

Mapping a Teacher Questions in Teaching English at a Senior High School

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Abstract

The objectives of this article are to identify and classify the questioning techniques (T) implemented by an English teacher in teaching English at a senior high school and to find out the cognitive levels of the questions (C) based on Bloom's revised taxonomy. This article was based on a research conducted in a descriptive qualitative research design. The data were the 29 questions uttered by the teacher during a class meeting collected using documentation technique. There was 1 question which belonged to T1, 9 T2, 2 T3, 7 T4, 2 T5, 4 T6, 1 T7, and 13 T8. In addition, there were 20 questions which belonged to C1, 5 C2, 3 C4, and 1 C6.

Keywords: *Teacher Questions, Questioning Techniques, Bloom's Revised Taxonomy*

1. Introduction

1.1 The Background of the Study

A teacher should create a good atmosphere while teaching in the classroom. To achieve it, teacher has to build a good relationship towards the students through interaction. The interaction shouldn't just purpose on how to create a good terms along with

the students, but also applying and implementing such triggered questions to make students more attractive and put more attention to the lesson, also it could reach the learning objectives.

A question is any sentence which has interrogative form or function (Cotton, 2012). Through question, someone can obtain certain

information in order to knowing something new or testing someone. Questions often used in usual interaction with other people in order to open a conversation or to gain information. For example, through the teacher question in order to analyze the students' comprehension and also spreading worksheet during the lesson.

In achieving the learning objectives there are several ways that teachers applying during the class. Questioning students in the classroom during teaching and learning process may be a way that teacher want to gain the curiosity of the students in regard the taught lesson. Questions have long been used as a teaching tool by teachers and preceptors to assess students' knowledge, promote comprehension, and stimulate critical thinking (Tofade et.al, 2013).

Further, in curriculum 2013 which is implemented in Indonesia, teachers are asked to design lesson plans which are oriented to Higher Order Thinking Skills (HOTS) using Scientific Approach. However, teacher perspective towards this HOTS level only focusing on their teaching

material. In fact, they have neglected to implement it during the class through classroom interaction.

A study had conducted by Limbong *et al* (2018) which has took place in one of SMP in Pakpak Bharat. The study is aimed at finding out the levels of questions used by teacher in English classroom and revealing the underlying reasons why teacher ask questions to the students in the classroom. The research which involved one of English teacher as the participant shows the results that there were four levels of questions used by the teacher in English classroom from six levels of questions based on Bloom Taxonomy in Anderson and Krathwohl, with the total of questions were 117 in two meetings. Teacher spent remembering level 56% (66 questions), understanding level 31% (36 questions), applying level were 4% (5 questions), and analyzing level were 9% (10 questions). This indicated that teachers are still using the first two levels of the taxonomy frequently during the class.

Based on the background of the study above, the objectives of this

study are to identify and classify the questioning techniques (T) implemented by an English teacher in teaching English at a senior high school and to find out the cognitive levels of the questions (C) based on Bloom's revised taxonomy.

1.2 The Techniques of Questioning

Questioning students in the classroom during teaching and learning process may be a way that teacher want to gain the curiosity of the students in regard the taught lesson. Questions have long been used as a teaching tool by teachers and preceptors to assess students' knowledge, promote comprehension, and stimulate critical thinking (Tofade et.al, 2013). In delivering the questions, teacher unconsciously applies some techniques.

In order to give the students the right moment in giving the questions and calculating the best question to the students, as proposed by Wilen (1991), there are nine techniques in throwing the questions, described as the following:

1. Plan key questions to provide lesson structure and direction (T1)

Write them into lesson plans, at least one for each objective-especially higher-level questions necessary to guide discussions. Ask spontaneous questions based on student responses.

2. Phrase questions clearly and specifically (T2)

Avoid vague or ambiguous questions such as "what did we learn yesterday?" or "What about the heroine of the story?" Ask single questions; avoid run-on questions that lead to student confusion and frustration. Clarity increases the probability of accurate responses.

3. Adapt questions to student ability level (T3)

This enhances understanding and reduces anxiety. For heterogeneous classes, phrase questions in natural, simple language, adjusting vocabulary and sentence structure to students' language and conceptual levels.

4. Ask questions logically and sequentially (T4)

Avoid random questions lacking clear focus and intent.

Consider students' intellectual ability, prior understanding of content, topic, and lesson objective(s). Asking questions in a plan sequence will enhance student thinking and learning particularly during discussions.

5. Ask questions at a variety of levels (T5)

Use knowledge-level questions to determine basic understandings and diagnose potential for higher-level thinking. Higher-level questions provide students 10 opportunities to use knowledge and engage in critical and creative thinking.

6. Follow up student responses (T6)

Develop a response repertoire that encourages students to clarify initial response, expand their responses, lift thought to higher levels, and support a point of view or opinion. For example, "How would you clarify that further?" "What are some alternatives?" "How can you defend your position?"

7. Give students time to think when responding (T7)

Increase wait time after asking a question to three to five seconds to increase the frequency and duration of

student responses and to encourage higher-level thinking. Insisting upon instantaneous responses, particularly during discussions, significantly decreases probability of meaningful interaction with and among students.

8. Use questions that encourage wide student participation (T8)

Distribute questions to involve the majority of students in learning activities. For example, call on non-volunteers using discretion regarding the difficulty level of questions. Be alert for reticent students' verbal and nonverbal cues such as perplexed looks or partially raised hands. Encourage student-to-student interaction. Use circular or semicircular seating to create an environment conducive to participation, particularly during discussions.

9. Encourage student questions (T9)

This promotes active participation. Student questions at higher-cognitive levels stimulate higher level of thought, essential for inquiry. Give students opportunities to formulate questions and carry out follow-up investigations of interest.

Students will try to find the best answer toward the teacher question, and allow them sharing their opinion towards a given case. Not only working individually, students can work together in order to find the answer, and it can train them their social psychology in building a good relationship to the other classmates even they can train their critical thinking.

1.3 Cognitive Levels of Questions

There are six cognitive levels (Anderson and Krathwohl, 2001). The first is remembering (C1). That is to retrieve relevant knowledge from long term memory. This stage includes students in recognizing and recalling ability. The second is understanding (C2). That is to construct meaning from instructional messages, including oral, written, and graphic communication. This stage requires students in interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining. The third is applying (C3). That is to carry out or use a procedure in a given situation. It includes executing and implementing.

The next stage of cognitive level is analyzing (C4). That is to break material into its constituent parts and determine how the parts relate to one another and to an overall structure or purpose. It requires students in differentiating, organizing, and attributing. The fifth stage is evaluating (C5). That is to make judgments based on criteria and standards. In this stage, students are needed to be able to check and critique. Finally, the highest level of cognitive is creating (C6). That is to put elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure. In this stage students are required to be able to generate, plan, and produce.

Higher order thinking skills (HOTS) consist of the top three levels of thinking namely, analyzing (C4), evaluating (C5), and creating (C6). HOTS means the ability to think in the complex process which useful for transferring the knowledge in real life, thinking critically, and solving the problems. The students who already have the higher order thinking

skills should be able to examine assumptions and values, evaluate evidence, and present the conclusions with their own words (Pratiwi in Gultom and Sitinjak, 2020)

1.4 Research Methodology

This research was conducted in accordance with descriptive qualitative research design. Ary et al (2010) state that a qualitative research occurs naturally, it is not a setting contrived specifically for research, and there is no attempt to manipulate behavior.

Document analysis was conducted to collect the data of the study. In qualitative research, personal and official documents were considerably important because they could provide access to understanding the subject matter being studied (Bogdan & Biklen, 2007). The document as the source of the data was a video recorded by a teacher (initials: LDS) entitled *Video Pembelajaran Bahasa Inggris Materi Biography*. The video was uploaded to youtube at November 18, 2018 with the link: <https://youtu.be/obju3DH5h-A>. The length of the video is 33:56 minutes.

The data were taken by observing the video. Then, they are analysed based on Miles, Huberman and Saldana (2014), namely: data condensation, data display, and data conclusion.

2. Discussion

Teaching activities are divided into 3 stages, namely: opening (pre-) activities, core (whilst) activities, and closing (post) activities.

Table 1. The Distribution of the Teacher Question

Result	Classroom Activities		
	Opening	Core	Closing
Number of Question	5	17	7

In table 1 above, it is known that there were 5 questions produced by the teacher in the opening activities, 17 questions in the core activities, and 7 questions in the closing activities. Opening and closing activities are shorter than core activities. Longer time means more utterances are possible to be produced.

Table 2. The List of the Questions in the Opening Activities

No.	Utterances	Techniques of Questioning	Cognitive Level
1.	Do you still remember our last meeting?	T8	C1
2.	What are the examples of them?	T3 & T4	C6
3.	In the biography, there are only three generic structures, what are they?	T2	C1
4.	Do you know the social function of biography text?	T2 & T8	C1
5.	What is the social function of biography?	T2 & T6	C1

Table 2 above shows that the questions in the opening activities dominantly belonged to LOTS (Lower Order Thinking Skills) as the opposite of HOTS (Higher Order Thinking Skills). Those questions belonged to C1 (remembering). On the other hand, There was only 1 question belonged to C6 (creating). In addition, there were 5 questioning techniques implemented by the teacher in the opening activities, namely T2, T3, T4, T6 and T8. In other words, questioning techniques T1, T5, T7 and T9 were not implemented by the teacher in the opening activities.

Table 3. The List of the Questions in the Core Activities

NO.	Utterances	Techniques of Questioning	Cognitive Level
1.	Is there any difficult word for you to understand the social function?	T3	C2
2.	What is the meaning of accomplishment?	T2	C1
3.	In the biography, there are only three generic structures, what are they?	T2	C1
4.	What is the event of biography?	T2	C1
5.	How about the reorientation of biography?	T4 & T7	C1
6.	The end of the story? Is that true?	T6 & T8	C1
7.	After we listen to the audio, what kind of material, what kind of audio that we have listened? About what?	T7	C4
8.	Well, and then what is the content of the biography?	T5 & T8	C4
9.	Do you know who they are?	T8	C1
10.	Can you tell me about him? He is...	T8	C2
11.	What are his achievements?	T1	C1
12.	We can conclude that we should...	T2 & T8	C1

NO.	Utterances	Techniques of Questioning	Cognitive Level
13.	Is there any difficult word for you?	T8	C1
14.	All of you get the meaning?	T6 & T8	C2
15.	'Born' present or past tense?	T2 & T8	C2
16.	What is the objective? Objective is the purpose of?	T2 & T8	C1
17.	The purpose of the writer is to?	T6	C2

In the table 3 above, there were 17 questions identified in the video which were uttered by the teacher in the core activities. Again, the questions are dominantly belonged to LOTS (C1/remembering and C2/understanding). There was only 1 question which belonged to HOTS (C4/analyzing). In addition, there were 8 out of 9 questioning techniques implemented by the teacher in the core activities, namely: T1, T2, T3, T4, T5, T6, T7 and T8. In other words, T9 (encourage student question) was not implemented by the teacher during the core activities.

Table 4. The List of the Questions in the Opening Activities

NO.	Utterances	Techniques of Questioning	Cognitive Level
1.	And what we have learned today?	T8	C4
2.	What the social function of biography?	T8	C1
3.	What about the language features?	T4	C1
4.	And what is the generic structure of biography?	T4	C1
5.	What about the orientation?	T4	C1
6.	And the event?	T4	C1
7.	And what about the reorientation? It is consist of?	T4	C1

Table 4 above shows that there were 7 questions uttered by the teacher in the closing activities. Even in these

activities, the questions were dominantly belonged to LOTS (6 out of 7 questions). It means, there was only 1 question which belonged to HOTS (C4/analyzing).

2.2 Questioning Techniques Implemented by the Teacher

After observing and analyzing the data, there are only 8 questioning techniques implemented by the teacher which are described as follow:

- a. Plan key questions to provide lesson structure and direction (T1)

Data 1:

What are his achievements?

Here the teacher asked the students after hearing their response from the previous question spontaneously. It was obviously because the question stated related to the same topic as the previous one.

- b. Phase questions clearly and specifically (T2)

Data 2:

In the biography, there are only three generic structures, what are they?

The question stated clearly and had the obvious answer for students to response.

- c. Adapt questions to student ability level (T3)

Data 3:

Is there any difficult word for you to understand the social function?

The question above required the teacher to phrase questions in natural, simple language, adjusting vocabulary and sentence structure to the students language and conceptual levels.

- d. Ask question logically and sequentially (T4)

Data 4:

What about the language features?

The teacher considered students' intellectual ability, prior understanding of content, topic, and lesson objective(s). Asking questions in a planes sequence will enhance student thinking and learning particularly during discussions.

- e. Ask question at a variety of levels (T5)

Data 5:

After we listen to the audio, what kind of material, what kind of audio that we have listened? About what?

By delivering the question, the teacher could train the students' creative and critical thinking.

f. Follow up student responses (T6)

Data 6:

The purpose of the writer is to?

By applying this technique, the teacher encouraged the students to develop their answer and having a further explanation.

g. Give students time to think when responding (T7)

Data 7:

How about the reorientation of biography?

In the video, when the teacher delivered the question to the students, she gave the students time to think when responding. While giving a question, sometimes the teacher might allow students to think before they could answer in more satisfying results.

h. Use questions that encourage wide student participation (T8)

Data 8:

And what we have learned today?

The teacher distributed the question to involve the majority of students in closing the teaching and learning activities.

2.3 The Cognitive Levels of the Teacher questions

After identifying and classifying the teacher questions based on Revised Bloom's Taxonomy, most of the questions belonged to LOTS (C1 and C2) and there were only a few questions belonged to HOTS (C4 and C6). The data are as follow:

a. Remembering (C1)

Data 9:

Do you still remember our last meeting?

There were 20 questions which were classified into remembering level (C1). The teacher reviewed the previous material briefly before discussing the new topic.

b. Understanding (C2)

Data 10:

Is there any difficult word for you to understand the social function?

There were 5 questions which were classified into understanding level. The teacher checked the students understanding about the element of the text, namely the social function.

c. Analyzing (C4)

Data 11:

Well, and then what is the content of the biography?

There were 3 questions which were classified into analyzing level. To answer the question above, the students had to analyze the content of the text given.

d. Creating (C6)

Data 12:

What are the examples of them?

There was only 1 question which belonged to creating level. The question delivered in the opening activities to check the students' mastery about the previous topic.

The mapping of the teacher questions based on HOTS in this

research is similar with the finding of the relevant study which was conducted by Limbong, *et al* (2018). The teachers in both researches dominantly delivered questions that were LOTS.

3. Conclusion

After analyzing the data collected, it can be concluded that:

- a. The teacher implemented 8 out of 9 questioning techniques. The most dominant technique was use questions that encourage wide student participation (T8). On the other hand the least dominant techniques implemented were plan key questions to provide lesson structure and direction (T1) and give students time to think when responding (T7).
- b. Most of the questions delivered by the teacher during the teaching belonged to remembering level (C1) and there was only 3 questions which belonged to HOTS namely 2 questions in analyzing level (C4) and 1 questions in creating level (C6).

References

- Anderson, L.W., and D.R. Krathwohl. (2001). *A Taxonomy for Learning, Teaching, and Assessing*. New York: Longman
- Ary, D., L.C. Jacobs., and C. Sorensen. (2010). *Introduction to Research in Education: 8th Edition*. Canada: Wadsworth
- Bogdan, R., & Biklen, S. K. (2007). *Qualitative research for education: An Introduction to Theories and Methods (5th ed)*. New York: Pearson.
- Cotton, K. (2012). *Classroom Questioning. School Improvement Series, 3*.
- Gultom, J.J. and Sitinjak, M. (2020). *Mapping Reading Exercises in English Textbook for Eleventh Grade Students Based on HOTS*. *Bahas* Vol. 31, No. 4. <https://doi.org/10.24114/bhs.v31i4.21912>
- Limbong, A.N.F., S.M., and Rika. (2018). *Teacher Questions in English Classroom*. ResearchGate
- Miles, M.B., A. M. Huberman., and J. Saldana. (2014). *Qualitative Data Analysis: A Methods Sourcebook*. Los Angeles: Sage
- Savitri, L.D. Video Pembelajaran Bahasa Inggris Materi Biography. <https://youtu.be/obju3DH5h-A> retrieved at April 8th, 2021
- Tofade, T., J. Elsner., and S.T. Haines. (2013). *Best Practice Strategies for Effective Use of Questions as a Teaching Tool*. *American Journal of Pharmaceutical Education*, 77(7)
- Wilens, W.W. (1991). *Questioning Skills for Teachers*. Eric: *National Education Association*