

TEACHERS' QUESTIONS TO PROMOTE STUDENTS' CRITICAL THINKING IN EFL CLASS

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ABSTRACT

Critical thinking has important role in the EFL class. It can be developed through questioning. However, English teachers rarely address the critical thinking questions to their students. Moreover, there is a scarcity of studies examining questions posed by the teachers to develop students' critical thinking in English language class, particularly at the junior high school level. Therefore, this study aims to investigate to what extent teachers use questions to promote students' critical thinking. This study employed a qualitative approach with open-ended questionnaires and interview to collect data. Seventy-eight of English junior high school teachers in Indonesia were involved in this study. The results of this research revealed that majority teachers employed critical thinking questions. They posed the questions for clarification, assumption, reasons and evidence, viewpoints or perspective, the implication, consequence or alternative, prediction, agreement and disagreement, and summary and conclusion to promote students' critical thinking skill.

Keywords: Critical Thinking, Teachers' Questions, Ilyas' Critical Thinking Framework

I. INTRODUCTION

Critical thinking that is one of the twenty-first century skills has important role in the EFL class. It must be taught to students (Alharbi, 2022) in order to channel their ideas with good communication, choose good decisions, analyze, and solve a problem in the right way (Esfandiari et al., 2021). Similarly, Agustina et al. (2022) point out that by having critical thinking, students enable to evaluate, interpret, synthesize, and consider viewpoints from many angles and reliable and valid facts to make a right decision. It is beneficial for students in their academic or future life.

There are several activities to stimulate critical thinking skills. According to Walker (2003), the activities are classroom discussion and debates. Those activities involve the students to control their tension between two opinions. The condition of tension between two opinions is one part of the emergence of critical thinking and it makes students are able to argue well and comfortably. Another activity that can stimulate critical thinking is written exercise. The written assignments obtained by students are also useful for processing their thinking. Similarly, Memari (2021) believes that essay writing can lead to students' critical thinking since they can interact with students' previous observations, experiences, and knowledge.

Further, questioning is one pedagogical approach to develop critical thinking (Chen et al., 2019). It is essential in language teaching and learning process (Dumteeb, 2009) and is an effective strategy addressed to EFL students to trigger their critical thinking (Defianty & Wilson, 2019). Open-ended (Almulla, 2018) and

provoking questions (Bai, 2009) have the potential to develop students' critical thinking skills.

Regarding to the importance of the questioning, a body of empirical previous studies investigated the teachers' questions in English language class (Defianty & Wilson, 2019; DeWaelche, 2015; Dumteeb, 2009; Ilyas, 2015). Defianty and Wilson (2019) studied questions addressed by senior high school teachers in West Java, Indonesia, to their students. They found that most of the teacher posed lower-order thinking questions (e.g. recalling the information or checking their students' comprehension). In similar vein, a research carried by Dumteeb (2009) suggested that Thai teachers mostly use knowledge questions when asking two classes of first year students majoring English language. On the other words, the low cognition questions addressed are dominant.

Conversely, the previous studies undertaken by Ilyas (2015) pointed out that the tasks provided to senior high school students in Jakarta, Indonesia consisted of critical questions. He developed the questions by examining the twenty critical thinking taxonomies, strategies, programmes and tests (Watson-Glaser Critical Thinking Appraisal (WGCTA), the Ennis-Weir Critical Thinking Essay Test (EWCTET), The California Critical Thinking Disposition Inventory (CCTDI) and The California Critical Thinking Skills Test (CCTST)). Similar to Ilyas, DeWaelche (2015) also employed the higher-order thinking questions to promote critical thinking of the college students in South Korea taking English conversation, advance English conversation, and American culture courses. Those questions were focusing on the analysis, evaluation, and creation.

From those previous researches can be identified that a scarcity of study scrutinizing teachers' questions to promote students' critical thinking in English class for junior high school level. To fill the void, the study explores the questions addressed by the junior high school English teachers to develop students' critical thinking by adopting Ilyas' critical thinking framework. Thus, research question is "To what extent do EFL teachers use questions to promote students' critical thinking in EFL class?"

II. LITERATURE REVIEW

Critical thinking concept

There are various definition of critical thinking revealed by scholars (Aloqaili, 2012; Cáceres et al., 2020; Toy & Ok, 2012). Ayçiçe (2021) urges that it is a cognitive skills consisting of determining the decision, making evaluation, finding the credible data, analyzing, and interpreting. In similar vein, Varenina et al. (2021) noted that it is used for inferring, analyzing, evaluating, and interpreting the data. Florea and Hurjui (2015) and Zubaidah et al. (2018) described it as the ability to find the solution and make a decision. It is employed to appreciate others' idea from different perspectives (Vidoni & Maddux, 2002). Further, Boulton-Lewis (1995) and Angeli et al. (2003) urge that it is used to seek and explicate the reason and viewpoints by considering the valid and reliable sources.

Critical thinking framework

Some scholars employ the framework of critical thinking to undertake their studies. Defianty and Wilson (2019) thought that Bloom's taxonomy is effective as it has hierarchy of cognitive skills in posing the questions in order to stimulate student's critical thinking. It consists of knowledge, comprehension, application, analysis, synthesis, and evaluation. They categorized knowledge and comprehension levels as low-order thinking skills. Knowledge level emphasizes on the 'recognition and recalling of facts' (e.g. What is the color of Indonesian flag?). Comprehension refers to 'interpretation of the information' (e.g. What is the text talking about?). Meanwhile, they grouped high-order thinking skills into application, analysis, synthesis, and evaluation. The application level means 'using information from the original learning context which it needs comprehension of knowledge' (e.g. What question do you use if you want to apologize?). The analysis focuses on the 'separating the whole into parts until the relationships among element is clear' (e.g. Why do many people concern on the climate change issue?). The other high cognitive level is synthesis concerning on 'combination of elements to form a new entity from the original one (e.g. Create an interesting short story). The last level is evaluation which is 'involving acts of decision making, judging, or selecting based on criteria and rationale (e.g. which one is more effective, work from office or work from office? Provide your reasons).

On the contrary, Ilyas (2015) concluded that Bloom's taxonomy has some criticism from scholars since the teachers have difficulty to differentiate analysis and evaluation levels. Moreover, it is general and has no clear example. He found that there are some similar verbs in different cognitive level. For instance, 'compare' verb is categorized in analysis and evaluation and 'conclude' is in category of synthesis an evaluation level. Further, he developed the critical thinking framework by examining the twenty critical thinking taxonomies, strategies, programmes and tests. His critical thinking framework provides the activities, questions, or tasks consisting of clarification; assumption; reason and evidence; viewpoints or perspective; implication, consequences, and alternatives; prediction; agreement and disagreement, and summary and conclusion (table 1)

Table 2. Ilyas' Critical Thinking Framework

Clarify	What do you mean by 'reducing' the garbage?
Assume	What do you assume about it?
Provide reasons and evidence	Can you explain your reason?
Give viewpoints or perspective	What do you think of work from home?
Show the implication, consequences, and alternatives	What is the best solution to solve the learning difficulty?
Predict	What will probably happen if people litter the river?

Agree and disagree	Do you agree with your friend's idea? Why?
Summarize and conclude	What can you conclude from the text you read?

III. RESEARCH METHOD

Method

The qualitative approach was undertaken in this study since it aimed to scrutinize the teachers' questions addressed to their students through interview and open-ended questionnaire. Creswell (2012) emphasized that the qualitative approach is employed to investigate the individuals' view and obtain their detailed information. Additionally, it is an approach that analyzes real experiences, beliefs and their perceptions with the aim of obtaining a reasonable understanding (Agazu et al., 2022). Interview and open-ended questionnaires were employed in collecting the data in order to build trustworthiness and credibility in the data.

Participant

This study involved seventy-eight (58 females and 20 males) English junior high school teachers in Indonesia. They were from Java Island (59%), Sumatera Island (6.5%), Kalimantan Island (19.3%), Sulawesi Island (10.3%), Maluku (2.6%), and Papua (2.3%). Their age and tenure were various. Mostly their age was more than 40 years old. The longest tenure was more than 15 years. Further, their education level was bachelor (70%) and master (30%). The participant's data were showed in table 2.

Table 4. Demographic Data

Participants' Characteristics		N	%
Age	20-30 years old	7	9
	31-35 years old	6	8
	36-40 years old	18	23
	> 40 years old	47	60
Gender	Female	58	74
	Male	20	26
Education	Bachelor	55	70
	Master	23	30
Tenure	<1 year	1	1
	1-5 years	8	10
	6-10 years	5	5
	11-15 years	19	25
	>15 years	46	59
Area	Java Island	46	59
	Sumatera Island	5	6.5
	Kalimantan Island	15	19.3
	Sulawesi Island	8	10.3
	Maluku	2	2.6
	Papua	2	2.3

Instrument and procedure

This study used open-ended questionnaires and interview sheets to collect data. The questionnaires and interview protocol were developed based upon Ilyas' critical thinking framework consisting of the questions of clarification; assumption; reason and evidence; viewpoints or perspective; implication, consequences, and alternatives; prediction; agreement and disagreement, and summary and conclusion (Ilyas, 2015). Seventy-eight teachers answered the questionnaire and seven of them were interviewed. The interview was conducted via WhatsApp call for 10-15 minutes. The questionnaire was used to ask the teachers to what extent they use critical thinking questions in their classroom. It consisted of 27 open-ended and close-ended questions. Further, the interview protocol had similar questions to the questionnaire in order to establish the data's trustworthiness and credibility (Creswell, 2012).

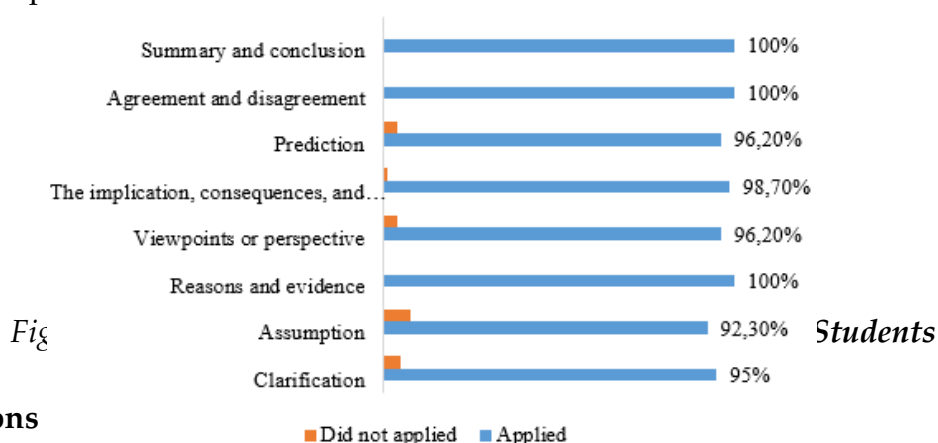
Data analysis

Data collected through questionnaire was analyzed by categorizing into question that probes assumption, reason and evidence, viewpoint or perspective, implication, consequence or alternative, prediction, agreement and disagreement, and summary and conclusion. Further, those data were coded and calculated the frequency and percentage of data occurrence. In addition, the data were collected through interview. The data from the interview are transcribed. The analysis process of interview is similar to the questionnaire.

IV. RESULT AND DISCUSS

Result

Data from the questionnaire showed that the majority of teachers applied critical thinking questions in the class (96.2%). They reported that they addressed different questions. The questions posed to the students were presented in figure 1.



Questions

The questionnaire presented that 95% of them addressed the questions for clarification. It was similar to the teachers' responses when interviewed. Seven teachers said they used those questions. Three teachers explained their reasons why they used the questions. Teacher A and B used that questions to confirm whether the students understood the material or not. Their statements were as follows:

Teacher A: I use the question to know whether my students understand or not.

Teacher B: I always ask it to check my students' understanding.

Besides, the questionnaire result pointed out 5% teachers did not use question for clarification. Two teachers, Teacher F and Teacher G revealed that questions were unnecessary and did not make students think critically. Further, Teacher H explained that students could accomplish their assignment without given the clarification questions but she only provided the clues for them. Their answers were as follows:

Teacher F: I think it is not needed for my students.

Teacher G: The question does not stimulate my students to think critically.

Questions for probing the assumption

When the teachers were asked whether they applied questions for probing the assumption, majority of them used them (92.3%) and a few of them (7.7%) are reluctant to use it. While interviewed, three teachers explained that they asked their students to probe their assumption because they wanted to know their students' knowledge. These are the following interview excerpts:

Teacher A: Before starting the class, I dig up my students' knowledge by asking them "Do you know.....?" , "What is your assumption about.....?"

Teacher B: I often ask the questions during my class for some topics.

Teacher C: I use the questions two or three time for some certain texts.

The other teachers who did not pose the assumption questions because they thought that the students had lack of vocabulary. They did not know the meaning of the words. Teacher J and K stated that "*our students are slow learners and they have limited English vocabulary*".

Questions for probing the reason and evidence

All teachers posed the students the questions to explain the reason and evidence. Further, when they were interviewed, they wanted to stimulate students' courage in expressing their opinions. Their responses could be seen in following interview excerpts:

Teacher B: The questions that I ask to my students "Why do you choose....?" or "Why do you answer like that?'," "What is the proof? In what line in the passage?"

Teacher C: I ask the students to give their reasons but I seldom ask them to provide the evidence.

Teacher D: I often ask my students to explain their reason.

Questions for probing viewpoint or perspective

The results of the questionnaire suggested that 96.2% of teachers asked students to give their viewpoints or perspectives. When interviewed, they encouraged their students' critical thinking by providing those questions. Those responses were as follows:

Teacher B: Almost every meeting, I ask the students' viewpoints to build their critical thinking. Previous meeting, I asked them to explain their viewpoints about eating instant noodle.

Teacher C: I always ask my students "What do you think?", "What's your opinion? or "What's your idea?" to trigger their critical thinking.

The questionnaire also showed that 3.8% of teachers did not use viewpoint or perspective questions. They pointed out that the questions were not suitable for their students. Teacher I urged that *"The questions are not suitable for grade 7"*.

Questions for probing implication, consequences, or alternative

98.7% of teachers asked the students to explain the implication, consequences or alternative in the class; however, 1.3% of them did not do it. When interviewed, two teachers responded that by providing implication, consequences or alternative questions could encourage students to find the solutions for the problem independently. The following interview excerpts were:

Teacher A: When I teach grade 8 and 9, I provided the problems and asked my students to solve them.

Teacher C: When I teach with the topic "healthy lifestyle" at grade 9, I asked my students to find the problems and solutions. I encourage them to learn find the solution by themselves.

Teacher O was interviewed and she commented that she did not give implication, consequence, or alternative questions since it would take much time for the students to think particularly to find the solutions.

Questions for predicting

The finding of the questionnaire showed 96.2% of teachers utilized the questions to predict. Teacher B commented that predicting is the easy to build students critical thinking. While teacher C explained that he used it when he taught procedure text. The interview excerpts were as follows:

Teacher B: I often ask my students to predict because it is one of the easy ways to encourage my students to think critically. I ask my students "What will happen if.....?" My students are happy if I ask them to predict.

Teacher C: I seldom to use it. I apply that question when I teach procedure text at grade 9.

The questionnaire result also suggested that 3.8% of them did not use questions for predicting. Teacher S believed that it was not necessary for the students.

Questions for probing agreement and disagreement

All teachers addressed questions for probing agreement and disagreement to the students. When interviewed, all teachers also responded that they applied the questions in order to stimulate and develop students' ability in expressing their agreement and disagreement. The interview excerpts were as follows:

Teacher B: For some certain topic, I teach agreement and disagreement. I ask them to practice how to ask and answer in expressing their agreement or disagreement. I support them to provide their reason if they agree or disagree.

Teacher C: I like to ask students whether they agree or disagree to some cases.

Questions for summarizing and concluding

The result proved that all of the teachers employ the questions for summary and conclusion. When interviewed, Teacher E argued that he used the questions for conclusion to identify whether his students understand the material or not. Teacher B posed the question at the end of the class *"I usually ask the students to conclude what they learn before I end the class. I want to check whether they absorb the material learnt well or not"*

Discussion

The overall finding showed that the teachers employed questions that encourage students to think critically. The result is similar to the finding of the previous study conducted by Chew et al. (2019). They addressed the Socratic questions to enhance the elementary students' critical thinking. The students had positive and significant support in improving their critical thinking skills.

However, the findings were contradictory to studies undertaken by Wilson and Defianty (2019), Shen and Yodkhumlue (2012), and Dumteeb (2009). They found that the teachers still posed the low-order thinking questions in the class. Those questions did not facilitate the development of students' critical thinking. In addition, the teacher was also less effective in using the strategy of asking students. Wilson and Defianty (2019) figured out that the teachers focused on the call up the information or check their students comprehension.

The findings pinpointed that the teachers stimulated the students by providing the questions for clarification, assumption, reasons and evidence, viewpoints or perspective, the implication, consequence or alternative, prediction, agreement and disagreement, and summary and conclusion. All teachers addressed the questions to encourage the students to give their reasons and evidence, agreement and disagreement, and summary and conclusion. Solihati and Hikmat (2018) urged that providing reason is a deep thinking skill that is needed by people. However, they also found that asking the students to provide the evidence was scanty. Therefore, they proposed the teachers to apply it in the language class. Encouraging the students to express their agreement and disagreement can develop

their critical thinking since it stimulates them to reveal why they agree or disagree (Solihati & Hikmat, 2018).

V. CONCLUSION

This study investigates to what extent teachers apply critical thinking questions in the EFL class. The findings shows that teachers addressed the questions for clarification, assumption, reasons and evidence, viewpoints or perspective, the implication, consequence or alternative, prediction, agreement and disagreement, and summary and conclusion to promote students' critical thinking skill. The most common questions addressed to students require them to provide the reasons and evidence, agreement and disagreement, and summary and conclusion.

Because of the time restriction, this study only collected the data through questionnaire and interview. The responses from teachers were obtained from questionnaire and interview regarding the implementation of critical thinking instruction through questioning, but they did not show their teaching and learning activities. It is required to examine their teaching practices to provide comprehensive critical thinking instruction concerning teachers-students interaction. Therefore, further study is required. First, the class observation is essential to the portray the critical thinking practice in the class. Second, the impact of critical thinking instruction need to be investigated.

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