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A QUANTITATIVE STUDY ON TEACHER DECISION MAKING BEHAVIOR IN EFL CLASSES

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ÖZET
Bu makale Çukurova Üniversitesinde yapılmış olan ""Reflecting on Teaching: Interactive Thoughts and Decisions of Experienced and Novice EFL Teachers"başlıklı daha geniş bir doktora çalışmasının bir parçasıdır. Bu nicel çalışma esasen öğretmenlerin ders sırasında gözlemlemiş oldukları öğrenci performans göstergelerine (ipuçları) karşılık vermiş oldukları etkileşimli kararları incelemektedir. Çalışmanın genelinde video, çağrışım tekniğine dayalı görüşme, yarı yapılandırılmış görüşme, ders planları, sınıf oturma planı, ve snake aktivetesi kullanılarak veriler toplanmıştır. Rakamsal değerler ve ilgili X2 (ki kare) değerleri tablolarda sunulmuştur. Sonuçlar bu çalışmaya katılan deneyimli öğretmenlerin öğrenci performans göstergeçlerine karşılık verirken daha fazla ve değişik öğretimsel hareket kullandıklarını da ortaya koymuştur. Diğer yandan bu çalışmaya katılan hem deneyimli hem deneyimsiz öğretmenlerin sınıf içinde karşılaştıkları öğrenci performans göstergeçlerini tanıyabildikleri saptanmıştır. Bu çalışmanın sonuçları sadece hizmet içi öğretmen eğitimi programları için değil aynı zamanda öğretmen yetiştirme programları için de bir takım değişiklikler ve yenilikler önermektedir.

ABSTRACT
This article is one part of a larger doctoral study titled "Reflecting on Teaching: Interactive Thoughts and Decisions of Experienced and Novice EFL Teachers" conducted at Çukurova University. The study is concerned with the instructional decisions EFL teachers make in the class (i.e., interactive decisions). This quantitative study mainly focuses on interactive decisions of teachers in relation to student performance cues they observed in the class. Four novice and four experienced EFL teachers participated in the study. The data were collected through videotaping procedure, stimulated recall technique, semi structured interview, lesson plans, classroom maps, and snakes. The numerical data and corresponding X2 values were presented in tables.The results have indicated that the experienced teachers employed a wider set of instructional actions in response to the student performance cues. However, both the experienced teachers and the novices were able to recognize student performance cues they face in the class..The results of the study suggest some significant implications not only for in-service teacher training programs but also for pre- service teacher training programs.

1.Introduction

The classroom is the crucible place- where teachers and learners come together to initiate learning process. Both teachers and learners do not, however, enter the class empty-handed: students bring with them their whole experience of learning and of classroom life together with their reasons for being there and their own particular needs which they hope to be satisfied. The teacher also brings his or her experiences of learning, teaching and of life, too. No matter what they bring, everything depends on how they react to each other when they all interact in the class. Even though teachers use the same materials, give the same lessons, or even sometimes do the same exercises, there seem to be some basic differences about what is really going on in those classes. On the surface, the textbook item seems to constitute the lesson but real learning takes place as a result of the interactions among the students and teacher. What happens in the classroom will certainly determine what learning opportunities learners will get **(**Allwright & Bailey, 1991; Gaies, 1980; Woods, 1991, 1996).

Freeman (1989) believes that teaching is a dynamic decision-making process. In line with this belief, Shavelson (1983) claims that decision making is integrated into teaching in a way that it is described as the most important professional activity a teacher does every day while planning the lesson, teaching in the class, and evaluating the lesson. That is to say, instructional decisions constantly operate before, during, and after teaching, respectively as pre-active, interactive, and post-active decisions.A lesson is actually co-produced by the teacher and the learner. That is to say, we, as teachers, may change our instructional behavior in the classroom due to some reasons such as student expectations, student behavioral cues (i.e., errors, questions, etc.), our prior teaching experiences, and so forth (Artiles, Mostert, & Tankersley, 1994; Borko & Shavelson, 1990; Johnson, 1992; Shavelson, 1983).

Most of the research on teachers' decisions comes from general education. For example, Westerman's study (1991), on the differences between novice and experienced teachers' interactive decisions, shows that experienced teachers are more aware of the students in the pre-active phases. Moreover, experienced teachers are found to monitor more often for student cues such as student errors or questions during the interactive phase.

Some recent studies report that student cues are the most frequently identified antecedents for interactive decisions of teachers (Borko & Shavelson, 1990; Johnson, 1992, 1999). In these studies, teachers are observed to rely on different types of student cues such as disruptive behavior, inattentiveness, incorrect or incomplete answers, unsatisfactory work, and apparent lack of understanding. It is also emphasized that thinking about instructional processes and strategies -such as the nature of questions, explanations, reinforcement, review, sequencing, pacing activities and transitions between the activities- constitute the second largest category of antecedents for interactive decisions of teachers. However, content or subject matter and instructional objectives represent the smallest percentages of teachers' statements about their interactive thoughts (Borko & Shavelson, 1990; Johnson, 1992, 1999).

Johnson (1992, 1999) also analyzes student performance cues, teachers' instructional actions in response to these cues, and teachers' interactive decisions among pre-service teachers. She notes that pre-service teachers use more student responses that

are elicited rather than initiated and that they employ more instructional attention to errors and deficient responses, while initiated and elicited responses receive less attention. The study also highlights that pre-service teachers are primarily affected by unexpected student responses and the need to control the flow of instructional activities while making interactive decisions in the class. Another finding reported by Johnson (1992, 1999) indicates that majority of their instructional decisions are concerned with student understanding, motivation and involvement, and instructional management.

Similarly, a group of further studies are conducted to explore interactive decisions with regard to social studies instruction among teachers teaching a social studies unit. These studies yield that teachers use the cues of student participation and involvement in the class to judge how well their lessons were progressing. Another finding reveals that the correlation between a measure of the complexity of teachers' interactive decisions and measures of student achievement and attitude are negative. In particular, students' achievement and attitude scores are seen to be lower in situations in which teachers report considering alternative teaching strategies and deciding not to change their behavior (Borko & Shavelson, 1990).

1.1 Aim of the Study

Many decisions made in the class are not simple matters in which teachers identify a situation, recall, and apply the correct course of the action. Teaching judgements and decisions cannot be made on an individual basis since every dealing of the teacher with one student will certainly affect the other students in the class in one way or another, which increases the complexity and stress of the situation (Johnson, 1999; Halkes & Olson,1984; Pratte, 1986). Therefore, this particular study is conducted to explore the nature of teacher decision making in the EFL classes from the teachers' perspective. The ultimate purpose is to identify and compare the student performance cues and teachers' instructional actions in response to these cues.

2. Methodology

2.1. Research Context and Participants

The study is one part of a larger doctoral dissertation conducted at the Foreign Language Center (YADIM), Çukurova University in 2001. The center provides an extensive English language learning program for the students of Çukurova University.

The participants of the study are EFL teachers who were, at the time of the study, teaching at YADIM, Çukurova University. S*tratified random sampling* was employed because of the subgroups included in the study. The teachers in the study can be divided into two subgroups, *novice and experienced teachers,* in terms of the years of experience teachers have. *Novice teachers* are those who **have been** teaching English for two years or less, and *experienced teachers* are those who **have been** teaching English at least for five years. 4 experienced and 4 novice teachers participated in the study voluntarily.

2.2 Data Collection and Instruments

Throughout the study, the qualitative method allows us to employ a variety of reflective data collection tools and methods of analysis. Therefore, different reflective instruments were conducted throughout the study to collect more reliable and accurate data on the interactive thoughts and decisions of teachers : the stimulated recall technique, video-taping, semi- structured interview, snake, audio-taping of the stimulated recall sessions, transcripts of video and audio-tapes, classroom maps, lesson plans, and teaching materials.

Lessons for each teacher were video-taped, in random order, three times at regular intervals in the same semester: at the beginning, in the middle, and at the end of the semester. Teachers were video-taped in their regular classes. Prior to the stimulated recall interviews, the video-taped data were coded to identify and classify student performance cues, teacher instructional responses to these cues, their interactive decisions, and their concerns while making any kind of decision in the class, adapting a standard classification scheme developed by Fogarty, Wang,and Creek (1983) (see Appendix 1).

2.3. Data Analysis

In the data analysis part, quantitative data on the student performance cues the teachers have utilized in the class, and the instructional actions they have employed in response to these cues have been presented. The researcher coded the data and also the participants confirmed the codes throughout the stimulated recall sessions.The quantitative data have been presented using the frequencies of the categories and the corresponding percentages. In addition, a Chi-square (X^2) test was conducted to see the significance of the differences observed between the experienced and novice teachers. X^2 values have been calculated using Statistical Package of Social Sciences (SPPS) for Windows, Release 12.0with the help of a statistician.

3.Discussion of the Findings

3.1. Student Performance Cues

Table1 presents the percentage frequencies of student performance cue categories utilised by both experienced and novice teachers during their interactive teaching in the class. As Fogarty et al. (1983) reported, some remarkable differences have been noted between the groups of the teachers. For example, the experienced teachers were observed to make use of the category Attention almost twice as much as the novice teachers. Kezban, however, seems to be the only experienced teacher who used the Attention category the least among all the teachers in the study. Moreover, the experienced teachers also employed the Deficient Response, Initiations and Errors categories more frequently than the novices. However, novices were found to be more interested in the Incomplete Answer, Elicited Response and Noise categories compared to the the experienced teachers. All these differences were also statistically supported by the Chi-square(X^2) values calculated for each category (see Table 1).

Overall, the frequencies reported in Table 1 for the utilization of the student performance cues, have revealed significant differences between the groups of the teachers (X^2: 225.516 $p \leq 0.001$) except for the category of Error. In general, the

experienced teachers utilized more student performance cues than the novice ones at the stimulated recall interviews.

Parallel to the findings reported by Fogarty et al. (1983), some differences have appeared among the individual teachers within each group in terms of the use of the student performance cues, as well. For example, two of the experienced teachers, Kumru and Kezban were concerned with the Errors category more than the other two experienced teachers, and they did not hesistate to use the mother tongue while correcting these errors. However, the other experienced teachers, Selen and Merve, completely avoided using the mother tongue while correcting students' errors. Another remarkable finding is that the experienced teachers Selen and Merve did not report utilising the category of Noise at all. This may be due to the fact that they were teaching graduate classes throughout the data collection period.

Similarly, the most inexperienced teacher Ece was seen to be interested in correcting errors and reducing the amount of the noise in the class much more than the other novices in the study. This may be due to the fact that she was trying to act according to some teaching principles she had been taught at the faculty. Another novice teacher, Zeynep favored Deficient Response category more than the other novices due to the nature of the course; she taught reading passages in all three video-taped lessons. Moreover, she was interested in the comprehension of the passages more than the management of the class.

As for the similarities between the groups observed in Table 1, the category of Elicited Response was found to be the most frequent student performance cue category among all the participants, which indicates that all the participants are sensitive about the students' performance in the class.

Table 1. Percentage Frequencies of Categories of Student Performance Cues Reported by the Experienced and Novice Teachers

Student performance Cues	Experienced Teachers										NoviceTeachers										X^2
	Kumru		Merve		Selen		Kezban		Total		Gamze		Burcu		Zeynep		Ece		Total		
	f	%	f	%	F	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	
Deficient Responses	116	14.55	145	15.75	155	19.45	112	19.68	528	17.10	153	19.79	81	11.22	197	24.10	93	18.14	524	17.56	44.035 ***
Initiations	147	18.44	186	20.92	176	22.08	122	21.44	631	20.22	138	17.85	206	28.53	144	17.56	95	17.47	583	19.86	16.741 ***
Errors	98	12.30	75	9.63	65	8.15	87	15.29	325	10.84	56	8.24	35	4.85	66	8.10	77	12.54	234	9.19	5.961
Attention	112	14.05	170	17.29	92	11.54	44	7.81	743	12.66	83	10.74	46	6.37	75	9.15	50	10.14	254	10.6	67.445 ***
Elicited Responses	289	38.26	320	33.95	274	36.38	174	35.58	1057	37	258	37.37	313	45.35	278	36.90	263	38.85	1112	39	24.333 ***
Incomplete Answers	11	1.39	12	1.23	18	2.31	1	0.20	42	1.37	32	5.14	18	2.85	24	2.93	6	1.72	80	2.99	17.624 ***
Noise	5	0.92	12	1.23	-	-	-	-	17	0.45	5	0.87	6	0.83	5	1.26	7	1.14	23	0.80	11.697 **
Total	797	100	983	100	797	100	569	100	3343	100	773	100	722	100	820	100	614	100	2810	100	225.516 ***

* $p \leq 0.05$ ** $p \leq 0.01$ *** $p \leq 0.001$

3.2. Instructional Actions

Table 2 displays the frequencies and percentages of instructional actions the teachers implemented for all the categories of student performance cues in the class regarding the expertise level of the participant teachers. Overall, the teachers, regardless of their expertise level, are seen to employ all the instructional actions categories, giving the most attention to the categories of Giving Feedback and Focusing Attention/Effort. As regards the category of Focusing Attention/Effort, apart from Selen, all the other teachers were seen to favor the category to a great extent. Selen claimed that the motivation of her class was already good; therefore, she did not need to employ this instructional action category a lot. For this reason, some other factors may be said to affect teachers' choice of the instructional actions rather than their expertise level.

As for the striking differences, the experienced teachers were found to implement the instructional categories, Explaining Concept/Procedure, Applying, Extending, or Planning, and Eliciting and Incorporating Input more frequently than the novices. However, the novices were observed to favor the instructional action categories involving Giving Feedback, Checking Knowledge, and Focusing Attention/Effort much more than the experienced ones (see Table 2). The possible reason for this difference may be that the novices perceive Deficient Responses and Errors as indicators of student misunderstanding or lack of understanding. Therefore, in line with the findings reported by Fogarty et al. (1983), the teachers were seen to choose to respond to these cues with the instructional action categories of Checking Knowledge, Giving Feedback, and Focusing Attention/Effort. That is to say, teachers' reactions may also differ with regard to how they perceive the student performance cues they observe throughout the lesson. All these differences between the experienced and novice teachers were also found to be statistically significant ($p \leq 0.001$).

Some individual differences are also observed within the groups in Table 2. For example, the most inexperienced teacher Ece implemented the category of Giving Feedback more frequently than any other categories in response to student performance cues (30.10 %). Moreover, this is the highest percentage category among all her reported instructional action categories in Table 2. Nevertheless, she paid the least attention to the category of Focusing Attention/Effort when compared to the other novice teachers in the study. As for the experienced teachers, Selen focused on the categories involving Applying, Extending, or Planning, Checking Knowledge, and Explaining Concepts/Procedure more frequently than the other experienced teachers. Another finding indicates that the most experienced teacher, Kumru was found to implement the category Checking Knowledge (1.63%) the least as compared to the other experienced teachers and to the other action categories she implemented throughout the study (see Table 2).

As shown in Table 2, both groups rarely implemented No Responding category with respect to the cues they observed in their classes (0.73% for the experienced teachers and 1.50% for the novices). Regarding the X^2 value (p: 26.884), the novices were found to keep their silence in some of the observed situations more frequently than the experienced teachers. This finding may also imply the fact that the experienced teachers are more ready to respond to the unexpected situations using a wider set of sponge activities and routines.

Table 2. Categories and Percentage Frequencies of Instructional Actions Utilized by the Experienced and Novice Teachers

Instructional Actions	Experienced Teachers										NoviceTeachers										X^2
	Kumru		Merve		Selen		Kezban		Total		Gamze		Burcu		Zeynep		Ece		Total		
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	
Giving Feedback	211	26.50	207	21.10	155	19.45	129	22.87	702	22.48	163	20.50	182	25.32	210	27.74	187	30.10	742	25.92	21,518 ***
Explaining Concept/ Procedure	125	15.70	129	13.10	176	22.08	84	14.89	514	16.45	115	14.47	100	13.90	83	10.77	85	13.64	383	13.20	18.757 ***
Checking Knowledge	13	1.63	24	2.44	65	8.16	41	7.26	143	4.88	69	8.68	33	4.59	59	7.65	91	14.61	252	8.89	31.191 ***
Focusing Attention/ Effort	238	29.90	348	35.36	92	11.54	195	34.57	873	27.85	268	33.71	257	35.75	233	30.22	123	19.74	881	29.86	92.906 ***
Applying, Extending, or Planning	61	7.66	87	8.84	274	34.38	54	9.58	476	15.12	97	12.20	75	10.43	76	9.86	68	10.91	316	10.51	94,232 ***
Eliciting and Incorporating Input	146	18.34	185	18.75	17	2.14	61	10.83	409	12.49	81	10.19	55	7.65	105	13.11	56	8.91	297	10.12	138,43 ***
No Responding	2	0.27	4	0.41	18	2.25	-	-	24	0.73	2	0.25	17	2.36	5	0.65	13	2.09	37	1.50	26,884 ***
Total	796	100	984	100	797	100	564	100	3141	100	795	100	719	100	771	100	623	100	2908	100	94.381 ***

* $p \leq 0.05$ ** $p \leq 0.01$ *** $p \leq 0.001$

As regards the number of the instructional action categories, the experienced teachers were found to employ more instructional categories (3141 vs. 2908) than the experienced teachers in Table 2, which also reveals statistical significance. The instructional actions of the novices, on the other hand, are observed to fall into the categories almost in equal frequencies (see Table 2).

3.3. The Instructional Actions of the Teachers for Separate Student Performance Cues

Table 3 reports the frequencies and percentages of instructional actions teachers employ in response to specific student performance cues they observe during the ongoing lessons. As seen in Table 3, some remarkable differences have appeared between the groups. For instance, as for the Deficient Response category, the experienced teachers implemented the categories of Giving Feedback, Explaining Concept/ Procedure, and Eliciting and Incorporating Input with a combined frequency of 15.68, while the novice teachers employed these instructional action categories less frequently (8.95% combined frequency) in response to the Deficient Response category. The novices, however, were seen to employ Checking Knowledge and Applying, Extending, or Planning categories more frequently than the experienced teachers (see Table 3). Furthermore, as found by Johnson (1992), all the experienced teachers react to the Deficient Response category using at least one of the instructional categories, whereas 0.57 % of the novices are seen to remain silent in response to Deficient Response categories in some instances. However, compared to the other instructional actions, both experienced and novice teachers employed the Focusing Attention/Effort category in the greatest percentage in response to the Deficient Response category (see Table 3).

As shown in Table 3, both groups implemented Focusing Attention/ Effort, Giving Feedback and Explaining Concept/Procedure categories in response to Initiations cue category almost in the same percentages, giving priority to the experienced teachers group.

Table 3 indicates that the groups of teachers employ different instructional actions in response to the Error category. The experienced teachers, for example, used Giving Feedback category more than the novices in response to the cue category of Error, whereas the novices employed Focusing Attention/Effort more frequently than the experienced teachers. Moreover, Giving Feedback category appeared to be the most predominant category among the experienced teachers giving secondary importance to the category Focusing Attention/Effort, while the novices favoured the Focusing Attention/Effort as the most pre-dominant category, giving the secondary importance to the Giving Feedback category. Furthermore, the novices implemented the categories of Checking Knowledge and Applying, Extending, or Planning more frequently than the experienced teachers when confronted with Errors**.** Nevertheless, the experienced teachers employed the category Eliciting and Incorporating twice as much the novices in response to the Errors categories. The only similarity emerged in this part is that both groups responded to the Errors category in the category of Explaining Concept/Procedure with a value under the 10% (6.35% a combined frequency) (see Table 3).

Table 3. Percentage Frequencies of Instructional Actions Utilized by the Experienced and Novice Teachers for Student Performance Cues

Instructional Actions	Deficient Responses				Initiations				Errors				Attention				Elicited Responses				Incomplete Answer				Noise				
	Exp.		Nov.		Exp.		Nov.		Exp.		Nov.		Exp.		Nov.		Exp.		Nov.		Exp.		Nov.		Exp.		Nov.		
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	X^2
Giving Feedback	40	7.62	27	5.16	166	26.47	150	25	116	35.8	65	27	61	15	58	24	367	39	394	36	14	35	22	28	-	-	-	-	18.977***
Explaining Concept\ Procedure	93	17.71	77	15	125	19.94	107	18	19	5.86	16	7	99	23.68	35	15	121	13	114	10.5	-	-	9	11	4	24	-	-	34.528***
Checking Knowledge	31	5.90	53	10	21	3.35	37	6	8	2.47	19	8.8	13	3.11	18	8	26	2.8	107	10	1	2.5	5	6	1	7	-	-	14.905**
Focusing Attention\ Effort	177	33.71	185	38	203	32.37	176	30	108	34	87	37	135	32.30	74	31	229	23	283	25	16	40	27	34	4	23	21	91	42.031***
Applying, Extending, or Planning	70	13.33	84	16.06	49	7.82	61	10	16	4.94	23	10	49	11.72	32	14	51	5	93	8	5	12.5	9	11	3	17	2	9	14.375*
Eliciting and Incorporating Input	114	21.72	94	18	63	10.05	43	8	57	17.55	22	9.4	61	14.55	43	8	162	17	101	9	4	10	8	10	1	6	-	-	11.752*
No Responding	-	-	3	0.5	-	-	14	2.9	-	-	5	0.8	-	-	-	-	-	-	16	1.5	-	-	-	-	4	23	-	-	42.000***
Total	525	100	523	100	627	100	593	100	324	100	234	100	418	100	240	100	956	100	1112	100	40	100	80	100	17	100	23	100	
X^2	16,159*				26.402***				26.301***				20.214**				87.874***				6.076				21.340**				

* $p \leq 0.05$ ** $p \leq 0.01$ *** $p \leq 0.001$

Similarly, the fourth student performance cue category, Attention has reflected both similar and different patterns between the groups. As for the similarities, Focusing Attention/Effort category was the major category employed by both group teachers in response to Attention category, whereas the Checking Knowledge category was the only category receiving the least attention by all the teachers in the study. As for the differences, the novices were seen to employ Giving Feedback category more frequently than the experienced teachers, whereas the experienced teachers favored Eliciting and Incorporating Input more than the novices in response to the Attention category.

In regard to Elicited Response category, both groups favored Giving Feedback and Focusing Attention/Effort almost in the same percentages (see Table 3). However, the experienced teachers implemented the Explaining Concept/Procedure and Eliciting and Incorporating Input categories with a combined frequency of 14.80%, whereas the novices employed those categories with a combined frequency of 9.70 %. Even though Checking Knowledge and Applying, Extending, or Planning categories were found to be the least popular categories in both groups for the cue category of Elicited Response, the novices employed those instructional actions more frequently than the experienced teachers throughout the study.

As displayed in Table 3, both groups implemented Giving Feedback and Focusing Attention/Effort categories as the major instructional action categories in response to the Incomplete Answers; nevertheless, the experienced teachers employed these categories more frequently than the novices. However, the novices responded to the Incomplete Answers category utilizing the category of Checking Knowledge more frequently than the experienced teachers (6% versus 2.5%). Besides, 11 % of the novices used the category of Explaining Concept/Procedure, whereas no experienced teachers implemented this category at all in response to Incomplete Answers category. The groups, on the other hand, did not differ in the use of the other two categories, Eliciting and Incorporating and Applying and Extending or Planning in response to the cue category of Incomplete Answers (see Table 3).

As for the last student performance cue, Noise neither group employed Giving Feedback category (see Table 3). However, the experienced teachers employed a wider set of instructional actions in response to the Noise category, whereas, the novices employed only two instructional actions, Focusing Attention /Effort and Applying Extending or Planning, However, the experienced teachers preferred not to respond to the cue category of Noise in some instances, while the novices reacted to the Noise category utilizing a kind of instructional action throughout the study.

Overall, as seen in Table 3, the experienced teachers responded to the student performance cues of Elicited Response, Initiation and Attention by implementing a cyle of instructional actions which cover Giving Feedback, Focusing Attention/Effort and Explaining Concept/Procedure. The novices, on the other hand, paid more attention to the student performance cue categories of Elicited Responses, Initiation and Deficient Responses and respond to them using a cycle of instructional actions which include Giving Feedback, Focusing Attention/Effort and Eliciting and Incorporating Input. The cue categories of Errors and Incomplete Answer received the least instructional attention from the teachers in both groups. However, priorities and preferences of the teachers differ in their reactions to these student performance cues with regard to their expertise level. The experienced teachers, for example, utilized Giving Feedback

category in response to Errors and Incomplete Answers cue categories as the predominant response category, whereas the novices gave the priority to the category of Focusing Attention/Effort (see Table 3).

Apart from the Incomplete Answer category, all the differences appeared between the groups are found to be significant. Therefore, in contrast to Fogarty et al.'s (1983) findings, the experienced teachers differ from the novices in the use of the instructional actions in response to specific student performance cues during the ongoing instruction.

4. Conclusion and Implications

Our findings have indicated that the experienced teachers are able to observe more student performance cues than the novices throughout the ongoing instruction. Moreover, three new student performance cue categories, Elicited Response, Incomplete Answer, and Noise, have emerged in the study. The results confirm the findings of Fogarty et al. *(*1983), Johnson (1992, 1999), Nunan (1996), and Westerman (1991) in that the novices are much more concerned with management related issues than the experienced teachers in the class. Moreover, the experienced and novice teachers are seen to differ in their priorities of the instructional actions in response to the specific student performance cues.

Apart from those differences, some similar patterns have also emerged between the groups of teachers regarding the instructional actions they employ in response to specific student performance cue categories. For example, both groups of teachers implemented the instructional action category of Focusing Attention/Effort more frequently than any other instructional action categories when confronted with Deficient Responses. The findings obtained with respect to the number of the instructional actions are seen to be compatible with the prior research findings (Fogarty et.al, 1983; Johnson, 1992, 1999) in that the experienced teachers employed a broader array of instructional actions than the novices in response to the student performance cues they observed during the ongoing instruction.

As noted by Chamberlin (1998), the results also indicate that the teachers respond to the classroom events in the way they interpret those events on the spot. In line with the prior research findings (Johnson, 1992, 1999; Westerman, 1991), all the teachers in the study, are seen to be involved in a continuous cycle of interpretation so that they can make appropriate instructional decisions to shape their in-class behaviors. As suggested by the relevant literature (Borko & Shavelson, 1990; Westerman, 1991), the study highlights that what the students say and do and how they act in the class affect the interactive decision making behavior of the teachers to a considerable extent. Nevertheless, how teachers perceive these student performance cues are also observed to influence their interactive decisions and thus their teaching to a greater extent since each teacher perceives the classroom events from his or her perspectives on the bases of his or her professional background, beliefs, learning theories, and so on. Moreover, the study has provided some opportunities for the teachers to revise their theoretical knowledge of teaching and learning within the context of their experiences of teaching and learning.

This study can also create a kind of awareness especially among novice and pre-service teachers about how to define and respond to student performance cues and unexpected events in the class since they lack real teaching experiences.The curriculum of pre- service teacher education should be rearranged to cover decision making as a compulsory component so that decision making skills of the pre-service teachers can be improved systematically using reflective teaching activities. Furthermore, through such a process, pre-service teachers can become objective investigators of their own teaching from the very beginning of their teaching profession.

Regarding the findings obtained throughout the study, a kind of in-service teaching training program can also be designed for each group, the experienced and the novice teachers, to help them make more appropriate and systematic interactive decisions through reflective activities suggested by the relevant literature (Fogarty et al., 1983; Johnson, 1999; Bailey, 1996; Westerman, 1991; Woods, 1996) and the current study.

5. Suggestions and Limitations

This study can be replicated from different theoretical and methodological perspectives to gain more insights into the interactive decision making process of EFL teachers. For example, a study can be conducted in regard to pre-service teacher education programs. In such a study, pre-service teachers can be shown some segments of classroom teaching of experienced teachers and asked how they would respond to the same situation if they were teaching the class. This procedure provides real teaching experiences for the pre-service teachers who have no or limited teaching experiences.

As in all studies, this study should also be interpreted in the light of several limitations. One of the limitations is that the data were coded only by the researcher throughout the study. A skilled researcher in the area was also asked to categorize a sample of the data to record agreements and disagreements between the coding procedures. However, all the data gathered in the study should have been independently read and coded by that skilled person to arrive at consensus for category descriptions and coding conventions employed throughout the study.

REFERENCES

Allwright, D., & Bailey, K. M. (1991). *Focus on the language classroom: An introduction to classroom research for language teachers.* Cambridge: Cambridge University Press.

Artiles, A. J., Mostert, M P., & Tankersly, M. (1994). Assessing the link between teacher cognitions, teacher behaviors, and pupil responses to lessons. *Teaching & Teacher Education,* 10 (5), 465-481.

Borko, H., & Shavelson, R. (1990) Teacher decision making. In B.F. Jones & L. Idol (Eds.), *Dimension of thinking and cognitive instruction* (pp.311-340). NJ: Lawrence Erlbam Associates, Publishers.

Chamberlin, C. (1998). Research in second language teacher education [Review of the books Teacher cognition in language teaching: Beliefs, decision-making, and

classroom practice & teacher learning in language teaching]. *Tesol Quarterly*, 32(3), 617-622.

Fogarty, J. L.,Wang, M. C., & Creek, R. (1983). A descriptive study of experienced and novice teachers' interactive instructional thoughts and actions. *Journal of Educational Research*, 77(1), 22-31.

Freeman, D. (1989). Teacher training, development and decision making: A model of teaching and related strategies for language teacher Education. *Tesol Quarterly,* 23 (1), 27-43.

Gaies, S. J. (1980). *Classroom centered research: Some consumer guidelines.* Paper presented at the Second Annual TESOL Summer Meeting, Albuquerque, N.M.

Halkes, R., & Olson, J. (1984). *Teacher thinking: A new perspective on persisting problems in education*. Lisse, Netherlands: Swets and Zeitlinger.

Johnson, K. E. (1992). Learning to teach: Instructional actions and decisions of pre-service ESL teachers. *Tesol Quarterly,* 26 (3), 507-535.

Johnson, K. E. (1999). *Understanding language teaching: Reasoning in action.* Boston: Heinle & Heinle.

Nunan, D. (1996). Hidden voices: Insiders' perspectives on classroom interaction. In K. M. Bailey & D. Nunan (Eds.), *Voices from the language classroom* (pp. 41-56). Cambridge: Cambridge University Press.

Pratte, R. (1986). Educational policy and teacher educators. *Australian Journal of Teacher Education*, 11(2), 9-18.

Shavelson, R. J. (1983). Review of research teachers' pedagogical on judgements, plans, and decisions. *The Elementary School Journal,* 83(4), 393-413.

Westerman, D. A**.** (1991). Expert and novice teacher decision making. *Journal of Teacher* Education, 42 (4), 292-305.

Woods, D. (1991). Teachers'interpretations of second language teaching curricula. *RELC Journal*, 22, 1-18.

Woods, D. (1996). *Teacher cognition in language teaching: Beliefs, decision-making and classroom practice.* Cambridge: Cambridge University Press.

Appendix 1
A Classification Scheme for Four Dimensions of Interactive Instruction

Category	Definition	Example
	Student Performance Cues	
Deficient responses	a behavior or response is not made after being elicited by teacher.	teacher asks students to read aloud and they do not respond
Initiations	students initiate spontaneous behavior or response.	student praises another's response
Errors	response that is incorrect, insufficient or superfluous.	given task using map symbols, student misplaces symbol on map key
Attention	level of student attention is either above or below appropriate level.	students show high enthusiasm for writing last sentence of a story
	Instructional Actions	
Gives feedback	teacher provides student with information regarding student's performance.	after noticing students make incorrect placement of map symbol on key, teacher showed correct response and compared it to the student's
Explains concepts \procedure	teacher provides or elicits an explanation or procedure for task completion not referring to a student response.	after students were unable to respond to about a game, teacher explained procedure for playing
Checks knowledge	teacher queries student about knowledge of a concept, topic, or procedure.	after incomplete student response to math question teacher asked for a more complete answer
Focuses attention \ effort	teacher directs student attention or encourages persistence.	after noticing a student's attention wandering the teacher placed a work card directly in front of him and asked a question
Applies, extends, Or plans	teacher applies new concepts, extends instruction to include them, or plans future instruction	teacher noticed students didn't understand "north," "south," "east," and "west," and planned future lesson on that topic
Elicits and incorporates input	teacher encourages student initiations and uses them in lesson	students were enthusiastically composing the ending sentence of a story and teacher asked for each student's ending and wrote them on the board
	Instructional Goals	
Student motivation/ and involvement	teacher considers increasing or maintaining student motivation and involvement in making. decisions	teacher allowed student to work independently in one subject to keep his interest in other subjects
Group management	teacher makes a decision with consideration for the effect of overall group process on the lesson	teacher answered irrelevant student question to facilitate return-to task for whole group
Curriculum integration	teacher makes a decision with consideration for the sequence of lesson content	teacher decided to continue an unsuccessful activity to make next lesson easier
Social development	teacher makes a decision considering student's social and developmental needs.	teacher allowed student to answer question ahead of others to develop communication skills
Subject matter content	teacher makes a decision considering nature of lesson content.	teacher probed for more specific answers in composition lesson, to show every sentence should not start with the same word
Student understanding	teacher makes decisions with primary consideration for increasing student understanding	teacher used unplanned example in class thinking to facilitate understanding of lesson
	Prior Knowledge	
Important content	teacher recalls considering knowledge related to lesson content.	teacher recalled previous class activity of use in present reading lesson
Pedagogical principles	teacher recalls considering knowledge related to instructional principles.	during math lesson, teacher recalled varying questioning procedure for the benefit of those most in need of help
Student history	teacher recalls considering knowledge related to student social behavior or attention span	teacher recalls particular student's shyness, in eliciting classroom student responses
Academic skills	teacher recalls considering knowledge related to level of student academic skills and ability	teacher gave special project, recalling particular abilities to be used to improve student's other abilities
Knowledge	teacher recalls considering student probable knowledge of content or concepts.	teacher knew that, because of where students lived, they were probably familiar with particular in class
Preferences	teacher recalls consideration of knowledge related to student's preferred activities	teacher used map in lesson because of knowledge that class liked maps

From Fogarty, Wang, & Creek, (1983)