ABSTRACT
In our efforts to compete with the most advanced countries in the world, our education system needs to be working to give birth to the young generation who are knowledgeable, capable of applying high level thinking skills as well as attempt to communicate effectively in the global ranking. HOTS involve high intellectual proficiency. This skill involves four proficiency levels of Bloom's taxonomy, which is to apply, analyze, assess and create. Metacognition of pupils must be high for differentiating, arrange, classify and identify cause and effect in accordance with their own views and opinions. Metacognition realization not only relates to the student's overall academic achievement but also with teaching achievements. The teaching of thinking skills that can involve high level in the classroom can only be done after a teacher has managed to embody students centered learning and can integrate and design the framework for teaching thinking skills. Next, the teacher may think about the strategy and the means that can promote the capacity of thinking skills. Good self-efficacy among teachers is the backbone in performing efforts to infuse high order thinking skills in pupils. This study aims to identify the relationship between the awareness of metacognition and teacher self-efficacy in the implementation of HOTS pedagogy. The findings of this study are expected to be able to help teachers to equip themselves for more effective teaching of HOTS.

Key word: metacognition, self-efficacy, high order thinking skills, education, HOTS

Introduction
HOTS or High Order Thinking Skills is an educational reform concept based on the Bloom taxonomy. The idea is that some types of learning require more cognitive process than others. Nevertheless this learning reaps high benefits (Resnick et al, 1987; Sue Watson 2018). In the Bloom Taxonomy, for example, skills involved in analysis, evaluation and synthesis (creating new knowledge) is considered high level which requires different forms of teaching methods than teaching concepts and facts. High order thinking involves learning complex skills such as critical thinking and problem solving. High order thinking is harder to be taught or learnt, but these skills are very valuable because high order thinking will benefit not only in situations where you learn but can be practiced in other situations.

HOTS is defined as the ability to apply knowledge, skills and values in logical thinking and reflection to solve the problem, decision-making, innovation and able to create something (Ministry of Education, 2013). HOTS is recognizable in Content Standard (CS) dan Learning Standard (LS) by the level of reflection in the revised classification of the Bloom Taxonomy by Anderson as shown in Figure 1. Based on the definition of HOTS and Figure 1, HOTS refer to the skills of application, analysis, evaluation and synthesis. These skills are determined by the level of thinking that has become the focus of determining Content Standard dan Learning Standard for subjects taught in schools to ensure that students master the skills to think high level as intended.
Figure 1
Thinking skills have been clearly incorporated into the curriculum since 1989. In fact, questions requiring thinking skills and open response questions are at all levels of evaluation, including the evaluation of Primary School Achievement Test (UPSR), Penilaian Menengah Rendah (PMR) dan Sijil Pelajaran Malaysia (SPM) Malaysian Examination Board, 2013). In the year 2016, 50%, 80% dan 75% of questions in UPSR, PT3 and the basic subjects of SPM questions assessed high-level thinking skills. In addition, 50% of questions for SPM elective subjects are higher level thinking questions. This data requires the teachers to shift their focus to HOTS education. Similar changes were made to the questions regarding the school-based assessments. (Ministry of Education, 2013). However, teachers face some problems in implementing HOTS; and their efforts till date have gained only limited success (Ministry of Education, 2013).

Problem Statement
Studies show that the Malaysian education system has not been established to equip our students with the high order thinking skills. This is due to the dominance of HOTS among students is still low. This can be demonstrated based on the results of the evaluation in Program for International Student Assessment (PISA), which shows Malaysia in the lowest third cluster at the international level. (Jun Wei, 2014; Ministry of Education, 2012; Rosnani Hashim et al., 2012). Hence, the aspects of HOTS among students need to be enhanced so that the thinking skill can be mastered further.

Student factor
Among the factors that contribute to the low achievement of the students are that the Malaysian students are unable to give comprehensive answers to questions that require them to think at higher levels (Ministry of Education, 2013). The mastery of students in some subjects like mathematics and science which requires higher order thinking skill is still low. This is because students lack the skills required to solve the high-level problems. Conclusions of the study by Siti Fatimah Sabran (2013) has proven that the level of mastery of HOTS among Form 5 students in solving mathematical problems is still low. It is also proven through the study of Chew Fong Peng (2014) where the students take a long time to apply thinking skills to the learning process of KOMSAS, further shows that the application of critical and creative thinking is only at a satisfactory level. Students must be given the right problem-solving skills, so they will be able to apply the skills to solve HOTS questions.

Teacher factor
Teachers are the main factor in determining students’ success and excellence in school. However, studies have since stated that teachers often lose their self-confidence or self-efficacy and have lost focus in teaching and learning processes which causes poor teaching competencies. Based on the Education Management Information system database (EMIS) Ministry of Education, Teachers only spend on average between 2.4 to 2.9 hours per day teaching in the classroom. This study showed that teachers spend a lot of time to perform administrative tasks (Between 15% and 30%, based on a survey)
Plan, 2013-2025). This situation will cause the spirit of the teacher to become weak and the quality of teaching and learning in the classroom becomes less effective. Teachers play an important role in guiding students’ thinking skills. Weak efficacy of a teacher directly affects the academic performance of students. Study conducted by Marjolein Zee, Helma M. Y. Koomen, (2016) shows a positive relationship between competencies for teachers with academic adaptation of students, teachers’ behavior patterns and good classroom practices and the underlying factors of the psychological well-being of teachers, including personal achievement, job satisfaction and commitment. Teachers must be wise to attract the interest and confidence of their students in the solving HOTS related problems. (Beremas Anak Inggit & Effandi Zakaria, 2016). Therefore, the level of self-efficacy of teachers must be increased to ensure the quality of students’ achievement can be upgraded.

**Metacognitive**
Metacognitive, learning awareness and processes that affect learning new subjects, including knowledge and regulations. (Schraw, 1994). Metacognitive has been identified as influencing the motivation and students’ characteristics found in classroom teaching (Lai, Zhu, Chen & Li, 2015). The term metacognitive refers to consciousness and control of mind, performance of duties or thinking of thinking (Coutinho, 2007). It shows higher cognitive processes like making plans for learning, using the right skills and strategies to solve problems, make performance evaluation and adjust the level of learning (Coutinho, 2007).

Metacognitive awareness is not limited solely with the academic achievement of the students but also to the teaching performance (Abdelallah, 2015). In addition, the relationship between metacognitive and the teacher's effectiveness has also emerged as an element of self-evaluation. Ghonsoolya, Khajavy dan Mahjoobi (2014) made a statement, "We can say that when teachers have a high level of metacognitive awareness they have a high degree of self-sufficiency." A high level of metacognitive can lead to a high ability for teachers to contribute to the achievement of their students (Ghonsoolya, Khajavy & Mahjoobi, 2014).

**Self-Efficacy**
Self-efficacy is an individual’s belief or natural ability to achieve an objective. Albert Bandura (1997) define it as a self-rule "How one can implement the necessary procedures to deal with situations that will occur". Self-efficacy forecasts determine a person's individual ability to display behaviour to resolve a problem and how long the effort can be maintained in the face of obstacles. Individuals with high self-efficacy will make enough effort, if implemented correctly give successful results, while those who have low self-efficacy may stop the effort early and fail. Self-efficacy is to believe in one's ability to succeed in a task.

In educational research, student's self-efficacy has proven to play an important role in influencing achievement and behavior. In addition, researchers find teachers’ self-efficacy affect teaching of students, behavior and motivation of their students and their achievement (Skaal-vik & Skaalvik, 2014). Teachers with low self-efficacy face more difficulties in teaching, it also contributes to a higher level of stress and low levels of job satisfaction.

Self-efficacy gives impact on the performance directly and indirectly through the effect on the analysis strategy, that shows evidence of metacognitive mediation in the relationship between effectiveness and performance. People who have strong self-efficacy are more likely to use metacognitive strategy when performing tasks and their performance was better than those who have poor self-efficacy. In a study conducted by Coutinho (2007). The relationship between self-efficacy and performance was reviewed and it was found that metacognitive is an independent prediction of efficiency and self-efficacy is the prediction of performance.
Conceptual framework of the study

Objective of the study
Based on the summary of the problem statement, the objectives that want to be achieved are
i. Assessement of the level of HOTS among students
ii. Determine the level of metacognitive awareness of teachers
iii. Defining the relationship between metacognitive awareness and self-efficacy of teachers
iv. Determine the relationship between metacognitive awareness and self-efficacy level of teachers to the level of HOTS among students.

Research Methodology
This concept paper was completed using library research and does not include field research. Given the length of time to produce this research concept paper, this study was conducted in a very limited range. Library research has been a great help in finding materials or ideas about the aspects that can be reviewed and development of research ideas. Researchers were able to broaden the knowledge associated with their topic because of library research. Library research has vastly been used to complete chapter one and two, chapters which requires information of suitable research concepts to be used in the current research and the knowledge that explains the question of past research that were done by former researchers. And because of my library research I was able to understand better how to conduct a study. Library research was not limited in finding the necessary books in the library Tun Siri Lanang, National University of Malaysia (UKM) alone, but also using the facilities through the libraries on the Internet.

Discussion
Based on studies conducted by Shamilati Che Seman, Wan Mazwati Wan Yusoff and Rahimah Embong (2017), the vast majority of teachers have a very basic knowledge about HOTS and they misunderstand some of the key components in HOTS. It can be inferred that teachers should be given extensive training about HOTS. The biggest challenge for teachers is to teach something they don't quite understand; and transfer skills that they themselves do not fully master to the students. Teachers will work with teaching methods and think tanks proposed by the Ministry of Education and contained in the curriculum and standard textbooks, but they are still unable to invent materials in their own way.
According to Abdul et al. (2015), teachers challenges in teaching and learning depends on the basic knowledge, teachers’ needs, knowledge of basic pedagogy, and educational knowledge content. Therefore, teachers need to master different fields; become skilled and efficient in teaching and learning; understand
students’ progress, teaching psychology and consulting skills; to meet the challenges in teaching and learning HOTS, so that each challenge is interpreted positively and studied. Nor Hayati and Kamarolzaman, (2015) in their study also expressed that these challenges are part of what is required by teachers to get the characteristics of the teachers in the 21st century identified by the Ministry of Education.

To meet these challenges, it is important for teachers to control different areas of knowledge to make themselves flexible and relevant, to enable them to absorb all current changes. Therefore, continuous learning can ensure that teachers are always ready to keep up with changes, challenges and high-efficiency teaching.

The teaching profession is a profession very close to everyone's life. And that's because almost all us have experienced school days that have seen various interactions with teachers. Teachers in turn are subjected to hopes by many parties. All kinds of urgent needs in terms of demanding new knowledge, skills or attitudes and practices have placed considerable strain on the teaching profession. Changes in the curriculum that occur alongside the demand of time, for example, require teachers to explore new knowledge and methods to ensure that they are always relevant.

Adding to the challenges of knowledge content and information from the internet, teachers are also confronted with a new millennium that requires the educational integration of intelligence with the use of technology and communication. Teachers are not just to relay information, teachers need to have high quality and able to meet the needs of the 21st century teaching. We cannot improve the quality of education in schools without improving the quality of the teachers, Demonstrates the seriousness of the teachers’ mission in improving and maintaining the quality and performance of students and schoolchildren.

In my high school teaching experience for almost 18 years, I have been through various problems, especially in dealing with teaching process. Self-assessment should be done from time to time to ensure we follow-up and stay up to date with the current education trend. Teachers must be sensitive to students’ need and always make changes to their teaching. Through surveillance and sometimes hearing the expression of parents, I have found many teachers does not make improvements in the delivery of education. Teachers are unaware of their weaknesses and unable to identify the problems of their students. Teachers are also passive and stagnant with pre-existing conditions without realizing the lack or needs of students.

In the context of school education, teachers should identify the shortcomings in teaching and learning, Understand the requirements of students and adapt appropriate teaching methods. Metacognitive refers to deep understanding of a person’s knowledge which will reflect effective use or clear description about knowledge delivered. Based on the issues discussed clearly show the need to study metacognitive awareness among teachers and the relationship with the level of self-efficacy. The ability of human being to think can increase with effective supervision by someone. Teachers with a high level of metacognitive awareness tend to use and practice thinking skills in their class. These teachers too are more active in the teaching process and are more confident and more social. (Abdellah Rasha, 2015). Metacognitive is important for success in learning because it allows individuals to better control their cognitive skills and the identification of vulnerabilities that can be rectified by building new cognitive skills. According to Chatzipanteli (2013), metacognitive is a skill that can be taught. Individuals who are aware of metacognitive skills, are more strategic and productive, they plan, organize and monitor learning. They're better than individuals who are still unaware of metacognitive skills.

Conclusion

Literary analysis clearly indicates the connection between metacognitive awareness and self-efficacy. It also indicates that teachers who possess high level of awareness and efficacy will be able to perform better in class and hence improve the quality of teaching and learning. This finding suggests that there is a gap between the assessment of the use of HOTS In the classroom and a teacher’s ability to implement a pedagogical tool which encourages higher thinking skills. Most studies indicate that teachers may have high self-competencies in differentiating between high-level and low-level goals offered in classrooms; However, are teachers really sure of their ability to implement the 21st century pedagogical techniques in the classroom to create higher order thinking skills among their students? Through this study it is expected that the relationship between metacognitive awareness and self-efficacy of teachers and their competencies in the implementation of high order thinking skill is determined.
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