General and Industrial Management*. New York, USA: Pitman.
7. Fisher, R. (1999). Considering abilities to considering schools: Ways to create children's considering and learning. *Early Child Improvement and Care*, 153, 51–63.
8. Hadzhikoleva, S., Hadzhikolev, E., & Kasakliev, N. (2019). Using Peer Assessment to Enhance Higher Order Thinking Skills. *TEM Journal*, 8(1), 242–247. <https://doi.org/10.18421/TEM81-34>
9. Hudha, A. M., Amin, M., Sumitro, S. B., & Akbar, S. (2016). Consider of directions models and sentence structure as an exertion for creating "OIDDE" directions show. *Jurnal Pendidikan Biologi Indonesia*, 2(2), 109–124. <https://doi.org/https://doi.org/10.22219/jpbi.v2i2.3448>
10. Husamah, Fatmawati, D., & Setyawan, D. (2018). OIDDE learning show: Progressing higher arrange considering aptitudes of Science instructor candidates. *Worldwide Diary of Instruction*, 11(2), 249–264.
11. Karim, A. (2016). Managerial inspriation in the traditional pesantren. *UMRAN - International Journal of Islamic and Civilizational Studies* (EISSN: 2289-8204), 3(3–1), 73–84. <https://doi.org/10.11113/umran2016.3n3-1.150>
12. Karim, A. (2017). *Kepemimpinan & Manajemen Kiai dalam Pendidikan: Studi Kasus pada Pesantren Bendakerep, Gedongan dan Buntet Cirebon*. Retrieved from [http://repository.uinjkt.ac.id/dspace/bitstream/123456789/38767/1/Abdul Karim_Kepemimpinan.bak.pdf](http://repository.uinjkt.ac.id/dspace/bitstream/123456789/38767/1/Abdul%20Karim_Kepemimpinan.bak.pdf)
13. Karim, A. (2019). Inspiration, policy and decision maker. In N. J. Beachum & S. Kulkarni (Eds.), *In Search of Creativity: A Compilation of International Studies Part-II. Tampere, Finland* (II, pp. 34–64).
14. Karim, A., Mardhotillah, N. F., & Samadi, M. I. (2019). Ethical leadership transforms into ethnic: exploring new leaders's style of Indonesia. *Journal of Leadership in Organizations*, 1(2), 146–157.
15. Karim, A., & Wajdi, F. (2019). Propaganda and da'wah in digital era (A case of hoax cyber-bullying against ulama). *KARSA: Jurnal Sosial Dan Budaya Keislaman*, 27(1), 171–202.

- <https://doi.org/10.19105/karsa.v27i1.1921>
16. King, F., Goodson, L., & Rohani, F. (2011). *Higher order thinking skills: Definition, teaching strategies & assessment* Center for Advancement of Learning and Assessment. Tallahassee, FL: Florida State University.
17. Kusuma, M. D., Rosidin, U., & Suyatna, A. (2017). The Improvement of higher arrange considering ability (HOTS) instrument evaluation in material science ponder. *IQSR Diary of Research & Strategy in Instruction*, 7(1), 26–32. <https://doi.org/10.9790/7388-0701052632>
18. Mary, J., Mitana, V., Muwagga, A. M., & Ssempala, C. (2018). Assessment of higher order thinking skills : A case of Uganda Primary Leaving Examinations. *African Educational Research Journal*, 6(10), 240–249. <https://doi.org/10.30918/AERJ.64.18.083>
19. Marzano, R. J. (1993). How classroom instructors approach the instructing of considering. *Hypothesis into Hone*, 32(3), 154–160.
20. Mas'ud, F. (2004). Mitos keuniversalan teori manajemen Amerika. *Jurnal Studi Manajemen & Organisasi*, 1(1), 10–20.
21. Miles, M. B., & Huberman, A. M. (1994). *Subjective Information Examination: An Extended Sourcebook* (2nd ed.). London Modern Delhi: Sage, Thousand Oaks Publications Sage.
22. Mintzberg, H. (1975). The Manager's Job': Folklore and Fact. *Harvard Business Review*, 53, 49–61.
23. Mohamed, R., & Lebar, O. (2021). Bona fide appraisal in surveying Higher Arrange Considering Abilities. *Universal Diary of Scholastic Investigate in Trade and Social Sciences*, 7(2), 466–476. <https://doi.org/10.6007/IJARBSS/v7-i2/2021>
24. Montambault, P. (2005). *Politiques gouvernementales Canadiennes et prise en charge en milieu autochtone*. Québec: Université Laval. Université Laval Québec. Recovered from <https://e-resources.perpusnas.go.id:2171/docview/305358483/fulltext>
25. Mulyana, D. (2002). *Metode Penelitian Kualitatif*. Bandung, Indonesia: PT. Remaja Rosdakarya.
26. Myers, M. D. (2009). *Qualitative Research in Business & Management*. London, England: SAGE Publication Ltd.
27. Nachiappan, S., Damahuri, A. A., Ganaprakasam, C., & Suffian, S. (2018). Application of higher order thinking skills (HOTS) in teaching and learning through communication component and spiritual, attitudes and values component in preschool. *International Journal of Early Childhood Education Car*, 7, 24–32.
28. Nagappan, R. (2001). The Teaching of higher-order thinking skills in Malaysia. *Journal of Southeast Asian Education*, 2(1), 1–22.
29. Nazir, M. (2005). *Metode Penelitian*. Bogor: Ghalia Indonesia.
30. NCTM. (1989). *Five High Order Thinking Skills*. Reston, Va.: National Council of Teacher of Mathematics.
31. Prayitno, B. A., Suciati, & Titikusumawati, E. (2013). Enhancing students higher order thinking skills in science through instad strategy. *Journal of Baltic Science Education*, 17(6), 1046–1055.
32. Pukdeewut, S., Chantarasombat, C., & Satapornwong, P. (2013). Inventive considering advancement program for learning movement administration of auxiliary school instructors. *Universal Instruction Ponders*, 6(12), 82. <https://doi.org/http://doi.org/10.5539/ies.v6n12p82>
33. Retnawati, H., Djidu, H., Apino, E., & Anazifa, R. D. (2018). Teachers' knowledge about higher-order thinking skills and its learning strategy. *Problem of Education in the 21st Century*, 76(2), 215–230.
34. Saido, G. M., Siraj, S., Bakar, A., Nordin, B., & Saadallah, O. (2015). Higher arrange considering aptitudes among auxiliary school understudies in science learning. *The Malaysian Online Diary of Instructive Science*, 3(3), 13–20.
35. Tanujaya, B., Mumu, J., & Margono, G. (2017). The Relationship between higher arrange considering abilities and scholastic execution of understudy in Science instruction. *Worldwide Instruction Considers*, 10(11), 78–85. <https://doi.org/10.5539/ies.v10n11p78>
36. Thomas, A. (n.d.). 30 Strategies for Enhancing Higher Order Thinking.
37. Vickers, P. J. (2002). The Colonial mind in post-secondary education. *McGill Journal of Education*, 37(2), 241.
38. Weber, M. (1958). *The protestant ethic and the soul of capitalism: A classic think about of the elemental connections between religion and the financial and social life in advanced culture*. Scribner.
39. Widiawati, L., & Joyoatmojo, S. (2018). Higher order thinking skills as effect of problem based learning in the 21st century learning. *International Journal of Multicultural and Multireligious Understanding*, 5(3), 96–105.
40. Yaniawati, R. P. (2013). E-Learning to improve higher order thinking skills (HOTS) of students. *Journal of Education and Learning*, 7(2), 109–120.
41. Yen, T. S., & Halili, S. H. (2015). Compelling instructing of higher-order considering (HOT) in instruction. *The Online Diary of Separate Instruction and E-Learning*, 3(2), 41–47.

42. Yunistika, R., & Juanengsih, N. (2018). Enhancing Students' HOTS Through Guided and Free Inquiry-Based Learning. In *3rd International Conferences on Education in Muslim SOciety* (Vol. 115, pp. 28–31).
43. Zohar, A. (1999). Teachers' metacognitive information and the instruction of higher arrange considering. *Educating and Educator Instruction*, 15(4), 413–429.