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TEACHER QUESTIONS AND QUESTIONING STRATEGIES REVISED: A CASE STUDY IN EFL CLASSROOM IN IRAN

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ABSTRACT

This study attempts to shed light on the types of teacher questions, questioning strategies and students' responses to teacher question in a private English language institute at upper intermediate level in Iran. The data were collected through a qualitative observational method by analyzing the transcription of their video-taped lessons and a questionnaire. The study engaged five female participants. A special emphasis is put on probing the types of questions teacher asked on students' discourse pattern. The results indicate that the knowledge and comprehension questions were frequently asked by the teacher respectively while it leaves little opportunity for application, analysis, synthesis, and evaluation questions. The implication of this study is that EFL teachers should be trained in developing their questioning strategies to facilitate their students' learning.

Keywords: *Iranian EFL Learners, Language Proficiency, Students' Attitude, Teacher Questions, Question Types, Questioning Strategies*

INTRODUCTION

A teacher talks in a classroom for different reasons: explaining, controlling, modeling, problem solving, asking questions and giving feedback. Asking questions in an EFL classroom is not an easy task. According to Smith and Higgins (2006), questioning is one of the most common techniques used by teachers and serves as the principal way in which teachers control the classroom interaction. Some studies reveal that questioning is the most frequent strategies used by EFL teacher/ESL teachers after lecturing in the classroom (Ellis, 2003; Foster, 1998). Dillon (1994) argues that researchers provide various reasons why questioning is one of the most familiar techniques used by teachers in their classrooms. Teacher questions function as language input for the students consequently form a basis in a classroom interaction (Ho, 2005). That is why Ellis (2008) proposes two reasons why teachers ask questions in their classrooms. First, questions require responses; therefore, they serve as a means of obliging learners to contribute to the interaction. Learners' responses also provide the teacher with feedback which can be used to adjust content and expression in subsequent teacher-talk. Second, questions serve as a device for controlling the progress of the interaction through which a lesson is enacted. It has been found that questions can also be used to motivate students, to revise, control, test or assess, explore, explain, encourage students to focus on a particular topic, elicit information, and check understanding and to control behavior (Young 1992; Richards and Lockhart 1994).

Studies made by Daniel (2006) on technical and vocational training institutes confirm that students have difficulties using the language and in interacting in the classroom. Most scholars agree on the importance of questioning to alleviate some of these problems. Supporting this view, Chaudron (1988, p. 126) states teachers questions constitute a primary means of engaging learners' attention promoting verbal responses, and evaluating learners progress. Therefore, one of the measures to be taken for the improvement of teachers' questioning skill will be assessing how teachers ask question in an EFL classroom.

According to Richards and Lockhart (1996), language teachers who are well aware of questioning skills can motivate their students to ask questions and to provide responses. Moreover, students' language proficiency can be improved through the interaction between the teacher and the students and among the students themselves.

Tollfeson (1989) postulates that asking questions in EFL classroom requires knowledge of the types of questions, strategies and the art of questioning skills. This article claims that teachers should be trained to

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ask questions and have a good knowledge of questioning strategies in their classroom. In other words, it investigates how EFL teachers pose questions, what question type and questioning strategies they employ in their classroom. Specifically, this study addresses these topics by asking the following research questions:

1. What types of questions does the teacher ask in the EFL classroom at pre-intermediate level?
2. Is there any significant difference between the distribution of teacher's use of knowledge and evaluation question?
3. What are students' perceptions towards teacher questions at pre-intermediate level?
4. Is there any significant difference between teachers' use of question types at two proficiency levels?

Background

Brock (1986) found that teachers ask significantly more display questions, which request information already known by the questioner, than referential questions. He stated questions at low cognitive levels, asking for factual recall or recognition, are display questions, while questions calling for evaluation or judgment are likely to be referential questions. He also suggests that responses to questions calling for the recognition or recall of factual information are shorter than responses to higher-order questions calling for interpretation or opinion.

That the use of known-information, or display, questions in the classroom generates discourse which is fundamentally different from everyday discourse is an important consideration for language teachers. An increased use by teachers of referential questions, which create a flow of information from students to teachers, may generate discourse which more nearly resembles the normal conversation learners experience outside of the classroom. He found that since the use of referential questions increases the amount of learner output, such questions may be an important tool in the language classroom, especially in those contexts in which the classroom provides learners their only opportunity to produce the target language. Ho (2005) believes that teacher questions form a basic part of classroom interaction. Nunan and Lamb (1996) argues that the objectives of teachers questions are to elicit information, to check understanding, and also to control behavior. Most of the classroom teachers questioning is used as eliciting responses from students during the whole class teaching. Tsui (1995) believed that teacher questions have been categorized in a number of ways: 1) open and closed questions, 2) display and referential questions, and 3) yes/no questions. He classifies the category of open/closed questions according to the kind of response elicited. The open questions May have one acceptable answer while close question can accept only one answer. The second category of questions, display/referential questions, relates to the nature of interaction generated (Tsui, 1995). For display questions, the teacher already knows the answers. They are asked in order to check if the students know the answers. On the contrary, for referential questions, the teacher does not know the answers and the students answer the questions in order to give the teacher information (Tsui, 1995).

Gunter and Mintz (2010) argue that the teacher, according to Socrates, should help the learner organize their thoughts in order to build new understanding from prior knowledge. Socrates method is learning by inquiry, the process of asking and answering perplexing questions. They classify questions into six main types:

- *Remembering questions* ask students to recall information
- *Understanding questions* ask students to explain ideas or concepts
- *Applying questions* ask students to use information in another familiar situation.
- *Analyzing questions* ask students to break information into parts to explore the relationship.
- *Evaluating questions* ask students to justify a decision or a course of action.
- *Creating questions* ask students to generate new ways of thinking about things.

In traditional language classrooms, factual questions are the most common type, while open questions are the least common type (Myhill *et al.*, 2006). A study conducted by Burns and Myhill's (2004) indicated that factual questions were the most commonly used form by the teachers (n = 64%) in the classroom.

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Teachers also often ask display questions to manipulate the unpredictability of students' responses to open questions (Edwards & Westgate, 1994). The display questions are usually predetermined by the teacher; consequently, they are rarely negotiated.

Cazden (1988) states that the most common used method for analyzing classroom discourse was categorizing teacher questions on some cognitive scale. One of the most widely used resources for cognitive question types is Bloom's taxonomy which describes the objectives relating to knowledge, intellectual abilities and intellectual skills. It describes a hierarchy of six categories - knowledge, comprehension, application, analysis, synthesis and evaluation (Bloom 1956; Hunkins 1972; Woolfolk 1984). Specifically the taxonomy explores the kinds of knowledge are we seeking to develop? Knowledge questions require students to recall the information as it was learnt. That is to say, students have to access knowledge of specific terminology, knowledge of ways and means of dealing with specifics, conventions, trends and sequences, classifications and categories, methodology and criteria and so on. Comprehension questions require students to indicate understanding of the material. Such questions require mental reorganization or interpretation. In application questions students need to solve problems for particular information. Unlike application question, analysis questions requires students to think critically, identify reasons, motives and make an inference based information given. On the other hand, synthesis questions require students to put together elements and parts so as to form a whole while the category of evaluative questions involves making judgments and offering an opinion to evaluate a product or idea. In other words, Bloom's taxonomy is divided into two types of questions: lower order and higher order questions. Lower order questions require students to comprise of knowledge, comprehension and application while higher order questions include analysis, synthesis and evaluation (Yang, 2010).

However, Bloom's taxonomy has been criticized on the two grounds. First the categories are too broad and some topics, such as personal qualities, have no space within it second the taxonomy does not distinguish between knowledge and skills (Carter 1985).

Although research has validated the educational benefits of teachers' asking more "higher order" questions, it has also been observed that categorizing teacher's questions on their cognitive value is hard to do (Cazden 1988). What makes it difficult is that all categorizations depend on the distinction between questions that request factual recall or literal comprehension and questions that require more complex inferential cognitive work to go beyond the information easily available in memory or text.

MATERIALS AND METHODS

Participants

The researcher adopted on case study over a period of 5 weeks in a private English institute at Amol. The subjects of the study were one non -native speaking (NNS) English instructor holding master's degree in TEFL. He had experience in teaching EFL courses for 8 years, taught general English courses at different levels. Other participants in the study were 30 Iranian students of English attending at conversation course in pre-intermediate & upper-intermediate level at Shevar English language institute whose ages ranged from 17 to 25, the majority was 19.

Instrumentation

As the purpose of the present study was to find out and describe the typical teacher's questions when he gives lectures to English majors in classroom setting, the types of questions based on Bloom's taxonomy (1956) utilized to collect the data. Bloom taxonomy comprised if six types of questions: knowledge, comprehension, application, analysis, synthesis and evaluation (see appendix A). In order to probe the students' perceptions and preference towards teacher's questions, the students were given a questionnaire where they had to assess what type of question they prefer. The questionnaire was adapted from Richards and Lockhart (1994) comprised five yes/no questions where the students had to mark their perception regarding teacher questions in the class and one open ended question.

Procedures

The data of the research was derived from observations of a conversation class in which students enrolled in a private institute. The class was observed as carefully as possible during two-month periods. The

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researcher carried out the observation personally, sitting in the classes from beginning to the end of each session. Following the advice of Hopkins (1985), teacher and students' performances were digitally audio recorded for subsequent analysis. Of the 4 hours and twenty six minutes of recorded, 80 minutes, which constitute the present study database, were transcribed by the researcher. The categories used to code the data in the present study were adapted from Bloom's taxonomy (1956) questions. In fact this classification was employed in order to obtain the types of question teachers ask in EFL classrooms and to determine how the teacher question types are different at pre-intermediate and intermediate levels.

The last stage of the present study was to tap students' attitude and beliefs underlying teacher questions, this was done to delineate which type of teacher question students find more effective. After data collection, the observed patterns were analyzed to research questions which the study set out to address. Descriptive and referential statistics were used for data analysis.

RESULTS AND DISCUSSION

The preliminary procedure followed in the data analysis was to compute frequencies and percentages to describe the overall characteristics of the data.

Following this, data collected through classroom observation were coded and changed to percentage. Table 1 summarizes the types of questions asked during observation. As indicated in table 1, the data based is composed of a total of 141 teacher questions. Of the six types of questions, knowledge and comprehension questions occurred approximately half of the teacher questions. Knowledge and comprehension questions account for 70.20% of all the feedback types in the database, this leaving little opportunity for other questions (Evaluation, 18.43%; application, 18.51%; synthesis, 2.12%; analysis 0.70%).

Table 1: Description of types of teacher questions

Teacher questions	N	% of teacher questions
Knowledge	58	41.13
Comprehension	41	29.07
Application	12	8.51
Analysis	1	0.70
Synthesis	3	2.12
Evaluation	2.6	18.43
Total no. of questions asked 141		

In order to find a distribution balance for teacher's knowledge and evaluation question, their corresponding numbers for each session were added up to probe the second research question. It was found that observed teacher has used knowledge questions 2.23 times more than the number of evaluation questions. In other words, out of a total of 141 questions, 58 have been knowledge question (41.13%) and only 26 evaluation question (18.43%).

In order to see whether this difference was significant or not a chi-square analysis was run. Using the chi-square the second null hypothesis was rejected at ($p < 0.5$, $df=1$). That is the observed chi-square was greater than the corresponding critical value (3.84). Statistically speaking, the number of knowledge questions used by teacher was significantly higher than the number of evaluation questions. In other words, the distribution of two questions was absolutely different.

The next step of the present study was to tap the attitude of pre-intermediate students toward teachers questions. Table 2 summarizes the analysis of students' response.

As indicated in the table, 63 % of the students responded "no" the question asked, 20% responded "no" to the encouragement given to the students, 22% of the subjects feared of asking question, 25% of students do not used English reported that questioning in EFL class do not promote English language learning.

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Table 2: Students' responses to teacher questions

Students' response	1	2	3	4	5
Yes	11 36.66%	10 33.34%	12 40%	22 73.34%	13 43.34%
No	19 63.34%	20 66%	18 60%	8 26.66%	17 56.66%
N=30	Total 30				

1=opportunity to ask questions, 2=encouragement given to students in the class,
 3=Use of English 4= fear to ask question, 5= promote English language learning

The last step of this study was to seek the probable differences between teacher use of question types at two levels, pre-intermediate and intermediate level. Table 3 indicates the description of types of teacher questions at two levels.

Table 3: Description of types of teacher questions at two levels

Teacher questions	N	% of teacher questions
	PI I	PI I
Knowledge	58 55	49.57 36.67
Comprehension	41 47	35.04 31.34
Application	12 18	8.51 12.00
Analysis	1 8	10.25 5.33
Synthesis	3 10	2.56 6.66
Evaluation	2 12	1.70 8
Total no. PI 117; I: 150		

PI: Pre-intermediate I: Intermediate

As indicated in the table3 teacher used more higher order questions at intermediate level (analysis, synthesis, and evaluation questions). However, the teacher advocate lower order question. In order to see the main effect differences between teacher question types at two proficiency level univariate analysis of variance (ANCOVA) was run. This analysis determine whether there is any significant difference between teacher use of question types at intermediate and pre-intermediate level. Table 4 indicates the test of between subject effect.

Table 4: Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5079.500 ^a	6	846.583	86.829	.000
Intercept	5940.750	1	5940.750	609.308	.000
Question	4988.750	5	997.750	102.333	.000
level	90.750	1	90.750	9.308	.028
Error	48.750	5	9.750		
Total	11069.000	12			
Corrected Total	5128.250	11			

a. R Squared =.950 (Adjusted R Squared =.891) Dependent Variable: score

As indicated in table 4 there is a significant main effect for question types, and the pre-intermediate and intermediate levels.. In other words, there is a significant and meaningful difference between types of questions asked in the classroom at different level. Therefore the results reject the forth null hypothesis and confirm that the teacher use different question types at two levels. This means that the level of students hinder the types of question and questioning strategies used in the classroom. Figure 1 demonstrates estimated marginal means of score at pre-intermediate and intermediate levels.

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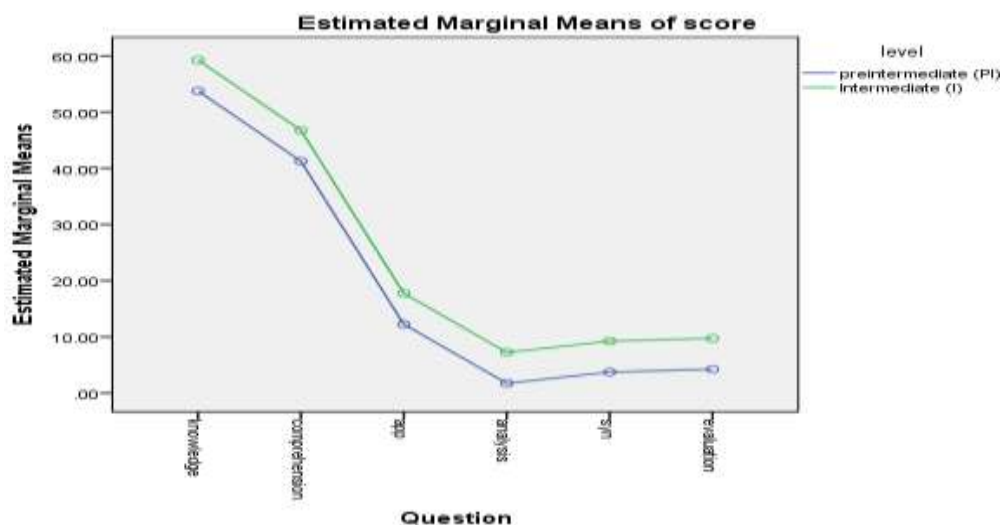


Figure 1: Estimated marginal means of score

Identification of six different types of teacher questions based on Bloom's taxonomy and a subsequent analysis of their frequency distribution delineates that knowledge questions were most frequently used type of question in the pre intermediate class, accounting for 41.13% of all the question types, and the analysis quotation was the least frequency account for 2.12%. This due to students' level. In fact teacher may use these questions to start a classroom discussion and lead the communication or take the discussion to a higher level of thinking. Therefore the use of knowledge question depends on the purpose of classroom questioning and level of the subjects. The study shows that application, analysis, synthesis and evaluation question were not used by teachers observed in the classroom. The nature of the lessons and students' ability may inhibit teachers to use these types of questions. Moreover the response to these questions might call for long expressions and complete sentence which are difficult for the learners at pre intermediate levels to use in the classroom. Besides, these questions take more time to give responses to questions, demand higher mental and problem solving activities. This finding parallels findings obtained in the observation studies with adult language learners (Moritoshi, 2002; Oberli, 2003; Azerefegn, 2008).

Concerning the second research question, the study focused on what is going on the classroom specifically on teacher questioning behavior, what kind of questions was most significant, knowledge or evaluation question. It was found that knowledge question outnumbered evaluation ones. Doff (1998) argues that output may be an important factor in successful second language acquisition. She suggests that the output creates the necessity for the learner to perform a syntactic analysis of the language. If it is true that knowledge questions can be an important tool in language classroom especially in those EFL contexts where classroom provide the only opportunity to produce target language. So a teacher can use knowledge questions to help the learners promote higher levels to answers questions such as synthesis, analysis and evaluation.

With respect to students' perception towards teacher questions, statistical analysis reveals that students reported negative attitude towards their teacher questions in the classroom. Students reported that they do not get opportunity to ask questions. If opportunity to ask questions is not given to the students, this may have a negative impact on language learning. Therefore teachers may provide turns to learners to ask questions. Sometimes students do not like to ask questions, so teachers may encourage their students. In fact these students should be motivated to ask more questions in English class since it is the only condition that provides learners with opportunity. According to respondents, fear of making mistakes and lack of adequate vocabularies are impediments to formulate questions. Thus it may be appropriate to avoid this inhibiting factor from students by using various activities that could help students speak.

The last question of this study was to probe teacher question types at two levels. The statistical analysis indicates that the teacher use different questioning strategies and question types at two levels. In other

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words teacher use more higher order question types in the intermediate level than in the pre-intermediate. Although the frequency of teacher question types did not significantly vary in lower questions (knowledge, comprehension and application) and higher order questions (analysis, synthesis, and evaluation), ANCOVA analysis indicates significant differences between the level and question. This means that students proficiency level is considered to be an important factor in the types of questions the teacher ask in the classroom.

Conclusions

The present study addressed the effects of the types of questions and students perceptions towards their teacher questions. The types of questions asked are determined by the pedagogical purposes and students' level. To facilitate students L2 development, the findings conclude that teachers should not ask only knowledge questions. They should ask questions require elaboration and elicit longer and more syntactically complex response. To bring about more dialogic forms, teachers should help student get opportunity to ask questions, motivate them to ask more questions and use the knowledge questions as a tool to help the learners promote higher levels to answer questions synthesis, analysis and evaluations.

Although it is difficult to generalize from a small- scale study like this, it is believed that this study has been beneficial in raising awareness about the nature of and role of questions in classroom interaction. Thus it is recommended that special attention should be given to the development and the types of questions and questioning strategies in EFL classroom.

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APPENDIX A

TYPES OF QUESTIONS BASED ON BLOOM'S TAXONOMY (1956).

KNOWLEDGE

- Remembering
- Memorizing
- Recognizing
- Recalling identification
- Recalling information
- Who, what, when, where, how? Describe

COMPREHENSION

- Interpreting
- Translating from one medium to another describing in one's own words
- Organization and selection of facts and ideas retell

APPLICATION

- Problem Solving
- Applying information to produce some result use of facts, rules and principle
- How is ----- an example of -----?
- How is ----- related to -----?
- Why is ----- significant?

ANALYSIS

- Subdividing something to show how it is put together finding the underlying
- structure of a communication identifying motives.
- Separation of whole in to component parts what are the parts or features of ----?
- Out line / diagram ----
- How does ---- compare /contrast with ---?
- What evidence can you list for---?

SYNTHESIS

- Creating a unique, original product that may be in verbal form or may be a physical object combination of ideas to form a new whole
- what would you predict /infer from -----?
- What ideas can you add to ---?
- How would you create /design a new ----?
- What might happen if you combined ----?
- What solutions would you suggest for ----?

EVALUATION.

- Making value decisions about issues.
- Resolving controversies or differences of opinion.
- Development of opinions, judgments or decisions.

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- Do you agree that ---?
- What do you think about.-----?
- What is the most important ---?
- Place the following in order of priority ----
- How would you decide about -----?
- What criteria would you use to assess---

APPENDIX B QUESTIONNAIRE

Dear Student,

This questionnaire aims to probe your attitude towards teacher question. Feel free to answer the question. It is believed that your response would help the researcher to get the necessary information. Thank you for taking your valuable time to fill this questionnaire.

PART ONE : Demographic information:

Full name:..... Gender: Male Female..... Level (term):

Age:..... Experience in learning English: year(s)

PART TWO: Answer the following questions as it required

1. The teacher gives me opportunity to ask questions in EFL classes
A. Yes B. No
 2. The English teacher encourages me to answer questions in EFL Classes.
A. Yes B. No
 3. I use English to ask questions in EFL Classroom.
A. Yes B. No
 4. I fear to ask questions in English in the Classroom.
A. Yes B. No
 5. Teacher question promote my language learning.
A. Yes B. No
-

PART THREE: Explain the advantage or disadvantage of teacher questions asked by your teacher in the classroom.

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