# TEACHERS' PERCEPTION ON THE INTEGRATION OF HOTS IN LANGUAGE TEACHING

Siti Nadia binti Mohamad Faculty of Education National University of Malaysia Bangi, Selangor, Malaysia sitinadia00@gmail.com

Abstract The teaching of thinking skills is important as it helps in promoting better learning and producing quality and skilled students. Higher Order Thinking Skills (HOTS) represent more sophisticated and context-rich thinking processes that include critical, logical, reflective, metacognitive, and creative thinking and thus, HOTS become key 'ingredients' in the education system in most countries, including Malaysia. The purpose of this study is to examine teachers' perceptions on the use of HOTS in language teaching as well as the constraints faced by them in doing so. A research survey was conducted to 144 English teachers in Hulu Langat, Selangor. The descriptive analysis indicated that overall, teachers had positive perceptions towards the use of HOTS in language teaching. Student-related constraints are the constraints with highest mean score (M= 3.49). Despite their positive perceptions on this matter, most of them still believe that they need to undergo more courses and trainings on the teaching of HOTS. The implications of this study are also discussed in this paper.

Index Terms—:higher order thinking skills, perceptions, language teaching

## I. INTRODUCTION

Education is one of the sectors that contribute to the development of human capital. Regarded as the development catalyst, it bridges knowledge, training, potential, interest and other elements of human quality in order to produce human capital that are more dynamic, innovative and progressive, to achieve the country's aspiration in becoming a developed nation [8].

In today's rapidly changing world, it is essential, but not adequate, for students to achieve minimal competence in areas such as reading, writing and numeracy [3]. Beyond this minimal competence, there is also a need for students to develop what are often called thinking skills that include critical and creative thinking, problem solving as well as decision making. There is a growing interest among scholars and researchers in the teaching of thinking skills as it helps in promoting better learning and producing quality and skilled students.

One of the elements in thinking skills is Higher Order Thinking Skills (HOTS). Higher Order Thinking Skills represent more sophisticated and context-rich thinking processes that include critical, logical, metacognitive, reflective and creative thinking whereby they require students to manipulate information and ideas that transform their meaning and implications, particularly when they are presented with unfamiliar problems and questions [2]. HOTS, in this sense, enable students to elevate their thinking level by connecting their knowledge with the cognitive strategies such as analysing, synthesising and evaluating.

Thus, HOTS become key 'ingredients' in the education system in most countries, including Malaysia. In line with one of the objectives of the Malaysian education system is to develop students' intellectual capacity, HOTS are given greater emphasis in the curriculum so that knowledgeable human capital who are critical and creative in their thinking and can compete with others at international level can be produced.

### II. BACKGROUND OF THE STUDY

It is essential for an individual to possess 21st-century skills that includes creative and critical thinking, analytical reasoning, decision making as well as problem solving in their learning in order to survive in today's highly competitive and challenging world. This is further supported by Krishnan and Muhammad Yassin (2009) who believe that the ability to memorise the whole textbooks is no longer sufficient for students to be excellent and competent; they must also be able to explore and relate the knowledge gained with the real world, by utilising these 21st century skills mentioned above [4].

In 2009, the Minister of Higher Education reported that approximately 30% of Malaysian public educational institutions graduates were still unemployed due to lack of creativity and soft skills, shown by their lack of ability to critically transfer an opinion or knowledge while communicating with others, especially during job interviews [5].

In addition to that, the Preliminary Report of the Malaysia Education Blueprint 2013-2025 has shown that most lessons in schools did not adequately engage students in constructive thinking where many teachers still relied on 'lecturing' format and learning therefore only involved the process of recalling facts or delivering knowledge to students rather than cultivating HOTS in teaching and learning processes [5].

The lack of thinking skills among students in Malaysia is also depicted in the report of Programme for International Student Assessment (PISA) in 2012 where according to the report published, Malaysia ranked 39 out of 44 countries on the assessment on creative problem-solving, while neighbouring country Singapore came out tops with a mean score of 562 (Organisation for Economic Co-operation and Development [6].

Therefore, this study purports to look into this problem by capturing teachers' perceptions on the integration of HOTS in their English language teaching, as English is considered as a crucial subject to be taught in the learning institutions. The teachers' perceptions are considered important as they reflect their practices in classrooms. At the same time, this study will examine the constraints that teachers face in integrating HOTS in their classrooms.

## III. METHODOLOGY

This study was designed to explore and examine Malaysian teachers' perceptions with regards to the integration of HOTS in their teaching. Therefore, quantitative research method is the most suitable method as it can convert the phenomenon (perceptions) that exist qualitatively into quantitative data that can be statistically analysed. 144 English teachers in Hulu Langat, Selangor are selected to be the participants and 33-items questionnaire are distributed to them. The questionnaire is adopted from Stapleton (2010) [7] and Akan (2003) [1] and it consists of 3 sections; demographic background of the respondents, general perceptions on HOTS as well as the constraints faced by teachers in integrating HOTS in language teaching. The questionnaire is pilot-tested to 15 English teachers and the cronbach's alpha is 0.83.

# IV. FINDINGS AND DISCUSSION

# A. Demographic Information

A total of 144 English language teachers were involved in this study. 41 of them (28.5%) are male while 103 (71.5%) are female. In terms of age, 35 (24.3%) teachers are between 20 to 30 years old, 71 (49.3%) are between 31 to 40 years old, 34 (23.6%) and 4 of them (2.8%) are 51 years old. In addition to that, the respondents' teaching experience is also included in this demographic data. 9 respondents (6.2%) have less than a year experience in teaching, 75 (52.1%) with 1 to 5 years of teaching experience, 53 (36.8%) of 6 to 10 years teaching experience while 4 of the respondents (2.8%) have 11 to 15 years of teaching experiences each. Lastly, the school location where the respondents work is also included in this section. 63 respondents (43.7%) are from urban schools, 78 (54.2%) from suburban schools.

# B. Teachers' General Perceptions on HOTS

Table 1 shows the findings of teachers' general perceptions on the use of HOTS in language teaching. There are 7 items in this section. The overall results showed that teachers have positive perceptions on HOTS, in general. When they were asked about HOTS as one of the important element in teaching,

130 respondents (97.2%) believed that teaching HOTS is an important part of their job as a teacher. This is further supported by the responses collected from the respondents when they were asked on the importance of HOTS in their lesson. In this regard, 125 respondents (86.8%) agreed that HOTS are critically important in the subject they teach. At the same time, 138 out of 144 respondents (95.8%) disagreed with the statement that it is not the role of a teacher to teach HOTS in the classroom while 95.9% of them did not agree with the statement that it is not necessary to increase the role of HOTS in the curriculum. Given these statistics, it is proven that majority of the respondents views HOTS as one of the important elements that should be taught to students in classroom. Due to this, 96.5% respondents agreed that teachers need more training on how to teach HOTS to students so that this element can be successfully and effectively imparted to

# C. Constraints Faced by Teachers in Integrating HOTS

There are four categories of constraints included in the questionnaire; teacher-related, student-related, curriculum-related and other constraints. Table 2 shows that among these four categories, the mean score for student-related constraint is slightly higher compared to other three constraints. This is supported by the responses gathered in the questionnaire on this constraint. Most respondents (76.4% = agree; 11.8 % = strongly agree) agreed that students are afraid of being incorrect when they are posted with questions that require them to think and almost the same percentages (72.9% = agree; 14.6% = strongly agree) agreed that students are not confident to share their opinions and views.

The second most-agreed upon category will be teacher-related constraint. Based on the analysis done, majority of the respondents (67.4% = agree; 28.5 % = strongly agree) believed that 'teachers do not undergo enough training on integrating HOTS in their lesson' as the most constraint faced by teachers in integrating HOTS in classroom.

In addition to that, curriculum-related constraints can be considered as the third most-agreed-upon category by the respondents where for instance, majority of the respondents (73.6% = agree; 11.1 % = strongly agree) agreed with the statement that course content is too loaded.

Last but not least, less respondents selected other constraints in the survey where for example, only 50% of the respondents (44.4% = agree; 6.3 % = strongly agree) agreed with the statement that improving thinking skills is not one of the school priorities as one of the constraints in integrating HOTS in language teaching. That is to say, the teaching of HOTS is not considered as important by school administrators and authorities. They most probably believed that it is more crucial to cover content rather than integrating HOTS in teaching and learning activities.

## V. IMPLICATIONS AND RECOMMENDATIONS

This study is significant in highlighting the views and opinions of English language teachers in regard to the use of

HOTS in language teaching. Although this study involved English teachers in Hulu Langat, Selangor, the results are essential especially to Ministry of Education and other organisations as they do raise important issues and provide insights about the actual scenario in teaching. In this study, teachers' perceptions are examined. These views should provide some insights for educational organisations such as Ministry of Education especially in conducting more courses, training and workshops for teachers in regard to the use of HOTS in classroom.

One of the major findings of this study is that teachers do have positive perceptions towards the use of HOTS in language teaching. That is to say, most of them are aware of the importance of HOTS in various aspects such as improving students' performance, developing students' moral reasoning as well as preparing these students to cope with the challenges of their learning, life and work in the future. However, most of the teachers opined that they need to undergo more courses and training on how to teach HOTS so that their skills and capabilities can be enhanced.

Based on the findings of this study, there are also several recommendations included in this study. Teachers, regardless of their qualifications and experience in teaching need to be continuously knowledgeable on strategies to integrate HOTS in their teaching and to adopt them for optimum teaching and learning outcomes. Although the present complexities of teaching large classes in short time periods challenge the use of HOTS in the lesson, there are various options and strategies that can be explored to overcome those challenges.

In terms of pedagogy, there is a need for teachers to shift the instruction methods progressively, from teacher-centered to learner centered so that learning can be more meaningful and students are given the opportunity to explore and construct their own learning. In doing so, teachers should be well equipped with the myriad of methods and approaches of teaching and at the same time, they should be well trained in the culture of thinking in the classroom to optimize the use of HOTS in teaching and learning activities.

More continuous trainings and courses that expose teachers to the appropriate techniques and strategies to incorporate HOTS in their teaching should be organised and conducted by Ministry of Education. This helps teachers equip themselves with knowledge and skills that will be useful for their career development and at the same time, it helps to boost teachers' motivation as they are more confident to use HOTS in their teaching.

Ministry of Education should also revise the curriculum and national assessment system to allow room for the integration of HOTS in teaching so that teachers are not pressured to cover and complete the syllabus to meet the requirements of the current system. That is to say, the curriculum should provide more opportunities and guidelines for teachers to practice and foster 'thinking culture' in their teaching so that students will be more inspired to use thinking skills in learning.

### VI. CONCLUSION

The findings of this study suggested that most of the respondents have positive perceptions towards the use of HOTS in language teaching. This study also explored the factors that influence teachers' perceptions on this subject and at the same time, it examined the constraints faced by teachers in doing so. The views and opinions gathered should not be left unnoted as they provide us some insights on the topic of HOTS.

Being the mediator and facilitator to the students, it is necessary for every teacher to be knowledgeable, skillful in their own field so that they will be able to equip students with the skills that they need for future success. English language teachers, in this sense, should be able not only to master pedagogical knowledge on how to teach English but they also need to equip themselves with skills, approaches and knowledge on how to incorporate HOTS into their teaching.

## REFERENCES

- [1] Akan, S.O., "Teachers' perceptions of constraints on improving students' thinking in high schools," Master's Thesis.. <a href="http://etd.lib.metu.edu.tr/upload/683631/index.pdf">http://etd.lib.metu.edu.tr/upload/683631/index.pdf</a>, Middle East Technical University, 2003.
- [2] Bloom, B. S., Englehart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R., "Taxonomy of educational objectives-handbook 1: Cognitive domain". New York: David McKay, 1956.
- [3] Forster, M., "Higher order thinking skills", Research Developments, http://research.acer.edu.au/resdev/vol11/iss11/1/, 2004.
- [4] Krishnan, M., & Muhammad Yassin, R. (2009). "Problem based learning in engineering education at Malaysian polytechnics:

  A Proposal". http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=0549 0599, 2009. [2009 International Conference on Engineering Education. Kuala Lumpur, Malaysia, December 7-8, 2009].
- [5] Ministry of Education. "Malaysia Education Blueprint 2013-2025 (preschool to Post-secondary Education): Executive Summary". Malaysia: Kementerian Pendidikan Malaysia, 2013.
- [6] OECD, "PISA 2012 Results in Focus: What 15-year-olds know and what they can do with what they know", 2014
- [7] Stapleton, P., "A survey of attitudes towards critical thinking among Hong Kong secondary school teachers: Implications for policy change" in Thinking Skills and Creativity, vol. 6(1), 2010, pp 14-23.
- [8] Van Winkelen, C. & McKenzie, J. Integrating individual and organizational learning initiatives: Working across knowledge management and human resource management functional boundaries. The Electronic Journal of Knowledge Management, Vol 5(4), pp 527 – 538, 2007.