

EFL Teachers' Perceptions of Implementing Higher-Order Thinking Skills During English Online Learning

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Abstract - This present study aims to explore the English as a Foreign Language (EFL) teachers' perceptions of implementing the Higher Order Thinking Skills (HOTS) and their strategies in their English online learning and teaching during the COVID-19 outbreak. A qualitative descriptive design was applied for the present study. Five EFL teachers (1 male and 4 females) from SMKN 1 Seyegan, Yogyakarta were involved in the data gathering process. The data were obtained from a semi-structured interview conducted face to face, and the data were analyzed descriptively. The findings of the present study revealed that teachers' perceptions of implementing HOTS in English online learning and teaching during the COVID-19 outbreak were varied among them. Furthermore, three respondents: Mr. S, Mrs. ECU, and Mrs. IL found it hard to fully implement HOTS in their online learning and teaching due to several factors such as students' low level of English knowledge, the nature of the topic delivered, and digital literacy. The findings also revealed that there are four strategies applied by the EFL teachers in conducting HOTS during their English online learning, they are through the activities of 1) reading a text; 2) watching videos; 3) creating the learning products, and 4) stimulating questions.

Keywords: English foreign language, HOTS, Online learning, Teachers' Strategies.

I INTRODUCTION

English as a Foreign Language (EFL) teachers is always encouraged to implement Higher Order Thinking Skills (HOTS) in their learning and teaching activities. The HOTS in learning and teaching is highly recommended for teachers to be implemented in the 21st-century skills to assist students to solve learning problems by thinking critically and achieving their learning goals (Susilowati, 2021; Sesmiyanti, 2021; Masyhud, *et al.*, 2021; Djami & Kuswandono, 2020; Ginting & Kuswandono, 2020; Susanti, *et al.*, 2020; Saputri, *et al.*, 2019;

Juhansar, *et al.*, 2016). The emergence of implementing HOTS is in line with Sulaiman's (2017), who states that the EFL teachers in the 21st century are expected to inculcate HOTS in their teaching and learning process.

HOTS based learning and teaching are necessary to equip students with knowledge and skills to master what so-called 4C skills, namely critical thinking, collaboration, communication, and creativity (Susilowati, 2021; Sitorus, *et al.*, 2021; Sudana, *et al.*, 2020; Pratiwi, *et al.*, 2019;). Teachers and students should be working together and synergizing with each other to make

this dream come true and able to face the challenges (Saepudin, 2016; Mubarok, 2019; Yahya *et al.*, 2012). Furthermore, the characteristics of HOTS are following the spirit of the Indonesian curriculum of 2013, or well-known for K13 in which emphasizes the students to possess higher-order thinking skills during the learning process. In the context of the Indonesian curriculum of 2013, for instance, the Indonesian EFL teachers should be creative and innovative in presenting the subject matter during their teaching sessions and be able to utilize the scientific approach. Therefore, EFL teachers must design online teaching strategies as an innovation in the teaching process (Widarini, *et al.*, 2021).

The scientific approach is closely related to the Bloom Taxonomy which categorizes two levels of thinking skills, first, low order thinking skills (LOTS), consisting of remembering, understanding, and applying; and second, higher-order thinking skills (HOTS), including analyzing, evaluating, and creating. The K13 curriculum encourages students to be more active in the learning and teaching process and promotes HOTS for students to face industry revolution 4.0, as well as develops students' potential from various aspects such as affective, cognitive, and psychomotor (Bahri, *et al.*, 2021; Ginting & Kuswando, 2020; Noviani & Wijaya, 2020).

Masyhud (2021) contends that the HOTS implementation in learning and teaching during the COVID-19 outbreak is not an easy project for EFL teachers. On the one hand, teachers must ensure that the learning process includes critical thinking and problem solving through some assignments or projects. On the other hand, the teachers should provide extra energy to implement HOTS by stimulating their students to be active learners. Besides, encourage students in every discussion of tasks given through teaching certain strategies such as conducting discovery/inquiry learning, problem-based learning, and project-based learning (Shiang, 2018). It is in line with Djami's & Kuswando's, 2020; Mahanal's, *et al.* (2016) statement that Indonesian EFL teachers found it hard to implement HOTS because they are not accustomed to having the activities of promoting higher-order thinking skills and do not have adequate training to integrate HOTS in their learning and teaching process.

The EFL teachers encountered several obstacles and possess their perceptions of

implementing HOTS during online learning and teaching activities (Widarini, *et al.*, 2021). In this point, the EFL teachers' perceptions become important to promote the students' HOTS in 21st-century learning. Therefore, EFL teachers, in conducting their learning and teaching activities should have clear ideas and strategies to achieve the students' learning objectives. Teachers are the main character in the learning process and should design strategies that can facilitate students' learning needs and achievements. Therefore, teachers' strategies are necessarily needed to achieve students' learning goals. Satrianingrum & Prasetyo (2021), contends that teachers perceive students' learning enthusiasm as affected by the availability of facilities, and different learning environment.

Aji (2020) states that the spread of the Corona Virus (Covid-19) changes human activities, including in the educational sector. Since the COVID-19 outbreak, the Indonesian Ministry of Education and Culture decided that all learning activities are conducted online using various learning platforms (Purwaningsih, *et al.*, 2021). Having had this situation, EFL teachers in SMKN 1 Seyegan, Yogyakarta, encountered some new challenges because they have to adjust to their teaching strategies, especially to implement HOTS when delivering learning materials to their students using several learning platforms to suit their needs and the current conditions. Our preliminary interview results with the English teachers of SMKN 1 Seyegan revealed that they have different perceptions of whether or not they have to implement HOTS in the learning and teaching process during the Covid-19 outbreak. Besides, appropriate teaching strategies should be carried out to promote HOTS which in turn help their students meet the 21st-century learning goals.

There are numerous studies on teachers' strategies in learning and teaching during the COVID-19 both national and international level, but the studies are focused on EFL teachers' perceptions of implementing HOTS and teaching strategies in the English online learning during the COVID-19 outbreak are still a few. To fill in the gaps, the researchers are interested in exploring the SMKN 1 Seyegan EFL teachers' perceptions of implementing higher-order thinking skills during COVID-19 and to find out what teaching strategies applied in their English online learning and teaching activities. Therefore, the following research questions are set as follows: 1) what are the EFL teachers'

perceptions of implementing HOTS in their learning and teaching during the COVID-19 outbreak? 2) what strategies are used by the EFL teachers during their English online learning and teaching?

HOTS are part of Bloom Taxonomy that guide teacher in teaching their students. Bloom Taxonomy was first formulated by Benjamin Bloom in 1956. The revised version of Bloom's Taxonomy provides six levels of learning skills, namely remembering, understanding, applying, analyzing, evaluating, and creating. From these six levels, the levels of thinking are divided into two parts, lower-order thinking skills (LOTS) which cover remembering, understanding, and applying, and higher-order thinking skills (HOTS) which cover analyzing, evaluating, and creating.

EFL teachers should apply the appropriate strategies in teaching the English language using HOTS. Teaching strategies can be defined series of activities designed to educational achievement as a particular goal. Meanwhile, learning strategy is a way that a teacher applies to organize instructional design, learning media, and time so that the learning process will be well organized (Ragin, *et al.*, 2020; Santosa, *et al.*, 2020). In the emergence of the spread of COVID-19, teachers must be able to perform various strategies and instructional designs. Widarini *et al.*, (2021) confirm that various strategies should be carried out by teachers in online learning to achieve students' learning objectives.

According to Sarjan (2017), strategy is a plan that contains a series of activities designed to achieve specific educational objectives. Meanwhile, Silver (2007), states that strategies are important because they are tools for designing thoughtful lessons and units, make the work of differentiating instruction manageable for teachers and motivating for students, and lead to consistent and significant gains in student achievement.

Online learning is distance learning that means students and teachers do not have to come to school just use their respective devices and be connected to the internet. This term implies that the learner is at a distance from the tutor and the learner uses technology to interact with the tutor and with other learners

There are two reasons why online learning occurs. First, teachers (and students) were unable to attend the class due to some problems or disasters. Second, there is

learning outside the subject's students take. Several parties who focus on boldly developing the education system and will assist include Google Indonesia, Quipper, Ruangguru, Sekolahmu (Harususilo, 2018).

Several previous studies were conducted to investigate HOTS and learning strategy, for instance, a study was conducted by Retnawati *et al.*, (2018) to investigate teachers' knowledge about HOTS and their strategy to apply HOTS. The result of this research was the teachers' knowledge about HOTS, their ability to improve students' HOTS, and measure students' HOTS was still low, but the teachers understand that using HOTS in learning is important and many ways to deliver it.

Another study was carried out by Sulaiman, *et al.*, (2017) whose aim was to explore the perceptions of science teachers in the implementation of higher-order thinking skills in teaching science. The result of this research is they think that knowledge and competence are crucial to ensure the quality of the HOTS

implementation. Next, Sarjan (2017) carried out a study on English Teachers' strategies in teaching reading comprehension at the Second Grade of Junior High School 1 of Wonomulyo". The findings of the study showed that teachers use two strategies to teach reading comprehension, namely Scaffolding and QARs (Question-Answer Relationship).

Arta (2018) conducted a study on the strategies used by English teachers to teach vocabulary at Several MAS in Aceh Besar. The researcher would like to find out the teachers' strategies in teaching English vocabulary and to identify the obstacles faced by the teachers in implementing the strategies. The results of this study revealed that the English teachers use several combinations of strategies such as World Map Strategy, and Scavenger Hunt Strategy.

Despite the numerous studies on the teaching strategies in their relation to higher-order thinking skills, a study that is focused on EFL teachers' perceptions of implementing HOTS and teaching strategies during online learning in the COVID-19 pandemic is still a few in numbers to the best of authors' knowledge. Hence, it is worth conducting the present study to explore the SMKN 1 Seyegan EFL teachers' perceptions of implementing HOTS and to find out what teaching strategy applied during their online English language learning activities. The study on EFL teachers' perceptions and teaching strategies in implementing HOTS during the

English online learning and teaching may help the EFL teachers to be more creative in managing the online learning process and implementing the HOTS in the near future. Besides, it may contribute to the existing body of knowledge in English Language Teaching, especially English online learning and teaching.

II. METHODS

The present study utilized a descriptive qualitative research design. Five EFL teachers of SMKN 1 Seyegan, Yogyakarta who hold bachelor's degrees in English Education and Literature were involved as the respondents in the data gathering process. The data were in the form of qualitative data which were obtained through semi-structured interviews. Furthermore, the interview was conducted face to face to explore the EFL teachers' perceptions and their teaching strategies which were applied in their English online learning and teaching during the COVID-19 outbreak. Notes-taking was carried out in each interview session to highlight the interviewees' important points. All data gathered were processed and analyzed descriptively following Miles and Huberman's interactive model (1994), namely data collection, data reduction, data display, and concluding.

III. RESULT AND DISCUSSION

Result

EFL Teachers' Perceptions of Implementing HOTS in English Online Learning During COVID-19 Outbreak.

As mentioned previously, the present study aims to explore the English as a Foreign Language (EFL) teachers' perceptions of implementing the Higher Order Thinking Skills (HOTS) and how they apply those strategies in their English online learning sessions during the COVID-19 outbreak.

The results of an interview with five EFL teachers of SMKN 1 Seyegan revealed that they perceived HOTS are necessary to be implemented in their English online learning and teaching. Apart from the issue, they have different teaching strategies applied in their English online learning and teaching session among them during the COVID-19 outbreak. The followings are the results of interviews with the five EFL teachers of SMKN1 Seyegan.

The results of the interview with the first respondent (Mr. S) showed that he perceived HOTS as necessary in his learning and teaching activities but not necessarily to be implemented

in all subjects during his English online learning. He went on to say that, HOTS is good for certain learning materials only. Mr. S's thoughts can be seen in excerpt 1 as follows:

...HOTS are important but not always must be used, it can be an alternative strategy. I do not always apply HOTS during my English online learning and teaching, but only in certain materials such as factual reading. (Mr. S).

The results of the interview with the second respondent (Mrs. ECU) revealed that she believes HOTS is a very important aspect of 21st-century learning skills. Implementing HOTS made it possible for students to think critically and solve their problems in the future. Excerpt 3 depicts Mrs. ECU's perceptions about the importance of HOTS.

...I believe that HOTS is important, especially in this era. HOTS are required to be implemented to make the students have their point of view that will help them in the future. (Mrs. ECU).

On one hand, she stated that HOTS are helpful to promote students' critical thinking skills, but on the other hand, she found it hard to implement HOTS in her English online learning class because for some reasons, as she stated in excerpt 4 as follows:

In practice, I cannot fully apply HOTS in the classroom during offline learning because I am afraid of my low level of students' ability, whether or not they can perform certain tasks given. Therefore, I usually use stimulating questions or ask the students to analyze a video or record a video related to the subject. (Mrs. ECU).

Like Mr. S's, and Mrs. ECU's statements, the third respondent (Mrs. G.W), was also thought that HOTS is important for students to become a more creative and critical thinkers. In response to the importance of HOTS, Mrs. GW expressed her thoughts in excerpt 6 as follows:

...HOTS require students to think more creatively and critically, I think, it is important for students to perform HOTS because they will be able to argue and

describe things critically. (Mrs. GW).

The results of the interview with the fourth EFL teacher (Mrs. IL) revealed that HOTS is indispensable to creating students to become more creative and develop their critical thinking skills. However, HOTS could not be fully implemented in her English online learning and teaching due to the students' low level of motivation. Besides, she found it hard to manage her class without meeting face to face directly with her students. Her perceptions of the HOTS implementation are presented in excerpt 7 as follows:

I argued that HOTS train the students to think more creatively and develop their critical thinking ability. I am expecting that the students can develop their knowledge and think creatively by exploring the learning sources independently and possess strong arguments in every class discussion. I do not always apply HOTS during my online learning and teaching because my students are not at the same level of English proficiency. Besides, I never met my students physically. (Mrs. IL).

The interview results with the fifth respondent (Mrs. MZ) revealed that HOTS would make it possible to measure students' level of thinking skills. She believed that HOTS is important for students to train their analytical skills, critical argument, and positive mindset of something observed. Excerpt 8 is Mrs. MZ's reasons why HOTS are necessary for students.

I think HOTS are suitable to measure students' higher-order thinking skill ability, including analyzing and reflecting. Besides, HOTS would train students to have a critical argument and change students' mindset from low-order thinking skills (LOTS) to higher-order thinking skills (HOTS). (Mrs. MZ).

Strategies Used by the EFL Teachers in Implementing HOTS in English Online Learning During COVID-19 Outbreak

The qualitative data findings from the interview results with the EFL teachers of SMKN 1 Seyegan revealed that teaching strategies used by the English teachers are varied among them.

For instance, Mr. S acknowledged that before he teaches, preparing actual and interesting learning materials is important to encourage his students to actively participate in the class discussion which in turn improves students' learning achievements. The types of learning instructions and activities are designed to promote HOTS. For instance, as Mr. S stated in excerpt 2 as follows:

...I usually prepare the actual material and interesting learning process to encourage the students to study. To make the class action, I will give the students questions from the simple one to the difficult one (remembering, identifying, describing, associating, analyzing, and evaluating). By performing this activity, the student's grades improved significantly. (Mr. S).

Another EFL teacher, Mrs. ECU, encountered some difficulties in implementing HOTS in online English learning and teaching. To cope with the problems, during the online learning and teaching, she applied some strategies such as; she asked students to analyze the text which will be discussed that day. To make students active in the class during online learning, she was helped by a class leader to motivate other students to learn. However, she felt that students remained lack of motivation, as she expressed her thoughts in excerpt 5 as follows:

The problem that I faced in conducting HOTS in online learning and teaching was the students were lack of motivation to learn because they do not comprehend the materials. (Mrs. ECU).

Meanwhile, the third respondent, Mrs. GW, when implementing HOTS, has put her students into groups and asked them to analyze, answer the reading text, and present it to the class. Besides, she requested the students to find their learning sources that day and tried to construct the related questions. Anyhow, she experienced some difficulties during conducting HOTS in online learning, for instance, the lack of learning facilities and infrastructure available in her institution. Besides, the students did not comprehend the materials and lack of focus during the class activities and discussion.

In implementing HOTS in her online learning and teaching, the fourth respondent,

Mrs. IL, strives for a balance between her instructional designs and the grading of learning materials to maintain the learning pace. Furthermore, she provided very clear instructions and utilized suitable learning media to facilitate students' learning. By so doing, Mrs. IL believed that the student's learning achievements will be increased significantly.

The fifth respondent, Mrs. MZ, has different strategies in implementing HOTS in her online learning and teaching class. To make her students active and enjoy the class, she implemented HOTS through several texts and videos. The next step is students need to analyze and take questions from the media used. She acknowledged that during online class, she is always wanted to conduct HOTS in the class activities, despite having very limited time. In general, she explained that the students' English language competence had started to improve because English teachers guided their students to think critically.

Discussion

Based on the findings of the present study, the majority of EFL teachers of SMKN 1 Seyegan perceived that implementing HOTS in their online learning and teaching are important and benefits for students to be critical thinkers in which may contribute to their learning achievements and 21st-century learning skills.

However, in practice, three respondents (Mr. S, Mrs. ECU, and Mrs. IL) found it hard to fully implement HOTS in their online learning and teaching. For instance, Mr. S perceived HOTS is not necessarily to be implemented at all times, but to consider several aspects, such as students' level of English knowledge, and the topic delivered. Meanwhile, Mrs. ECU views the implementation of HOTS in her online learning and teaching did not working well when the students did not have adequate knowledge of the topic delivered. Mrs. IL perceived it is important to combine HOTS and LOTS in her online learning and teaching because the students' level of English knowledge and skills are varied. Therefore, she has always combined both LOTS and HOTS in her classroom practice. The results of the present study support the findings of the previous study conducted by Widarini, *et al.*, (2021) that teachers encounter some challenges, including unresponsive students, and the issue of technological literacy.

Furthermore, there several strategies applied by the EFL teacher of SMKN 1 Seyegan in

implementing HOTS in his English online learning and teaching class, namely, first, activities of reading a text: the English teacher prepare reading material from the textbook and sent the students' soft file, or the teacher asks students to search for their text from the internet and send it to the teacher for consultation. If the material is appropriate, students should read, discuss, analyze, and conclude the text. Furthermore, the aforementioned strategy was applied by Mr. S in his class activities, for instance, he provided authentic learning materials (reading text) for his students to read, and he inserted the aspects of HOTS in the learning process.

The second strategy applied was activities of watching videos: in this strategy, the teachers send an interesting video related to the materials and ask the students to watch the video carefully. After watching the video, the teacher asked the students some questions according to the video and the students should conclude the video and try to retell it with their perspective. The aforementioned strategy was used by Mrs. ECU and Mrs.Mz in their class activities. For instance, Mrs. ECU integrated aspects of LOTS and HOTS into the learning materials by asking her students to watch a video relating to the topic of that day. After watching the video, students were asked to do several activities, such as describing the setting, plot, and sequence of the events of the scene. The present finding supports the previous finding of Sutarto *et al.*, (2020) that the strategies used by the teachers to increase students' interest in learning are using interesting learning media. The present finding matches with Widarini's, *et al.*, (2021) that teachers implemented HOTS through several strategies, including the use of video, google meet, and quizzes.

The third strategy was the activities of creating the learning products: in this strategy, the teachers asked students to make a video by recording their daily activities. The project can be carried out individually and/or in a group and they were given two weeks to complete the project and they have to make several questions from the video for class discussion and speaking session. Like what Mrs. ECU did in her class, the strategy of using video was also used by Mrs. IL in her online learning and teaching activities. Unlike the video in Mrs. ECU's class, the learning products (video) in Mrs. IL's class were created by students. She asked the students to record their daily activities and brought them to class for the learning materials. A similar finding

can be found in Widarini's, (2021) that teachers implemented HOTS through several strategies, including the use of video as a medium of learning.

The fourth strategy applied by the teachers was giving stimulating questions: in this stage, the teachers initiated the class by asking some questions related to the subject of that day. Moreover, teachers asked from easy questions to complicated ones to stimulate students' class participation. By having this strategy, students had high motivation to think, analyze each question, and answer them critically (HOTS aspects).

This strategy was used by Mrs. GW and Mr. S. For instance, Mrs. GW has always inserted several questions before delivering learning materials to stimulate the students' ideas and thoughts. She presented learning materials and asked the students to describe, e.g., pictures or maps of a location in their perspectives. Besides, students were asked to construct their questions and the rest of the students would respond to the problems critically. The present finding is in line with Djami's & Kuswando's (2020), who state that the effective teaching strategies in using HOTS were asking open-ended questions and encouraging students to give a critical opinion. A similar result can be observed in the finding of Juhansar's *et al.*, (2016) that in the classroom setting HOTS can be applied in the forms of questioning and answering the problem.

IV. CONCLUSION

Based on the findings and discussion, the important points are highlighted as follows: EFL teachers of SMKN 1 Seyegan perceived HOTS are necessary to be implemented in their online learning and teaching process during the COVID-19 outbreak. This is one of the ways to make students more active and creative. Besides, HOTS develop students' critical thinking skills which are a very important aspect of 21st-century learning skills. Moreover, implementing HOTS made it possible for students to think critically and solve their problems in the future. However, HOTS were not fully implemented by the EFL teachers in their online learning and teaching due to three main reasons, first, the students' low level of motivation; second, the limited number of online learning facilities; and third, the EFL teachers thought that it is hard to implement the HOTS without meeting their students face to face physically.

Several strategies were applied by the EFL

teachers of SMKN 1 Seyegan in implementing HOTS during their English online learning amidst the COVID-19 pandemic, including, activities of reading a text, activities of watching videos, activities of creating the learning products, and giving stimulating questions. By having this strategy, students will possess a high motivation to think, analyze each question, and answer the problems.

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