KNOWLEDGE OF ISLAMIC EDUCATION TEACHER IN IMPLEMENTING TEACHING OF HIGHER ORDER THINKING SKILLS (HOTs)

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Accepted date: 30-07-2019
Published date: 05-12-2019

To cite this document: Talhah, Aminudin, Juhazren & Marzuki. (2019). Knowledge of Islamic Education Teacher In Implementing Teaching Of Higher Order Thinking Skills (HOTs). Journal of Islamic, Social, Economics and Development (JISED), 4(26), 34 – 43.

Abstract: Islamic Education teachers play a big role in educating generations. Thinking skills are very important in directing students so that they can learn well and apply it. This study is a survey conducted on Islamic Education teachers in secondary schools in Selangor for the purpose of identifying the level of understanding of Islamic Education teachers towards the application of higher order thinking skills (HOTs) in teaching and facilitating (PdPc) of Islamic Education. The questionnaire was used as the main instrument in this study. A total of 117 Islamic Education teachers were involved as respondents in the study. Data obtained from the questionnaires distributed were analyzed using IBM Statistical Package which involved mean score, standard deviation, percentage, and frequency. The findings of the previous study to all teachers showed that the level of knowledge of teachers towards HOTs was moderate. However, the findings in this study indicate that the level of knowledge of the Islamic Education teacher is at a high level with a score of (min = 4.05). This study is expected to assist the school, researcher and the Islamic and Moral Education Curriculum Division, Ministry of Education to implement improvements. Furthermore, it provides numerous plans to enhance teachers' knowledge and skills, in particular, the Islamic Education teachers in order to enhance the success of the application of Higher Order Thinking skills (HOTs) in Islamic Education subject to meet the 21st Century National Education System (SPN21). Further efforts can help improve the quality of teachers in implementing new skills to be applied in teaching and facilitating (PdPc).

Keywords: Higher Order Thinking skills (HOTs), Mastery level of teacher, Knowledge.
**Introduction**

The success of innovation or change which has been implemented will not succeed on its places without the suitable agent (FJ King et al., 1998; Marlina Sabran, 2013; Fahimah Hassan et al. 2014). The quality of the system should not exceed the quality of teachers (Maszuria A. Ghani et al., 2014; Adebayo Fashina, 2017). The readiness of these knowledgeable teachers will make the PdPc process run more efficiently so that students can acquire new and meaningful knowledge (Nurul Azmi Mat Nor et al., 2017). In order to produce a student who performs well in HOTs, teachers must first prepare themselves for mastering knowledge about HOTs. It is a great challenge for Islamic Education Teachers (IET) to implement HOTs in PdPc which requires skill in it as it involves high student cognitive aspects and the determination of teachers. The study (Hadi Bunyamin, 2016) shows that PdPc learning using HOTs needs to be more open, relaxed, and less formal and celebrate the diversity of student ideas through storytelling techniques.

Higher order thinking skills (HOTs) are the highest levels of the cognitive process. The main element in building HOTs on students is the teacher. Therefore, the teacher has a great responsibility and plays a role in the success of Islamic Education (Al-Kaylani, 2005; Kamaruddin & Andi Anto, 2018; Deden Makbuloh, 2019). Thus, teachers need to prepare themselves early with the mastery of skills. The readiness of teachers plays an important role in implementing skills when PdPc. Hence, seminars, workshops, and training on HOTs should continue to be provided as a teacher's readiness. Although previous studies have examined HOTs views on teachers, there has been no study to examine HOTs towards Islamic Education teachers in secondary schools, especially in terms of the level of preparation of skills to the HOTs. Thus, the current study focuses on the issue IET of teaching quality in applying HOTs.

**Literature Review**

The cultural development process of this sense applied to the educational process which is fundamental to the development of the use of reason and thought challenged with higher among students and is in line with the requirements of the Quran and Sunnah (Baba, Salleh, Zayed & Harris 2015). Although the main focus on subjects such as math and science, subjects of Islamic education is no exception in applying the elements of higher-order thinking as it is a call that has been set in the drawing this Al-Quran (Jasmi, Tamuri & Hamzah, 2010). Framework for the use of reason is the ability of the world community believe that the knowledge and skills needed by teachers to meet the challenges of the 21st century. In addition, a report by consultants Kestrel Education of England and 21st Century School of the United States in 2011 states that higher-order thinking among teachers and students in Malaysia is still low.

The highlight of the previous study on HOTs is to address the issue of HOTs specifically related to the readiness of teaching in Islamic Education subjects. The study by Othman, M., & Kassim, A. (2017) found that the implementation of HOTs teaching in the field of Islamic education in the classroom was inconsistent, as it was also due to the fact that teachers' knowledge of HOTs was not yet extensive. This issue is explained in the monitoring by Jemaah Nazir (2015) which shows the Islamic education teacher's teaching and facilitating (PdPc) is still seen as traditional and less involving high-level thinking of poor planning before the classroom so that the HOTs is inconsistent throughout the teaching. This is based on the monitoring of the national report (Jemaah Nazir & Quality Assurance JNJK, 2015) for Islamic education subjects (special examination of HOTs) on the quality of teaching of the teacher, which is 48.25% of PdPc's planning is written in general and less lead to the formulation of measurable forms of treatment, 34.01% failed to deliver good teaching content, 47.58% used educational resources but they
were traditional as manila cards and worksheets, less use of information technology-oriented equipment and 55.82% of questions raised by teachers could increase new knowledge but lack of evaluation results for follow-up actions either in the form of recovery and enrichment.

As a result, a generation of Muslims who produced it may be wise and high level of academic development but in fact the inability to translate the knowledge acquired in the form of a steady appreciation of the faith and in accordance with the laws of Allah swt. This balance needs to be practiced in every student and this is the reason why HOTS needs to be done in tandem with the implementation of Islamic Education of other subjects such as science and mathematics (Halim et al., 2010 ; Hashim, 2012). Overall, there for the quality of HOTs IET teaching should implement some improvements to achieve good and excellent levels.

**The Level of HOTs Readiness of The Islamic Teachers**

The readiness of teachers in implementing the HOTc is shown when PdPc is still ongoing, but there is no active communication involvement between students and teacher in the classroom (Nurliyana Abd Halim, 2015). The willingness and ability of teachers in delivering HOTs are still low and there are widely use of conventional methods in teaching among teachers (Nurul Azmi Mat Nor & Nurzatulshima Kamarudin, 2017). Recent studies clearly indicate that teachers' willingness in the implementation and knowledge aspects are still inadequate (Nooriza Kassima & Effandi Zakaria, 2015). In term of teachers readiness of the implementation is still not significant when conducted questionnaires on four respondents, two of them ready and two other respondents are still unprepared. Additionally in another study, according to Nurliyana Abd Halim, (2015), another factor that makes students inactive is because of inadequate teacher preparation in implementing this HOTs from the early PdPc

Most of the teachers are not being able to provide the materials for the limited time reason. For example, the simulation method is less used by teachers in their teaching when it is an activity that invigorates the mind, this fact is based on Abd. Ghafar Md. Din. (2003) simulation method is less applied by the teacher in teaching learning but this method succeeds to involve students actively and think. The main factors in the method are time factors and how teachers can be prepared against them. The study by Suhaimi & Razali Hassan (2014) shows that teachers have some sorts of constraints and problems in terms of their implementation process, inadequate equipment and have to be prepared by the teachers themselves and limited time allocation. This is supported by the findings of Munirah Othman et al., (2015) which states that students will be worried and less confident if they are overly stressed by time constraints. The findings of Rahayu Lasan, Aderi Che Noh & Isa Hamzah (2017) also show that less emphasis is given by IET on aspects of student readiness versus aspects of knowledge and attitude towards HOTs in Islamic Tasawwur subjects, this also relates to the willingness of teachers themselves.

Generally, Islamic Education teachers are expected to be able to implement teaching through the integration of HOTs. However, some teachers are not yet fully prepared or still inadequate to carry out the teaching and learning process through HOTs integration (Nurul Azmi Mat Nor & Nurzatulshima Kamarudin, 2017). Hence, the willingness of teachers to teach Islamic education by using HOTs, should be considered as one of the factors that make the government's hope to build HOTs on students. If the teaching process is still unchanged and unfixed, including without taking into account the ongoing HOTs, it will greatly influence the achievement of students (Zamri, 2012).
However, different findings are seen in the study by Sukiman et al. (2012) where teachers have enough skills to develop students' thinking skills, teachers also have enough understanding to teach thinking skills, as well as being able to teach students to think well, and believe and believe that the objective of thinking skills can be achieved through subjects taught. In addition to the other studies, teachers also have a positive perception of the value and importance of thinking lesson (Rosnani Hashim & Suhailah Hamzah, 2003; Sukiman et al., 2012). Barathimalar (2014) also noted that teachers are aware of the importance of HOTs and are ready to create a society with a high level of thinking. However, in the study by Sukiman et al. (2012) and Barahimalar (2014) found that there are some other factors that cause the teaching of high-level thinking skills cannot be emphasized. Some teachers argue that students need to first master and know all the facts and concepts of a subject before they can be encouraged to think (Sukiman et al., 2012). Based on these studies, it is clear that there is a discrepancy between teachers' readiness in the aspects of knowledge and skills previously discussed.

According to Tarmizi (2016), the readiness of Islamic education teachers to be further improved in the HOTs teaching. In line with the views of Nooriza Kassima & Effandi Zakaria. (2015) that teachers' readiness in the aspects of implementation and knowledge of HOTs is still inadequate, as Islamic education teachers still have difficulty in building high-profile questions in the classroom. This view by Nooriza Kassima & Effandi Zakaria (2015) is based on a study conducted from the perspective of IET's knowledge of HOTs readiness. The findings of the study on Islamic education teachers show that all respondents are unclear about this taxonomic application in teaching. From the findings of the study, it shows that the input of the course has revealed that Islamic education teachers are still less emphasis on the Reform Bloom Taxonomy app (Anderson and Krathwohl, 2001). This is stated by the respondent D "... I do not think there is anything about taxonomy that he only exposes to teachers how to use maps that are all as appropriate. The maps are continuing with the content ... ". Meanwhile, the factors not being able to attend the course are also the factors that erode knowledge about this taxonomy as stated by respondents "... Forgotten. That's my problem. Every five years I never go on the course ... ". The lack of exploring information is also found to be one of the root causes of limited respondents' knowledge of HOTs dominance. This is stated by respondent D "... I do not explore only what is delivered ... ". Most of the respondents have knowledge about HOTs which is limited to questioning techniques and thinking maps in i-Think because they are only tied up with knowledge and only HOTs courses.

In conclusion, the knowledge of Islamic education teachers towards the HOTs itself is still worrying, as there are still teachers who have never attended the HOTs course, even though there are teachers who feel that the diversity of skills that the ministry is trying to implement as HOTs is too heavy to be absorbed by teachers (Norafidah Jabayan & Juliana Osong, 2015). Hence, the knowledge of a teacher is an important aspect of the implementation of skills in HOTs teaching as it implies a passive or active activity of students when PdPc. The higher the knowledge of teachers, the more precise the HOTs technique is chosen for students.

Methodology

Scope and Research Design
This study uses a survey method which uses questionnaire as the main instrument to answer the research questions. According to Najib Ghafar (2003), the survey method is suitable for measuring respondents 'views on issues or topics, and achievement of respondents' goals. The survey is also the best data collection method when there is a situation where the population of
study is too big for Babbie (2004). The selection of the sample study was based on simple random sampling involving Islamic Education teachers teaching in Secondary schools in Bangi and Kajang areas. Bangi and Kajang areas have 14 secondary schools. Given the small number, researchers are determined to use the population in this study in these two areas.

**Research Instrument**
In this study, the instrument used is the questionnaire administered by the researcher himself. This instrument consists of 25 items that are measured using the 5-point Likert scale consisting of three parts: Part A, B, and C. The items used in this questionnaire were adapted from Nurliyana (2015), Ahmad Tarmizi (2016), and Hasmaliza (2016), Part A contains 2 items on the respondents’ demographic profile (Gender and attendance), while Section B contains 10 items on the level of knowledge of Islamic Education teachers in the application of HOTs. Data and information obtained from respondents through this questionnaire were quantitatively analyzed.

**Area of Study**
The study takes place at 14 secondary schools in Bangi and Kajang, Selangor. The location of this study was chosen as it is in the vicinity of the researcher area and the study of higher order thinking skills (HOTs) has not been conducted yet in this area. This indirectly encourages researchers to conduct studies on the mastery of teachers, especially Islamic Education teachers in relation to high-level thinking skills at secondary school level. In addition, the location of this study was chosen because it facilitated researchers to conduct surveys of all schools involved at lower cost and save time researchers as the areas around Bangi and Kajang were closer and easier to visit than other areas.

**Data Analysis**
Answered questionnaires were analyzed using computers with IBM Statistical Package application. The analysis of this data involves descriptive statistics to see the level of mastery of the attitude and the willingness of Islamic Education teacher skills towards the application of HOTs in the Islamic Education subject. Descriptive statistics were analyzed in terms of frequency, percentage and mean to describe the study sample and answer the study questions. According to Mohd Majid (2009), data analysis using SPSS programming software can produce accurate and error-free calculations.

**Findings**

**Respondent Profile Analysis**
Sample distribution of this study consists of 117 Islamic Education teachers teaching Islamic Education subjects at national secondary schools in Bangi and Kajang, Selangor. Teacher background analysis focused on respondents' demographic information. The findings of the respondents' profile are shown in Table 1:

<table>
<thead>
<tr>
<th>Table 1: Respondent Profile</th>
</tr>
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<tbody>
<tr>
<td><strong>Demographic</strong></td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Attendance of the HOTs workshop</td>
</tr>
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<td></td>
</tr>
</tbody>
</table>
The respondents were 12 (11.4%) male teachers and 93 (88.6%) female teachers. On the other hand, the number of attendance on the HOTs workshop was more than ever before. Overall, in this study, female teachers are more likely to be compared with male teachers and the number of participant to the HOTs workshop is more than ever. However, the findings are staggering because there are still Islamic education teachers who have never been to the HOTs workshop within the time of the introduction.

**Descriptive Analysis**

This section aims to answer the questions of study, namely the level of readiness of the Islamic Education teacher skills to the application of higher order thinking skills (HOTs) in the teaching and learning of Islamic Education. The results analysis report is displayed in the form of min and standard deviation.

**The Preparation of The Mastery Level of Islamic Education Teachers on The Application of Hots**

Based on Table 2, as a whole, the level of readiness of Islamic Education teachers towards higher order thinking skills (HOTs) is at a high level with a total score of 3 to 4 as shown in Table 2. However, there are three items min the lowest level of attitude the three 3.91, 3.96 and 3.99. In facts, these three items of attitude did not show a significant difference and it is still at high level based on Jamil's (2002) score.

**Table 2: Analysis of Knowledge Aspects for Islamic Education Teachers on Higher Order Thinking Skills (HOTs)**

<table>
<thead>
<tr>
<th>No</th>
<th>Readiness Item</th>
<th>Min</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I know the contents of the Islamic Education syllabus that contains HOTS elements</td>
<td>4.25</td>
<td>0.507</td>
</tr>
<tr>
<td>2</td>
<td>I plan to apply HOTS elements in teaching.</td>
<td>4.27</td>
<td>0.567</td>
</tr>
<tr>
<td>3</td>
<td>I know that students actively participate in the teaching and learning process</td>
<td>4.25</td>
<td>0.540</td>
</tr>
<tr>
<td>4</td>
<td>I have the knowledge to improve the level of the student's HOTS when it first started teaching</td>
<td>3.91</td>
<td>0.572</td>
</tr>
<tr>
<td>5</td>
<td>I have enough knowledge to develop my students.</td>
<td>3.98</td>
<td>0.629</td>
</tr>
<tr>
<td>6</td>
<td>I know how to determine the content of the lesson based on the ability of the student.</td>
<td>4.05</td>
<td>0.471</td>
</tr>
<tr>
<td>7</td>
<td>I know how to develop the potential of individual students.</td>
<td>3.97</td>
<td>0.490</td>
</tr>
<tr>
<td>8</td>
<td>I know how to evaluate student progress in HOTS</td>
<td>3.95</td>
<td>0.600</td>
</tr>
<tr>
<td>9</td>
<td>I know the techniques of teaching Islamic Education by applying HOTS elements.</td>
<td>4.08</td>
<td>0.511</td>
</tr>
<tr>
<td>10</td>
<td>I use various strategies for implementing HOTS elements.</td>
<td>3.85</td>
<td>0.551</td>
</tr>
<tr>
<td></td>
<td><strong>Overall</strong></td>
<td><strong>4.05</strong></td>
<td><strong>.386</strong></td>
</tr>
</tbody>
</table>
Discussion and Implication

Knowledge of Islamic Education Teachers Knowledge on Higher Order Thinking Skills (HOTS)

In order to achieve the ideal objective of the HOTs System, teachers must have the adequate knowledge and understanding regarding all the aspects of the HOTs System. Highly knowledgeable teachers are not only able to execute effective PdPc, they are also capable of accomplishing the objectives of the Islamic educational system using practical measures. In this section, there are 10 items that cover explanation of concepts and terms, method and strategies related to the HOTs System. Result of research shows that the level of understanding the HOTs System by the teachers are high. The mean data of the level of understanding the HOTs System are 4.05. The importance of teacher's understanding is the core of the planning.

The result of the research which is supported by the findings of W. A. Wan Ismail, W.I. Muhammad, M.A. Lubis & M. I. Hamzah (2016) explains the level of understanding and mastery among teachers in implementing HOTs are high. Overall result of the research dictates that teachers of Islamic education possess sufficient knowledge in applying the principal of the Taxonomy Bloom supervised by Anderson in teaching the contents of Islamic Education subject. Similar results are shown in the research conducted by Rosnainani (2003); Rosnani (2006); Puspha Rani (2006); where the data show the level of knowledge in Islamic education teachers in implementing HOTs is also high. In conclusion, the results from these research clearly shows that the teachers are aware of the terms, definitions and concepts of critical thinking and are optimistic of the implementation of critical thinking in PdPc, hence contributing positive impact to the students.

Further study from other countries concerning HOTs, such as Elaine Hall (2006) explains knowledge development by teachers are only possible when HOTs is implemented accordingly based on a structured curriculum obtained from a specific course and workshop. This is because teachers are able to obtain exposure and exchange information the particular courses and workshops. Other studies also exhibit the level of knowledge among teachers, starting from low, then proceed to intermediate and will always advance. Research from Sivapakkiam, et al. (2016), portrays the level of HOTs among teachers is at 50% and the percentage is increasing in high schools. Other results from the research shows that teachers are positive of the approach of relating higher order thinking skills (HOTs) with the chapters that are intended to be taught in PdPc using HOTs methods.

Madzanah (2002) & Hong, E, et al., (2009) explains that thinking can bring positive positive effects to students if a teacher is creative in facilitating group works. Even though such activity are difficult to conduct in a premise such as a classroom, thinking in groups or pair is an activity that can aspire more ideas, easy to control and time efficient. This view is supported by Eggen and Kauchak (2001) where working as a group can be seen as a medium to develop thinking skills by encouraging discussion among students and also a solution to the issue of having time constaraints. Next, the research done by Norakma Daus et al. (2015) also describe that educated groups in Malaysia are still ignorant in understanding the definition of HOTs, application of HOTs models and methodology used. In other words, teachers are still lack of knowledge in implementing HOTs within the given period of time. Hence, the orthodox teaching method is more favoured by teachers due to having little understanding of HOTs. According to Masniah (2014), teachers are still lack of skills in implementing HOTs in daily PdPc.
Therefore, it is a must for teachers to equip themselves with a variety of knowledge and develop skills that are related to thinking skills (Merriam Webster, 2005). Teachers who are capable in mastering the art of thinking critically will be a guiding compass to not repeat the same mistakes. Researchers observe that teachers that are incompetent in applying any set of skills will cause anxiety to control one's action, thus leading students into making similar mistakes in thinking and students will incline to think in a narrow, vague and indecisive manner. Therefore, adequate knowledge and understanding of HOTs is the core aspect that teachers need to be aware of, hence providing positive effects to the development students' thinking skills. Teachers' involvement in courses and workshops that are organised by KPM will contribute in the mastery of IET knowledge of HOTs.

**Conclusion**

In conclusion, the study shows that the level of knowledge of Islamic Education teachers in implementing HOTs in teaching and learning process is high. It is hoped that the findings from this study will provide some insight into the level of mastery of teachers' knowledge especially Islamic Education teachers in secondary schools on the application of HOTs in the process of teaching and learning Islamic Education.

The mastery of HOTs acquisition is the starting point for other branches of expertise. HOTs are the skills needed today to connect learning with the real world. Teachers as a key element of integrating a higher order thinking society requires that the teacher be competent in using HOTs. When teachers implement pedagogy that helps students develop HOTs, teachers can directly improve student achievement. In addition, HOTs mastery will translate skills into action. This study needs to be further refined in qualitative form in order to have empirical evidence.

**Acknowledgment:**
The authors hereby acknowledge the Universiti Teknologi Malaysia for their financial support through the Grant no. Q.J130000.2533.19H96 on title development of miswak prototype.

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