

Teacher's Questions of Thinking Skills in an English as Foreign Language Classroom

Feby Dwi Putri Setyo, Suprihadi, Fajar Kartika
Universitas Muria Kudus

Abstract

Effective teachers' questioning is very important in controlling the classroom interaction, focusing students' learning in the lesson, making the students be more active and motivated to hold their opinion. The objectives of this descriptive qualitative research are to find out the types of question used by the teacher and to describe the questioning purposes used by the teacher. The researchers collected the teacher's questioning by doing observation and taking audio recording and note-taking. The first step in analyzing data is classifying the teachers' questions and the purposes of questioning and then drawing the conclusions. The results of this research show that the dominant type of question used by the English teacher is remembering. Most of the teacher's thinking skill questions are LOTS instead of HOTS. Meanwhile, the dominant purpose of questioning is guiding the students to focus on the learning and to understand the material. The researchers suggest that the teachers use variety of questions not only for managing the class but also to focusing and motivating the students to express their opinion and be more active in the classroom and to developing students' HOTS.

Keywords: teacher's questioning, types of question, purposes of questioning, EFL classroom, LOTS, HOTS

INTRODUCTION

In teaching learning English, building interaction in a classroom is an important point of success. Interaction in the classroom is considered as an activity that provides opportunities for the teacher and the students to talk to each other. Teacher action and teacher-learner interaction are important aspects of classroom life. Having good interaction in a classroom will help both teacher and students to create a collaborative exchange of thought, feeling or ideas which result in reciprocal effect on each other.

Classroom interaction is part of communication among teacher and students occurred within the classroom. In an English as a Foreign Language (EFL) class, when the teacher explains the material using the foreign language only some of the students can respond. Based on the observation in a private school in Pati, there were students who were afraid of English lessons. This is evidenced by the attitude of the students who were silent when the teacher taught and were afraid of expressing their opinions or giving responses because they did not understand.

Teaching is a reciprocal interactive process between teachers and students, which allows them to work collaboratively to achieve the intended learning outcomes of the curriculum. One way of doing this is by asking good questions that enable teachers to get informative feedback about students' real progress. Teachers can also encourage students to participate, think, and check their own understanding by answering questions that address different thinking levels.

Teachers questioning could be a way to establish the interaction within the classroom. Brown (2007) suggests that one of the best ways of teacher being an initiator and sustainer of interaction is by employing questioning strategies. Additionally, Suk-a-nake, *et.al.* (2003) report that the use of questions with various types benefits classroom interaction. Long & Sato (in Shomoossi, 2004) state that interactive classroom is the result of mutual interaction between teacher and student, student and student, group discussion, and any other classroom participation.

In an EFL classroom where students indicate unexpected responses, teachers have to improve the teaching learning process to help the students understand the materials more easily and attract them to pay attention to the teacher's explanation. In classroom setting, Cotton (2003) claims that teacher questions and student answers are considered a powerful teaching approach if they are used to expose contradictions, challenge assumption, and lead to new wisdom and knowledge. To maximize the use of classroom questions, teachers should design questions which can expand students' knowledge and promote creative thinking.

The research conducted by Prabowo and Alfiyanti (2013) shows that, among others, the problem faced by the teacher were the crowded classroom condition and the ineffective interaction between the teacher and the students, while the problem faced by most students was the lack of confidence. In accordance with questioning, the study conducted by Rosyidah (2018) reveals that the teacher tended to use convergent question and various questioning techniques in asking the students in the classroom. Another study (Adibah, 2012) shows that the teacher used six question types: knowledge, comprehension, application, inference, analysis, and synthesis question.

The current study is different from the three previous studies in that it identifies and classifies the types of questions with reference to Anderson and Krathwohl's Taxonomies. This study aims at exploring the types of teachers' questions and the purposes of using the types of the questions during the classroom interaction in an EFL classroom in teaching and learning process.

This study is important because the results might encourage English teacher to employ certain types of questions that help students to engage in mutual interaction within classroom, which in turn can lead to the progress of student's language learning. More practically, the results of this study can help English teachers in conducting classroom interaction. Knowing the types and purposes of questions is beneficial information for them to conduct the classroom interaction. For further researchers, the result can be used as a basis to conduct research in different settings with larger source of data.

Taxonomy of Educational Objectives

In the early work, Bloom (in Watson, 2019; Ardina, 2018; Brown, 2007) proposed a taxonomy of cognitive domain into knowledge, comprehension, application, analysis, synthesis, and evaluation. However, in 2001 the taxonomy was revised by Anderson and Krathwohl (Anderson *et al.*, 2001; Krathwohl, 2002; Wilson, 2016; Ardina, 2018; Alfari, 2018; Quevillon, 2018; Watson, 2019) by changing noun in the taxonomy into verb in the revised taxonomy so that the formulation was 1) remember; 2) understand; 3) apply; 4) analyze; 5) evaluate; and 6) create. This was in order to meet educational objectives because such objectives indicate that students should be able to do something (verb) by using something (noun). This is in line with Chung (1994) who states that Bloom's taxonomy of the cognitive domain is one of the basic frameworks for categorizing educational goals, compilation tests, and curriculum throughout the world.

The order of thinking of the taxonomy is commonly divided into 2 categories referred to as *Low Order Thinking Skills* (LOTS: category 1-3), and *High Order Thinking Skills* (HOTS: category 4-6). The illustration of the comparison of the order of thinking between Bloom's model and that of Krathwohl and Anderson's is presented in Figure 1.

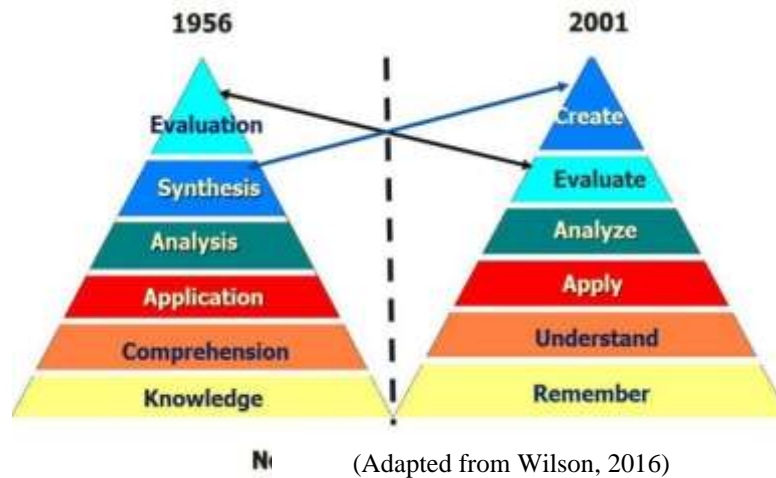


Figure 1. Bloom's and Anderson and Krathwohl's Taxonomies

In 2013 Curriculum, English lesson consists two kinds: Obligatory and Elective. In senior high *school* level, this subject is taught in all grades, those are grade 10, 11, and 12. The objective of the English teaching is students are expected to be able to use English in accessing information and communicating with others.

Teacher's Questioning

In conducting classroom interactions, asking questions is different from everyday communication. *Questioning* is one of the most commonly used techniques by teachers and serves as the main way in which teachers control classroom interaction. Through questions, teachers can actively involve students in the lesson at hand and challenge their thinking, because most questions are provided to get answer. Thus, the use of teachers questioning will stimulate students to talk when answering questions. At the individual level, questions can be used to build students' confidence in speaking. According to Mark, 2002 (in Prabowo and Alfianti, 2013) questioning learning method is asking questions that are not understood about they observe or add some information about it. Competences that developed are creativity, curiosity, ability to formulate a problem to create a critical thinking that is needed for the students' daily life. So, it is very useful for students to ask and get some additional important information.

The Importance of Questioning

Asking is the way teachers use to know what students already know, identify in knowledge and *understanding*. Questions are the most common form of interaction between students and teachers. Questions play a big role in communication. This is used as a learning tool to increase interaction. According to Richard and Lockhart (1994), the functions of questions in teaching are:

1. stimulating and maintaining students' interest
2. encouraging students to think and focus on the content of the lesson
3. enabling teachers to check students' understanding
4. enabling teachers to elicit particular structures or vocabulary items
5. encouraging students to participate in the lesson

Meanwhile, Brown (1994) argues that appropriate questioning in an interactive classroom can fulfill a number of different functions:

1. Teacher questions give students the impetus and opportunity to produce language comfortably without having to risk initiating language themselves.
2. Teacher questions can serve to initiate a chain reaction to student interaction among themselves.
3. Teacher questions gives the instructor immediate feedback on students' comprehension.
4. Teacher questions provide students with opportunities to find out what they think by hearing what they say.

Basically, learning is asking and answering questions. Asking questions is a skill to find answers from other people. In the learning process, question and answer is very important. The question-and-answer process will help a teacher to find out students' understanding of the material. So, the teacher can guide and direct students when experiencing difficulties. However, the questions must be effective.

Collier (2018) proposes an effective questioning as the one which involves using questions in the classroom to open conversations, inspire deeper intellectual thought, and promote student-to-student interaction. Effective questions focus on eliciting the process, i.e., the 'how' and 'why,' in a student's response, as opposed to answers which just detail 'what.' Using them in the classroom creates opportunities for students to analyze their own thinking, that of their peers, and their work. Furthermore, Collier (2018) suggests the benefits of effective questioning as follow.

1. Encourages students to engage with their work and each other.
2. Helps students to think out loud.
3. Facilitates learning through active discussion.
4. Empowers students to feel confident about their ideas.
5. Improves speaking and listening skills.
6. Builds critical thinking skills.
7. Teaches respect for other people's opinions.
8. Helps students to clarify their understanding.
9. Motivates students and develops an interest of a topic.
10. Allows teachers to check students' understanding.

Classroom Interaction

The demand for English proficiency in schools requires English teacher to build interactive classes. Accordig to Shomoossi (2004: 98), interactive classes are the result of reciprocal interactions between teachers and students, students and students, group discussions, and other class participation. Brock (1986) states that it is of significance because through interaction, students can increase their language store, have opportunity to understand and use the language that is incomprehensible, help (foreign) them learn the target language easily and quickly.

Bongolan, 2009 (in Prabowo and Alfiyanti, 2013) argues that cooperative learning, problem-based learning, the use of case methods and simulation are some approaches that promote active learning. Classroom interaction is a process in which students engage in activities, such as writing, reading, discussion or problem solving that promote analysis, synthesis and evaluation of class content. Interaction in the classroom requires students to be

involved and active in the learning process. Meanwhile, to Richards (2002), classroom interaction is a pattern of verbal and non-verbal communication and the types of social relationships which occur within classroom.

The instructor serves a coach or facilitator, guiding students through activities, but letting the students take control of the learning event itself. Class interaction is a teaching method that engages students in the learning process rather than seeing them as passive recipients. In EFL classes, verbal interaction means communication that uses teacher and student talk. Verbal interactions occur because teachers and students speak, while on-verbal interactions include movements or facial expressions by the teacher and learners when they communicate without using words (Pratama, 2015). Chudron (1998) adds that class interactions include class behavior such as taking turns, asking and answering questions, negotiating meaning and feedback.

RESEARCH METHOD

The design of the research is descriptive qualitative. The data are the teacher's questions in a teaching-learning process and the data source is the teacher of XI MIPA 1 of SMA PGRI 1 Pati, which consists of 37 students, who teaches English "Elective" subject.

The researchers collected the data by doing an observation in the classroom, audio recording, note-taking, and transcribing the teacher's utterances. Then, the researchers identified the teacher's questioning, separating those from ones which were not questions.

The first step in the analysis of the data was classifying and symbolizing the questions based on Anderson and Krathwohl's Taxonomy of Cognitive Domain, which consists of remembering (C-1), understanding (C-2), applying (C-3), analyzing (C-4), applying (C-5), and creating (C-6). C-1, C-2, and C-3 are Low Order Thinking Skills (LOTS) while C-4, C-5, and C-6 are High Order Thinking Skills (HOTS). The second step was interpreting the purposes of the questions if they were used to monitor the students' involvement (SI) and the students' thinking and understanding (TU), to review lesson (RL), to know the students' control (SC), and students' progress (SP). The next step was counting the number and the percentage of the questions which belonged to C-1, C-2, C-3, C-4, C-5, and C-6 type and SI, TU, RL, SC, and SP purpose. By counting the frequency and percentage of each classification, we can arrive at the conclusion to which skill and purpose the questions tend to be. In this way, the general picture of the teacher's questioning can be detected.

RESULTS AND DISCUSSION

There are 2 findings of the research: the types of the questions and the purposes of questioning used by the English teacher.

Types of Questions Used by the English Teacher

Based on the data, there were 50 questions from the English teacher when he taught at XI MIPA 1. Table 1 presents the summary of the types of the questions.

Table 1. Types of Questions Used by the English Teacher

No.	Types of Questions	Frequency	%
1.	Remembering (C-1)	20	40
2.	Understanding (C-2)	11	22
3.	Applying (C-3)	3	6
LOTS		34	68
4.	Analyzing (C-4)	7	14
5.	Evaluating (C-5)	6	12
6.	Creating (C-6)	3	6
HOTS		16	32
Total		50	100

The result of classifying the type of questions shows that he asked 20 remembering, 11 understanding, 3 applying, 7 analyzing, 6 evaluating, and 3 creating. It means that the dominant questioning that he used was *remembering*. It covers 20 of 50 questions or 40% of all the questioning types. If we compare the order of the thinking skills, he tended to deliver LOTS questions rather than HOTS ones. The percentage of LOTS questions is 68%, while that of HOTS questions is only 32%.

There are six types of questions used by the English teacher, they are remembering, understanding, applying, analyzing, evaluating, and creating. After classifying the questions, the writer discusses the types of questioning which had been asked by the English teacher when he taught in the class.

From Table 1 we can see that the English teacher uses dominant remembering than other types of questions with 20 questions or 40%. They are essential for managing the class, and keeping them interested and alert. So, the students always focus on the material being taught during teaching and learning process. The teacher often asked questions about students' memory, so that the students always focused on the material being taught.

The fact that the teacher mostly used LOTS (68%) instead of HOTS (which was only 32%) indicates that he has not yet developed HOTS maximally. This might be related with the dominant purpose of questioning he utilized, that is thinking and understanding. The question he used which indicates that he develops the students' HOTS to create something is very low: only 3 of 50 questions or 6%. In the development of LOTS, in which for the highest level, applying, he only used 3 of 50 questions or 6%. This phenomenon might be interpreted that he probably had certain reasons why he did so, such as the material of the day which did not demand the students to create something.

Purpose of Questioning by English Teacher

From the fifty questions the teacher used, the summary of the purposes of the questioning is presented in Table 2

Table 2. Purposes of Questioning Used by the English Teacher

No.	Purposes of Questioning	Frequency	%
1.	Students' Involvement (SI)	10	20
2.	Thinking and Understanding (TU)	14	28
3.	Review Lesson (RL)	8	16
4.	Students' Control (SC)	7	14
5.	Students' Progress (SP)	11	22
Total		50	100

All of the purposes of questioning were utilized by the teacher but with slightly different intensity. The teacher asks 10 questions for Students' Involvement, 14 questions for Students' Thinking and Understanding, 8 questions for Review Lesson, 7 questions for Students' Control, and 11 questions for Students' Progress. The difference between one purpose and another is not far, but he tended to use Students' Thinking and Understanding purpose (14 questions or 28%). The next tendency was Students' Progress (11 questions or 22%) and Students' Involvement (10 questions or 20%). Reviewing important lesson content was the next purpose which the teacher utilized with 8 questions (16%) and the last purpose the teacher empowered was students' control (7 questions or 14%).

There are five purposes of questions used by the English teacher, there are involve students, thinking and understanding, review lesson, control student, and students' progress. After classifying the purposes of questions, the writer discussed the purposes of questions which had been asked by the English teacher when he taught in the class.

From Table 2 above, we can see that the English teacher uses dominant thinking and understanding than other purposes of question with 14 in thinking and understanding purposes. Then, he uses students' progress, involve students, review lesson, and control students. The teacher uses students' thinking and understanding, because to build the students' perspective. Perceptual learning can be thought of as the education of attention.

From the discussion above, it shows that students' thinking and understanding purposes for teacher questioning than other purpose. In this research, the English teacher who teach at XI MIPA 1 in SMA PGRI 1 Pati tend to use students' thinking and understanding purpose with the total of frequency 14 questions. They are essential for focusing on learning and building students' perception. So, the students can be controlled during teaching and learning process.

CONCLUSION

Based on the result of data analysis which has been discussed, it can be concluded as follow:

1. The types of the questions of the English teacher of XI MIPA 1 SMA PGRI 1 Pati in the teaching and learning process tended to be *remembering*. *Remembering* is the dominant type with the total frequency 20 questions or 40%. Referring to LOTS and HOTS questions most of the teacher thinking skill questions are LOTS instead of HOTS: the teacher tends to use LOTS questions (34 of 50 questions or 68%) instead of HOTS questions (16 of 50 questions or 32%). Remembering type of question indicates that the English teacher focuses on managing the class and keeping them interested and alert to make the students always focus on the material being taught during teaching and learning process.
2. The purposes of teacher questioning of the English teacher of XI MIPA 1 SMA PGRI 1 Pati in the teaching and learning process were varied but the highest frequency was

Students' Thinking and Understanding (TU) with 14 of 50 questions (28%). The other purposes which were used slightly below TU were *Students' Progress* (22%) and *Students' Involvement* (20%). It means that the English teacher focus on learning and building students' perception. Therefore, the students can be controlled during teaching and learning process.

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