

## THE QUESTIONING TECHNIQUES USED BY FOREIGN-EDUCATED TEACHER TO PROMOTE CRITICAL THINKING

Oleh:

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### Abstrak

Berpikir kritis adalah keterampilan kognitif yang harus dicapai oleh seorang mahasiswa di pendidikan tinggi. Dengan memiliki pemikiran kritis, terutama di kelas bahasa, seorang mahasiswa harus memahami bahasa serta pesan yang dibawanya untuk dikomunikasikan dengan fasih dan hal tersebut akan menjadi aset yang baik untuk masa depan mereka, terutama untuk menghadapi dunia kerja. Untuk menumbuhkembangkan pemikiran kritis mahasiswa, seorang guru diharuskan untuk memberi mereka pertanyaan yang cukup rumit dengan teknik bertanya yang cocok. Bertanya dengan teknik yang sesuai adalah cara yang baik untuk memicu pemikiran kritis. Penelitian ini menggunakan pendekatan kualitatif dan berfokus pada guru pribumi yang mengenyam pendidikan diluar negeri sebagai subjek. Guru tersebut dipilih karena, berdasarkan teori, di luar negeri telah merasakan lingkungan berpikir kritis yang lebih baik. Penelitian ini bertujuan untuk mengetahui jenis pertanyaan dan teknik bertanya yang digunakan oleh guru untuk memicu pemikiran kritis mahasiswa. Hasil penelitian menunjukkan bahwa guru menggunakan pertanyaan kognitif tingkat tinggi yaitu analisis (25, 3%), sintesis (21%) dan evaluasi (20, 3%). Kemudian teknik bertanya yang digunakan guru sebagian besar adalah penguraian (25%). Dapat disimpulkan bahwa guru dapat menumbuhkan pemikiran kritis mahasiswa dengan memberikan teknik tingkat tinggi dan pertanyaan dengan tingkat kognitif yang tinggi.

**Kata Kunci:** Berpikir kritis, luar negeri, Pertanyaan, Teknik

### 1. INTRODUCTION

Being able to be a critical thinker is a significant skill to be accomplished by the students since they live in a period where information are rapidly spread. By having critical thinking, students must be able to comprehend, analyze and evaluate some information they got and avoid the bias. They are able to uncover the bias before making conclusion (Nguyen Thi Cam Le, 2005). In language learning context, critical thinking is a vital skill to be grasped by the students since it is a foremost goal of higher education (Wang, Chai, & Hairon, 2017). Critical thinking has many recompenses. Pennycook (1997) mentioned that students will comprehend of a passage or discourse by having critical thinking. Critical thinking benefices the user of language for having proper communication within society (Brown, 2007). Students are able to become proficient in language learning because they are not only practice the language but also understanding the meaning of the language and the process of it needs the critical thinking ability (Bachman & Palmer, 2000). It is in relevant with what Brown (2004) proposed that to be capable in a language mastery, learners need to have critical thinking of the target language as well (Brown, 2007).

Having students ready with critical thinking can assist them the workforce (Feng, 2014). Increasing critical thinking skills in college

students is a crucial effort (Yang, Newby, & Bill, 2005), it can help them compose appropriate decisions, communicate effectively, and use proof to support conclusions (Harris, 2014). In fact, as King (1998) pointed out that critical thinking and depth analysis of the students can be built and triggered by some problematic questions (King, Goodson, & Rohani, 1988). Teacher questions aim to disclose understanding. A proper question seeks to expose and discover the knowledge, thinking process, or misconceptions of the student. By delivering questions, teacher can stimulate the word production of a students as well as guide them to think deeply about the information they get in the classroom.

Meanwhile, the notion of critical thinking atmosphere in classroom is also correlated with the situation they can engage daily within their teachers set of teaching and teacher as the role model for the students (Báez, 2004). Asian countries are identified to have lack of critical thinking circumstances than western countries. In Asia, the students usually be the passive knowledge recipient from the teacher (Ha, 2008b). But nowadays, there are some teachers who experience in an English speaking country to study where it means that they have the mobility to other nationality and they might grasp the new way of thinking and behavior as a teacher in teaching the students (Ha, 2008a). However, critical questions

about study abroad value remain to upsurge (Gomez-lanier, 2017).

Foreign teacher experiences a substantial number of short-term immigrants in the city (Sharifian, 2010). In addition, study abroad will give a potential of shifting viewpoints. Participants of such programs tend to have global views. Within their foreign study to an English speaking country, the teacher might get the atmosphere of critical thinking situation that they can adapt later in their own country. (Nguyen Thi Cam Le, 2005) They experience the situation of having question and answer, class discussion and the open-minded argument delivering. This condition will reduce the dichotomy of native and non-native speaker of English in teaching the students (Rizki, 2018). Where now, there is a globalized teachers who study abroad and grasp the climate of western country education and add the good point to their teaching and their way of questioning and giving chance to the students to be more active in class (Punyanunt-carter, Wrench, Carter, & Linden, 2014).

Considering the background above, the problem constructed in this research are: First, what are the questions used by foreign-educated teacher to promote critical thinking of the students? Second, how do the questioning techniques used by foreign-educated to foster critical thinking of the students?

## 2. REVIEW OF LITERATURE

Critical thinking is the set of cognitive and intellectual skills, abilities and dispositions characterized. It develops skills for reasoning and evidence. It inspires students to ascertain and process information, and to do so with discipline. It teaches students to think their way to infer and make conclusions, defend positions on complex issues, consider a wide variety of viewpoints, analyze concepts, theories, and explanations, clarify issues and conclusions, solve problems, transfer ideas to new contexts, examine assumptions, assess alleged facts, explore implications and consequences, and increasingly come to terms with the contradictions and inconsistencies in their own thought and experience (Paul & Elder, 2013)

In relevance with that, Chin (2006) describes that by giving systematically lower to higher order questions, teacher can raise up the cognitive level and ladder the critical thinking. Starting the lesson with a new content, teachers may employ lower-level question focused on recall and application (Chin & Chin, 2006)

Gall (1991) mentioned that for language classes, question is the major aspect mainly in teaching and learning process (Gall, 1991). Moreover, In EFL circumstances, the classroom is frequently the only situation in which students exposed to the target language regularly (Brock,

1986). Therefore, questions displays a worthy portion in the acquisition of the language, because, as Ellis (1994) argues, mostly, the language learner has most opportunity to speak up when they were asked by some questions.

To one side from its contribution for the learning of second language, questions that teachers use to ask in classroom also contribute some benefits pedagogically, like motivating, stimulating and retaining students' interest, making the students think and focus on the contents, empowering teachers to check, elicit and clarify the understanding of the students toward the lesson (Kleinsasser, Richards, & Lockhart, 1995).

Then, Brown & Wragg (1993) propose other cognitive and similar motives for asking questions such as encouraging recall memory, developing understanding, increasing imagination and stimulating problem-solving (Wragg & Brown, 1993).

Furthermore, to analyze and observe the questions which include cognitive level and trigger students' critical thinking skills in a classroom of language, this research was based on Bloom's (1956) cognitive level theory and his questions taxonomy. Then, Wu's (1993) taxonomy of questioning techniques was also be the based theory of the teacher questioning techniques. The taxonomy of Bloom (1956) contains a level of learning starting from the basic to the complex one. The cognitive process of it contains some stages such as knowledge, comprehension, application, analysis, synthesis, and evaluation (Brown, 2007).

Knowledge. This level is the prerequisite for the higher level. Knowledge claimed as the lowest level of cognitive process. The ability like remembering, recalling knowledge and materials in the previous study are the purpose of asking questions by the teacher.

Comprehension. In this level, students are expectedly understand what they have learned and go beyond the knowledge because by comprehending, students are not only have the knowledge but also understand what they have already known. In addition, this level requires students to deduce the facts and comprehend the meaning of information as well as understand how it uses in a certain condition. The questions form to elicit comprehension are rephrase, describe, and explain.

Application. In this level, students are inspires to put on knowledge they have well-read and expanded in class to numerous situations. Students tends to have this ability if they can apply the idea, knowledge and principle in a new situations. The questions starts by some verbs such as determine, solve, employ, choose, demonstrate, relate and interpret would help the students master this cognitive level.

Analysis. The ability of students in which they can break down or separate their knowledge they

have comprehended into quantities and function it in diverse conditions and problems are the illustration of having analysis process. In analysis, the questions verbs to be used are such as why, analyze, categorize, and classify.

**Synthesis.** This ability is driving together of components and parts so as to form a complete, working with components, parts and conjoining them in a way as to establish a pattern or structure not clearly there before (Bloom, 1956). By delivering synthesis questions, teacher can stimulate students to put all the parts together into a whole. They must use their own ideas, background and experiences in synthesizing process.

**Evaluation.** This level requires students to make judgment about the experience, value, and purpose of ideas, methods, resolutions, and materials. Evaluation means the student used all the previous level of cognitive process from knowledge, comprehension, application, analysis and synthesis. Moreover, evaluation inspires students to compose their decisions about somewhat they know, and have been analyzed, synthesized, based on the criteria which can be seen explicitly to show their perspective. The question that encourages evaluation are evaluate, judge, evaluate, choose, criticize, predict, argue and estimate.

Furthermore, the taxonomy of questioning techniques of Wu (1993) contains five questioning techniques like repetition, rephrasing, decomposition, simplification and probing.

In repetition, means that the teacher repeats the question, the same questions in order to support the students to respond to that question. Then, in rephrasing the teacher reforms an original question in another way when there is no response from students. Here, the teacher asks the question in different words and structures once more to give easier form of questions.

**Simplification.** In this technique, the teacher rephrase the content of the questions by which it is simplified. Then, it includes making the scope of the answers specifically that will help the students recognize the question better and thus can answer the question are the purpose of simplification.

**Decomposition.** This techniques let the teacher breaks down an original question into smaller parts in order to help the students to respond to the question is what the teacher do in decomposition. Then, in Probing, the teacher solicits more information from students. Here, assisting the students to have a quality in their response is the purpose. It encourages the students of having more accurate, clearer or more original added with supportive reasoning, justification or accurate responses of information.

### 3. RESEARCH METHODS

The research was conducted by using a qualitative design and presented descriptively. In

qualitative research, the design is flexible and may change during the investigation if appropriate (Creswell, 2014). The design of qualitative research is thus often described as “emergent.” (Ary, Jacobs, & Sorensen, 2017). In relation with a qualitative research, the data sources implemented the ‘nature’ of the setting of the classroom, teaching and learning process at English classroom. Furthermore, the qualitative approach was used for interpreting the data and presenting descriptively. Some reasons that make this study considered as qualitative are: (1) source of the data adopted the “nature” of classroom setting, teaching and learning process at English classroom, (2) the researcher directly observed the event happened in the setting as a “key instrument”, and (3) The study describe the teachers’ questions employed and the students’ response related with their comprehension and their critical thinking development. The data of this study would be in the form of utterances contain with questions from the teacher and the utterances from the students in the form of their response to the question as an indicator that the question lead them to comprehend and to have critical thinking.

The setting of this study was an English classroom in a private University, primarily in the general English class where the objectives was preparing the students to have critical thinking in order to be ready to face the workforce. Then, the main subject of this research was a local teacher who experienced a study abroad in Australia. The response of the students were also be seen as the indicator of the successful teacher questioning. The utterance and response of teacher-student in class were then be transcribed and coded based on the questioning and techniques code book. Before conducting the observation, the preliminary research was done to get depth understanding of the critical thinking skills level of the students. The preliminary research was in the form pre-observation. The rubric was based on the holistic critical thinking test of critical thinking based on Facione and critical thinking center (Facione, 2011). The result of the preliminary research depicted that the critical thinking of the students was in the insufficient level where the students were still misinterpret evidence, confused groupings and categorizations, failed to identify strong applicable counterarguments, disorganized claims with the reasons offered in their support, misused major modifications or resemblances and so on.

### 4. DISCUSSIONS OF MAIN THEMES/ RESULTS AND DISCUSSIONS

The preliminary research, the students were still in the insufficient level of critical thinking where they fit the criteria of that level. The students were at first could not understand what was the message of the material they got in the classroom.

They just saw what was in the surface of the material, for example when they were given an audio visual passage about theme in the market, they did not comprehend why the buyer bargain statement could not be accepted by the seller, then the students could not analyze the reason why that could be happened. They could not get the information that the seller and the buyer were not in the same culture for instance. In other passage, the students could not comprehend why such misunderstanding happened within the condition in an interview. Then the teacher needed to guide the students' way of comprehending and criticizing the passage as well as infer, analyze, evaluate, till have a self-regulation through the questioning techniques in class.

The findings of the observation showed that the teachers asked 256 questions during their teaching and learning process. The questions were based on some categories as classify in the codebook to analyze the data.

**Table. 1 Categories of questions used by the foreign-graduated teacher in class**

Categories	Number	Percentage
Knowledge	16	6,25%
Comprehension	39	15,2%
Application	30	11,7%
Analysis	65	25,3%
Synthesis	54	21,0%
Evaluation	52	20,3%

From the table above, it can be known that the foreign-graduated teacher asked totally 256 questions consist of 16 knowledge question (6,25%), 39 (15,2%) comprehension questions, 30 (11,7%) application questions, 65 (25,3%) analysis questions, 54 (21%) synthesis questions and 52 (20,3%) evaluation questions. The findings indicated that the teacher used more high cognitive level questions than low cognitive level question, this was indicated because the teacher tried to elicit more responses and trigger the critical thinking of the students by guide them to analyze more about the material given rather than just recalling the information they got. By guiding the students to have analysis, synthesis and evaluation through some questions, the student critical thinking level was increased in some level after seen by the observation of critical thinking components and it increased in the acceptable level so they could do such accurate interpretation, evidence given , statements, graphics, questions, categorizes/groups objects correctly and identified main thoughts properly (Cottrell, 2005). Moreover, the students showed they could identify pertinent arguments (reasons and claims) pro and con, correctly distinguish reasons from claims, is able to note major and minor differences and similarities as in the criteria of the rubric (Facione, 2011).

Furthermore, the questioning techniques used by the foreign-graduated teacher in the classroom is presented as follows:

**Table 2 Questioning Techniques Which Elicited Students' Responses**

Questioning Techniques	Number	Percentage
Repetition	21	10 %
Simplification	47	22%
Rephrasing	39	18%
Decomposition	54	25%
Probing	51	24%

From the findings, the questioning techniques used by the foreign educated teacher was 212. It consists 10% repetition, 22% simplification, 18% rephrasing, 25% decomposition, and 24% probing. By employing those questioning techniques, the teacher mentioned that the students gave more response to the teacher questions. The techniques used helped the students to understand the question more then made the students knew what they have to react.

Repetition was the lowest used in the class because the class situation was already in a good and proper situation so the teacher did not need to repeat the question more and more. The class was conducted in the language laboratory. Furthermore, the third highest employing techniques were simplification, probing and decomposition. Here decomposition took 25% of the total techniques which means that the teacher break down part of the questions into smaller version in order to stimulate students respond which is then can have critical thinking promotion. Here, the teacher let the students practice English as the response of the questions freely, means that the students in class might have discussion and debate of other responses. The students then practice more vocabularies, more complex grammatical features to show their critical thinking accomplishment.

## 5. CONCLUSION

In this research, the foreign-graduated teacher applied six types of questions based on the taxonomy of Bloom in the classrooms. The questions were knowledge, comprehension, application, and analysis, synthesis, and evaluation questions. Hence, analysis questions were found to be the most dominant questions. The dominance of analysis questions was caused by the factor such as the teacher wanted to help the students to have deeper understanding of the material by analysis the factor and message behind the material delivered by the teacher. The three high cognitive level of questions were mostly used because the teacher goal of teaching was also included a critical thinking factor in the class. The teacher gave the students chance to discuss and debate the response of other students' too. Furthermore for questioning

techniques the teacher used repetition, simplification, rephrasing, decomposition and probing in the class. Decomposition was the most frequently employed in the classroom. This is because the teacher needed to break down the original question in order to be more understood by the students. The students seemed to be brave to express their idea and tried not to be shy to tell what they have in mind about the material given.

By employing teacher questions based on Bloom taxonomy and Wu's teacher questioning techniques, students' critical thinking was about to be promoted. The preliminary research which was done to observe the critical thinking level which was in the insufficient level were then increased into the acceptance level of critical thinking criteria proposed by Facione (2011). In the acceptance level students accurately interpreted evidence, statements, graphics, questions, correctly categorized/grouped objects, identified main ideas correctly, identified relevant arguments (reasons and claims) pro and con. Furthermore, the students correctly distinguished reasons from claims, was able to note major and minor differences and similarities. From the teacher techniques and guided questions of critical thinking students were also able to offered analyses and evaluations of obvious alternative points of view, correctly distinguished between well-reasoned vs poorly reasoned arguments, correctly evaluated the credibility of sources.

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