The Effect of Experience on Semantic Schemata in L2 Teacher Talk

Vahid Rahmani Doqaruni

Department of English Language and Literature, Faculty of Humanities
University of Gonabad, Iran
E-mail Address: rahmani@gonabad.ac.ir

Abstract

In order to gain a deeper insight into second/foreign language (L2) classroom discourse, teacher talk, as one of the most important aspects of this discourse, needs to be studied from different perspectives. So, the purpose of the present study is to address the association between teachers' experience and different types of semantic schemata in their talk in L2 classroom contexts. The participants were 12 male EFL teachers who were divided into two equal groups regarding their experience, namely experienced and inexperienced. To collect the required data for this study, the classrooms were observed and audio-recordings were made from one lesson of each teacher. The audio-recordings were then fully transcribed and teacher talk was categorized into different semantic species types. Chi-Square test was employed to find out whether teachers' talk was significantly different in terms of semantic schemata. The data revealed that inexperienced teachers significantly use more semantic schemata in their talk, in comparison to experienced teachers, which can be attributed to their differences in

several areas such as classroom practices, questioning behavior with respect to the concept of wait-time, application of the communicative approach principles in classroom, and ability in grading their language to their students' proficiency level. The results of this study help us to gain a more profound understanding of teacher talk in L2 classroom discourse and would benefit both pre-service and in-service teachers on how to manage and critique their own talk.

Keywords: *teacher talk; teacher experience; semantic schemata; L2 classroom discourse; wait-time; language grading*

Introduction

Teacher talk is an important issue in all educational settings but it is of considerable importance in second/foreign language (L2) classroom discourse. This is due to the fact that teacher talk not only functions as the main source of presenting L2 knowledge and directing activities in the classroom context, but also sets a role model for students on how to communicate and plays an important role in encouraging more interaction between teachers and students. As Skinner (2019) points out, teacher talk in L2 classrooms "represents a special kind of classroom discourse given the status of the second language as 'doubling up' as not only the subject matter-lexis, structure and phonology but the medium or tool of communication" (p. 2).

Due to such an importance, teacher talk has always been an interesting topic for L2 researchers in classroom discourse research (Rahmani Doqaruni, 2017a). However, despite the existence of a large number of studies on teacher talk in L2 education (e.g., Cullen, 1998, 2002; Garton, 2012; Ghajarieh et al., 2019; Nakamura, 2008; Seedhouse, 2004; Skinner, 2019; Stanley & Stevenson, 2017; Thornbury, 1996; Walsh, 2002, 2003, 2006a, 2006b, 2011; Yanfen & Yuqin, 2010), a very significant aspect of teacher talk, that is semantic

schemata, has not been investigated. Semantic schemata are defined as groups of grammatical and lexical associations which are related through relations of similarity (involving the notion of resemblance) and contiguity (entailing temporal or spatial adjacency) in a language (Lafford et al., 2003). Chat and speech are good examples of the former, while knife and fork belong to the latter. The main reason for studying semantic schemata in teacher talk is that since these schemata are considered the basic elements of language, they provide L2 researchers and teachers alike with objective criteria for analyzing L2 teacher talk in classroom discourse.

As previous research has shown that "experience" has a significant effect on different aspects of teacher talk in L2 education (e.g., Rahmani Doqaruni, 2017a, 2017b; Ghajarieh et al., 2019), another aim of the present study is to consider this influential variable by investigating the use of semantic schemata in both experienced and inexperienced L2 teachers' talk. Thus, the main purpose of the present study is to address the association between teachers' experience and different types of semantic schemata they use in their talk in EFL classroom contexts.

2. Research Questions

To meet the objectives of the present study, the following research questions were formed:

1) Are there any significant differences in the use of semantic schemata of experienced vs. inexperienced teachers in L2 classroom discourse?

2) What might be the possible reasons for the potential differences in the use of semantic schemata by experienced teachers vs. their inexperienced counterparts?

Theoretical Background

The theoretical background of the present study is based on Vygotsky's sociocultural theory of learning (1978) and Long's Interaction Hypothesis (1996). Vygotsky's view toward learning is relevant to the present study as he considers classrooms social venues

where students can learn from each other and from the teacher by way of talking. More specifically, he proposes that talking to an "expert knower", i.e., the teacher or a more proficient student, results in successful learning. He further introduces the zone of proximal development (ZPD) as an important concept of his theory. ZPD refers to the difference between what a learner can achieve alone and what the same learner can achieve when support is provided by a more knowledgeable person. In order to deal with this difference, teachers use their talk as scaffolding, which is defined as the linguistic support provided by teachers to learners.

Long's interaction hypothesis (1996) is also of particular relevance to the present study as it proposes that not only teacher talk is important, but also negotiation should occur between learners and with their teacher for learning to take place. Equivalent to Vygotsky's expert knower, Long uses the term "competent interlocutor", which refers to the teacher in language classrooms. He coined the term to emphasize the fact that teachers play an important role in L2 classrooms as they are the ones who have sufficient knowledge about L2 and can manage negotiations and interactions in such a way so that they are practiced appropriately.

Literature Review

Teacher talk is an essential ingredient of L2 classroom discourse as it facilitates effective L2 learning (Skinner, 2019). This is because teacher talk is considered a reliable kind of input for students in L2 classroom contexts which affects their understanding of the L2 and, consequently, their language learning process. Moreover, as Yanfen and Yuqin (2010) point out, "appropriate teacher talk can create a harmonious atmosphere and at the same time promotes a more friendly relationship between teachers and students, and consequently creates more opportunities for interactions between teachers and students" (p.77). So, the fact that teacher talk plays an essential role in the L2 teaching and learning process as an interactive device is unavoidable.

Due to such an importance, L2 teacher talk has been investigated from different perspectives including clarifying its constructive or obstructive features (e.g., McNeil, 2012; Walsh, 2002), analyzing teacher talk in various contexts (e.g., Tasker et al., 2010), its pedagogical functions (e.g., Forman, 2012; Kim & Elder, 2005), ways of enhancing its quality (e.g., Moser et al., 2012), and its use by both native and non-native L2 teachers (e.g., Clark & Paran, 2007; Shin, 2008; Tajeddin & Adeh, 2016). The main purpose of most of these studies is to delineate the huge effect of teacher talk on L2 learning through identifying its significant features and functions. In other words, previous research on teacher talk has tried to show that it plays an important role in contributing to students' success or failure whether it is in the form of explanation, evaluation, instructions, giving feedback, or even building rapport. As teacher talk is of utmost importance in creating opportunities for language learning in classroom contexts, it has been suggested that teacher educators should equip student teachers with such a valuable tool by giving priority to teacher talk in teacher education programs (e.g., Evans & Cleghorn, 2010; Moser et al., 2012).

As teacher talk plays an important role in L2 education, some researchers attempted to gain a deeper insight into teacher talk by identifying its main features. For example, Walsh (2006a) identified four key features of teacher talk in classroom discourse, namely control, elicitation, modification, and repair. Control refers to different patterns of talk which teachers use to control interaction in classroom context, such as the well-known initiation-response-feedback (IRF) pattern. Elicitation simply means eliciting language from the learners by the teacher which is the second key feature of teacher talk. Modification which is the adaptation of language by teachers is another key feature of teacher talk in L2 classroom talk. Finally, repair, which is defined as the teacher's way of correcting students' language, is the last key feature of teacher talk. Proposing that classroom contexts cannot be studied alone as it is shaped by participants and through interactions with pedagogic objectives, Walsh (2006b) also introduced the Self-Evaluation of Teacher Talk (SETT) framework. The SETT

framework has four modes which are defined as L2 classroom micro contexts which have specific pedagogic goals and interactional features, namely, managerial mode, material mode, classroom context mode and skill and system mode. The model provides a descriptive system which teachers can use to have a better picture of interactional processes in their own classrooms. The English Language Teacher Talk Functional Scale is another model which was developed and validated by Khany and Malmir (2017). They specifically aimed to develop an instrument to analyze teacher talk in ELT classroom contexts due to the lack of an appropriate tool in the field. Their scale included 40 items which were categorized into three main components of ELT teacher talk, namely representational, interactional and rapport-building functions. They claimed that "the items included in Teacher Talk Functional Scale are all attempts to reflect the wide range of teacher talk functions in ELT contexts and to capture the inter-dependence of these functions under several main components" (p. 46).

Despite such attempts to identify the main features of teacher talk in L2 education, however, previous research has overlooked the role of teaching experience as an influential factor in affecting teacher talk. To fill the gap, some recent studies have tried to explore the effect of teachers' experience on different aspects of their talk inside the classroom context. For example, Rahmani Doqaruni (2017a) compared experienced and inexperienced EFL teachers' talk in order to find out whether differences between teachers in the course of communication strategies could be attributed to their teaching experience. He found that experienced teachers used a smaller number of communication strategies in their talk in comparison to inexperienced teachers. This finding was explained by reference to the longer teaching history of experienced teachers, their higher confidence due to being professionally prepared for their responsibilities, and being more focused on the act of learning rather than other issues such as students' negativity. In another study, Rahmani Doqaruni (2017b) used the measure of lexical variation to analyze the lexical richness of experienced and inexperienced teachers' talk in EFL classroom contexts. It was found that experienced teachers used a smaller

number of types and tokens in their talk in comparison to their inexperienced counterparts. This was attributed to differences between experienced and inexperienced teachers with respect to various issues such as their different views toward the communicative approach, language learning experiences, teaching history, and type of relationship between teachers and students. More recently, Ghajarieh et al. (2019) analyzed the classroom talk of novice and experienced EFL teachers with a special emphasis on the quality of communicative features of their talk. The results showed that although communicative features were used by both novice and experienced teachers in their classroom talk, the experienced teachers' quality of presentation was far better.

Yet, as mentioned earlier, another neglected issue with reference to teacher talk is semantic schemata. Schema theory is of particular importance in understanding human cognition as it explains how knowledge is acquired, processed, and retrieved. Schemata have been considered the building blocks of human cognition (Rumelhart, 1980) as they play an important role in representing elaborate networks of information that help people make sense of their environment. A particular type of schemata is called semantic schemata which are essential ingredients of any language. This is due to the fact that semantic schemata interact with other aspects of linguistic knowledge, such as syntax, to have an appropriate understanding of the concepts and notions (Altman et al., 1992). Although schema theory has been widely studied in L2 education (e.g., Li, 2014; Salbego & Osborne, 2016; Sun, 2014; Xue, 2019; Zhao & Zhu, 2012), it has not been investigated in teacher talk which needs to be addressed in current research such as the present study.

Methodology
Participants

The participants were 12 EFL teachers who were teaching general English courses in a private language institute in Mashhad, northeastern Iran. Convenience sampling (i.e., using participants who were convenient sources of data) was used in the present study. All

teachers were male and their ages ranged from 25 to 43. The present study was carried out with the intention of attributing the observed differences among the semantic schemata in teachers' talk to their teaching experience, and consequently, tried to remove as many sources of variation as possible. To this end, all classes were homogenized in terms of a number of variables to minimize their effect; the same course book series, "Touchstone", was taught to Iranian adolescent EFL learners studying at intermediate language proficiency level. Each class consisted of 10 to 14 language learners with ages between 12 and 16. A communicative approach to teaching was followed by all the 12 teachers in their classrooms, as required by the institute. The classes were further parallel in terms of their content focus and all concentrated on the development of the four macro skills in the learners. Despite the attempts to remove the interfering variables as much as possible, however, it should be noted that the classroom context is a microsystem in which the quantity and quality of teacher talk might be affected by some latent variables, such as teacher personality, which are difficult to control in convenience sampling studies.

As teaching experience was the main variable investigated in the present study, the teachers were grouped with respect to this variable. In line with previous research, experienced teachers were defined as those with more than five years, and inexperienced those with less than three years, of teaching experience (e.g., Rahmani Doqaruni, 2017a, 2017b; Gatbonton, 1999; Tsui, 2003, 2005). In this way, six teachers with less than three years of pedagogical practice were labeled as inexperienced and the other six teachers with more than five years of pedagogical practice were viewed experienced in the present study. The participants' teaching experience varied from one to 17 years. More specifically, the inexperienced group included one teacher with one year of teaching experience, another one had one and a half years of teaching experience, three of them had two years of teaching experience and the last one had two and a half years of teaching experience. The experienced group consisted of teachers with different amounts of teaching experience, namely 7, 10, 12, 13, 15, and 17 years of teaching

experience. All 12 teachers had completed their B.A degree in English language teaching and gone through teacher training courses in the institute in which they were teaching. All the participants consented to taking part in the study.

Data Collection

To collect the required data for this study, the researcher observed the classrooms as a non-participant and made audio-recordings from one lesson of each teacher which lasted for 90 minutes. Observation as a qualitative data collection strategy "is one of the oldest and most fundamental research method approaches. This approach involves collecting data using one's senses, especially looking and listening in a systematic and meaningful way" (McKechnie, 2008, p. 573). I specifically played the role of a peripheral member researcher (Adler & Adler, 1987), which means that I developed an emic perspective without participating in the classroom that I was observing.

Two MP3 recorders were used in the present study; one for capturing the audio-recordings of the whole class, and the other, which was put near to the teacher on his desk, for recording both whole-class interactions/communications and teacher's voice more clearly. In this way, 18 hours of naturally occurring data was obtained from the 12 teachers participating in this study. As the teachers were aware of the voluntary nature of participating in the present study and their anonymity was assured, they all gave permission to record their classes. So, it does not seem that the presence of audio recorders in the classroom might affect their talk. The audio-recordings were then fully transcribed and categorized into 48 different semantic species types (*see the Appendix*).

Data Analysis

The analysis of data resulted in the identification of different semantic schemata categories, the frequency of which were then calculated and compared both within and across the groups. In order to find out whether teachers' talk in terms of the tokens and types of semantic schemata differ from each other significantly in their genus

types or not, Chi-Square test was employed. SPSS software (version 24) was used to run the statistical analyses.

Results

Table 1 presents the number of schema genus types used by both experienced and inexperienced teachers. The overall pattern which emerges from Table 1 is that the inexperienced teachers have outnumbered their experienced counterparts in all genus types. They have used adjectives, adverbs, nouns and verbs more than experienced teachers by 12.5%, 9.1%, 11.5%, and 14.9%, respectively. The verbs genus has witnessed the biggest difference and the smallest difference is seen in the adverbs genus.

Another interesting pattern which attracts the attention is the same order of the use of genus types by both experienced and inexperienced teachers. Nouns are overall used with much more frequency than any other genus type across both groups. The second genus type in terms of frequency is verbs. Adjectives and adverbs are in the following ranks, respectively.

Table 1

Experienced/Inexperienced vs. Genus Cross-tabulation

| | | Genus | | | | Total |
		Adjectives	Adverbs	Nouns	Verbs	
Experienced	Count	150	24	504	156	834
	Expected Count	151.5	21.9	473.4	187.2	834.0
	% within Experienced & Inexperienced	18.0%	2.9%	60.4%	18.7%	100.0%
	% within Genus	32.9%	36.4%	35.4%	27.7%	33.2%
	% of Total	6.0%	1.0%	20.1%	6.2%	33.2%
Inexperienced	Count	207	30	669	240	1146
	Expected Count	208.2	30.0	650.4	257.4	1146.0
	% within Experienced & Inexperienced	18.1%	2.6%	58.4%	20.9%	100.0%
	% within Genus	45.4%	45.5%	46.9%	42.6%	45.6%
	% of Total	8.2%	1.2%	26.6%	9.6%	45.6%
Common	Count	99	12	252	168	531

		Genus				Total
		Adjectives	Adverbs	Nouns	Verbs	
Total	Expected Count	96.3	14.1	301.2	119.4	531.0
	% within Experienced & Inexperienced	18.6%	2.3%	47.5%	31.6%	100.0%
	% within Genus	21.7%	18.2%	17.7%	29.8%	21.1%
	% of Total	3.9%	.5%	10.0%	6.7%	21.1%
	Count	456	66	1425	564	2511
	Expected Count	456.0	66.0	1425.0	564.0	2511.0
	% within Experienced & Inexperienced	18.2%	2.6%	56.8%	22.5%	100.0%
	% within Genus	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	18.2%	2.6%	56.8%	22.5%	100.0%

As Table 2 shows, the difference in the number of semantic genus types between two groups of experienced and inexperienced teachers is statistically significant (x^2=14.387, df=6, p=.03).

Table 2

Chi-square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.387	6	.037
Likelihood Ratio	14.003	6	.047
Linear-by-Linear Association	1.725	1	.212
N of Valid Cases	2511		

Discussion

The research results point out that experienced teachers differ from inexperienced teachers in terms of semantic schemata. As the findings show, experienced teachers use a significant smaller number of semantic schemata in their talk in comparison to their inexperienced counterparts.

The results might be attributed to different kinds of concern of experienced and inexperienced teachers with respect to their classroom issues. Previous research has shown that experience is an important factor in shaping different concerns in teachers (e.g., Kagan, 1992; Meister & Melnick, 2003; Melnick & Meister, 2008; Thibodeau & Hillman, 2003). One of these concerning issues is related to the

differences between these two groups of teachers with respect to their classroom practice. While inexperienced teachers are mainly concerned with classroom management issues (Nunan, 1992), their experienced counterparts mainly focus on the language needs of their students in their classrooms (e.g., Gatbonton, 1999, 2008; Mullock, 2006). According to Stergiopoulou (2012), this difference arises from different views toward teacher's role by experienced and inexperienced teachers as "they [inexperienced teachers] seem to possess a more humanistic view of the teacher's role (e.g., they describe a teacher as caring, sensitive, tolerant) and this seems to be in contrast with the more learner-centered views of experienced teachers..." (p. 110). So, it seems that inexperienced teachers are less concerned about language learning of their students, and instead are more concerned about their students as human beings who need respect and care. In this way, Rahmani Doqaruni's (2017a) study revealed that while experienced teachers mostly encourage their students to be more active and do more exercises, novice teachers care too much about their students' behavior, especially their negative reactions such as being unhappy, anxious, and undisciplined. Similarly, Watzke's (2003, 2007) studies also revealed that students' well-being is a source of sustained concern for inexperienced teachers. This different classroom practice by experienced and inexperienced teachers is reflected in the different number of semantic schemata in their talk. In other words, it seems that as inexperienced teachers are mostly dealing with their students' behavior, instead of teaching what they are supposed to, they are distracted from the act of teaching most of the time and find themselves in contexts and situations which require them to talk more in order to deal with these behavioral issues. Hence semantic schemata have higher frequency in their talk in comparison to experienced teachers who just focus on their job and do not use language more than it is necessary.

Another reason for the differences in the number of semantic schemata in experienced and inexperienced teachers' talk can be attributed to the concept of "wait-time" as an important aspect of L2 teachers' questioning behavior in the classroom context which affects

both "the quality and quantity of participation in classroom interaction" (Yaqubi & Pourhaji Rokni, 2012, p. 133). Wait-time is defined as the amount of time that is provided by a teacher, after asking a question, to encourage the students to answer (Lightbown & Spada, 2006). Previous studies have shown that wait-time extension decreases teacher talk (Swift & Gooding, 1983; Tobin, 1986) and leads to teachers asking fewer questions (Fagan et al., 1981; Honea, 1982). More interestingly, it has been shown that experience plays an important role in teachers' wait-time extension. For example, Ghajarieh et al. (2019) found that experienced and inexperienced teachers in their study had different wait-time extension as an important communicative feature in their talk. As they point out,

> Experienced teachers appeared to be more patient during the Q&A tasks. After asking questions they waited for a few seconds, allowing the student to think and process in their mind. The novice teachers, on the other hand, allowed less than enough wait time. (p. 118)

In this way, it can be inferred that since inexperienced teachers allow less wait-time, they decrease their students' opportunities for participation in the classroom, which means these teachers need to talk more with respect to different pedagogical issues. This increased teacher talk is consequently mirrored in more use of semantic schemata by inexperienced teachers in comparison to experienced teachers in the present study.

One more issue which can shed light on the results might be related to the way the communicative approach is applied in the L2 classrooms. Nowadays, L2 teachers are asked to follow the principles of the communicative approach, especially one of its important tenets which encourages them to talk less and instead create more opportunities for their students to talk more in the classroom and engage in communicative exercises. In this way, a good L2 teacher is the one who makes their students talk most of the time in class, while a poor one takes a large amount of class time by their talking. As Rahmani Doqaruni (2017b) points out, this arises from the fact that,

> The center of second language teaching process has changed from teaching to learning and the course of teaching should be student-centered. Thus, too excessive teacher talk should be avoided in L2 classes and teachers should take roles such as a guide, a manager, a counselor and a facilitator (p. 224).

However, as previous research has shown, inexperienced teachers are so concerned with issues other than their main pedagogic task, such as establishing discipline and control, dealing with lack of time for covering the assigned material, and preparing students' exams (Pennington & Richards, 1997, 1998) which they are basically distracted from applying the principles of communicative approach to their teaching context. So it is not surprising to see that these concerns push inexperienced teachers toward a teacher-centered approach rather than a learner-centered one (Rahmani Doqaruni, 2017b). Thus, it might be concluded that the inexperienced teachers in the present study have talked more, in comparison to their experienced counterparts, in order to compensate for their lack of theoretical knowledge and practical skills in applying the principles of the communicative approach to their classrooms; a finding which is supported by the present data with reference to the higher number of semantic schemata used by inexperienced teachers.

Yet the findings might be interpreted by considering the concept of "language grading". Previous research has shown that inexperienced teachers experience difficulty when they try to grade their language to the level of their students. For example, Stanley and Stevenson's (2017) study revealed that it can be challenging for "novice native-speaker teachers to grade their teacher talk to their learners' level of English [as a foreign language]" (p. 9). This is to say that no matter how hard inexperienced teachers try to convey information in their classroom context, their teacher talk seems to be unfamiliar to their learners as they are not able to adjust their talk in such a way to be in line with their students' L2 proficiency. So even though they might succeed in communicating their intended meaning, their intention, nevertheless, may not be received by their learners due to the lack of language grading. In this respect, it seems that inexperienced teachers have

found that talking more can help them to deal with the grading problem. In this way, Rahmani Doqaruni's (2017a) study showed that inexperienced teachers use more communication strategies in their talk, in comparison to their experienced colleagues, in order to prevent communication breakdown and convey their intention. In the same vein, it can be concluded that inexperienced teachers in the present study used more semantic schemata in their talk to grade their language to their students' proficiency level.

Limitations and Recommendations

The points discussed in the present study are based on only quantitative data. It is therefore suggested that mixed methods studies which obtain both quantitative and qualitative data should be designed in order to have a more comprehensive view about teachers' talk in the L2 classroom context. Moreover, this study carries messages only for teachers and teacher education specialists as it does not consider students' achievements and points of view about their teachers' talk. So, studies which cover both students' achievements and their opinions should be carried out to give us a more accurate understanding of the atmosphere in the classroom context with respect to teacher talk. Furthermore, as it was shown that experience is an important factor which affects teacher talk, longitudinal research designs which involve repeated observations of teacher talk over long periods of time are needed. Longitudinal studies should be specifically conducted from the first day of novice teachers' employ in order to record the main changes in their talk in the process of becoming an expert in the field.

Conclusion

The quantity and quality of teacher talk, as the main aspect of teachers' behavior in the classroom context, are of considerable importance in any educational context. Research into teacher talk is especially of noteworthy significance in L2 teacher education and the classroom context. This is due to the fact that teacher talk plays an important role in both "modeling the target language for learners and

providing input that assists them in acquiring this language" (Stanley & Stevenson, 2017, p. 2). The present study was thus an attempt to study this important factor in L2 education. In order to gain a deeper insight of the issue, this study specifically examined an important aspect of teacher talk of L2 teachers, i.e., semantic schemata, in an EFL context. As Rahmani Doqaruni (2017b) points out, "the rationale for this exploration is that understanding the teaching process and the development of teachers is incomplete unless the teachers' classroom behavior, especially their talk, is taken into consideration" (p. 227). In other words, it is through teacher talk that teachers might either succeed or fail to implement their teaching plans.

The findings showed that experience plays an important role in affecting teacher talk. The authentic data provided here based on observations of real classes revealed that inexperienced teachers significantly use more semantic schemata in their talk, in comparison to experienced teachers, which can be attributed to their differences in several areas such as classroom practices, questioning behavior with respect to the concept of wait-time, application of the communicative approach principles in their classroom, and ability in grading their language to their students' proficiency level.

The results of this study help us to gain a more profound understanding of teacher talk in L2 classroom discourse and would benefit both pre-service and in-service teachers by reminding them how to manage and critique their own talk. It is hoped that the findings of the present study add to the body of knowledge on teacher talk in L2 education and lead to improvement of L2 teachers, and by so doing contribute to improvement of learners' L2 proficiency.

References

Adler, P. A., & Adler, P. (1987). *Membership roles in field research.* SAGE Publications.

Altman, G. T. M., Garnham, A., & Dennis, Y. (1992). Avoiding the garden path: Eye movement in context. *Journal of Memory and Language, 31*, 685–712.

Clark, E., & Paran, A. (2007). The employability of non-native-speaker teachers of EFL: A UK survey. *System, 35*(4), 407–430.

Cullen, R. (1998). Teacher talk and the classroom context. *ELT Journal, 52*(3), 179–187.

Cullen, R. (2002). Supportive teacher talk: The importance of the F-move. *ELT Journal, 56*(2), 117–127.

Evans, R., & Cleghorn, A. (2010). 'Look at the balloon blow up': Student teacher-talk in linguistically diverse Foundation Phase classrooms. *Southern African Linguistics and Applied Language Studies, 28*(2), 141–151.

Fagan, E. R., Hassler, D. M., & Szabo, M. (1981). Evaluation of questioning strategies in language arts instruction. *Research in the Teaching of English, 15*, 267–273.

Forman, R. (2012). Six functions of bilingual EFL teacher talk: Animating, translating, explaining, creating, prompting and dialoguing. *RELC journal, 43*(2), 239–253.

Garton, S. (2012). Speaking out of turn? Taking the initiative in teacher fronted classroom interaction. *Classroom Discourse, 3*(1), 29–45.

Gatbonton, E. (1999). Investigating experienced ESL teachers' pedagogical knowledge. *Modern Language Journal, 83*(1), 35–50.

Gatbonton, E. (2008). Looking beyond teachers' classroom behavior: Novice and experienced ESL teachers' pedagogical knowledge. *Language Teaching Research, 12*, 161–182.

Ghajarieh, A., Jalali, N., & Mozaheb, M.A. (2019). An investigation into the classroom talk of Iranian EFL novice vs. experienced teachers. *Register Journal, 12*(2), 100–125.

Honea, M. J. (1982). Wait time as an instructional variable: An influence on teacher and student. *Clearinghouse, 56*(4), 167–170.

Kagan, D. M. (1992). Professional growth among pre-service and beginning teachers. *Review of Educational Research, 62*(2), 129–169.

Khany, R., & Malmir, B. (2017). The development and validation of an English language teacher talk functional scale. *Iranian Journal of Language Teaching Research, 5*(2), 37–52.

Kim, S. H. O., & Elder, C. (2005). Language choices and pedagogic functions in the foreign language classroom: A cross-linguistic functional analysis of teacher talk. *Language Teaching Research, 9*(4), 355–380.

Lafford, B. A., Collentine, J. G., & Karp, A. S. (2003). The acquisition of lexical meaning by second language learners: An analysis of general research trends with evidence from Spanish. In B. A. Lafford, & R. Salaberry (Eds.), *Spanish second language acquisition: State of the science* (pp. 130–159). Georgetown University Press.

Li, Q. (2014). Schema theory and the teaching of college English news listening. *Theory and Practice in Language Studies, 4*, 1469–1475.

Lightbown, P. M., & Spada, N. (2006). *How languages are learned.* Oxford University Press.

Long, M. H. (1996). The role of linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413–454). Academic Press.

McKechnie, L. E. F. (2008). Observational research. In L. M. Given (Ed.), *The SAGE encyclopedia of qualitative research methods* (pp. 573–577). SAGE Publications.

McNeil, L. (2012). Using talk to scaffold referential questions for English language learners. *Teaching and Teacher Education, 28*(3), 396–404.

Meister, D. G., & Melnick, S. A. (2003). National new teacher study: Beginning teachers' concerns. *Action in Teacher Education, 24*(4), 87–94.

Melnick, S. A., & Meister, D. G. (2008). A comparison of beginning and experienced teachers' concerns. *Educational Research Quarterly, 31*(3), 40–56.

Moser, J., Harris, J., & Carle, J. (2012). Improving teacher talk through a task-based approach. *ELT journal, 66*(1), 81–88.

Mullock, B. (2006). The pedagogical knowledge base of four TESOL teachers. *Modern Language Journal, 90*, 48–66.

Nakamura, I. (2008). Understanding how teachers and students talk with each other: An exploration of how repair displays the co-management of talk-in-interaction. *Language Teaching Research, 12*(2), 265–283.

Nunan, D. (1992). The teacher as decision-maker. In J. Flowerdew, M. Brock, & S. Hsia (Eds.), *Perspectives on second language teacher education* (pp. 135–165). City Polytechnic.

Pennington, M., & Richards, J. C. (1997). Reorienting the teaching universe: The experience of five first-year English teachers in Hong Kong. *Language Teaching Research, 1*(2), 149–178.

Rahmani Doqaruni, V. (2017a). Communication strategies in experienced vs. inexperienced teachers' talk: A sign of transformation in teacher cognition. *Innovation in Language Learning and Teaching, 11*, 17–31.

Rahmani Doqaruni, V. (2017b). Relationship between teachers' experience and their talk richness: A case study of Iranian EFL teachers. *New English Teacher, 11*(1), 217–230.

Richards, J. C. (1998). What's the use of lesson plans? In J. C. Richards (Ed.), *Beyond training* (pp. 103–121). Cambridge University Press.

Rumelhart, D. E. (1980). *Introduction to human information processing.* Wiley.

Salbego, N., & Osborne, D. M. (2016). Schema activation through pre-reading activities: Teaching proverbs in L2. *Brazilian English Language Teaching Journal, 7*(2), 175–188.

Seedhouse, P. (2004). *The interactional architecture of the second language classroom: A conversational analysis perspective.* Blackwell.

Shin, S. J. (2008). Preparing non-native English-speaking ESL teachers. *Teacher development, 12*(1), 57–65.

Skinner, B. (2019). "Let's move on": Second language trainee teachers' talk and its impact on learner interaction. *The Language Learning Journal, 47,* 1–14.

Stanley, P., & Stevenson, M. (2017). Making sense of not making sense: Novice English language teacher talk. *Linguistics and Education, 38*, 1–10.

Stergiopoulou, E. (2012). Comparing experienced and inexperienced foreign language teachers' beliefs about language learning and teaching. *RoSE-Research on Steiner Education, 3*(1), 103–113.

Sun, F. (2014). The application of schema theory in teaching college English writing. *Theory and Practice in Language Studies, 4*, 1476–1482.

Swift, J. N., & Gooding, C. T. (1983). Interaction of wait time feedback and questioning instruction on middle school science teaching. *Journal of Research in Science Teaching, 20*(8), 721–730.

Tajeddin, Z., & Adeh, A. (2016). Native and nonnative English teachers' perceptions of their professional identity: Convergent or divergent? *Iranian Journal of Language Teaching Research, 4*(3), 37–54.

Tasker, T., Johnson, K. E., & Davis, T. S. (2010). A sociocultural analysis of teacher talk in inquiry-based professional development. *Language Teaching Research, 14*(2), 129–140.

Thibodeau, G. P., & Hillman, S. J. (2003). In retrospect: Teachers who made a difference from the perspective of pre-service and experienced teachers. *Education, 124*(1). 168–181.

Thornbury, S. (1996). Teachers research teacher talk. *ELT Journal, 50*(4), 279–289.

Tobin, K. G. (1986). Effects of teacher wait time on discourse characteristics in mathematics and language arts classes. *American Educational Research Journal, 23*(2), 191–200.

Tsui, A. B. (2003). *Understanding expertise in teaching.* Cambridge University Press.

Tsui, A. B. (2005). Expertise in teaching: Perspectives and issues. In K. Johnson (Ed.), *Expertise in second language learning and teaching* (pp. 167–189). Palgrave Macmillan.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Harvard University Press.

Walsh, S. (2002). Construction or obstruction: Teacher talk and learner involvement in the EFL classroom. *Language Teaching Research, 6*, 3–23.

Walsh, S. (2003). Developing interactional awareness in the second language classroom through teacher self-evaluation. *Language Awareness, 12*(2), 124–141.

Walsh, S. (2006a). *Investigating classroom discourse*. Routledge.

Walsh, S. (2006b). Talking the talk of the TESOL classroom. *ELT Journal, 60*(2), 133–141.

Walsh, S. (2011). *Exploring classroom discourse*. Routledge.

Watzke, J. L. (2003). Longitudinal study of stages of beginning teacher development in a field-based teacher education program. *The Teacher Educator, 38*, 209–229.

Watzke, J. L. (2007). Foreign language pedagogical knowledge: Toward a developmental theory of beginning teacher practice. *Modern Language Journal, 91*, 63–82.

Xue, Y. (2019). The use of schema theory in the teaching reading comprehension. *International Journal of Liberal Arts and Social Science, 7*(4), 58–63.

Yanfen, L., & Yuqin, Z. (2010). A study of teacher talk in interactions in English classes. *Chinese Journal of Applied Linguistics, 33*(2), 76–86.

Yaqubi, B., & Pourhaji Rokni, M. (2012). Teachers' limited wait-time practice and learners' participation opportunities in EFL classroom interaction. *Journal of English Language Teaching and Learning, 10*, 127–161.

Zhao, X., & Zhu, L. (2012). Schema theory and college English reading teaching. *English Language Teaching, 5*, 111–117.

Appendix: Semantic Species Types

No.	Species	Example
1	Agentive Adjective	Interesting
2	Agentive Complex Adjective	Good looking
3	Comparative Adjective	Better
4	Complex Adjective	Antiwar
5	Dative Adjective	Interested
6	Complex Dative Adjective	Research-based
7	Derivational Adjective	Distinctive
8	Derivational Complex Adjective	Nonfunctional
9	Nominal Adjective	Iraqi
10	Simple Adjective	Good
11	Superlative Adjective	Best
12	Comparative Adverb	More
13	Complex Adverb	Head-on
14	Derivational Adverb	Quickly
15	Simple Adverb	Well
16	Superlative Adverb	Latest
17	Adjectival Noun	Warmth
18	Complex Noun	Background
19	Compound Noun	Notebook
20	Compound Complex Noun	Slide-and-lantern
21	Conversion Noun	Little and often
22	Derivational Noun (Simple)	Arrival
23	Derivational Complex Noun	Misconception
24	Gerund Noun	Swimming
25	Gerund Noun (Complex)	Understanding
26	Nominal Noun	Iranian
27	Simple Noun	Book
28	Complex Verb (Base)	Underlie
29	Complex Verb (Third Person)	Underlies
30	Complex Verb (Past participle)	Underlied
31	Complex Verb (Present participle)	Underlying
32	Complex Verb (Simple Past)	Underlied
33	Derivational Verb (Base)	Realize
34	Derivational Verb (Third Person)	Realizes
35	Derivational Verb (Past Participle)	Realized
36	Derivational Verb (Present participle)	Realizing
37	Derivational Verb (Simple Past)	Realized
38	Phrasal Verb (Base)	Give up
39	Phrasal Verb (Third Person)	Gives up
40	Phrasal Verb (Past Participle)	Given up
41	Phrasal Verb (Present Participle)	Giving up
42	Phrasal Verb (Simple Past)	Gave up
43	Simple Verb (Base)	Go
44	Simple Verb (Third Person)	Goes
45	Simple Verb (Past Participle)	Gone
46	Simple Verb (Present participle)	Going
47	Simple Verb (Simple Past)	Went
48	Verb (Slang)	Gonna