

Teacher's Understanding and Practice on Implementing Higher Order Thinking Skills (HOTS) in EFL Classroom

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Abstract

This study focuses on Teacher's understanding and practice on Implementation Higher Order Thinking Skills (HOTS) in speaking classroom. The study aims to find out the result of (1) the teacher's understanding and practice about the concept of Higher Order Thinking Skills on implementing HOTS in EFL classroom, (2) students' response about Implementing Higher Order Thinking Skills (HOTS) in EFL classroom. The method of the research uses qualitative descriptive. The study is conducted at SMP Telkom Makassar. The subjects of this study are 32 respondents. In collecting data, the research uses Questionnaire and Observation. In technique data analysis uses three steps namely Data collection, Data reduction and data display. The result of the study shows that (1) the teacher understands and practice about the implementation of Higher Order Thinking skills is minimum. The result showed that the teacher has minimal understanding and practice about the concept of higher order thinking skills (HOTS) on implementing HOTS in EFL classroom. Teacher still confused about what is mean by the definition of HOTS. The teacher was mentioned the HOTS as learning method, not an ability that the students have to master it. (2) Based on the research that, students' response about implementing HOTS in teaching classroom were still low. Some students tended to be more silent then showing their response or their opinion.

Keywords: *Teacher's understanding and practice, Higher Order Thinking Skills (HOTS), speaking classroom.*

INTRODUCTION

In the 21st century of teaching and learning, it is the competence or skills that must be possessed by human resources. It is known as 4C namely critical thinking and problem solving, creativity, communication skills, and the ability to work collaboratively. Higher Order Thinking Skills (HOTS) have been implemented in Indonesia as part of the 21st Century learning to face Industry Revolution 4.0. The implementation of HOTS is also fully supported by the Minister of Education (MoE) considering, that those critical thinking skills are fundamental to facilitate students to think critically, problem- solving and decision making.

Higher Order Thinking Skills (HOTS) is considered as an important skill that each student has to master it. Higher Order Thinking Skills or is known as HOTS does not only allow students to understand and memorize what they learned but also it helps them to use the information and gain experience with their expertise. In developing students' critical thinking or HOTS need the role of teachers in teaching and learning English. As we know that a teacher is who is not only have a role to transmit knowledge to the students, are responsible to develop HOTS in their classes. They need to update their knowledge of implementing HOTS in their teaching and adjust to what is happening in this globalization era. Therefore, the role of teachers is very important to train students to develop their critical thinking (Kasmawati, 2020; Kamalia 2020; Nurlaelah 2020; Rahman 2020 and Ririantika 2020).

Thinking skills are the most basic skills that can be developed in the classroom and are the key to achieving goals for all students. Thinking is one of the mental activities that a person experiences when facing a problem that must be resolved (Sulaiman, Muniyan, Madhvan, Hasan, & Rahim, 2017). Thinking skills are divided into two types, namely High Order Thinking (HOT) and Low Order Thinking (LOT). According to Sulaiman, Muniyan, Madhvan, Hasan, & Rahim (2017) higher order thinking skills are defined as the use of the mind broadly to create or discover something new. Higher order thinking skills require a person to apply new information and manipulate it to reach possible answers in new situations. A higher order thinking skill is thinking at a higher level than simply memorizing facts and telling someone exactly the information they are told.

Central to higher order thinking skills is the ability to make sound decisions in complex situations. It emphasizes "learning how" rather than "learning what." Therefore, efforts to help individuals achieve their targets require self-awareness which is part of educators' efforts to explore higher order thinking skills (Sulaiman, Muniyan, Madhvan, Hasan, & Rahim, 2017).

This is due to the government's efforts to disseminate this new curriculum revision to teachers so that it can be implemented both in the lesson plans and in the learning process in the classroom (Sakkir, 2018). English as a prestigious subject is considered to make it a compulsory subject with high competence so that teachers are required to be wiser and more creative in implementing all the characteristics of the new revised 2013 edition of the curriculum in the teaching process.

In education today, learning must be directed at increasing the ability to think in order to be able to compete in global competition (Syatriana, 2020 & Sakkir 2020). This can be achieved if education not only emphasizes the ability to memorize scientific concepts, but also improves students' thinking skills, especially higher order thinking skill. That is, teachers need to educate students to develop higher order thinking paradigms.

In developing higher order thinking skills, teachers have an important role in developing learning components. The role of schools in developing higher order thinking skills can be carried out through the planning to evaluation stages such as lesson plans, learning activities, and assessments.

Higher Order Thinking Skills (HOTS) have been included in some schools' curriculum in several countries (Assaly & Smadi, 2015), including Indonesia through K.13. One element of K.13 is strengthening the learning process. Through strengthening the learning process, it is hoped that it can improve the quality of learning to become more effective, efficient, steady, and meaningful. By implementing Higher Order Thinking Skills (HOTS) at schools, many efforts are used to prepare teachers in designing activities related to the 21st century learning framework (Zahrani & Elyas, 2017). In this context, the researchers discuss the perceptions of Senior High

School English teachers in East Nusa Tenggara (Flores Island) regarding the challenges they face in designing HOTS assignments.

In fact, based on an anecdotal observation prior to the research, there are still many teachers who did not understand the importance of HOTS. Hence, teachers need to learn how to design assignments to the students by seeing the students' needs. There are challenges that are likely unavoidable for teachers to implement HOTS as their strategy to make their methods suitable for 21st century learning. Cultural properties and local values are the strongest ones that teachers have to cope with. It is by no means eradicating whatever has been considered ideal in the society where the learning process takes place, but rather, it is about how teachers sync their HOTS with cultural properties and local values to make them blend and not collide.

Therefore, the implementation of higher order thinking skills to students need to the teachers' role to develop students' critical thinking skills. In this study, the teacher wants to analyze the teacher's knowledge of understanding about concept about higher order thinking skills and the strategies can be used by teacher to develop students' critical thinking.

METHOD

Method section consists of the type of research, data, and technique of collecting data, instrument, procedure, and analysis method of data. This research is qualitative descriptive research with case study as the research design. Case study is selected to be the research design since it can investigate a case deeply by collecting it from more than one source of evidence, just as how expert defines it as a qualitative approach in which the researcher conducts an empirical investigation of contemporary phenomenon within its natural context using multiple sources of evidence (Yin, 2011).

This research is a concern to identify and analyze the phenomenon of the teacher's knowledge about the understanding the concept of HOTS and to analyze teacher's practice in designing assignments related with the indicators of HOTS in EFL classroom. Furthermore, to understand an issue or problem in-depth, a research needs to investigate and explore one or several cases within a certain period and collect data from various sources, for example : observation, documents, report, or interviews Cresswell (2014).

The research conducted at SMP TELKOM Makassar. SMP TELKOM Makassar is located at A. P. Pettarani Number 4. It is near to Phinisi Tower of State university of Makassar. This school has implemented the system of education which is Holistic, Balance and excellent education. It also has adapted with curriculum based on 21st century skills namely K-13 curriculum with on emphasize on the proficiency of Science, Technology, Engineering, Arts and Mathematics (STEAM). The researcher will choose one teacher from three English teachers at SMP TELKOM Makassar as the sample of this research. The researcher chooses one class which is the ninth grade. It is based on the teacher teaches at the classroom. The participants of this research will be very helpful in obtaining the data of research related on teacher's level knowledge and practice on implementing Higher order Thinking Skill in EFL classroom.

In collecting data, the researcher uses three instruments, those are: Interview guide approach, Online Observation and document such as Lesson Plan.

The data analysis presents based on the research questions staging to obtain a clear narration of the explanation of the teacher's knowledge and practice on implementing Higher Order Thinking Skill in EFL Classroom. The following steps were explained below: data collection, data reduction, data display, and data verification. In short, the steps in analyzing the data were:

(1) the researcher collected the data through interviews, Observation and documents analysis. Then, the researcher selects, identifies, and focuses on the data by referring to the formulation of the research problem. (2) After selecting the data, the researcher displayed those data in good sentences. (3) After displaying the data, the conclusion is drawn.

FINDINGS AND DISCUSSIONS

1. Findings

The presentation of the finding was initiated the result of qualitative analysis of the data through interview guide approach conducted and the classroom observation by the research. This research questions intended to find out the teacher’s level knowledge and practice on implementing Higher Order Thinking skill in speaking class and students’ response on implementing Higher Order Thinking skills. The samples of this research were An English teacher of SMP TELKOM Makassar and the ninth grade students.

The findings of the research were classified into two parts based on the research questions: (1) How does the teacher’s knowledge and practice on implementing Higher Order Thinking (HOTS) in EFL Classroom? (2) What are the students’ responses on Implementing Higher Order Thinking (HOTS) in EFL Classroom?

a. The teacher’s knowledge and implement Higher Order Thinking (HOTS) in EFL Classroom

Based on the research, the data found that the identifications of teacher’s knowledge about Implementing HOTS or Higher Order Thinking Skills showed that the teacher has answered some questions in interview section.

1) Definition about Higher Order Thinking Skills

Table 1
Definition of HOTS

Teacher’s Initial	Extract
HM	Yes, I do. Higher Order thinking is the Ability to think critically, logically, reflectively, analyze, and think creatively. (Question 1)

Based on the table above showed that the answer was accordance with the definition of higher order thinking skills in bloom taxonomy concept. Therefore, the teacher has already known about the commonly definition of HOTS.

2) The important of HOTS in teaching and learning process

Table 2
Important of HOTS in Teaching

Teacher’s Initial	Extract
HM	Well thank you, the approach that HOTS uses is not only thinking about remembering but also increasing creativity and analysis to solve problems. Students are not focused on memorizing the material, but how the material is memorized and understood to be used in solving a problem creatively and critically. Or in other words, it requires analytical evaluation and creative skills. Therefore, students should be trained to think this way as a form of

	preparing the younger generation to face the challenges of the world of work 4.0 (Question 2)
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Based on the table above showed that the question has answered or gave response by commonly answer about the importance of implementing HOTS in education. It can train students in solving a problem creatively and critically.

3) Components of HOTS or Higher Order Thinking Skills

Table 3
Components of HOTS

Teacher's Initial	Extract
HM	I don't have the idea about it (Question 3)

Based on the table above, that the question has answered by showing the response with the teacher mentioned the instruments of assessing HOTS based on the bloom taxonomy concept.

4) The use of instruments in assessing HOTS

Table 4
Assessment of HOTS

Teacher's Initial	Extract
HM	Assignments, multiple choice questions and descriptions. (Question 4)

Based on the table above, that the question has answered by showing the response with the teacher mentioned the instruments of assessing HOTS based on the bloom taxonomy concept.

5) The implementation of HOTS

Table 5
Implementation of HOTS

Teacher's Initial	Extract
HM	Yes, I do. One of the demands of the 2013 Curriculum is the application of HOTS in learning. Therefore, it is a good school; in this case the teacher should implement HOTS oriented learning. (Question 5)

Based on the table above that the question has answered by showing the response with the teacher mentioned the important of implementing HOTS that was the education has changed the curriculum from KTSP to K13 curriculum.

6) Description of HOTS implementation in teaching and learning process

Table 6
Describing of HOTS

Teacher's Initial	Extract
HM	HOTS are very important abilities for students to have at this time, especially in learning English. HOTS is the ability to think critically, logically, reflect, metacognitive learning material which requires students not only to remember and describe the lesson that has been taught but also to be able to predict and design. The promotion of the HOTS item development is due to the low ability of Indonesian students in survey conducted by international benchmarking such as PISA (2009) and PIRLS (2011). Learning to think critically is not directly like learning about material, but learning how to think critically in its uses to solve problems are related to one another. (Question 6)

Based on the teacher a based on the table above that the question has answered by showing the response not specifically to describe the implementation in teaching and learning specially in speaking.

7) Strategies in implementing HOTS in speaking skills

Table 7
HOTS in Speaking Skill

Teacher's Initial	Extract
HM	By applying effective learning methods that are accordance with the basic competencies that must be achieved. (Question 7)

Based on the table above showed that the teacher only mentioned strategies but not explaining more about the strategies. Therefore, it was not unclear giving the explanation about strategies in implementing HOTS in speaking class.

8) The difficulties and solution in the learning process.

Table 8
Teacher's Difficulty and Solution

Teacher's Initial	Extract
HM	Yes, in particular I have many aspects related to HOTS- oriented learning practices. As is well known, the application of HOTS learning is very difficult. Besides the teacher must really master the material and learning strategies, the teacher is also faced with challenges with the environment and student intake. Therefore, the government needs to hold

	trainings or education and training that are evenly distributed for teachers related to the forward learning that focuses on HOTS. (Question 8)
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Based on the table above that showed the teacher realized that he had the difficulties while implementing higher Order thinking skills specially in speaking class. Therefore, the teacher must master the material and learning strategies. And the important thing that was teacher needed to hold training to develop his skill in implementing Higher Order Thinking skills before implementing to the classroom.

b. The students' response on Implement- ing Higher Order Thinking (HOTS) in speaking skills

The observation was one of the instruments in collecting the data in the research. The observation was conducted by online. In observation, the researcher attended the zoom meeting as the media for teaching and learning process. There were 32 students attending the online class. The duration of online teaching was 30 minutes. The research observed students' activities during the online teaching and learning activities. There were three learning procedures namely opening activities, main activities and closing activities.

Opening activities

In this section, teacher greeted and checked students' attendance in zoom meeting.

- Teacher: *First of all, let us be grateful for the mercy and blessing that given to us. And also, thank you very much for all of you for clicking the link to sharp to you for joining our class zoom today. Good morning all!*
- Student A: *Good morning sir!*
- Teacher: *How are you today?*
- Student B: *I'm fine.*
- Student C: *I'm bored.*

From this conversation above, it can be seen that there were 3 respondents from teacher's questioning.

Main Activities

In this section, the teacher reviewed the previous lesson by using teacher's questioning. Explanation about the material/ lesson:

- Teacher: *Before we begin our material today, I wanna ask you "what did you learn in previous material"? Specifically yesterday.*
- Student A: *Present continuous tense.*
- Teacher: *Good. Do you have any idea? What can you say about present continuous tense? Mungkin ada yang bisa kasi sedikit gambaran atau you can give an example.*
- Student B: *Mmm digunakan untuk meng- ungkapkan aksi yang sedang dilakukan.*
- Teacher: *Ok. Good job! Jadi, something that we are doing at the moment or right now. Jadi itu salah satu dari fungsi atau kegunaan dari present continuous tense. Jadi,*

untuk menyatakan sesuatu yang sedang kita lakukan. For example “what are you doing right now”?

Student A: *I am studying.*

Student B: *I am studying.*

Teacher: *What is your mom doing right now?*

Student A: *My mom cooking*

Teacher: *“Your mom is cooking”. Oke. Jadi itu sekilas tentang pembelajaran kita kemarin which is itu tentang present continuous tense. Jadi kalian harus ingat baik baik present continuous tense itu digunakan untuk menyatakan hal-hal yang kita lakukan sekarang.*

Teacher: *Let’s get in term into the material. Take a look to the sentences.*

Teacher: *Based on two sentences, which one to showing a future plan? What is future plan?*

Teacher: *Future plan adalah sesuatu yang akan datang.*

From this conversation, it can be found that 2 students gave the answers from teacher’s questioning. In student’s response “mmm...digunakan untuk mengungkapkan aksi yang sedang dilakukan (student B)” it showed that student tried to remember what she has learnt in previous meeting. In this level that, the students expressed her idea by remembering the definition about present continuous tense. According to Schraw (2011:191) classifies bloom’s thinking skill into two categories that is Lower Order Thinking Skills (LOTS) which consists of knowledge, understanding and application. While Higher Order thinking (HOTS) skills consist of analysis, synthetic and evaluation. Therefor the student’s idea was in LOTS level. It meant that the student’ ability about HOTS was not developed well.

Based on the observation, the researcher found that the teacher gave the assignment by using fill the blank and multiple choices. The questions were designed based on the indicators of Higher Order Thinking skills. It can be shown from this result below:

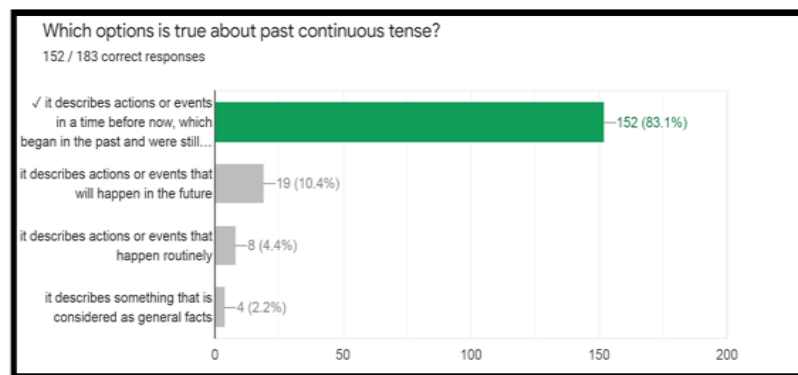


Figure 1
Question Model 1

Based on the questions, the question was designed by giving the definition of the lesson that has taught by teacher. The indicator of question was in the level of Higher Order Thinking skill. The students gave respond around 83%.

Table 9
Question Model

Question Model	Respond Around
Question Model 1	83%
Question Model 2	70%
Question Model 3	77%
Question Model 4	80%
Question Model 5	70%
Question Model 6	83%
Question Model 7	75%
Question Model 8	80%
Question Model 9	71%
Question Model 10	78%
Question Model 11	71%
Question Model 12	78%
Question Model 13	80%
Question Model 14	69%
Question Model 15	80%

2. Discussion

From the discussion of teacher's knowledge about HOTS, the research result did not correspond to the theories. The result showed that the teacher has minimal knowledge about HOT or higher order thinking skill. It was in line with the result found by Retnawati et al (2018) in her research that stated that teacher still confused about what is mean by the definition of HOTS. The teacher was mentioned the HOTS as learning method, not an ability that the students have to master. These research results were also consistent with the outcomes of Driana and Ernawati's research (2019) which the study concluded that the majority of the teacher understood about HOTS partially.

These things reflected to how importance teacher to participate socialization, workshops and training discussed HOTS more and in- depth explanation and understanding, therefore teacher can implement his knowledge to his classes ideally and effectively. The majority mentioned HOTS related to analysis, not completely mentioning other components of HOTS.

The result of teacher's knowledge and Practice in Implementing HOTS in teaching reflected to the theory suggested by Fogarty (2009) although they had not applied all the points of HOTS teaching. The collaboration of teacher's knowledge about HOTS with their implementation of HOTS in teaching reading was very important to gain an ideal and effective of HOTS Implementation in teaching, especially for teacher whose curriculum involves HOTS in their stage of learning. The teacher has to master the concept of the skills first. In fact, majority of teachers did not use certain questions or activities that were lead the students to HOTS. This finding was consistent with the research result of Yusoff and Seman (2018) was conducted in

Malaysia that presented majority of teachers participated in the research asked LOTS instead to check students' memorization and comprehension.

CONCLUSION

From the finding of the study that have been discussed in the previous chapter, there are several conclusions that can be taken from the teacher's activities while implementing remembering level, understanding level, applying level, analyzing level, evaluating level and creating level. Based on the discussion of teacher's knowledge and practice on implementing HOTS, it can be concluded that teacher has the lower knowledge about the understanding of HOTS. It can be seen from the majority of questions were given were not able to define, to mention the components of HOTS conceptually. However, the result of the HOTS implementation in designing assignment showed that teacher had the minimum understanding. Based on the research that, students' response about implementing HOTS in EFL classroom was still lowest. Some students tended to be more silent then gave their response or their opinion. The questions were given by teacher were not suitable with the indicators or criteria of designing questions based on higher order thinking skill.

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