CHAPTER II

THEORETICAL BACKGROUND

A. Teacher Question

Generally, in education, the question is a tool for teacher to verify students' knowledge and comprehend. Furthermore, question is not only to verify student's knowledge and comprehension but also to stimulate students' responses to be more active in classroom. Tofade, Elsner and Haisnes (2013) affirmed that questions are often used to stimulate the recall of prior knowledge, promote comprehensions, and build critical-thinking skills. Hence, questions frequently used can encourage students in recalling the knowledge, verifying comprehends, and stimulating critical thinking skills.

Teacher question is one of particular in teacher talk (Brown, 2010). Through teacher question, students can explore their ideas and knowledge with the appropriate answer. Teacher question also can stimulate students to recall their knowledge about the material which has been taught by the teacher. Furthermore, Chin (2007) explained that questions are the key component of classroom discourse. This suggests that teacher's questions have potential as a psychological tool in mediating students' knowledge construction. In addition the questions that we ask, how we ask them, and how we teach students to ask their own questions can significantly increase English learner's engagement, as well as their language and academic learning (Sanchez, 2010). Through questioning, students will learn how to explore their ideas with their own

knowledge. Letzer (1982, as quoted by Shaunessy, 2005) described about further discussion through questions:

> Students must learn to consider how and why their thinking is so and what has led them to their conclusions. In this manner, the teacher focuses learning on the investigation of student ideas to bring about further discussion and turns student statements around into questions that challenge them to think more deeply about their own thinking. (p. 18-19)

Teachers have to know that through questions, they can invite the students with more discussion and positive achievement to think more about learning materials. Meanwhile, there are still many teachers who do not use teacher questions well to engage students to open their mind. Therefore, the teacher has to know the aims of asking question for students.

The appropriate question used by the teacher can develop the thinking skill of students. It is in line with King (1994, as quoted by Roth, 1996), "good questions provoke thought, are based in students' experiences, and call for creative thinking" (p. 710). Consequently, good questions are the ones which are appropriate for students and stimulate their knowledge to improve.

B. Principles of Questioning

There are the principles in every technique for teaching-learning process. Principles are a fundamental truth or proposition that serves as a foundation for a system of belief or behavior or for a chain of reasoning. Although, the questions also have a principles to guide the teacher to make good questions and appropriate for interactive learning progress. Here are some principles of questioning adapted from Lewis (2002):

1. Distribute questions so that all, including non-volunteers, are involved.
2. Balance factual and thought-provoking questions.

3. Ask both simple and exacting questions, so that the poorer students may participate and the brighter students may be extended.
4. Encourage lengthy responses and sustained answers. (Avoid yes-no questions, questions overlaid with afterthoughts, fragmentary questions, and those that tug or encourage guessing. NOTE: If you catch yourself asking a yes-no question, add "Explain").
5. Stimulate critical thinking by asking: "To what extent?" "How?" "Under what circumstances?" "Why?" "Compare (or contrast)..."
   (a) Avoid: "Does anyone know...?" and "Who can tell us...?"
   (b) Allow time for thought. Wait until five or six want to speak.
   (c) Be a model of exact phrasing and coherent thinking.
      (1) Phrase questions clearly, within the vocabulary limits of the class.
      (2) Make each question specific, short, and proactive.
   (d) Encourage students to comment on the answers of classmates.
      (1) Start the crossfire by asking, "What's your opinion of that answer...?"
      (2) Follow up promising leads, building on contributions.
      (3) Tactfully curb aggressive students. (No student or teacher domination should prevail.)
      (4) Don't drop too quickly a student who seems unable to answer. If a student is nonplussed, inquire "How can we help...out?"
   (e) Never interrupt a student who is attempting to answer nor tolerate ridicule of an honest effort.
6) Use the overhead technique: (a) question, (b) pause, (c) name;
7) Insure audibility, and then refuse to repeat questions or answer (Except in large classes always repeat questions and answers!)
8) If a student asks a question, don't answer it until you've asked the class, "How would you answer that question…?"
9) Personalize questions ("Pretend you are ... what would you do?")
10) Suggest partnership by inquiring, "How can we ... ? (p. 1)

Hence, by following the principles of questioning, teachers are expected to have their teaching and learning process run interactively.

C. Levels of Question

The level of questions here is adapted from the Bloom's Taxonomy theory (1956). The learning of cognitive domain is created in order to promote higher order thinking skills in education. Feng (2013) stated, "according to Bloom's Taxonomy, the teachers' questions every day can be divided into six

types: knowledge, comprehension, application, analysis, synthesis and evaluation" (p. 150). In addition, Bloom Taxonomy as quoted by Satucci (2019) said that the six types of questions divided into two levels such as higher order thinking (HOT) skills and lower thinking (LOT) skills. The lower thinking skills include knowledge, comprehension and application. The higher thinking skills include analysis, synthesis and evaluation. Moreover, Bloom, Engelhart, Furst, Hill, & Krathwohl, (1956) as cited by Dori and Herscovitz (1999) described uses of questions and the level of questions:

> Questions are an essential education tool for all disciplines in general and for science in particular. Questions can be rank ordered according to the level of thought required for answering it. The most common hierarchy is the Bloom taxonomy knowledge, comprehension, application, analysis, synthesis, and evaluation. Later, other question hierarchies were suggested; the only two levels agreed upon are lower-order and higher-order questions." (p. 412).

Henceforth, questions are educational tool which have several types and every question has a rank and refers to the level of thought required for answering it.

There are several types of questions based on level cognitive domain of question according to Bloom as quoted by Shaunessy (2005):

Table 1

Objective	**Descriptors of Action Verbs for Each**
Knowledge	list, define, tell, describe, identify, show, label,collect, examine, tabulate, quote, name
Comprehension	summarize, describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss, extend
Application	apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover
Analysis	analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer
Synthesis	combine, integrate, modify, rearrange, substitute, plan, create, design, invent, what if?, compose, formulate, prepare,

	generalize, rewrite
Evaluation	assess, decide, rank, grade, test, measure, recommend, convince, select, judge,explain, discriminate, support, conclude, compare, summarize (p. 23)

Similarly, there is Bloom's cognitive taxonomy compiled by Cecil & Pfeifer (2011, as quoted by Neslihan, 2016), as follows;

Table 2
Bloom's cognitive taxonomy

Type of Question	Responsive Behavior	Question beginnings
Knowledge	-Remembering facts or observations -Remembering definitions	-Who -What -Where -When -Single word definitions
Comprehension	-Explanations	Explanation (What happened when the third goat jumped over the fence?)
Application	-Applying techniques	-If ….then… -What is the length of the room?
Analysis	-Stating reasons -Conclusion -Finding evidence supporting general conclusions	-Why…? -Now we are learning about whales. As a conclusion, what can we say about them? -What is your evidence to support?
Synthesis	-Problem solving -Guessing -Creating original product	-How we can solve this problem? -How we can improve our research? -What will happen when you find it? -What will happen according to your estimation?
Evaluation	-Expressing opinions on conditions -Evaluation of correctness of ideas -Evaluation of problem	-Do you agree with him/her? -Do you believe that this is to best option to take? Why? -What is your solution for this problem? Why?

	solving skills -Evaluation of other products and artistic quality Evaluation of opinions and ideas	-Why do you think this is the best option? -Which video do you like better? Why? (p.162)

Thus, teachers are required consider level of questions they can ask to their students in order to optimize the students' thinking skills.

D. Study of the Relevant Research

This research is relevant with Feng (2013). The results from the study, skillful use of wait-time and creating a safe, respectful and encouraging thinking environment are integral to fostering higher order thinking skill of students. Based on the explanation, it is needed to conduct the research entitled 'Teacher Questions in English Foreign Language (EFL) Setting". In this research, the utterance of teacher questions used by the teacher will be analyzed. One teacher has been chosen as the participant of the research. This study is important for the teachers, especially English teachers in order to make them understand about teaching-learning through teacher questions based on bloom's taxonomy.