Questioning in Teacher Talk

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Abstract

Asking questions is one of components in teacher talk. Some types of questions are posed by teachers to assess students' understanding of learning materials. This paper presents the results of the investigation of the types of questions used by English as Foreign Language (EFL) teachers in teaching English for the second graders of a senior high school. The subject was a female teacher who teaches English at SMA Teuku Nyak Arif Fatih Bilingual School, Banda Aceh. This qualitative study was conducted employing six classroom observations (480 minutes) focusing on four types of questions (factual, empirical, productive and evaluative) based on Moore (2007). The results revealed that factual questions appeared to be the most dominant type employed by the teacher (59.9%), followed by evaluative (16.6%) and empirical (12.9%). Productive questions were the least occurrence from all types of questions applied, which is 10.7%.

Key words: Questions, teacher talk, classroom interaction.

Introduction

Teachers' language or teacher talk plays an important role for implementing language teaching and achieving teaching goals. Ellis (1986) concludes that the language used in the classroom by the teacher to second language learners is adjusted to teacher talk. Therefore teacher talk is teachers' use of specific language features in addressing students in the classroom. The most important thing is that teacher talk is useful for language acquisition processes because the quality of teacher talk will determine the comprehensible input and students' output (Richards & Lockhart, 1996). Teacher talk is categorized into seven aspects, they are accepting feelings, praising or encouraging, accepting or using students' ideas, asking questions, lecturing, giving directions, and criticizing or justifying authority. Commonly, asking question is one of the aspects of teacher talk that is mostly used by teachers to facilitate interaction in the language learning (Brown, 2001; Richards & Lockhart, 1996; Nunan, 1991; Chaudron, 1988). More than half of the time in the classroom talk is run under question-answer exchanges (Richards & Lockhart, 1996). Chaudron (1988) mentions that a teacher's question is the main tool to get students' participation stimulate students' oral response and assess students' progress. In the classroom, a teacher is a key person to stimulate interaction. Interaction or turn talk can occur if teachers are able to encourage students to participate in a language classroom. Therefore, employing strategies to encourage students to talk during teaching-learning processes is important. Some scholars (e.g. Brown, 2001; Richards & Lockhart, 1996; Nunan, 1991) conclude that asking questions is one of a teacher's strategies to get students talked and participated in the classroom lesson.

In the Indonesian EFL context, the important function of teacher questions has been formulated in the 2013 curriculum (K13) involving the emphasis on the scientific approach (observing, questioning, associating, experimenting and networking) in learning. Teacher question is the second step of five main learning activities in K13, within which, teachers are expected to be able to address good criteria of questions in order to guide students learning and answer the questions well. Teacher question is expected to encourage students to actively learn and develop questions, encourage students' participation and develop their ability to think creatively and critically (Kementerian Pendidikan dan Kebudayaan, 2013, p. 157). Principally, the main basic competence expected from learning language at the senior high school level is to be able to analyze the text rather than understand or recognize it. In other words, students are required to extend their thinking to be more critical and creative in the learning process. To this end, teachers have to provoke students' thought by asking more thought-provoking questions or higher order thinking skills questions. Higher order thinking skill questions require students to be able to analyze critically, think creatively and to evaluate including the process of analysis, synthesis and evaluation (Barjesteh & Moghadam, 2014; Bloom, 1956).

Some previous studies have investigated teacher questions in teacher talk. Faruji (2011), by conducting eight observation sessions, found out types of questions posed by an Iranian English teacher who teaches students studying at a language institute in Iran. The analysis of the question types was based on Moore (2007). Moreover, Mahmood and Rana (2006) involved Japanese EFL elementary students and a teacher to look into the level and types of questions used by the teacher to monitor students' progress in learning language.

The framework used to analyze the teacher questioning is also based on Moore (2007). Similar to these two studies, this present study also used Moore's (2007) types of question to analyze the teacher questions. However, in this study, the process of teaching and learning in the classroom relied on questioning process as the second step of five main learning activities in the classroom. The greater the degree of requirement of K13, the greater the efforts are expected from the teacher to achieve the learning goal. Furthermore, in an isolated area like Aceh, there has not been much research so far emphasizing questioning in teacher talk, especially in a senior high school level. Accordingly, this study proposed this question: "What types of questions are used by the teacher in EFL classroom?" To find out the frequency of each question type, this study proposed the other question: "What is the frequency of different types of questions used by the teacher in the EFL classroom?" These two research questions will hopefully fulfill a need for existing research studies in teacher talk in Aceh, Indonesia.

Literature Review

This study will discuss some theoretical backgrounds related to teacher talk, teacher's classroom question and the description about types of teacher's questions used in the classroom interaction.

Teacher Talk

Allwright and Bailey (1991) simplify a talk as one of the main ways to deliver information to student, and a talk is also utilized in the classroom to control students' behavior. So, teacher talk is defined as the use of specific language features by teachers in addressing second or foreign language students in the classroom. Classroom is the place where students can get more comprehensible input of language learning. Harmer (2007) argues the language input that low-level students get from outside of the classroom will commonly incomprehensible. Consequently, students need a model to provide the language which is comprehensible for them. Harmer (2007) therefore suggests that teachers must be a model to provide comprehensible input for students.

Occasionally, teachers adjust the classroom talk differently to different levels of students" proficiency as what Henzl (1979, cited in Ellis, 1986) studies in term of adjustment in pronunciation where the teacher used standard pronunciation for low-level students. Chaudron (1988) advises that teachers should modify their talk in the area of phonology, lexis, syntax and discourse in addressing classroom processes. Opposing to Gaise's finding, Nunan (1991) suggests that teachers need to try to elaborate the language rather than make it simpler.

Nunan (1991), Yan (2006), Yanfen and Yuqin (2010) conclude that teacher talk plays two important roles in teaching language; firstly, teacher talk is sources of language input or valuable input of language exposure, and secondly, teacher talk can serve as communicative sources to generate interaction during classroom instruction. The role of communicative function of teacher talk is to maintain and promote facilitation in learning interaction including types of questions the teacher ask, modification they use when talking to learners, and the way the teacher react to students' mistakes (Lei, 2009). The part of classroom talk considered as a talk for communicative function is found in Mahmood and Rana's (2006, p. 25) study such as, "what is the lesson now"? "What is date today? May I go to drink water"? Kind of input and interaction from teacher talk is mostly important for the learner. Beller (2008) concludes that the quality and quantity of language acquisition is very demanding on language input; the input about the language that students hear and accept from that they can learn a language. Also, Ellis (1986) argues that successful outcomes of learning depends on language features used by the teacher and types of interactions taking place in the classroom, no matter it is a subject lesson or a language lesson.

So, quantity and quality of language input is relied on teacher talk or language features used by the teacher in the classroom interaction. Teacher talk has been assumed as an important part in learning a language which is aiding for leaners' input.

Questions in Teacher Talk

One important variable of teacher talk is teacher's questions. Questioning is employed by teachers to create classroom interaction with the students during teaching-learning processes. Questioning in

teacher talk is considered to have a potential effect on learners' comprehension, and has been hypothesized to be important for Second Language Acquisition (SLA) (Ma, 2008).

Teacher's question is the main aspect of language teaching which affects students' participation in classroom negotiation (Farahian & Razaee, 2012). Teachers usually initiate an interaction by asking questions, explaining activities and giving directions (Yanfen & Yuqin, 2010). Some studies show that asking questions in the classroom is one of the most dominant strategies used by teachers (Farooq, 1998; Yu, 2010; Yanfen & Yuqin, 2010).

Teacher's questions serve as language input for students because questions require responses from students. When giving the response, learners also contribute to interactions (Ellis, 2008). Other benefits of questioning in the classroom which is more pedagogic are like encouraging and maintaining students' interest, encouraging students to think and focus on the lesson, checking students' comprehension, prompting and clarifying (Richards & Lockhart, 1996). Essentially, teacher's question plays a crucial role for classroom interaction. And interaction can help students acquire comprehensible input.

More than half of the time in the classroom talk is run under question-answer exchanges (Richards & Lockhart, 1996; Farooq, 1998). Normally, teachers spend a day to ask about 300-400 questions in the classroom (Darn, 2008). According to Darn (2008), teachers need to consider some effective types of questions, for example, teachers have to minimize the use of yes/no questions, ask balance of display and referential questions, use open-ended questions (divergent) to encourage opinions, elaboration and discussion. So, questions which are categorized as higher order thinking skills are highly suggested to be employed in the classroom.

Therefore, questioning has the main role for both language acquisition and maintaining students' participation in the classroom talk. Instead of creating an interactive environment in the classroom, teacher's questions are employed to measure students' progress about the lesson.

Types of Teacher's Questions

A number of researchers have classified and identified questions in term of types and functions. Long and Sato (1983) classified questions based on types and functions into display and referential. In recent years, teacher's questions have drawn researchers" attention to study display and referential questions in EFL context (e.g. Farooq, 1998; Shomoossi, 2004; Yan 2006; Özcan, 2010; Meng & Wang 2011; Hamiloğlu & Temiz, 2012; Farahian & Rezaee, 2012; Al-Zahrani, 2014). Display questions are defined as questions used which the answer is already known by the teacher (Yan, 2006). On the other hand, referential questions refer to questions that the teachers do not know the answer (Yan, 2006).

Another researcher like Barnes (1969) differentiates types of questions into closed and open questions. Closed question refers to narrow questions, and it is usually has one existing answer. On the other hand, open questions may have more than one answer. They call for students to think creatively and imaginatively. This classification is very useful to language teachers as it can relate to types of questions with students' language output (Pearl, 1995). Additionally, Richards and Lockhart (1996) group questions into three categories such as procedural, convergent and divergent. Procedural questions more focus on classroom procedures, routines and management; while convergent questions are distributed in order to recall students' knowledge particularly to support similar students' response about the topic. In contrast, divergent questions are delivered to get dissimilar students to respond with long statements, and to encourage students to use their own information rather than recall previous lessons.

Bloom (1956) determines six cognitive levels of classroom questions which are widely used for educational purposes. They are knowledge, comprehension, application, analysis, synthesis and evaluation. The six types of teacher's questions by Bloom (1956) had been studied by other researchers in EFL context (e.g. Brown, 2001; Adibah, 2012; Barjesteh & Moghadam; 2014). Brown (2001) adopts and modifies six categories of classroom questions based on Bloom into seven types, they are: knowledge, comprehension, application, inference, analysis, and synthesis and evaluation questions. Brown (2001) defines inference questions as a conclusion made by the teacher that is not directly stated in instructional materials. Another useful classification of teacher questions was developed by Moore (2007). Not only Brown (2001), Moore (2007) also modifies six cognitive questions from Bloom (1956) into four types of classroom questions namely factual, empirical, productive and evaluative. Four types of questions based on Moore (2007) had been studied by other researchers in other EFL contexts (Mahmood & Rana, 2006; Faruji, 2011).

Factual questions aim to simply recall information from students which refers to knowledge or comprehension questions. Empirical questions try to ask student to analyze or integrate the information given, it includes application or analysis. The question requires a lot of thinking, but once thought out, and the answer is a single correct answer. Productive questions do not have a single correct answer. This question requires students to think creatively and imaginatively to produce something unique. They are open-ended and broad which ask students to go beyond the simple recall of information. The last one, evaluative question, is used to make judgments and give an opinion to evaluate an idea or product. Like productive questions, they are often open-ended. However, they are more difficult to answer than productive questions because they ask for some internal or external criteria which are established to evaluate and judge on something.

Having reviewed different classifications of classroom questions, the one proposed by Moore (2007) is employed to the present study, considering that the classification is modified based on Bloom taxonomy which is the most useful ones for educational purposes instead of language teaching. In the context of Indonesian curriculum, Bloom taxonomy is used to classify questions that have to be addressed during teaching processes by teachers (Kementerian Pendidikan dan Kebudayaan, 2013). Mostly, teachers are familiar with six levels of questions based on Bloom taxonomy. The hierarchy of cognitive levels is also helpful for teachers to ask questions differently to different levels of thought.

Research Method

The purpose of this study is to find out and describe the process of classroom questions used by the teacher. Therefore, the descriptive qualitative which is a naturalistic inquiry was employed in this study in order to describe and to understand the classroom process as what they are. This study was conducted at SMA Teuku Nyak Arif Fatih Bilingual School, Banda Aceh. The participant was a female English teacher teaching fourteen Grade 2 female students. In teaching, the teacher used Student's Book and Work Book 3.

This study attempted to analyze the teacher talk particularly teacher's questions used by an Acehnese EFL teacher during 840 minutes sessions of teaching-learning processes. The teaching-learning process was videotaped and then transcribed for the purpose of data analysis. During the classroom observation, observation sheets and field notes were also utilized.

Data Analysis

To treat the data from observation, this study followed steps suggested by Miles, Huberman and Saldana (2014): data condensation, data transcription, data display and conclusion verification. To analyze the types of questions posed by the teacher, this study consulted Moore's (2007) list of question types as discussed in the literature part of this paper. To calculate the frequency of each question type used by the teacher, this study manually count the number of each type of question found in the analysis.

Findings and Discussion

This study found that the teacher in her talk used the four types of questions mentioned by Moore (2007). In addition, the teacher has different purposes when posing different types of questions to her students. These are discussed below.

Factual Question

In this study, the teacher used factual questions mostly to check students' understanding or comprehension about the material given, vocabulary and other topics related to students' background knowledge. This type was used to ask about grammar, listening and reading topics. Meanwhile, questions related to vocabulary include definition of words, terms and idioms from the reading and listening topic. Questions about the topic related to students' background knowledge is a question asked by the teacher in order to give opportunity for students to link their background knowledge to the topic.

In the present study, the examples of factual questions related to the material given, vocabulary and students' background knowledge are as follows:

- [E1] So, all of them are in what tenses?
- [E2] Ok, and then number two who was the first person to travel more than 100 kilometers in a car?
- [E3] Number one is apologize, what is number two? [E4] Trunk, trunk, what is it?
- [E4] Trundling, what does it mean?
- [E5] You can call me anytime if you need to talk. What does it mean? Bottom of my heart...
- [E6] Who has boyfriend here?
- [E7] Yes, do you know The Kite Runner?

Empirical Questions

There are two forms of empirical questions found by this study. They are application questions and questions related to analyzing particular information. Based on the finding of this study, the teacher applied more application questions than analyzing information questions. The example is as follows:

- [E8] OK, so what is the difference between limp and hobble? [E10] Kate, what happen to her?
- [E9] To be yes, we have to be....and the 'to be', how is the 'to be'?
- [E10] How many sentences can you make using this chart?

Productive Ouestions

The occurrences of productive questions found by this study included questioning on students' ideas and experiences, describing something and students' action toward something. Mostly, productive questions about students" experiences are related to students" background knowledge. Below is the example:

- [E11] And then, what kind of holiday is it? What do you think?
- [E12] Heart, ok, what can you relate to heart? What can you relate to heart?
- [E13] Susi Air ya, I heard there is no stewardess, and you can talk to the pilot, have you ever been in SUSI Air? How was there (in Susi Air) tell us?
- [E14] Ok, so have you ever felt something like this?
- [E15] What if you make mistake to your parent, then how will you apologize?
- [E16] And then (pause) so what do you do? Ohh what about when it is, it was the first time for you to be on the plane? How do you solve your feel down?

Evaluative Questions

Evaluative questions found by this study can be categorized into two purposes. Firstly, the questions demanded students to give their preference about something.

Secondly, the question was aimed to ask students" wish or hope about something. Some examples of evaluative questions about preferences and wishes are shown in the following:

- [E17] Marking, which marking do you like?
- [E18] Ok, by the way, what about you? Ok, in which place do you prefer to live? Town, or a big city?
- [E19] What do you wish Ririn for this city, what do you wish? Before we go for the next one, you want to help Ririn Balqis?
- [E20] Ok, exploit, complete the sentence with your own ideas. What would you do if you had 3,000 pounds for a holiday?

From those types of questions found from the observations, they were calculated manually afterwards and displayed in Table 1. The table confirms the most dominant type of questions occurred in the classroom to the least one. Hence, the question frequency can be made in percentage as shown in the following table.

Table 1. The frequency of types of questions

Types of questions	Code	Frequency	Percentage
Factual	Q1	184	59.8 %
Empirical	Q2	40	12.9 %
Productive	Q3	33	10.7 %
Evaluative	Q4	51	16.6 %
Total		308	100 %

From the table above, factual questions appeared to be the most type of question used by the teacher in the classroom (59.8%). This finding is in line with Faruji's (2011) finding. He found that factual questions were the mostly used questions by the teacher. 52.71 % of the questions were shown to be factual which mostly related to asking the meaning of the word. Moreover, another study conducted by Mahmood and Rana (2006) has proved such questions occurred in the highest number compare to other types of questions. It indicated the questions more focus on the knowledge level.

Furthermore, evaluative questions appeared to be the second dominant type employed by the teacher. It reached 16.6%. This is followed by empirical (12.9%). The material-oriented questions indicated that evaluative questions appeared to be more dominant due to the topic of second conditional in the first

and the second meeting. This finding is supported by Faruji's (2011) finding. Evaluative questions are also the second highly used types of questions which were used with proportion of 27.13%. Faruji (2011) concludes that the use of these types of questions was to get the learners to participate in the classroom.

Empirical questions appeared to be the third highly used type of questions due to grammar topics during the fifth and the sixth observation. On the contrary, Faruji (2011) found that empirical questions were used as the lowest number in his study compare to other types of questions. While, the least type of question applied by the teacher based on this study was productive question, which merely occurred 10.7%. The teacher described that such questions were barely appeared in grammar and vocabulary-based topics. This phenomenon is similar to Mahmood and Rana's (2006) finding on four types of questions. They found out in their comparative studies in 2001 and 2003 that factual and evaluative questions were increased. However, empirical and productive questions were decreased. A decrease in empirical and productive questions indicated a decrease of higher order thinking skill questions.

It can be concluded that the classroom interaction portrayed the more factual questions. This situation remains unchanged, if the students mostly use their lower order thinking skills to answer factual questions. Factual questions are derived from knowledge and comprehension questions based on Bloom taxonomy. Bloom (1956), Sadker, Sadker and Zittleman (2011) and Barjesteh and Moghadam (2014) grouped knowledge and comprehension questions into lower order thinking skill questions. Yet, the student's English proficiency is well enough to produce more response in the target language since their exposure to the target language is full time during the lesson.

Conclusions

Based on the analysis of data obtained from the classroom observation, factual questions appeared to be the most dominant types of questions employed by the teacher (59.8%) which was followed by evaluative (16.6%). Empirical (12.9%) and productive (10.7%) questions were the least one among four types of questions employed. This finding is in line with Chaudron's (1988) statement that the characteristic of classroom question is display questions. Factual and display questions are questions which only require simple recall information. The teacher used these questions to know students" understanding.

Although most of the questions used appeared to be factual questions, the interaction between the teacher and students seemed to be interactive. The teacher seemed to encourage students" participation to respond the questions. So, more responses and participations were coming from the students. Almost all of them actively participated in learning during the lesson. Productive and evaluative questions were posed by the teacher in order to open more discussions, to give more chances for students in expressing personal ideas and to evaluate each other's ideas.

Nevertheless, this study is not without limitation, for example, this study only observed one teacher teaching in a homogenous classroom. Therefore, this study invites other researchers to conduct a similar study involving more teachers teaching students who are heterogeneous in nature.

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