

Investigating an EFL Teacher's Strategies and Challenges in Promoting Students' High Order Thinking Skills

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ABSTRACT

Critical thinking is essential to be acquired by today's generation specifically since it is one of the skills in the 21st-century skills. Considering its importance, developing students' high-order thinking skills has become a requirement for teachers, specifically in their language learning. This study investigates an EFL teacher's strategies in promoting students' high-order thinking skills and the challenges they face in implementing it. A case study was conducted involving one junior high school teacher in Jember. The interview and classroom observation were conducted to collect the data. The data was analyzed by classifying the strategy used by the teacher using Hennessy et al.'s (2016) Scheme for Educational Dialogue Analysis and specifying the challenges faced by them through an interview. The findings of this study indicated that most strategies used by the teacher were to invite elaboration or reasoning. The challenge encountered by the teacher was the difficulties in teaching HOTS for low achiever students, difficulties in managing passive students in the classroom, and difficulties in constructing HOTS strategy in some skills in English. Therefore, more strategies to actively engage student participation in the classroom and good classroom management are needed to extend students' high-order thinking skills.

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1. INTRODUCTION

In recent years, there has been much-grown awareness regarding the importance of critical thinking development, specifically for students. There are many different views about the exact definition of critical thinking. Critical thinking incorporates skills and knowledge that involve analysis, evaluation, and inference (Abdo & Semela, 2010; McGrath, 2005). Critical thinking has also been referred to as metacognition (Tempelaar, 2006). Being capable of thinking means students can apply the skills and knowledge they extend while studying a recent topic (Indriyana & Kuswandono, 2019). Critical thinking begins to be included in learning subjects such as English and has become one of the skills students need to achieve. This critical thinking development has the objective of preparing students to face the new era's challenges. The capability to think critically is considered the critical point

in constructing accomplishments in life, and it is most expanded in the class (Nessel & Graham, 2007). A need for a learning activity that can enhance students' critical thinking becomes a consideration in the educational system today. It leads to an educational policy that provides instruction to involve critical thinking in language learning applied in many countries.

In Indonesia, critical thinking becomes one of the components of the revised 2013 Curriculum that must be implemented in the classroom mandated by the Indonesian Ministry of Education and Culture. *Kurikulum 2013* directs students to be capable of thinking critically. As a part of the strategies for promoting students' critical thinking, High Order Thinking Skill (HOTS) strategies are suggested by The Ministry to be implemented by the teachers in the classroom. This HOTS development is based on the theory proposed by Bloom (1956). Bloom classifies an individual's cognitive domain into six parts from modest to complex levels those are knowledge, comprehension, application, analysis, synthesis, and evaluation (Krathwohl, 2002). In the 2013 curriculum, teachers need to extend higher-order thinking skills (Indriyana & Kuswando, 2018). This integrated critical thinking material aims to prepare students for the new era of the 5.0 challenge. Embedding HOTS into the nationwide curriculum is anticipated to instruct students to be the millennials who can communicate, cooperate, think creatively and critically, resolve issues, and accomplish innovations (Putri et al., 2022). It is clear that the curriculum calls for collaboration between teachers and students to improve students' high-order thinking skills capability. Good cooperation between them in performing HOTS learning activities becomes important to achieve the determined learning goal, particularly for the teacher in their role as a facilitator.

Teacher plays a prominent role in developing students' higher-order thinking in the classroom. This condition leads to a demand for teachers to provide an effective HOTS strategy in their language teaching. The effort to enhance the capacity to conduct HOTS is not only centralized on students but also affected by the strategy of teachers (Haas, 2005; Noor, 2009; Sunal & Haas, 2005; Zerihun et al., 2012; Zohar, 2004). The result of students' HOTS development can be completed through the active role of teachers in designing, performing, and assessing HOTS-oriented knowledge (Retnawati et al., 2018). They must be competent in creating the plan of study, the material of learning, the activity of learning, and assessments of learning that can facilitate students' critical thinking skills (Putri, 2022). In conclusion, teachers must have good knowledge in applying the appropriate strategy to support students' critical thinking.

There are many strategies that teachers can use to implement HOTS for students. As a profound mental process, crucial strategies permit students to deliver their thinking skills, including dialogue and discussion (Albergaria-Almeida et al., 2011; Amin et al., 2019; Kummala et al., 2022; Moss, 2004). Teachers also can apply problem-based learning in order to develop students' critical thinking. Using problem-based learning as a teaching and learning approach encourage students to think critically, collaborate in groups, and find the answer in the contextual situation (Mahanal et al., 2019; Narmaditya et al., 2018; Suwono et al., 2017). In this case, teachers' competency and creativity regarding HOTS material become the basic requirement for implementing a proper learning activity for students. The HOTS strategies developed by teachers could find any challenges based on the situation they have. For example, students lack skill in answering the HOTS question. Furthermore, some students have difficulty responding to HOTS-based questions from the teacher (Syafardin et al., 2021). On the contrary, this problem can also be experienced by teachers who lack an understanding of HOTS. Even though teachers understand that students can be drilled concerning HOTS by employing various learning models (e.g., inquiry learning, cooperative learning, project-based learning, and problem-based learning), teachers still being confused about applying activities in the particular learning model (Putri et al., 2022). This means that teachers and students can contribute to the successful learning outcome by developing students' HOTS.

Studies regarding the strategies and challenges of applying critical thinking have been conducted in the past five years. A study by Riwayatingsih et al. (2021) investigated teachers' metacognitive

knowledge in boosting young EFL learners' critical thinking skills. This study found that teachers' strategies in evolving students' critical thinking were based on students' backgrounds and needs analysis. In line with the investigation of teachers' strategies, Anggraeni and Khongput (2022) explored teachers' practices and perceptions of critical thinking in teaching English subjects to twelfth-grade students. It was found that the most commonly used strategy by teachers in improving students' critical thinking was inviting elaboration or reasoning. Regarding the challenges faced by the teachers' three studies found that the teachers lacked professional knowledge pertaining to critical thinking and how to implement it in the classroom, for example, to determine learning methods, learning models, or learning activities used (Putri et al., 2022; Retnawati et al., 2018; Zhang et al., 2018). The challenges in applying HOTS in the classroom were found in a study done by Syafryadin et al. (2021) that identified the format of the questions utilized by the teachers and students in the classroom based on Bloom Taxonomy revision and the matters encountered by lecturers in carrying out the process of HOTS-based learning. This study indicated that the problem faced by the lecturers was that some students were still passive and their ability to control the classroom.

After reviewing studies about critical thinking development, it can be concluded that there are many studies about teachers' strategies or challenges in implementing HOTS. However, a further investigation dealing with an EFL teacher's challenges and strategies in promoting students' high-order thinking skills is highly needed, particularly for the junior high school level. Therefore, to fill this gap, this case study was conducted to comprehend the strategies that EFL teachers implemented in the learning activities to stimulate students' high-order thinking skills and the challenges they found in implementing them in the classroom.

2. METHODS

This study used a qualitative approach with a case study design. The participant was an English teacher who taught in a junior high school in Jember. The participant was a teacher who had been teaching English for three years and taught eight grade students. Data collection for this research was obtained from the observation and interview conducted by the researcher. Before conducting the research consent form was given to the participants to maintain the ethical consideration of this research. An adapted framework from Hennessy et al.'s (2016) Scheme for Educational Dialogue Analysis in promoting critical thinking was used to analyze the data from observation. The framework consists of nine components dealing with teachers' strategies in the implementation of critical thinking instruction. The components are invited elaboration or reasoning, make reasoning explicit, build on ideas, express or invite ideas, positioning and coordination, reflect on dialogue or activity, connect, and guiding direction of the dialogue. Then, an in-depth interview was conducted in order to comprehend the challenges faced by the teacher in promoting HOTS. Bahasa Indonesia was used in the interview to get rich data from the participant, and it was recorded. The result of the interview was transcribed and coded based on the determined criteria. After that, the transcription result was given to participants for confirmation. Lastly, the interview was translated into English from Bahasa Indonesia before being analyzed deeply.

3. FINDINGS AND DISCUSSION

3.1. *Teacher's strategies in promoting HOTS in the learning activity*

Classroom observation was conducted to collect data about strategies used by the teacher to promote students' critical thinking. From the observation, it was found that the teacher implemented several strategies in order to develop students thinking. The result of the teacher's strategies to develop students to be critical thinkers is depicted in the following table.

Table 1. Teachers' strategies in the implementation of critical thinking instruction adapted from Hennessy et al.'s (2016) Scheme for Educational Dialogue Analysis.

No	Strategies	Keywords	Example
1	Invite elaboration or reasoning	Invite possibility thinking or prediction Invite building on/ elaboration/ (dis)agreement/ evaluation of another's contribution or view	<p>"If the subject is 'I, you, they, or we,' should we use have or has as the to be?"</p> <p>"If the subject is students, what should you use as the to-be? Have or has? Why?"</p> <p>"...you have found the words that contain the present perfect tense. Now, can you make a sentence using the present perfect tense?"</p> <p>"This is how you make the positive sentence. So, how about making a negative sentence for present perfect tense? Can you explain its formula?"</p> <p>"So to make a present perfect sentence, if we have used 'been' in the sentence, do we not need to use verb 3? Do you agree with that? Why?"</p>
2	Make reasoning explicit	-	-
3	Build on ideas	-	-
4	Express or invite ideas	Invite opinions/belief/ideas	<p>"After watching the video, what do you think the difference between has been and have been?"</p> <p>"What do you think about the sentence? Is it right or not? If you think it is right, why? And if it is wrong, why?"</p> <p>"Do you think this sentence is correct? Any opinion about that?"</p>
5	Positioning and coordination	-	-
7	Reflect on dialogue or activity	-	-
8	Connect	-	-
9	Guide direction of dialogue	-	-

According to the table above, the teacher used three strategies to promote students' critical thinking. The two strategies used were invited elaboration or reasoning and expressing or inviting ideas. The keywords used in the implementation of the HOTS activity were invited possibility thinking or prediction, invited building on or elaboration or (dis)agreement or evaluation of another's

contribution or view, and invited opinions or beliefs or ideas. Meanwhile, the other strategies in the framework were not implemented by the teacher in the learning activity. The keyword that was mostly used by the teacher was invite possibility thinking or prediction. The teacher used invite possibility thinking or prediction four times by giving questions requiring students to think or speculate the answer based on the material they had learned. The teacher gave a question that made students predict the answer, such as by using the word "If," and asked them to make a sentence based on the formula they learned.

The teacher also used invite building on or elaboration or (dis)agreement or evaluation of another's contribution or view as the strategy. The teacher implemented this strategy by providing the students a chance to express their opinions when dealing with the questions the teacher gave. The teacher stated the grammar rule first. Then they were invited to share their opinion about the answer. They were given a chance to express their idea to agree or disagree with the statement issued by the teacher. The teacher also elaborated on them to explain why they offered their opinion. Therefore, it could train them to think critically about the material they learn.

The next strategy applied by the teacher was to invite opinions beliefs, or ideas. In this activity, the teacher stimulated the students by having them watch the video first. After watching the video, the students were asked to conclude the information that they got from the video. They were asked to explain the difference between 'has been' and 'have been' based on the video they watched. By using the same strategy, the teacher also asked the students to give their opinions or ideas about the example of a present perfect sentence that a student made. They were asked to create an opinion on whether the sentence was already correct or not and give an explanation based on their answer.

From the table, it can also be inferred that all the teachers' strategies were questioning strategies to promote students' critical thinking skills. The teacher mostly used the questioning strategy to invite elaboration or reasoning. This is in line with the study that was conducted by Anggraeni & Khongput (2022), which found that teachers generally used inviting elaboration or reasoning to facilitate students' critical thinking. In giving the question, the teacher also used an open-ended question that provided students to answer not just by answering by 'yes' or 'no' words. They were guided by the teacher to give further explanations regarding their belief. Implementing this activity can train the student to be a critical thinker.

However, the strategies used by the teacher only limited to two strategies, those were invite elaboration or reasoning and express or invite ideas. Then, the strategies used by the teacher were also limited to giving the question to students. More strategies to be implemented are needed to promote students' critical thinking. The teacher can create a learning activity in which the students can engage actively, such as group discussions, problem-based learning, inquiry-based learning, and other strategies that can make them think critically. The more strategies used by the teacher, the better students' critical thinking improvement.

3.1. Challenges in implementing HOTS in the classroom

In implementing HOTS strategies in the classroom, the teacher can also face challenges or obstacles during the learning activity. To deeply understand the challenges that the teacher faced, an interview was conducted. From the interview, it was found that several challenges were encountered by the teacher in promoting students' critical thinking. First, there are difficulties in teaching HOTS to low achiever students. High-order thinking skills require students to utilize their background knowledge of the presented material. Based on the interview, the teacher stated that the student's knowledge of dealing with the material given became the obstacle that she had to face when she wanted to implement HOTS strategies.

"I think it is difficult to implement HOTS learning activities for low-achiever students. Sometimes, I doubt using open-ended questions to them. It is because they tend to be passive, and it will make the learning activity not effective."

The students' engagement also becomes the teacher's challenge in implementing HOTS learning activities. Some students were found to be passive after the teacher gave the question to them. They were not engaged well in the learning activity. Only some students that responded well to the learning activity.

"When I asked the question, there are some students who stay passive. Only some students can be active. It means that sometimes they are not engaged well in the classroom."

This challenge is in line with the study by Syafradin et al. (2021), which found that the teacher's challenge in implementing HOTS was that some students had difficulties responding to HOTS-based questions that the teacher asked. It portrayed that HOTS learning needs active participation from both students and teachers. It also leads to the conclusion that there is a need to create an interesting and active HOTS learning activity for students in which all students can participate and involved properly in the classroom. Good classroom management is also suggested for managing students' engagement in the classroom. Those considerations need an active role from the teacher.

Another challenge that the teacher faced was the difficulty of implementing HOTS in some English skills. When doing the observation, the teacher taught grammar material to students. The material was about the present perfect tense. The teacher thought it was difficult for her to implement HOTS learning activities in some skills especially in grammar. It is because she had difficulties in constructing HOTS learning activities for example for asking HOTS questions.

"In implementing HOTS, I think I have difficulties in applying it in some skills. You know that HOTS requires thinking critically, we must provide students with an open-ended question to achieve that, and I think it is not easy to implement to teach grammar. Unlike reading, we may vary the question, but in teaching grammar, it is difficult for me to make the HOTS-based question for that skill."

This challenge mirrors the findings of teachers who report a lack of knowledge on implementing critical thinking in the classroom, particularly regarding the selection of learning methods, models, or activities (Putri et al., 2022; Retnawati et al., 2018; Zhang et al., 2018). It can be concluded that teachers still lack the ability to effectively implement Higher Order Thinking Skills (HOTS) strategies in their teaching practices. This indicates a critical need for training programs designed to help teachers integrate HOTS strategies into their classrooms. Such training would enhance their understanding of HOTS material and its practical application in educational settings. Therefore, it is essential for policymakers and the government to organize and support these training programs to improve teachers' competency in employing HOTS strategies, ultimately fostering a more analytical and critical learning environment for students.

4. CONCLUSION

According to the result that was discussed above, it can be concluded that the teacher implemented two strategies for promoting students' critical thinking. The strategies used by the teacher were questioning strategies, including inviting elaboration or reasoning and expressing or inviting ideas. More teaching strategies are needed to facilitate students' higher-order thinking skills better. Regarding the challenges in applying the HOTS activity, the teacher found that students lacked knowledge dealing with the material, some students were passive in the learning activity, and the difficulties in planning HOTS material for teaching grammar. This study suggests better classroom management and the need

to provide a training program dealing with implementing HOTS learning activities for teachers. In addition, this study is only limited to studying one teacher to comprehend the strategy and challenges in implementing HOTS learning activities. Therefore, studies with more participants about HOTS implementation are suggested. Further research regarding the students' strategies in answering the HOTS question is also suggested to be conducted.

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