

Analysis of the Types of Classroom Questions Which Jordanian English Language Teachers Ask

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Abstract

The present study aimed to explore the types of classroom questions which Jordanian English language teachers ask. The sample of the study consisted of 77 teachers who were randomly selected from different public and private schools in Amman- Jordan. A total of 1574 classroom questions were collected and analyzed using descriptive statistics, *t* test and analysis of variance. The results showed that 80% of teachers' questions were on low thinking levels; 77% were closed-ended questions; and 86% were display questions. The results also indicated that teachers used higher thinking questions, more referential questions, and more open-ended questions at upper basic stage and secondary stage. It was recommended that EFL teachers in Jordan ask different types of questions at each grade level.

Keywords: educational stage, Jordan, questions, teachers

1. Introduction

Teaching is a reciprocal interactive process between teachers and students, which allows them to work collaboratively to achieve the intended learning outcomes of 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. However, some teachers dominate classroom learning by getting students to answer questions that only foster rote memorization and mechanical drilling of certain language tasks. They may spend most of the class time asking questions that do not challenge students' thinking, but mainly aim at recalling information, speech modifications, and error correction.

Researchers used different labels to classify classroom questions. For example, Hussain (2003) classified classroom questions into "closed questions" and "open questions" based on the thinking level expected from the learner. The answers to a *closed* question are usually limited in number, but many answers acceptable for the open question as far as these answers are justified by the student. Naming questions, observation questions, control questions, and pseudo-questions are examples on the former type, whereas the latter type includes reason or analysis questions, evaluation questions, and problem solving questions.

Other classifications of questions include display questions and referential questions (Brock, 1986; Chaudron 1993; Cundale, 2001; and Nunan, 1991). Display questions refer to those to which the teacher already knows their answers, but wants to check whether students can recall specific information taught or not. Examples of display questions include: *What is the past participle of "send"? Where did the old man lose his money? How many cities did the writer visit during his journey?* Referential questions, on the other hand, require students to provide genuine information which neither the teacher nor other students in the class may have. Examples of referential questions include: *which character in the story you admire most and why? Can you end of the story in a different way? How? What would you do if you were in the judge's place?*

Callahan and Clarke (1988) introduced four main types of questions. First, "recall questions" which merely

require learners to memorize the information taught or learned. Second, “convergent questions” which ask students to explain, interpret, give examples, or summarize concepts in their own words. Third, “divergent questions” are those which get at students’ underlying assumptions and beliefs about a topic. Fourth, evaluation questions which require students to make a value judgment, to express opinions, to provide a criticism, or to raise their own questions. They require the highest form of thinking and there is generally no right or wrong answers to evaluative questions.

On the other hand, Day and Park (2005) classified reading comprehension questions into five levels: literal comprehension, reorganization, inference, prediction, evaluation, and personal response. Literal comprehension refers to an understanding of the straightforward meaning of the text, such as facts, vocabulary, dates, times, and locations. Reorganization questions are based on a literal understanding of the text, but they move students from a sentence-by-sentence consideration of the text to a more global view. Inference questions involve students in combining their literal understanding of the text with their own personal knowledge or schema. Prediction involves students combining both their understanding of the passage and their own knowledge of the topic to determine what might happen next or at the end. Evaluation requires the learner to give a global or comprehensive judgment about some aspect of the text. Personal response requires readers to respond with their feelings or emotions for the text and the subject.

It is worth mentioning that the cognitive levels of questions proposed by Bloom (1956) represent the frame of reference for many other classifications systems proposed afterwards (e.g. Brown, 1994; Callahan & Clarke, 1988; Nunan 1991; Pearson & Johnson, 1978; Richards & Lockheart, 1996; and Swaby, 1984). According to these classifications, there are basically six levels of questions: The first three (knowledge, comprehension and application) are considered low-level questions, while the other three (analysis, synthesis and evaluation) are considered high-level questions.

1.1 Context of the Study

Jordan is a country where English is taught as a foreign language as both public and private schools from grade one to grade twelve. There are almost five (45 minutes) English classes per week. Public schools use a centralized EFL curriculum enforced by the Ministry of Education (MoE), whereas private school generally choose or develop their own curricula and textbooks. There is a general tendency in Jordan that teaching and learning at private school is more advanced. This may explain why the number of private schools has rapidly increased lately.

The new EFL curriculum for lower basic stage in Jordan (grades 1-5) is founded on new concepts in the field of teaching and learning. One of these is critical thinking, which typically involves (a) raising a question, (b) gathering information, (c) reaching a conclusion, (d) assessing assumptions and (e) communicating. The teacher’s role is to guide pupils through a set of stages starting from asking questions and finding answers to solving problems. Most critical thinking exercises in the Pupil’s Book are found in the *Read and answer* exercises. Pupils have to go beyond the reading task to answer a question that requires various level of thinking, such as connecting, inferring, analyzing, judging, etc. Examples of these types of questions include: *Where does Omar work? Why is it his perfect job? How long has Omar worked there? Why is the work important? Will they build big shops and hotels? Why? Read again and decide whether a statement is an opinion or fact.* (Harmes, Penn, & Mackay, 2015)

Another example of the new trend is the emphasis on critical reading skills for the upper basic stage EFL students (grades 6-10). This involves identification of what the text tells reflection on what the text does, and inferring what the text means. Teachers are expected to help readers to identify the writer’s purpose, tone and to detect any bias, and to guide them to evaluate what they read. Sample critical reading questions include: *What does the author say? Why does the author say so? What is the purpose? How does the author achieve the purpose? What is the author’s attitude? Does the author give evidence to prove the point? Do you agree/ disagree with the author? Why?* (Johnson, 2013).

Critical thinking has also become a focus in the EFL curriculum for secondary stage (grades 11 and 12) along with the other language or study skills such as listening, reading, writing or speaking. For example, twelve grade EFL students are involved in the process of analyzing, synthesizing and evaluating information they get from different sources. There are also many opportunities for students to practice critical thinking skills through asking brainstorming questions, comparing and contrasting, opposite thinking, and synthesizing. Teachers are expected to ask different types of questions that promote critical thinking abilities of their students such as: *Why does the author/ speaker say so? How does he/she achieve their purpose? What is his/her attitude? What evidence does he/she provide? What would happen if things were different? Write a letter to the head teacher of*

their school explain why they think it would be a good idea to include sign language in their school curriculum. Look carefully at the two photographs on the page and say in what way(s) they are similar or dissimilar. Explain your answer. (Kilbey, Peltert, & Greet, 2015).

1.2 Definitions of Terms

The following terms are operationally defined to serve the purpose of this study

EFL: This term stands for teaching English as a foreign language. In the present study, it refers to teaching English as a foreign language where English is treated as a school subject rather than means of communication outside school.

Teachers' questions: The questions which EFL teachers ask during the class period, or the questions which are included in teacher made tests. These questions are classified into the following three categories:

- Display questions that refer to questions whose answers are known to the teacher, but he wants to check whether students can provide them or not; "referential questions" which elicit genuine or unfamiliar information to other participants in the class.
- Closed questions whose answers are usually limited in number, and open questions which have many acceptable answers;
- Low-level questions (knowledge, comprehension and application) and high-level questions (analysis, synthesis and evaluation).

Educational stage: This refers to one of the three educational stages in Jordan: lower- basic stage (grades 1-5); upper basic stage (grades 6-10); and secondary stage (grades 11 and 12).

1.4 Purpose and Questions of the Study

The main purpose of this study was to investigate the types of questions Jordanian EFL teachers ask in the classroom. More specifically, the study aims to answer the following four questions:

1. What is the distribution of the types of classroom questions that Jordanian English language teachers ask?
2. Are there any statistically significant differences ($\alpha = .05$) between the mean scores of teachers, which can be attributed to school?
3. Are there any statistically significant differences ($\alpha = .05$) between the mean scores of teachers, which can be attributed to teaching experience?
4. Are there any statistically significant differences ($\alpha = .05$) between the mean scores of teachers, which can be attributed to educational stage?

2. Related Studies

Lynch (1991) reviewed a number of researchers who investigated the balance between referential questions and display questions in the foreign language classroom. He found out that only 14% of the questions asked by teachers at class are referential questions, although 76% of the questions asked in real life conversations are of this type. Cundale (2001) also carried out a collaborate study with two teachers at the Anglo Mexican Cultural Institute (Puebla), which aimed to identify the types of questions teachers ask their students. Findings of the qualitative and quantitative data revealed that teachers used a majority of referential questions and they favored the use of open over closed questions. Shomoossi (2004) conducted a qualitative-quantitative study on five EFL instructors in two Iranian Universities in Tehran. Forty reading comprehension classes were observed by the researcher during a two-month period to explore recurring patterns of teachers' questioning behavior and their effects on classroom interaction using the non-participant observation technique. The findings indicated that display questions were used by instructors more frequently than referential questions. It was also concluded that not all referential questions could create optimal interaction.

Some researchers studied teachers' use of closed and open questions by teachers. One of them was Boyd and Rubin (2006) who examined English language classroom talk in grades four and five. Analysis of extended classroom revealed that both text-based display questions and open-ended questions elicited elaborated responses. It was concluded that asking open-ended questions was not a necessary condition for triggering student utterances. However, the distinguishing characteristic of teacher questions was found to be their ability to ask probing questions that elicited more mature answers. Erdogan and Campbell (2008) analyzed the question levels of constructivist teaching practices conducted one of these studies. Twenty-two in-service teachers from north-central Iowa in the mid-western USA were videotaped. Through both quantitative and qualitative methods,

the findings revealed that teachers used a significantly greater number of open-ended questions than closed questions. Another study was carried out by Kucuktepe (2010) on 156 elementary school teachers working in 20 elementary schools in 5 different districts of Istanbul, Turkey. Teachers' questions during a total of 492 class hours were recorded. Data were analyzed using percentages, frequencies and mean scores. The teachers asked 4,467 questions (about 10 questions per class hour) which were classified as open-ended and closed. The results showed that 86% of all the questions asked by the teachers were closed, while the other 14% were open-ended.

Other researchers investigated the distribution of high and low level teachers' questions. For example, Wolf, Crosson, and Resnick (2006) conducted a study which aimed to analyze teacher talk and classroom questions. Twenty-one teachers and four hundred and forty one ESL students from ten elementary and middle schools in three urban districts in the USA participated in the study. The reading comprehension lessons were coded and transcribed to identify teachers' levels of questions. Results showed teachers engaged students in high-level thinking questions, which allowed for effective students' participation in classroom talk and for a rigorous lesson. Al-Subaie (2007) investigated the types and levels of questions raised by 19 EFL teachers in Tabuk, Saudi Arabia. Six-hundred and sixty four questions were collected through classroom observations and analyzed using frequencies, percentages and chi-square. The results showed that about 63% of teachers' questions were on lower levels and only 3% were on the level of evaluation. Scheiner and Gorsetman (2009) studied the types of questions that thirty-one teachers in four private preschools in Manhattan ask to preschool children during classroom book reading. Results showed that many teachers did not find it necessary to ask inference questions or analytical questions to young children. Results also indicated that there were no differences between types of teacher questions due to their educational level, or years of teaching experience. In another study, Gillies (2011) analyzed the types of questioning strategies Australian teachers use to promote thinking, problem-solving and reasoning during small group discussions. Teacher questions and a sample of a small group discussion were audio taped, fully transcribed and analyzed. The results showed that the teachers used a variety of questions, ranging from simple to higher-level questions that required children to provide reasons, make connections and think metacognitively. Although all those questions types encouraged responses that were informative and detailed, it was the higher-level questions which helped children to connect information or ideas that elicited explanations, reasons and justifications. As a result, the children adopted many of those ways of thinking and talking and used them in their interactions with each other. It was concluded that teachers need to explicitly guide and scaffold these discourse patterns in their interactions with their students to promote higher thinking skills. Khan and Inamullah (2011) also explored the levels of questions Pakistani teachers ask at secondary stage using Bloom's taxonomy. Twenty teachers of different subjects teaching at secondary stage in Peshawar were randomly selected as sample of the study. Teachers were observed using an observational guide and audio recording. The result of the study showed that among 267 questions 67% were knowledge based, 23% were comprehension based, 7% were application based, only 2% were analysis based and 1% was synthesis based, and 0% evaluation based questions.

In Jordan, several studies have been conducted on classroom questions. For example, Asfoor (1988) studied the common types of classroom question used by UNRWA teachers in Jordan. The sample of the study consisted of 45 teachers at the upper basic stage. Data were collected via classroom observations (90 observations). Percentages and frequencies were used to analyze the data of the study. The results of the study showed that 95% of teachers' questions were on lower levels while only 5% were on higher levels. Al-Nayef (1989) investigated the cognitive levels of questions asked by EFL teachers to determine their effect on reading achievement of eleventh grade EFL student in Al-kourah, Jordan. Means and standard deviations were used to analyze the results of the post test. Results showed that using higher level questions significantly improved the reading comprehension of students. Al-Rayyan (1995) investigated the effect of questions level on the reading comprehension of seventh grade student in al-Balqa, Jordan. Students were asked to answer high-level questions (analysis and evaluation) and low-level questions (knowledge and comprehension). Means and standard deviation were used to analyze the data of the study. Results showed that using high-level questions significantly improved the reading comprehension of learners. Shatnawi (1998) explored the types and levels of question raised by EFL teachers in Irbed, Jordan. The sample of the study consisted of 20 teacher at the secondary stage. Means and standard were used to analyze 243 questions collected through class room observations. Results showed that the majority of teachers used WH, yes/no, t/f and multiple choice questions that were at of the lower levels comprehension. Hamdan (2005) studied the types and levels of questions EFL teachers in al-Mafraq, Jordan ask. Thirty tenth- grade teachers were randomly selected. Percentages and frequencies were used to analyze the data of the study. Results showed that more than 50% of teachers' questions, regardless of teaching experience, were on the lower cognitive levels and the majority of those questions were closed question. El-Shara (2013) analyzed the assessment questions included in six mathematics textbooks for grades 4-6 basic stage in Jordan. The

questions were classified based on the six cognitive levels of Bloom's taxonomy. The results showed that the percentage of lower order thinking skills was 66.64% and 11.21% of higher order thinking skills. Freahat and Smadi (2014) also analyzed the thinking levels of the reading comprehension questions in *Action Pack II*, *Action Pack 12 textbooks* for the secondary stage students and the *Headway Plus text* for first year university students in Jordan. Based on Bloom's Taxonomy of six levels of cognition, the percentages, frequencies and Chi square (χ^2) were used. The results revealed that low-level questions were dominant in both stages, but there was more concentration on higher-level thinking questions in the secondary.

The review of literature above shows that many studies have been conducted on the types classroom questions. The majority of them compared low level with high-level questions; display questions with referential questions; or closed question with open questions. The results of those studies indicated that only little attention has been given to investigating the types of EFL teachers' questions, and only few studies have explored the types of questions asked by EFL teachers in Jordan (Al-Nayef, 1989; Asfoor, 1988; Hamdan, 2005; and Shatnawi, 1998).

In an EFL classroom, as opposed to those in the ESL or first language classroom, students virtually have little (or no) chance to communicate in English outside the classroom. Teachers' questions can compensate for this lack of real life communication. Therefore, teachers need to be aware of the importance of asking quality questions during the class time.

The present study shares some aspects of those studies, but it differs in that all of the six types of questions are compared simultaneously. It also compares teachers' questions in light of some other variables such as type of school (private and public), teachers' experience (long, average, and short), educational stage (lower basic, upper basic, and secondary). Therefore, the findings of this study may give EFL teachers insights into the most common types of questions asked in the English classes in Jordan. These findings may also help teachers realize how much their own questions address different cognitive levels of their students. Curricula developers and textbook authors may also find the results of this study important to reconsider the learning materials and teaching methods presently used at schools in Jordan.

3. Method

The population of the study consisted of all classroom questions which teachers of English as a foreign language (EFL) asked. Seventy-seven (77) teachers, teaching grades 1-12, were randomly selected from 20 private and public schools in Amman- Jordan. Their teaching experiences ranged from one year to seventeen years, which were classified as follows: short experience (1-5 years); average experience (6-10); and long experience (11 years or more). To collect data, the researcher and another observer made one classroom visit to each teacher and wrote down the questions raised by the teacher during the class period. One teacher- made test was also randomly selected from teachers' school records. The resulting pool of teachers' questions was 1574 questions. The researcher and another EFL specialist independently analyzed a random sample of 265 questions (17%) by using a special coding worksheet that was validated by a panel of EFL experts. Each question was classified as open-ended or closed; referential or display; and low-level (knowledge, comprehension, or application) or high-level (analysis, synthesis, or evaluation). To establish reliability of the two coders, Holsti's inter-coder reliability formula was applied:

$$C.R. = 2M/N1 + N2,$$

where "M is the number of coding decisions on which the two judges were in agreement, and N1 and N2 referred to the number of coding decisions made by judges 1 and 2, respectively. The calculated percentage of agreement between the two coders was .95. This percentage was considered appropriate to conduct the study.

4. Results

To answer the first question: *What is the distribution of the types of classroom questions which Jordanian English language teachers ask?*, frequencies and percentages were calculated. Results are presented in Table 1

Table 1. Frequencies and percentages of question types used by EFL teachers in Jordan.

Question type	frequency	percentage
Low-level questions	1261	80.10%
High-level questions	313	19.90%
Total	1574	100%
Closed questions	1212	77.0%
Open-ended questions	362	30%

Total	1574	100%
Display questions	1350	85.76%
Referential questions	224	14.24%
Total	1574	100%

The results of Table 1 show that about 80.10 % of teachers' questions were low-level questions, 77% were closed questions, and 85.76% were display questions. This indicates that teachers rely heavily on questions that require students to memorize or retell information more than questions that encourage them to reflect on, analyze, reconstruct and evaluate information. These results are consistent with the results of studies conducted by other researchers (Al-Rayyan,1995; Al-Subaie,2007; Asfoor,1988;; Hamdan,2005; Khan and Inamullah,2011, Kucuktepe,2010; Lynch,1991; and Shatnawi,1998), but they are inconsistent with those of Boyd and Rubin,2006; Cundale, 2001; and Gillies,2011.

In order to answer the second question: *Are there any statistically significant differences ($\alpha = .05$) between the mean scores of teachers, which can be attributed to school?*, means, standard deviations . Results are presented in Table 2.

Table 2. Means, standard deviations and T-test results of public and private schools EFL teachers with regard to their use of each question type

Type of questions	School	N	Mean	Standard Deviation	t	df	Sig. (2-tailed)
Open-ended questions	Public	36	4.36	3.016	-0.744	75	0.459
	Private	41	5	4.307			
Closed questions	Public	36	14.64	7.522	-1.34	75.00	0.184
	Private	41	16.83	6.826			
Display questions	Public	36	15.94	7.841	-1.81	75.00	0.074
	Private	41	19.02	7.066			
Referential questions	Public	36	3.03	2.873	0.29	75.00	0.771
	Private	41	2.8	3.71			
Low-level questions	Public	36	15.6944	7.33609	-0.78	75.00	0.435
	Private	41	16.9756	6.98745			
High-level questions	Public	36	3.1389	2.91942	-1.92	75.00	0.059
	Private	41	4.878	4.69678			

* The mean difference is significant at ($\alpha = .05$)

The results of Table 2 show that there are differences between the mean scores of private and public school teachers with regard to the type of questions asked. To test if those differences were significant or not, t test was used. The table shows that the t values (-0.744; -1.34; -1.81; 0.29, -0.78; -1.92) were statistically insignificant ($\alpha = .05$). This may indicate public and private school teachers use the same methods of teaching and assessment to achieve the same the intended learning outcomes of teaching English in Jordan. It may also indicate that teachers in both sectors join the same teacher preparation programs.

To answer the third question: *Are there any statistically significant differences ($\alpha = .05$) between the mean scores of teachers, which can be attributed to teaching experience?*, means and standard deviations were used. Results are presented in Table 3.

Table 3. Means and standard deviations of the types of questions used by EFL teachers with regard to teaching experience

Types of questions	Teaching Experience	N	Mean	Standard Deviation
Closed questions	Short	21	14.71	5.75
	Average	30	15.43	7.05
	Long	26	17.12	8.39
	Total	77	15.81	7.20
Open-ended	Short	21	4.10	3.81

questions	Average	30	4.30	3.87
	Long	26	5.65	3.51
	Total	77	4.70	3.75
Display questions	Short	21	16.38	6.41
	Average	30	17.33	7.00
	Long	26	18.85	8.98
Referential questions	Total	77	17.58	7.55
	Short	21	2.43	3.14
	Average	30	2.40	3.31
Low-level questions	Long	26	3.88	3.40
	Total	77	2.91	3.33
	Short	21	14.86	5.95
High-level questions	Average	30	16.63	6.50
	Long	26	17.31	8.62
	Total	77	16.38	7.13
High-level questions	Short	21	3.95	5.03
	Average	30	3.07	3.49
	Long	26	5.31	3.51
High-level questions	Total	77	4.06	4.04

The results of Table 3 show some differences in the mean scores of long, average and short experience teachers. To test if those differences were statistically significant or not, one-way analysis of variance ANOVA was used. The results are presented in Table 4

4. Results of Analysis of Variance (ANOVA) Test Regarding Teaching Experience

Type of question	Source of variance	Sum Squares	df	Mean Square	F	Sig.
Closed questions	Experience	73.77	2	36.89	0.71	0.497
	Error	3862.31	74	52.19		
	Total	3936.08	76			
Open-ended questions	Experience	36.14	2	18.07	1.30	0.280
	Error	1031.99	74	13.95		
	Total	1068.13	76			
Display questions	Experience	73.70	2	36.85	0.64	0.530
	Error	4257.00	74	57.53		
	Total	4330.70	76			
Referential questions	Experience	37.37	2	18.68	1.72	0.186
	Error	803.00	74	10.85		
	Total	840.36	76			
Low-level questions	Experience	73.00	2	36.50	0.71	0.494
	Error	3795.08	74	51.29		
	Total	3868.08	76			
High-level questions	Experience	70.32	2	35.16	2.23	0.115
	Error	1168.36	74	15.79		
	Total	1238.68	76			

* The mean difference is significant at ($\alpha = .05$)

Table 4 shows that the f values (**0.71;1.30 ; 0.64;1.72 ; 0.71; 2.23**) were statistically insignificant ($\alpha = .05$). This result agrees with the results of Hamdan (2005), and Scheiner & Gorsetman (2009). These results may indicate that teachers do not join in-service teacher training courses or workshops on asking effective classroom questions; especially if the workshops are voluntary. It may also indicate that teachers, regardless of their teaching experiences, share the same beliefs about the types of questions to be asked.

In order to answer the fourth question: *Are there any statistically significant differences ($\alpha = .05$) in the mean*

scores of teachers, which can be attributed to educational stage?, means and standard deviations were calculated. The results are presented in Table 5.

Table 5. Means and standard deviations of the types of questions asked by EFL teachers with regard to educational stage

Type of questions	Educational Stage	N	Mean	Standard Deviations
Closed questions	Lower-basic	28	15.11	6.08
	Upper basic	34	15.47	7.70
	Secondary	15	17.87	8.02
	Total	77	15.81	7.20
Open-ended questions	Lower-basic	28	2.89	2.51
	Upper basic	34	5.97	4.12
	Secondary	15	5.20	3.67
	Total	77	4.70	3.75
Display questions	Lower-basic	28	16.21	6.81
	Upper basic	34	17.53	7.77
	Secondary	15	20.27	8.13
	Total	77	17.58	7.55
Referential questions	Lower-basic	28	1.79	2.10
	Upper basic	34	3.91	4.14
	Secondary	15	2.73	2.49
	Total	77	2.91	3.33
Low-level questions	Lower-basic	28	15.54	5.69
	Upper basic	34	16.53	7.91
	Secondary	15	17.60	7.97
	Total	77	16.38	7.13
High-level questions	Lower-basic	28	2.39	2.79
	Upper basic	34	4.91	4.85
	Secondary	15	5.27	3.01
	Total	77	4.06	4.04

Table 5 shows that there are differences between the mean scores with regard to the distribution of each type of questions. To find out whether these differences were significant or not, one-way analysis of variance ANOVA was used. The results are shown in Table 6

Table 6. Results of One -way Analysis of variance (ANOVA) with regard to educational stage

Question type	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
Closed questions	Educational stage	81.20	2	40.60	0.78	0.462
	Error	3854.88	74	52.09		
	Total	3936.08	76			
Open-ended questions	Educational stage	150.08	2	75.04	6.05	*0.004
	Error	918.05	74	12.41		
	Total	1068.13	76			
Display questions	Educational stage	160.58	2	80.29	1.43	0.247
	Error	4170.12	74	56.35		
	Total	4330.70	76			
Referential questions	Educational stage	69.98	2	34.99	3.36	*0.040
	Error	770.38	74	10.41		
	Total	840.36	76			
Low-level questions	Educational stage	43.04	2	21.52	0.42	0.661

	Error	3825.04	74	51.69		
	Total	3868.08	76			
High-level questions	Educational stage	124.33	2	62.16	4.13	*0.020
	Error	1114.35	74	15.06		
	Total	1238.68	76			

* The mean difference is significant at ($\alpha = .05$)

Table 6 shows that the f values (6.05; 3.36; 4.13) regarding teachers' usage of open-ended questions, referential questions and high-level questions respectively were significant ($\alpha = .05$). To see in favor of who (secondary, upper basic or lower basic stage teachers) those differences were, Tuckey test was used. The results are shown in Table 7.

Table 7. Result of Tuckey test with regard to the educational stage

Type of question	Educational stage	Lower-basic	Upper basic
Open-ended questions	Upper basic	-3.08*	
	Secondary	-2.31	0.77
Referential questions	Upper basic	-2.13*	
	Secondary	-0.95	1.18
High-level questions	Upper basic	-2.52 *	
	Secondary	-2.87 *	-0.35

*The mean difference is significant at ($\alpha = .05$)

The results of Tuckey test show that upper basic stage teachers used open-ended questions significantly more often ($M=5.97$) than lower basic stage teachers ($M=2.89$). The results also show that the upper basic stage teachers used referential questions significantly more often ($M= 3.91$) than lower basic stage teachers did ($M=1.79$). As for the cognitive level of questions, secondary stage teachers and upper basic stage teachers used greater number of high-level questions ($M= 5.27$ and $M= 4.91$ respectively) than lower basic stage teachers did ($M=2.39$). These results indicate that, in general, upper basic stage teachers use high cognitive level questions, referential questions, and open-ended questions more than lower basic stage teachers do. The results also indicate that the higher the educational stage is; the more teachers emphasize high cognitive skills. These results partially agree with those of Freahat and Smadi (2014).

5. Discussion

As reported in the results section, almost 80% of the questions teachers used in the classroom did not address high-level-thinking skills of learners. Regardless of their teaching experience, school type, or educational stage, teachers emphasized using lower level questions, closed questions and display questions more than the other three types. More specifically, the results in Table 1 show that 80.10 % of teachers' questions were low-level questions, 77% were closed questions, and 85.76% were display questions. This indicates that majority of teachers' questions are not thought provoking or analytical, and they are unlikely to help students make inferences (*see Appendix 1 as an example*).

One possible explanation of these results could be that EFL teachers in Jordan were not trained to use different questioning strategies during their pre-service or in-service teacher training. A review of teacher education programs offered by Jordan universities revealed that less than 10% of the syllabus is dedicated for practicum. On the other hand, only less than 7% of the courses deal with evaluations and assessment strategies. Ideally, pre-service teacher training and internship are designed to help prospective teachers to reflect on school classes, negotiate their observations with cooperating teachers, and develop their own teaching practices to respond to students' different learning styles and preferences. Student-teachers are encouraged to plan their teaching with experienced teachers, especially in writing up to write their own exams. They are also recommended to make use of the sample tests which are provided in the teacher's book (teacher's guide) for each grade level, because the MoE adopts a centralized curriculum for all schools in Jordan.

According to Day and Park (2005) and Hussain, (2003), higher-order questions, as opposed to lower-order questions, encourage learners' genuine language production. Effective teachers usually ask high-level questions

and probing questions to find out if a student's answer reflects understanding, or it is only a matter of chance. Khan and Inamullah (2011) also believe that teachers ask questions to diagnose difficulties, help children reflect on what they learn, develop thinking skills, provoke discussion and show interest in pupils' ideas. However, this does not mean that higher-order questions should replace lower-order questions. Teachers can use the two levels of questions during the same class period, so that students are exposed to all thinking levels necessary for effective learning

The results also reveal that referential questions are underemphasized by EFL teachers, although these questions elicit longer and more authentic responses than display questions do. Referential questions involve the exchange of information and negotiation of meaning among all class participants, which can help teachers get the necessary feedback for eliciting more information from students (Cundale, 2001; Nunan, 1987; and Thornbury, 1996). Therefore, referential questions should occur more frequently in a lesson with a communicative focus as expected by the EFL curricula in Jordan. The results also showed that teachers asked closed questions more than open-ended questions. This may imply that EFL teachers think students are unable to provide their own answers since they are non-native speakers of English. EFL teachers might be hesitant to ask more open questions because these questions usually time consuming and more difficult to evaluate. Another reason could be that teachers are inclined to assign students grades more than probe or negotiate answers because only grades count in the final evaluation of students' achievement in Jordan. Unfortunately, this would deprive students of the pleasure of providing approximations that show their own interpretation, abilities of processing of information, and expressing themselves more freely as independent learners. Because open questions provide the respondent with the greatest opportunity to participate, teachers should use them more often. Encouraging critical thinking, eliciting students' personal experiences, and responding to individual preferences of students are valid reasons for emphasizing both types. (Brock, 1986; Cundale, 2001; Nunan, 1987; and Thornbury, 1996).

Low-level questions, such as knowledge and comprehension, are direct and probably most frequently asked questions. They are also easier for students to answer, which encourages the majority of students to participate. This may explain why teachers of lower basic stage students used them to a large extent. This explanation is supported by Scheiner and Gorsetman (2009) who found that elementary school children had a harder time answering non-literal questions about text compared to literal questions. Studies involving older children have also emphasized the importance of asking high level question at advanced stages. For example, Freahat and Smadi (2014) found that low-level questions were dominant in both secondary stage textbooks and first year textbooks at the university level, but there was more concentration on higher-level thinking questions in favor of secondary school textbooks.

6. Conclusions

It can be concluded from the results of this study that teachers can develop students thinking abilities by asking different types of questions to account for individual differences among learners. Regardless of the types of questions asked, these questions must not only be appropriate to the level of the learners, but also challenge them to compare, evaluate, or draw inference from the available input. If teachers do not ask questions on different levels of thinking, they may not use their full potentials as able learners. Higher order thinking skills, referential questions and open-ended questions are necessary to provide students with the opportunity to participate more freely and creatively to meet the aspirations of curricula.

Based on the abovementioned results, it can be recommended that critical thinking skills, learning autonomy, reflective learning skills, and problem-solving skills be included in classroom teaching and learning since they represent major highlights of the educational reform plan in Jordan. Teachers need to ask questions that go beyond a literal understanding of a text, develop students' higher thinking skills necessary for long life learning. The Ministry of Education is also recommended to hold special workshops to train EFL teachers to use different types of classroom questions and make them an integral part of exams for all educational stages. Other researchers are also recommended to investigate the effect of using a variety of teachers' questions on the achievement of EFL students of all grade levels.

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Appendix 1

Sample teachers' questions

What's the title of unit 15?

What's the meaning of "ask and answer"?

When do you use water?

What's the meaning of "planet"?

Who can describe this picture?

What do we mean by "smuggling"?

How do we form adverbs?

He "ate" or "eats"?

Who is going to put "sudden" in a useful sentence?

Have you ever won a competition?

How often do you play basketball?

Why did you choose this sport?

Imagine that Omar is here now, write down any questions you want to ask him about his favorite sport ?

How many horses are there?

What can you see in this picture?

What is the meaning of "Jordan Valley"?

Why didn't they use camels instead of horses?

What is the meaning of "sinking", "tourists", "waving", and "coastguard"?

What is the title of the lesson?

How did they save the young man's life?

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