

THE USE OF WAIT-TIME AS A CONVERSATIONAL MANAGEMENT STRATEGY
IN SECOND-LANGUAGE CONVERSATIONS

by

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(ABSTRACT)

Successful management of conversations can bind human beings together in linguistic communication. Learning how to manage conversations in a second language is as important as learning the language's grammatical structures. Among the conversational management strategies commonly employed is the use of pauses to buy time keeping conversational channels open, organize thoughts, or search for a suitable response.

This study described and compared these pauses, called wait-time, as they were used with other conversational management strategies by first- and second-year students and by third-year students engaged in conversations in three different conversational settings: a teacher-controlled conversation setting, a student-controlled planning setting, both in Spanish; and a researcher-controlled setting in English to compare and contrast patterns of interaction in the target language and English. Audio recordings made during the 1986 Virginia Tech Foreign Language Camps were transcribed and coded using a listing of conversational

management strategies by Kramsch (1981) and the Observational System for Instructional Analysis IV (OSIA IV) developed by Hough (1980).

The following results were obtained from the study: (a) two kinds of wait-time are present in conversations: inter-speaker (2.41 seconds mean duration) and intra-speaker (1.57 seconds mean duration); (b) speakers pause more frequently and for shorter periods of time within their own utterances than they do between the utterances of different speakers; (c) advanced Spanish students accord each other longer pauses between utterances than first- and second-year students; and (d) conversational management strategies of taking the floor, linking to previous points and reactive listening were used most as participants gave and asked for information.

Dedication

To my wife, Judith,
our children, Alyson and Amy,
and my parents
for their love and support

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I. THE PROBLEM

Introduction

One of the ways in which people are bound together is through the use of human language for communication. Savignon (1983) contends that when people communicate, they intend to convey meaningful ideas to each other through conversations, lecturing, and writing. She defines communication as "a continuous process of expression, interpretation, and negotiation" (p. 8).

Communication can occur in a formal setting such as a diplomatic talk between representatives of various governments, the delivery of a speech, a lecture, or even a presentation of a lesson to a group of students. Informal settings such as friendly talk between friends can also be the stage for communication to take place. As a form of communication, conversation can also occur in formal or informal settings. Conversation, as examined in this study, was defined as the "interchange of thoughts and words; familiar discourse or talk" (Oxford English Dictionary). Oral interactions are the exchange of words between two or more people. Because of the similarities between conversation(s) and oral interaction(s), the two terms were used interchangeably in this study. The emphasis was on oral interactions or conversations that took place between students and teachers (participants) of a second language in a simulated classroom setting or between students (participants) in a simulated naturally occurring conversation.

As participants in a conversation begin to converse, they share assumptions and expectations about the makeup of a conversation, the development of the conversation, and how they are expected to contribute to the conversation (Richards and Schmidt, 1983). A conversation begins when one of the participants makes an opening move or an attempt to begin the conversation. Within this opening move there may be a solicitation or demand that the other participant(s) make an utterance or respond to what was said by the initial speaker. A solicitation is an invitation to interact or "any manifest . . . behavior that evokes a response from another person . . ." (Hough, 1980a, p. 43). The power to designate the next speaker to be involved in the conversation is available to the initial speaker. The second step in a conversation is an exchange of utterances by the participants. Finally, one of the participants makes a closing move to end the conversation. These moves are but a small portion of the moves that comprise the paradigm known as conversational management strategies (Kramsch, 1981) used in this study. An example of a simple conversation follows:

Paul: Where did you go last night? (opening move)
 Ted: I went to the circus with Mary.
 Paul: I bet it was really enjoyable, wasn't it?
 Ted: Yeah, it was. Wow! It's 10:30! I have to go.
 See you later. (closing move)

According to the earlier definition of conversation, an informal exchange of thoughts has taken place; a conversation has occurred. Within and between each of the conversational moves, there may occur a period of time or pause where nothing may be said. Kramsch (1981)

reports that non-native speakers use pauses as an option for finding the correct expression to use in the conversation. Speakers also use pauses to process the previously said information and to formulate a response to the solicitation.

When people converse in naturally occurring conversations, they use pauses, consciously or unconsciously. These pauses, called wait-time, are critical to the development of the conversational interaction. Rowe (1986) points out that as wait-time increases from one to three seconds in the science classroom, exchanges between students increase, an increase of attending to each other is noted, and the discourse becomes more coherent.

In the classroom setting, Stahl (1976) points out that during teacher-to-student interactions, time can be used for "retrieval and translation of information, to reflect upon previous statements, to frame or complete a response, to complete a task, and to think" (p. 11). This time element is often ignored when the study of second languages is grammar intensive rather than communication intensive. In classrooms where communication is stressed, this time element can be studied by focusing on conversational processes and classroom interactions. Students' communicative abilities are markedly less developed when second-language study emphasizes grammar-oriented approaches (Rivers, 1973; Valette, 1973). Recently there has been a greater emphasis on the nature of teacher-to-student or student-to-student oral interactions and "the rules of discourse" (Kramsch, 1981, p. 1). Teachers and researchers are now examining

the "whats", "whys" and "hows" of oral communication and oral interactions.

The period of time or pause between the solicitation and the response is known as wait-time I (Rowe, 1972, 1974; Lake, 1973; Tobin and Capie, 1980) or post-solicitation wait-time (Shrum, 1982). The length of this post-solicitation wait-time is a variable controlled by the speaker or the respondent depending upon the assumptions and expectations brought to the conversational process. The pause following the response is known as wait-time II (Lake, 1973; Rowe, 1974) or post-response wait-time (Shrum, 1982). The length of this post-response wait-time is controlled by the first speaker or others involved in the conversation.

Rowe (1974a, 1974b, 1986) reports that mean wait-time I (post-solicitation) is one second while mean length of wait-time II (post-response) is 0.9 seconds in science classes. Rowe also reports increases in the number and quality of students' responses as wait-time I is lengthened to three or more seconds. Shrum (1985) reports that in second-language classes the mean post-solicitation wait-time is 1.91 seconds and the mean post-response wait-time is 0.73 seconds. These findings are less than the three seconds of criterion wait-time recommended by Rowe.

In the instructional classroom, the teacher controls the conversational process, determines what will be the topic of conversation, controls some wait-time lengths, and chooses the next speaker. When the teacher allows students to converse with each

other in the classroom, teacher influence remains present. Alternatives to such teacher-controlled conversations are those in which teacher influence is absent. These student-to-student conversations occur in a setting where ideas or thoughts are exchanged in an informal, or in a naturally occurring, setting. In her investigations of wait-time in the second-language classroom, Shrum (1982) reports that there were not enough instances of student-to-student communication to tabulate the use of wait-time and that its mean length could not be determined. The present study is the first undertaken to explore the use of wait-time in student-to-student oral communication in the target language among second-language students.

Statement of the Problem

In this study, descriptions and comparisons were made of the use of wait-time as a conversational management strategy by students engaged in conversations with each other and with teachers in the target language, Spanish, and the native language, English. It was important to explore the use of wait-time in student-to-student conversational settings in the target language to gain a better understanding of student use of wait-time as a conversational management strategy. A comparison was made of student use of wait-time and other conversational management strategies in three settings: (a) a teacher-controlled conversation session in the target language; (b) a student-controlled planning session in the target language with no teacher present; and (c) a

researcher-controlled interview session in the native language. Comparisons between these settings were used to suggest improved conversational skills in the classroom. Wait-time was described and compared in terms of its mean length in relation to its use by second-language students with various conversational management strategies in order to understand how conversational moves and time were used by students in the three conversational settings.

In the classroom setting, the solicitation-response interaction between teachers and students is the most frequent occurrence of wait-time (Shrum, 1982). Even though students are in school for approximately seven hours per day for five days per week, their conversations are not monitored constantly nor are they engaged constantly in teacher-to-student interactions. Students are also engaged in conversation with each other in non-classroom settings, i.e., before and after school, in the halls between class changes, and during the lunch period, with little or no teacher influence on the conversational topic. Their conversations are allowed to develop naturally without teacher influence. In these settings, student use of wait-time and other conversational management strategies outside of the classroom can be identified.

The major research question is:

How are wait-time and other conversational management strategies used by students in conversational settings in the target language and the native language?

The mean length of wait-time as used in student-chosen moves and strategies was identified. The relationship between wait-time and

the various strategies in conversational settings was described and compared. An analysis of the conversation was conducted according to a listing used by Kramsch (1981) to describe and compare relationships between wait-time and other conversational management strategies.

Time can be used by conversational participants to process the previously stated utterance, to formulate a response, or both. The use of time to develop a conversation occurs so naturally that participants are often not aware that it is being used. It is not known whether, during second-language conversations, wait-time occurs between speakers' utterances or within an utterance by a single speaker or in both situations. Two different aspects of the use of time were identified, described, and compared in this study. One aspect was identified as inter-speaker wait-time, referred to as wait-time I or wait-time II by Rowe (1972) and post-solicitation wait-time or post-response wait-time by Shrum (1982). The second aspect of time in this study was intra-utterance wait-time and included pauses made by a speaker pausing between sentences within a conversational move or by pausing within an utterance during the conversational move. The speaker began an utterance, paused, and then continued the utterance. In both instances of this intra-utterance wait-time, there was no change of speakers.

To understand how wait-time is used by second-language students, descriptions and comparisons were needed to establish the prevalence

of pauses as inter-speaker wait-time and as intra-utterance wait-time. One of the five secondary research questions is:

How is wait-time used by students in three conversational settings in the target language and native language?

The use of time or pauses is but one way speakers manage the conversation. Conversation is composed of words and conversational skills that utilize management strategies. After the opening speaker's purpose in using a strategy has been achieved, the interaction between participants continues as the speaker pauses to allow the other participant(s) to make a move to continue the conversation or as the speaker makes a solicitation to the other participant(s). Since the use of time during a conversation is an integral part of the development of the conversation, wait-time and other conversational management strategies occur together. Two additional secondary research questions are:

What conversational management strategies are used in three conversational settings in the target language and native language?

How are wait-time and other conversational management strategies used together in three conversational settings in the target language and native language?

Students of varied language levels, that is, the number of years enrolled in a second language, were included in this study. As students progress to advanced levels in the second language, one might expect that different conversational strategies would be used to control the conversation and that wait-time would vary dependent upon the student and the strategy. Without a descriptive study to identify this relationship, it was not known how second-language

students of various language levels used conversational management strategies with wait-time. Second-language students need to become aware of how and when to use conversational management strategies in order to communicate better with each other in the target language.

An additional secondary research question was:

Is there a relationship between wait-time and other conversational strategies used by students in the target language when they study additional years of language?

In the United States, native English-speaking second-language students are surrounded by people using English to communicate. While second-language students may be able to communicate in a classroom setting using the target language, it is likely that their native language influences the target language in classroom and non-classroom settings.

The students' prevailing attitudes and conversational patterns from their native language were brought with them despite their involvement in a one-week immersion program in a foreign language camp. An interview setting in the students' native language, English, was conducted with the students to establish a pattern in which they used wait-time and to determine which conversational strategies were employed while conversing in their native language. The participants' use of wait-time and conversational management strategies in English was then compared to their use in the target language. The final secondary research question was:

Is there a relationship between the use of wait-time in combination with other conversational management strategies in the target and the native languages?

In summary, time and other conversational management strategies are used by conversational participants to develop, control, continue, and end a conversation. This study was undertaken to describe and compare how students used these strategies in simulated classroom and natural settings in the target and native languages.

Significance of the Problem

Students learning to communicate in a second language can be compared to children first learning to communicate in their native language (Kramsch, 1981). Studies have shown that before children are taught the grammatical rules of their native language, they have learned to use their language in a functional manner (Keenan and Klein, 1975; Garvey, 1975, 1977; Scollon, 1973; and Savignon, 1983). The functional use of language is "the purpose of an utterance; the use to which a particular grammatical form is put (e.g., to request, to permit, to describe)" (Savignon, 1983, p. 305). Garvey (1977) equates learning to talk and learning to interact. This conversational interaction is not refined after language is acquired, but it is developed while learning to talk and to listen. Since children learn this conversational interactional process as a part of their native language acquisition, second-language students should also learn to converse in the target language in the same manner.

Language serves a purpose for all speakers during their oral interactions in their native language. The use of time and other conversational management strategies is learned concurrently with vocabulary development. Children's repetitions are mainly discursive

operations in which they attempt to create and maintain a coherent conversation by using conversational management strategies (Keenan and Kline, 1975). Students learning to converse in a second-language classroom need to be given opportunities to practice conversational management strategies such as use of time for thinking, requesting, describing, commenting, acknowledging, and opinionating (Kramsch, 1981).

A facilitative environment in the classroom enables students to learn to use conversational management strategies. Central to this environment is time to pause, keeping the conversation channel open and allowing the speaker to organize thoughts and/or to formulate a response (Kramsch, 1981).

Problems are created for participants in a conversation by the pauses or the periods of silence between turns. The participants interpret the pause as being controlled by the intended next speaker who is therefore pressured to take the turn. The intended speaker must utter a filler, such as erm, um, or mm to hold the turn or incorporate the silence into their turn by an audible intake of breath (Kramsch, 1981). This pause between turns is generally referred to as wait-time by Rowe, 1974a, 1974b, 1974c, 1986; Lake, 1973; Boeck and Hillenmeyer, 1973; Tobin, 1980, 1987; Tobin and Capie, 1980; Shrum, 1982, 1985a, 1985b.

Pauses are naturally occurring parts of conversational management strategies; but, in classrooms, teachers often do not allow enough time for its valuable effects to be accomplished.

Actually, as Rowe (1986) reports, some teachers in science use wait-time as a discipline control device instead of as a learning device. To the contrary, she found that protracted wait-time can lead to more manageable behavior in the classroom. Motivation appears to be influenced by protracted wait-time which may also result in increased attention and cooperation. Wait-time observed with the use of other conversational management strategies can yield much information for second-language research on learning to communicate.

The significance of the study was in the observation of the conversational model and strategies used by second-language students in conversational settings and its implication on second-language research. By observing learners "managing" their speech in their learning environment, Kelly (1955) noted how cognitive control over a learner's environment was extended by using conversational management strategies. Krashen (1981) uses the words of several authors to summarize how learners manage their conversations:

What Candlin and Breen call "negotiating, interpreting, and expressing abilities" are management strategies that not only "encourage intake by allowing conversation" as Krashen (1978) suggests, but constitute the very process of learning itself (Candlin and Breen, 1981). "The problem of learning is not merely one of determining how many or what kinds of reinforcements fix a response or how many nonreinforcements extinguish it, but rather how does the (learner) phrase the experience" (Kelly, 1955, p. 13).

Through the conversational analysis of conversations, wait-time and the strategies used in second-language communication by the

participants of this study were identified as components in second-language communication acquisition.

Assumptions

An assumption of this study was the high availability of instances of verbal exchanges or conversation in the target language between students in conversational settings. Further, it was assumed that a second-language conversational ability was acquired by using the language for communication. In addition, it was assumed that the population of wait-time instances that were obtained from the described observations was representative of the universe of wait-time instances used by students engaged in conversations in conversational settings. A final assumption was that the simulated classroom and natural conversational settings during the Foreign Language Camps was similar to the classroom and natural interactions that occur in the daily lives of the students.

Definition of Terms as Used in this Study

Closing move	An utterance, solicitation, or response made by one of the participants that is a signal that the conversation is to end.
Communication	People exchanging information in a continuous process of expression, interpretation, and negotiation occurring in an infinite variety of situations (Savignon, 1983).
Communicative abilities	A person's ability to engage in conversation at various levels of proficiency.

Conversation	Talk or verbal exchange of thoughts between students talking informally.
Conversational Management Strategies	The use of wait-time and other moves to begin, continue, and end a conversation.
Foreign Language Camps	An immersion experience where students are exposed to and speak the target language.
Formal setting	A setting in which students are controlled or influenced by a teacher.
Informal setting	A setting where students or participants are in control of and influence their own conversations.
Language level	The number of years a student has been enrolled in a second-language class.
Native language	The language that is normally spoken in their living environment for communication purposes outside the Foreign Language Camps.
Opening move	An initial utterance or solicitation made by a participant in a conversation that obligates another participant to respond.
Oral interaction	An exchange of words between two or more participants.
Participant	A person who is engaged in a conversation with another person or persons.
Post-response wait-time	The interval of time measured following a response.
Post-solicitation wait-time	The interval of time measured following a solicitation.
Response	The utterance or answer given by a participant to whom a solicitation was made.
Second language	Synonymous with target language.

Solicitation	An oral invitation to respond made by one participant in a conversation to another participant.
Student	A person who is between the ages of 13-17, who has completed at least one year of a second language, and is attending the Foreign Language Camps at Virginia Polytechnic Institute and State University.
Target language	The language being learned by students that is different from that normally spoken in their normal living environment; also referred to as a second language.
Teacher influence	The influence that a teacher has in controlling wait-time, directing and controlling the conversation in which students are engaged.
Wait-time	The pause or interval of time between speakers or the pauses that occur within a speaker's utterance.

Delimitations of the Study

Participants involved in this study were limited to students who attended the week-long Foreign Language Camps at Virginia Polytechnic Institute and State University. These students were motivated to use the target language in a setting where teacher influence was minimal. In the Camps, students were constantly exposed to the target languages, French, German and Spanish, and were expected to use the target language in their conversations. To determine if wait-time and other conversational management strategies vary according to the setting, data were collected from eight conversational settings where there was a group leader and from four conversational settings where students were in control of the conversation for a comparison. This

affected the generalizability of the study to some extent because the students were voluntary participants and were interested in using the target language as opposed to students in a conventional classroom who vary greatly in their motivation and ability to use the target language in a conversational setting. The campers were largely a self-selecting group. Interested students of varying degrees of social and economic status attended the Camps. This may affect the degree of exposure to the target language and motivation to speak it that each camper may have had. However, the sample provided valuable data in examining the use of wait-time in student-to-student communication to determine how students develop their conversational abilities in conversational settings.

A second delimitation of the study was that only wait-time occurrences between students engaged in conversation were recorded. Wait-time occurrences in other forms of student-to-student communication, i.e., body language, written messages, pictures, and other forms of nonverbal interaction were not considered.

A third delimitation of the study was the decision to record on audiotape rather than videotape student conversations. Nonverbal communication and actions that may have influenced wait-time use would have been recorded by the use of videotape, but the scope of this study was to record conversational interactions, not to observe nonverbal behavior.

Limitations of the Study

One of the factors in this study was the number of years that a student had been enrolled in a second-language class. Recently, the second-language profession has recommended that student progress in learning a second language be measured not by the number of years of study but rather by the level of proficiency as detailed in proficiency guidelines developed by the American Council on the Teaching of Foreign Language (ACTFL). In this study, it was not feasible to conduct oral proficiency interviews with the students involved, and, instead, the number of years of study was used as a descriptor of the students' level. Another limitation of the study was the physical presence of the researcher and/or teacher and the recording equipment which could have inhibited the students in their freedom to converse with each other in a natural manner. To minimize the effects of such an occurrence, the researcher did observe, record, and talk with the students on several occasions prior to data collection.

A final limitation of the study was that the Virginia Tech Foreign Language Camps lasted for only one week, July 26 to August 2, 1986. Nevertheless, students had numerous opportunities to converse with each other in the target language in conversational settings.

Organization of the Dissertation

The study consists of five chapters. This is Chapter One and contains the introduction, research questions, purpose of the study, and significance of the problem.

Chapter Two examines research on wait-time and conversational analysis and includes a brief review of the literature on Virginia Tech Foreign Language Camps.

Chapter Three describes the methods and procedures used in conducting the research. A description of the sample, the instruments and the statistical analyses used are included.

Chapter Four details the findings and results of the data collection and their statistical analysis. Frequency counts, mean frequencies, and standard deviations were calculated for the wait-time and conversational management strategies variables. Analyses of variance were conducted to determine the relationships, if any, between the different variables.

Chapter Five summarizes the results, present conclusions, and the interpretations of the data. Future research recommendations and implications are discussed in this chapter.

A complete bibliography and other appendices follow Chapter Five.

II. REVIEW OF LITERATURE

The research related to the study embraces three areas: discourse analysis, wait-time, and second-language acquisition. The section on discourse analysis examines various conversational management strategies used to interact with others. Among these strategies is wait-time, the pause that occurs between the change of speakers who are orally interacting and/or the pauses within a speaker's utterance. Research on wait-time is examined as it relates to the use and value of wait-time during conversational interactions. Second-language acquisition is reviewed since the study focuses on the conversational management strategies used in second languages. A description of the Foreign Language Camps at Virginia Polytechnic Institute and State University is provided for informational purposes.

A consistent viewpoint in the works that were reviewed is that conversation is an interactional process. Conversational management strategies enable the speakers to develop and sustain the conversation. Natural and classroom settings provide researchers with settings to study the use of conversational management strategies. Researchers have devised frameworks to study and analyze these strategies.

Discourse Analysis Research

Understanding of the mechanisms for maintaining communication and interacting are made possible through the study of discourse

analysis (Stubbs, 1981). The literature in this study on discourse analysis is divided into two sections: (a) a natural setting and (b) the classroom setting. Each section reviewed the conversational management strategies and the various organizational schemes used to analyze the strategies.

A Natural Setting

The linguistic study of conversation first attracted the attention of researchers when Firth (1935) used descriptive linguistics to encourage the study of conversations and stated that a better understanding of language formation and usage is gained through the study of conversations. Austin (1962) moved from the study of formal structure of language to a study of meaning where he asserted that all utterances are performative in nature. Other researchers who have been instrumental in the advancement of discourse analysis are Halliday (1973), Goffman (1981), R. Lakoff (1972), Widdowson (1974), Sinclair (1973), Sacks (1972), and Coulthard (1977). While the study of the phonological, lexical, and syntactic features of speech is of importance in linguistical studies, the functional use of language must be a main concern of discourse analysis (Coulthard, 1977).

Halliday (1973) identified seven different functions or uses of communication used by his young son in his first attempts to communicate. The functions are instrumental (satisfying wants and needs), regulatory (controlling or being controlled), interactional (establishing and maintaining contact), personal (expressing

individuality), heuristic (learning to be inquisitive), imaginative (pretending), and representational (informing). As the child grows older and becomes more adept in using his language, relationships between concepts can be made. At the same time indications can be made as to the purpose for which the child uses the language.

While Halliday identified seven functions of communication, Coulthard (1977) examined the concept of strategies or moves used in conversation. A basic element of conversation is a change in the roles of speaker and listener called turn taking in which a low incidence of overlapping speech and silent periods occur. Two features of American English conversation are: (a) an unspoken rule that only one speaker at a time talks and (b) the recurrences of speaker changes present problems for the participants. Central to this problem is how to maintain control of the conversation so that the concept of "one speaker at a time" is observed.

Coulthard found that Sacks (1974) had made suggestions that the current speaker can control the next turn in three varying ways:

1. The next speaker can be named or alluded to by the use of a descriptive phrase.
2. The next utterance can be constrained although the next speaker is not chosen.
3. Neither option is taken by the current speaker thus allowing one of the other participants to self-select to be the next speaker.

It should be emphasized that the three options are observed in order. If Option 1 is chosen, then the right of the selected next speaker is maintained over a speaker who attempts to interrupt. According to

Coulthard (1977), an important fact is that these options function only utterance by utterance: The prerogative of the present speaker is to choose the next speaker, but not beyond that speaker. The concept of turn-taking involves knowing when the current speaker is finished so the next speaker can begin an utterance.

Since turns to speak in a conversation are highly valued and sought, most turns consist of only one sentence. Coulthard (1977) observed that next speakers are monitoring the current speaker's utterances to find the possible completion point since the exact point of completion is difficult to anticipate. The speaker's turn consists of one or more sentences with the change normally occurring at the end of the sentence. When the current speaker has finished a sentence or reached a point of possible completion, the next speaker begins. The relative lack of overlap and silence between turns can be partially explained by this fact. The participants need to possess a high degree of skill in order to know when to begin their turn. As Coulthard (1977) suggests, ". . . they need to be able to both analyze and understand an ongoing sentence in order to recognize when it is possibly complete, and also to produce immediately a relevant next utterance" (p. 55). Coulthard speculates that if participants do not possess this, a period of silence results between the turns.

The participants in a conversation attribute this silent period to the next speaker. Coulthard (1977) notes that the tolerance for this silence is very low which causes the previous speaker to issue a

post-completor, such as a question asking, Didn't you hear me? or repeat his previous statement. The intended next speaker can hold the turn by taking a breath or issuing sounds such as mm, um, or erm. These techniques are used when the intended next speaker needs time to arrange the next utterance. The strategies used to avoid this silence between turns depend upon the skill of the participants.

The simple concept of turn-taking can become complex due to the conversational management strategies participants choose to employ in a conversation. Coulthard (1977) reports that Sacks (n.d.) has devised three techniques to override the concept of turn and to allow the current speaker to continue speaking beyond the possible completion point. Depending on the skill of the speaker, one or all of the following techniques may be used: (a) Utterance incompleters such as but, did, however, and other clause connectors; (b) an incompletion marker such as if, since, or any other subordinator; and (c) the current speaker can introduce a large unit of speech by such phrases as There are two points I'd like to comment on or First. These techniques do not guarantee complete control since an intended speaker may interrupt; but the current speaker can continue in control of the utterance by speaking louder, or by speaking more quickly and at a higher pitch.

Burton (1980) found that many analysts of naturally occurring data encountered problems when using the classroom coding scheme of Sinclair-Coulthard (1975) in coding the moves of Feedback or Follow-up since these moves rarely appeared in the data. This

suggests that in casual conversations people may talk just to talk while in teacher-to-student interactions present in the classroom, conversation is purposeful and requires feedback and follow-up to accomplish its goals. Burton set up a general framework of coding with three columns headed as Challenging Move, Opening Move, and Supporting Move. Seven specific moves under these general headings were identified: Framing, Focusing, Opening, Supporting, Challenging, Bound-Opening, and Re-Opening. Each of these moves was further explained by the type of strategy used or, as Burton prefers, Classes of Act. He modified the twenty-two acts of Sinclair and Coulthard (1975) to allow casual conversation to be better analyzed. Some of the Acts are Marker, Silent Stress, Starter, Conclusion, Informative, Directive, Comment, Accept, Reply, Acknowledge, Preface, and Evaluate. With these acts, Burton devised an analytical framework for interpreting casual or naturally occurring conversation.

Brown and Levinson (1978) reported that much of the everyday interaction between people is characterized as an interpersonal use of language to establish points of agreement and similar views. Speakers use varying measures to exhibit an appearance of agreement by a repetition or summary of the previous speaker's utterance(s). Brown and Yule (1983) continued with research on the interactional function of language and the characteristics of the spoken language by reporting that an interactional function of language is involved in the expression of social relations and personal attitudes. In

summary, this research supports the contention that conversational management strategies are used to establish an interpersonal relationship and to show agreement.

In an effort to develop characteristics of conversational management strategies of spoken language, Brown and Yule (1983) compiled a listing from the descriptive works of Labov (1972), Sinclair and Coulthard (1975), Goffman (1981), and others:

1. The syntax of spoken language is typically much less structured than that of written language.
2. In spoken language the largely paratactically organised chunks are related by and, but, then, and, more rarely, if.
3. It is rare in spoken language to find more than two premodifying adjectives and there is a strong tendency to structure the short chunks of speech so that only one predicate is attached to a given referent at a time.
4. In spoken language it is quite common to find what Givón (1979) calls topic-comment structure, as in the cats + did you let them out.
5. In informal speech, the occurrence of passive constructions is relatively infrequent.
6. In chat about the immediate environment, the speaker may rely on (e.g.) gaze direction to supply a referent: (looking at the train) frightful isn't it.
7. The speaker may replace or refine expressions as he goes along: this man + this chap she was going out with.
8. The speaker typically uses a good deal of rather generalised vocabulary: a lot of, got, do, thing, nice, stuff, place and things like that.
9. The speaker frequently repeats the same syntactic form several times over.
10. The speaker may produce a large number of prefabricated 'fillers': well, erm, I think, you know, if you see what I mean, of course, and so on (pp. 15-17).

These characteristics can be observed in the conversational management strategies of emphasizing, agreement, turn-taking, holding turn, framing and focusing.

An organizational system for conversational turn-taking has been proposed by Sacks, Schegloff, and Jefferson (1974). The following pattern may occur at the initial exchange or any subsequent exchange:

1. If the turn-so-far is so constructed as to involve the use of a 'current speaker selected next' technique, then the party so selected has the right and is obliged to take the next turn to speak; no others have such rights or obligations, and transfer occurs at that place.
2. If the turn-so-far is so constructed as not to involve the use of a 'current speaker selects next' technique, then self-satisfaction for next speakership may, but need not, be instituted; first starter acquires rights to a turn, and transfer occurs at that place.
3. If the turn-so-far is so constructed as not to involve the use of a 'current speaker selects next' technique, the current speaker may, but need not continue, unless another self-selects (p. 704).

From the above system, it is difficult to predict at what point in a conversation a change of speaker will occur. Once the participants in a conversation have utilized the turn-taking and speaker selection techniques of conversational management strategies, there are other strategies to be utilized within the conversation itself.

Edmondson (1981) explains conversational strategies as what a conversationalist actually does while interacting as opposed to knowing what to do according to the prescribed set of conversational rules. He also refers to conversational strategies as a type of social competence in which the speaker uses "know-how" to reach a

conversational goal without threatening face, which he defines as "an image of self delineated in terms of approved social attributes" (p. 7). A conversation takes place when the speaker-hearer roles change during the course of interaction, a turn in this case. As a result, one of the fundamental conversational management strategies after the opening move is that of turn.

Since the strategy of turn is a fundamental conversational strategy, Stubbs (1983) maintains that one can study through the use of discourse analysis the mechanisms that maintain communication, understanding and interaction. In long conversational narratives, such as jokes or stories, the speaker introduces the narrative with prefaces such as 'guess what?' . . . ; 'y'know what?' . . . ; 'that reminds me' . . . ; and 'you shoulda seen me once' . . . (p. 23). In a like manner, these narratives do not simply stop, they are ended by boundaries that mark the end of the narrative. These markers usually contain little informational content and include such "cliche-cum-proverbs" as: 'Still, that's life'; 'Well, that's the way it goes'; 'Still, we may as well hope for the best'; 'you know--that might have been something'; or 'it makes you think' (p. 24). Participants in conversations that contain narratives need to recognize the strategies of introducing and closing a narration with prefaces and ending markers.

In the research reviewed for naturally occurring conversation, all researchers agree that conversation involves an interaction between two or more people, using opening moves and turn-taking as

two fundamental strategies. Like the research reviewed to this point about naturally occurring conversation, classroom conversation is an equally rich arena for studying.

The Classroom Setting

The concept of moves as detailed in naturally occurring conversations is also used by Bellack, Kliebard, Hyman, and Smith (1966) in describing classroom interaction. They categorized all classroom interaction as occurring in terms of four moves: (a) structuring--moves controlled by the teacher to set the context for teacher and student interaction; (b) soliciting--moves that question, command, or request so as to force a verbal response from the person addressed; (c) responding--moves that complete the solicitation category; and (d) reacting--moves that modify and/or rate previously said utterances. They also suggest that these four moves occur in patterns known as teaching cycles that begin with a structuring or soliciting move and end with a reacting move.

The moves defined by Bellack et al. (1966) become an integral part of the four levels of discourse in the categorization schema developed by Sinclair and Coulthard (1975). The four levels of discourse are the lesson, the transaction, the exchange, and the move. The move level includes four teaching acts: opening, answering, follow-up, and focusing. Each of these four acts further consists of the following 21 discourse acts:

Opening Moves:

- (1) Marker (marks boundaries in the discourse);
- (2) Starter (provides information about or directs attention to or thought toward an area);
- (3) Elicitation (requests a linguistic response);
- (4) Check (enables the teacher to ascertain whether the lesson is progressing successfully);
- (5) Directive (requests a nonlinguistic response);
- (6) Informative (provides information);
- (7) Prompt (reinforces a directive or elicitation);
- (8) Clue (provides additional information that helps students answer the elicitation);
- (9) Cue (evokes a bid);
- (10) Bid (signals a desire to contribute to the discourse);
and
- (11) Nomination (calls on or gives permission to a student).

Answering Moves:

- (1) Acknowledge (shows that the initiation has been understood and the student intends to react);
- (2) Reply (provides linguistic response which is appropriate to the elicitation) and
- (3) React (provides appropriate nonlinguistic response defined by the preceding directive).

Follow-up Moves:

- (1) Accept (indicates that the teacher has heard or seen and that informative move, reply, or react move was appropriate);
- (2) Evaluate (comments on the quality of the reply, react, or initiation moves); and
- (3) Comment (exemplifies, expands, justifies, or provides additional information).

Framing and Focusing Moves:

- (1) Metastatement (helps student see the structure of the lesson, helps them understand the purpose of the subsequent exchange and see where they are going);
- (2) Conclusion (helps students see the structure of the lesson by summarizing what the preceding chunk of discourse was about);
- (3) Loop (returns the discourse to the stage it was at before the student spoke, from where it can proceed normally); and
- (4) Aside (instances where the teacher talks to himself or herself, not really addressed to the class)
(pp. 45-47).

In an effort to bring together various concepts and organizational systems used in naturally occurring conversations and in classroom interactions, Kramsch (1981) compared the rights and duties of the classroom teacher and those of speakers in naturally occurring conversations. She found that discourse used by the teacher in the classroom closely paralleled the strategies used to sustain a natural conversation: turn-taking, internal organization of the turn, and negotiation for understanding (refer to Tables 1, 2, and 3). The terms used in Tables 1, 2, and 3 are defined in Appendix I. As a result of this comparison, Kramsch (1981) suggests that ". . . management skills should be taught concurrently with the formal structures of speech and with the other communicative skills. Students should be taught to 'speak like the teacher'" (p. 17).

While the focus of this study was on the use of conversational management strategies in natural settings by second-language speakers, it was beneficial to investigate the literature for similar research in the second-language classroom in order to connect the two settings. Shrum (1986) suggests that the common task of second-language teachers and learners is to increase the learner's competence to communicate in real situations. The framework in which students use conversational management strategies in the classroom is provided by the teacher. Contrary to the goal of the teacher and learners, the teacher, not the student, becomes skilled in the use of conversational management strategies and in choosing the next speaker as a result of the role the teacher assumes in the classroom (Shrum,

Table 1

TURN TAKING

A. Description

<u>Natural Discourse</u>	<u>Traditional Classroom Discourse</u>
Conversational partners' moves showing readiness to interact	Teacher's moves, showing readiness to teach
<u>Turn Taking</u> (for effective interaction)	<u>Opening</u> (for effective teaching)
1. Find natural completion points	1. Mark boundaries in discourse
2. Take the floor	2. Direct attention
3. Nominate/prime/check/steer/avoid/change topic	3. Nominate topic, provide information, give clues
4. Select next speaker	4. Nominate responder
5. Give the floor	5. Elicit/demand response
6. Check tactical aspects of interaction	6. Check tactical aspects of lesson

(Kramsch, 1981, p. 23)

Table 2

INTERNAL ORGANIZATION OF TURN-AT-TALK

A. Description

<u>Natural Discourse</u>	<u>Traditional Classroom Discourse</u>
<u>Organization within Turn-at-Talk</u> (for successful communication)	<u>Framing and Focusing</u> (for successful progress of lesson)
1. Metacomment and paraphrase	1. Metacomment and paraphrase
2. Expanding through amplification/generalization restriction/contrast examples/examination of causes, consequences, alternatives	2. Expanding through amplification/generalization restriction/contrast examples/examination of causes, consequences, alternatives
3. Internal linking and structuring by announcing future points or by returning to previous points	3. Metastatement and conclusion by structuring future discourse or by summing up past discourse
4. External linking to previous point made by partner	

(Kramsch, 1981, p. 24)

Table 3

NEGOTIATION FOR MEANING

A. Description

<u>Natural Discourse</u>	<u>Traditional Classroom Discourse</u>
<u>Negotiation</u> (for proper communication)	<u>Follow-Up and Answering</u> (for proper transmission of material)
1. Accept or request clarification	1. Accept or request clarification
2. Predict, check, match understanding	2. Check understanding
3. Cooperative repair work	3. Evaluate, correct
4. "Back-channel" activities: restatement/repetition, tag question, summarizing, or paraphrase	4. Comment: restatement/repetition, tag question, summarizing, or paraphrase
5. Buying time, mitigating	

(Kramsch, 1981, p. 26)

1986). Central to this is Long's (1983) statement that in the second-language classroom, the target language is used as the medium as well as the interactional goal.

After observing native French and German speakers, Kramsch (1981) organized their conversational management strategies into the following 21 categories:

Attention Getting, Opinion Opening, Framing and Focusing, Redirecting the Topic, Self-Paraphrasing, Expanding a Point, Announcing Several Points, Adding a Point, Prefacing New Point, Buying Time, Guarding against Interruptions, Returning to the Point, Restating, Cross-Referring to a Previous Point, Piggy-Backing, Counter-Argument, Asking for Clarification, Acknowledgment, Assent, Dissent, Noncommittal, and Fighting Back (pp. 67-89).

Kramsch notes that these strategies have their counterparts in the strategies used by English-speaking Americans. While this list is not exhaustive, it does offer a starting point for using and observing conversational management strategies.

In summary, there has been much research on discourse analysis in the areas of linguistics, sociolinguistics, ethnomethodologies, and philosophy in order to provide a language framework to analyze conversations in lengths of more than one sentence or utterance. Throughout the works reviewed on discourse analysis, each researcher has acknowledged that conversation is an interactional process between participants dependent upon conversational management strategies used by the speakers. Conversational management strategy frameworks have been devised and categorized to study how participants in a conversation sustain and manage their conversations in natural and classroom settings.

Classroom settings are convenient for collecting data since the students are contained in one room facilitating the use of audio and video equipment for recording. However, classroom conversations are teacher-influenced and not allowed to occur naturally. It is more difficult to collect data from natural settings as the speakers are free to choose the setting for a conversation to take place, making it more difficult to use audio and video recording equipment. This freedom allows conversations to occur and develop naturally without teacher influence of the choice of topic or direction of the development of the conversation. Conversations and the conversational management strategies used by the participants can be studied as they naturally occur.

Wait-Time Research

Most research studies dealing with wait-time have been conducted in a classroom setting; however, few wait-time studies dealt with this variable in a second-language setting. The variable wait-time as identified by Rowe (1974a, 1974b, 1986) originated in the observation of three- to five-second pauses on 300 tapes where student-to-student and student-to-teacher questioning was present. In order to study this pause event, Rowe conceptualized a variable called wait-time.

The research conducted by Rowe (1974a, 1986) is used as a reference among wait-time analysts. More than 300 tape recordings of children in elementary science programs were analyzed showing a mean wait-time of about one second. This meant that after a teacher asked

a student a question, that student began to respond within an average of one second. If the response did not begin within the one second average, the question was repeated or rephrased to the same student, a different question was asked, or a different student was asked the same question. Rowe (1974b, 1986) noted two types of wait-time: wait-time I and wait-time II. Wait-Time I is the pause that occurs between the teacher's question and the student's response. Wait-time II is the potential pause that occurs between the student's response and the teacher's reaction. After the response was made by the student, an average time of 0.9 seconds elapsed before the teacher reacted or asked another question.

Rowe, in her study, requested the teachers to choose the best five and the lowest five academic students. She found that the best five received a wait-time of almost two seconds to begin a response to a question while the academically disadvantaged students received only 0.9 seconds to begin their response.

During the analysis and identification of wait-time, Rowe (1974c, 1986) concluded that the usual science classroom has a rapid exchange rate, a high sanctioning rate, and the students' responses are repeated by the teacher. Short wait-time intervals or intense verbal sanctioning prevents the development of conversation where students expand upon each other's ideas. A threshold of 2.7 seconds wait-time is the point below which there is no effect and above which there are marked effects in conversational development.

To further examine the effect of wait-time on the development of language and logic in children, teachers were trained to extend wait-time to a criterion level of at least three seconds. In the analysis of more than 900 tapes with mean wait-times of three to five seconds, Rowe (1974a, 1986) identified ten student variables that had changed values:

1. Student responses increased from seven words (S.D. = 3) to 28 words (S.D. = 6).
2. Unsolicited but appropriate student responses increased from a mean of three (S.D. = 2) to a mean of 37 (S.D. = 11).
3. Failure to respond decreased from a high of 30% where wait-time was one second or less.
4. Confidence as reflected in fewer inflected responses increased.
5. The incidence of speculative thinking increased.
6. Teacher-centered show and tell decreases and student-student comparing increases.
7. More evidence followed by or preceded by inference statements occurred from a mean of 6 statements to a mean of 14 statements.
8. The number of structuring moves increased from a mean of 4 (S.D. = 3) to a mean of 18 (S.D. = 5).
9. Contributions of slow students increased.
10. The number of solicitation, structuring, and reacting moves increased from a mean of five to a mean of 32 (pp. 89-91).

Rowe also identified three teacher changes:

1. Teachers exhibit greater response flexibility as indicated by the occurrence of fewer discourse errors.
2. Number and kind of teacher questions change.

3. Teacher expectations for performance of certain children seem to change (pp. 91-92).

Lake (1973) furthered Rowe's research by investigating the effect of simple extension of wait-time on achieving desired student inquiry behavior. He also investigated the possibility that an extended wait-time schedule would result in cognitively more complex responses from students. To study these broad questions, Lake (1973) worked with 76 fifth grade students who had been randomly assigned to 18 groups of 4. To control the teacher variable in the study, Lake taught all eighteen groups a unit on "Making Paper Airplanes" from the Science Curriculum Improvement Study. He taught nine groups the unit under long wait-time conditions, three seconds or longer, while the other nine groups received instruction under short wait-time conditions, one second or less. After tape-recording, transcribing, and analyzing the transcriptions from the Discovery phase of instruction, the data indicated that the simple extension of wait-time at least to the criterion level of three seconds answered Lake's two general questions: (a) The development of the desired student inquiry behavior is achieved, and (b) student responses become cognitively more complex. When combining these two results, Lake states that ". . . wait-time emerges as one of the most influential instructional variables which has recently been identified" (p. 2).

Lake (1973) concluded from his study that a new definition of wait-time was needed. He suggested that wait-time should be considered as "the length of the silent period which occurs

immediately before a teacher utterance" (p. 122). He contended that the need to wait at least three seconds before the teacher begins talking after a student response is essential to study the effect of increased wait-time. This new definition excludes the wait-time that Rowe (1974) refers to as wait-time I (the pause between the teacher solicitation and students' response) and considers only what Rowe called wait-time II. Lake does not deny the importance of wait-time I but claims that this pause is more in the control of the student and should be referred to as student wait-time, not teacher wait-time.

Boeck and Hillenmeyer (1973) took a different approach in the study of wait-time. They attempted to determine if spontaneous changes in wait-time would result if there were changes in the teacher's questioning behavior. Boeck and Hillenmeyer chose 20 University of Minnesota College of Education juniors who were enrolled in educational psychology and a science methods course. The student-teachers were assigned to one control group and two experimental groups. All groups had to teach five micro-lessons from assigned physical science topics. The two experimental groups received special treatment that consisted of a training session on questioning behavior. Almost all twenty subjects exceeded Rowe's three-second criterion. The analysis of the audiotapes of the lessons taught by the three groups did not reveal the teacher technique of rapid-paced questioning characterized by wait-times of one second or less. This may be due to the fact that student

teachers discussed the importance of allowing pupils a sufficient amount of time to begin their response to questions. The teachers were aware of the variable wait-time and gave the students more time to begin their response to questions. Boeck and Hillenmeyer did observe that "there is a relationship between the type of teacher question asked and the wait-time before a response is given" (p. 8). Generally high-level questions do receive longer wait-times, but there are other variables that affect the length of the pause.

Tobin (1980) investigated the effect that variations in teacher wait-time would have on students in the middle school, grades 5-7. Tobin departed from Rowe's (1974) definition of wait-time and adopted one used by Lake (1973), which was the length of pause preceding any teacher utterance. By using this particular definition of wait-time, teachers controlled the length of the pause and student talk did not affect teacher wait-time. Tobin used a sample of 733 students ranging in age from 10 years to 13 years and attending 11 Australian middle schools. Twenty-three teachers were involved in the study.

The ten teachers in the normal wait-time group averaged 0.7 seconds while an average of 3.1 seconds was achieved by the thirteen teachers in the extended wait-time group. The incorporation of an extended teacher wait-time into thirteen classes was associated with higher average student achievement scores. Tobin advocates the development and use of integrated higher-level thought processes for children 10-13 years old. He reports that extended wait-time alone will lead to a higher process-skill attainment; but when used in

conjunction with other variables, the results are more dramatic. Tobin, like Rowe (1974) and Lake (1973), notes that an increase in achievement level occurred when the mean teacher wait-time was extended beyond three seconds. He reports that wait-time is a valuable teaching tool and that the adoption of a schedule of extended wait-time is an essential component of effective science teaching.

Tobin and Capie (1980) investigated the effect of student engagement and two teacher variables on science achievement. One of the teacher variables was teacher wait-time used as "the length of the pause preceding any teacher utterance" (p. 14). The second teacher variable was questioning quality used "to describe cognitive level, clarity, and relevance of questioning" (p. i). Thirteen middle school teachers representing grades six through eight from four schools in Clarke County, Georgia, received varying degrees of feedback designed to extend teacher wait-time at least to Rowe's criterion level of three seconds and beyond that level. Questioning strategies used by teachers were to increase in quality through feedback.

Tobin and Capie (1980) operated on the premise that if a question that needs a higher-level objective engagement is asked, time must be given for students to formulate a response. They found that science achievement varied significantly in relation to the "variation in teacher wait-time, formal reasoning ability, and two categories of student engagement (attending and generalizing)"

(p. i). The results indicated an increase in science achievement when teachers used a mean wait-time of approximately three seconds and students were at maximum on-task levels with the instructional objectives.

Tobin (1987) defined wait-time as ". . . the duration of pauses separating utterances during verbal interaction" (p. 69).

Elementary, middle, and high school students achieved a higher level of cognition and the discourse of students and teachers changed when the wait-time threshold value of three seconds was reached. These results are consistent with results obtained in other studies.

However, Tobin (1987) recommends a consistent system of referring to and describing the variable wait-time. The nomenclature and definitions that he recommends for the four types of wait-time identified in previous studies are:

1. Wait time TS: The pause following any teacher utterance and preceding any student utterance.
2. Wait time ST: The pause following any student utterance and preceding any teacher utterance.
3. Wait time SS: The pause following a student utterance and preceding an utterance from the same or a different student.
4. Wait time TT: The pause separating consecutive teacher utterances (p. 90).

Meredith (1978) reports the effect of an enforced delayed response upon impulsive, reflective, fast-accurate, and slow-inaccurate Level II Spanish students. Generally, in second-language classrooms, an impulsive responder answers questions prematurely and with a high rate of inaccuracy while a reflective

responder tests various hypotheses and rejects incorrect hypotheses before a response is made. The testing of oral second-language skills requires students to begin a response within a few seconds, encouraging impulsive responders and penalizing reflective responders. Spanish II students in Meredith's study were assigned to a free-latency group in which wait-time was free to vary or to an imposed-latency response group in which a response pattern of 20 seconds was imposed. He found that, under imposed-latency conditions of 20 seconds, impulsive responders were more accurate in their responses and that there was a movement of all groups toward a higher performance level regardless of the students' earlier pattern of performance. Among other conclusions, Meredith suggested that oral second-language testing incorporate an imposed-latency response period in its guidelines to gain a more accurate indication of students' language proficiency.

A study that deals with wait-time in second-language teaching is that of Shrum (1982; 1985a, 1985b). Shrum used the definition of wait-time as first proposed by Rowe (1974a) as the pause to think after solicitations and responses. This is different from the wait-time that precedes any teacher utterance that was used by Lake (1973), Tobin (1980), and Tobin and Capie (1980) in their studies.

In an effort to determine the existence of wait-time in second-language classes, Shrum conducted a descriptive study in which the average length and variability of wait-time was investigated and the relationship between wait-time and solicitations and responses in

native and target languages was described. The data for this study, collected over a four-week period, were from the observations of five classes composed of first-year Spanish and French students in an urban community of 75,000 and in a rural community of 10,000.

Shrum coded 7503 classroom events using Hough's (1980) Observational System for Instructional Analysis IV (OSIA). Of these classroom events there were 3270 occurrences of wait-time. Shrum further coded the wait-time occurrences as post-solicitation wait-time or post-response wait-time, the same categories Rowe (1974a, 1974b) called wait-time I and wait-time II. Post-solicitation wait-time ended in an occurrence when the student response began or when the teacher rephrased the solicitation or called on another student. Post-response wait-time ended when the teacher or another speaker made an utterance after the response. Shrum found that the mean length of post-solicitation wait-time was 1.91 seconds and the mean length of post-response wait-time was 0.73 seconds. Shrum found that both types of wait-time in second-language classes were less than the three- to five-second criterion level recommended by Rowe (1974a, 1974b, 1974c, 1986).

Among the conclusions offered by Shrum (1985b) are:

1. Wait-time in second-language classes is longer than in science classes, but still too short to allow for thoughtful cognitive processing.
2. There was longer wait-time after English solicitations than after target language solicitations.
3. Post-response wait-time did not interact with target or native language variables at all (p. 311).

One of Shrum's (1985b) recommendations concerning the use of wait-time was: "In order to make second-language classrooms the sites of meaningful target language communication, teachers and students should spend more time listening to and reflecting upon what is said in those classrooms" (p. 311). Her study indicates that little reflection time is used in either the native or target language.

In summary, researchers have shown that wait-time and questioning strategies used in the science classroom are influential in improving student achievement. Meredith (1978) and Shrum (1982) established the existence of wait-time in the second-language classroom.

Several important generalizations concerning wait-time can be made:

1. Rowe, Lake, and Tobin among others have established that student responses increase in quality and length when wait-time is extended.
2. Speakers can be taught to extend wait-time, but must have follow-up re-enforcement in order to maintain the extension.
3. In the classroom, science and second-language, post-solicitation or wait-time I is generally student controlled. Teachers generally control post-response wait-time or wait-time II.
4. There is little reflection given to solicitations or responses in the classroom due to the short wait-time period.

Shrum (1982) reported that the representation of student-to-student interaction events in the classroom was poor. Their interaction with each other in the target language where

students elaborate upon their utterances needs to be examined in order to provide a further understanding of the nature of natural communication in the target language.

Related Research

An area of research related to this study is language acquisition. Literature on language acquisition was reviewed to learn how native language is first acquired. As the native language is being learned, what characteristics become evident in patterns of acquisition?

Language Acquisition

Fredrick and Walberg (1980) report that language acquisition was thought, until recently, to be a factor of the degree of maturation or early sensitivity of a young child. Now language acquisition is thought to depend more on the amount of formal or informal exposure to the language in the child's environment. It has not been proven that different processes, dependencies, or rates are involved in second-language learning. In other words, first-language acquisition and second-language acquisition are similar in the manner in which they are learned.

Another step in the process of language acquisition is conveying and responding to requests for action. Garvey (1975) investigated this acquired ability in children. The subjects in her study were 21 girls and 15 boys from white, middle-class, predominantly professional families enrolled in the same nursery school. Their

ages ranged from three years six months to five years seven months. The children were divided into dyads, and spontaneous speech of 36 dyads of the children were analyzed. Garvey identified frequent direct request forms of which the majority were verbally acknowledged. Upon examination of the contexts of the direct requests, Garvey found that speaker and learner shared "an understanding of the interpersonal meaning factors relevant to requesting" (p. 41). The same number of direct requests were produced by younger and older dyads. The success of achieving the intended effects of the direct requests were equal for both groups. A key focus of Garvey's study was that these pre-school children had acquired the ability not only to say what they meant, but to understand the meaning behind the request.

An additional theory on first- and second-language acquisition is that of the Input Hypothesis Theory (Krashen, 1982, 1983) consisting of five hypotheses about second-language learning: the Acquisition/Learning hypothesis, the Natural Order hypothesis, the Monitor hypothesis, the Input hypothesis, and the Affective Filter hypothesis.

The Acquisition/Learning hypothesis states that second languages, like first languages, are acquired and learned. Language acquisition occurs subconsciously in that the users are not aware that they are acquiring the language, but only that they are using the language for communication. Krashen (1982) states that adults and children can use the language acquisition device (LAD) first

identified by Chomsky. Learning, according to Krashen (1982), is ". . . the conscious knowledge of a second language, knowing the rules, being aware of them, and being able to talk about them" (p. 10).

The second hypothesis, Natural Order, states that grammatical structures are acquired in a predictable order. Some structures are acquired early, and others are acquired at a later stage in language development. First language influence can alter the order in second-language acquisition, but instruction cannot alter the order. Krashen states that grammatical sequencing should be rejected in all cases if the goal for a learner is language acquisition.

The Monitor hypothesis describes the interrelationship of acquiring and learning. One's fluency in second language is made possible by acquisition, not learning. Conscious learning has the function of being used as an editor, or monitor, to make corrections, to alter the acquired system before communicating or to self-correct. Conscious learning, or use of formal rules, may be used by second-language communicators when three conditions are met: time to think, focus on form, and know the rule. However, overuse of the Monitor can produce a hesitant style of speaking with unnatural sounding grammatical structures.

The fourth hypothesis is the Input hypothesis stated in four parts (Krashen, 1982):

1. The Input hypothesis relates to acquisition, not learning.

2. We acquire by understanding language that contains structure a bit beyond our current level of competence ($i + 1$). This is done with the help of context or extra-linguistic information.
3. When communication is successful, when the input is understood and there is enough of it, $i + 1$ will be provided automatically.
4. Production ability emerges. It is not taught directly (pp. 21-22).

This Input hypothesis predicts that a pedagogical approach that emphasizes the provision of large quantities of comprehensible input will be more successful in developing language acquisition than any of the older approaches.

The last hypothesis, the Affective Filter hypothesis, states that various affective factors relate to second-language acquisition. Language acquirers who possess attitudes conducive to acquiring second languages, in addition to seeking and obtaining more input, will have a lower or weaker affective filter. Stevick (1976) suggests that classrooms that promote low anxiety among students will encourage low filters and that language acquisition will occur with greater intensity.

Krashen's theory is not without critics who suggest that the number of variables prohibit language development rather than improving acquisition. Higgs (1985) criticizes Krashen's theory by suggesting that flooding the second-language classrooms with comprehensible input will not lead to language acquisition. Higgs points out that Krashen does not convincingly discount for the fossilization of language among second-language students. He

suggests that Krashen's Input Hypothesis model is not applicable for second-language classrooms in the United States since they are removed from the immersion/second-language environment that forms the theoretical basis for his model.

In summary, language acquisition research has been extensive in both first-language and second-language acquisition. It is known that children develop their native or first language through listening to their oral environment and then through producing oral elements of it (Garvey, 1984). The process of becoming a proficient user of the language is a lengthy and complex one.

SUMMARY OF REVIEW OF LITERATURE

The literature reviewed in this chapter concerned three areas: conversational analysis, wait-time, and language acquisition.

Through conversational analysis, the process for beginning, sustaining, and ending a conversation can be studied. After opening moves and identification of the next speaker, the participants in a conversation use various conversational management strategies to sustain or end the conversation. Since conversation is an interactional process between two or more participants, the development of that conversation is dependent upon various conversational management strategies employed by the participants as they interact. Through the analysis of these strategies, researchers can better understand how people manage their conversations and how to help people who have difficulties in conversing with other people.

Wait-time has been established as a variable in second-language and other classes, but whether wait-time is teacher controlled or student controlled varies according to researchers. The literature suggests that post-solicitation wait-time is generally controlled by the student in the classroom while post-response wait-time is often controlled by the teacher. The positive effects of the extension of wait-time in science classes includes increased confidence in language usage, student speculative thinking, level of contribution, increased numbers of solicitations, structuring, and reacting moves. In science classes the mean post-solicitation wait-time is about one second while in second-language classes the effects of meeting and surpassing a criterion wait-time have yet to be established. Since second-language acquisition research has determined that acquiring a second language is much like that of acquiring a first language, an ideal setting to practice and to use a second language in a natural setting, i.e., outside of the classroom, is foreign language camps. In these camps, the campers interact with leaders using the target language and are stimulated and encouraged to use their target language at all times. Such a setting provides an opportunity to study the use of conversational management strategies, including wait-time.

When considered as an entirety, research on the use of wait-time in various conversational management strategies is extremely limited. By observing second-language learners who use conversational management strategies, researchers can observe how learners extend

cognitive control over their learning environment. Conversational analysis of student-to-student conversations can provide insights into how language acquirers use wait-time in conversational management strategies to interact with others. Finally, through conversational analysis, the strategies that aid in second-language acquisition can be identified.

Foreign Language Camps

A description of the Foreign Language Camps at Virginia Tech is included to provide the reader an understanding of the context of the data collection. This site was selected because the Virginia Tech Camps have been conducted for several years and have experienced an increase in the number of campers attending the Camps.

Shrum (1985) reports that the Foreign Language Camps at Virginia Tech have developed a unique concept of staffing known as curricular teams formed by a high school teacher, a native speaker, and a junior counselor. The high school teacher possesses the creativity to plan a variety of instructional settings that will meet the varied interests and abilities of the students. Native speakers provide cultural and linguistic authority to promote realistic native experiences and encourage communication in the campers' target languages. The junior counselors, aged 17 to 22, serve as role models for the younger campers to continue their language studies. The target language of each team--Spanish, French, or German--is used to solve problems, plan, raise questions, secure resource materials, and form friendships, i.e., to communicate in a natural setting.

During the week, Monday through Friday, the curricular teams lead planned activities during a daily Conversation Group and three daily Activity Groups. Providing interaction and communication in the target language among themselves and the campers is an important informal function of each team member. All meals, recreational events, and evening cultural activities provide opportunities for the campers to converse with each other in the target language in a natural setting. Finally, Shrum states that the Camps at Virginia Tech ". . . provide a unique opportunity . . . to interact . . . to use the target language naturally and easily in task-oriented projects" (p. 222).

In summary, it is stressed that the Camps are immersion programs where the teachers and students communicate with each other and among other groups. It is in this manner that use of the target language by the campers is continually encouraged in order to provide for meaningful communication.

III. PROCEDURE

Population

The population for the study consisted of the conversational management strategies in which wait-time occurred in second-language conversations in the target and native languages observed during one week in the Spanish Camp. The strategies were noted from audio-recorded tapes made by campers. The Spanish Camp was an integral part of the Virginia Tech Foreign Language Camps held at Virginia Polytechnic Institute and State University located in Blacksburg, Virginia. The campers were self-selected, and the only special requirements were that they be 13 to 17 years old, had completed one year of Spanish by the time the Camps were held, and had the recommendation signature of their Spanish teacher.

Sample Selection

The sample consisted of the population in which wait-time occurred with other conversational management strategies used by students conversing in Spanish. The researcher recorded and collected much in-depth data on wait-time used as a conversational management strategy within the time limitations of this study. The tabulation of a large number of occurrences was facilitated through the use of The Observational System for Instructional Analysis IV (OSIA IV) as the method of analysis.

Research Design

Audio recordings were made of second-language conversations in the target language, Spanish, and in the native language, English, by students in the Spanish Camp of the Virginia Tech Foreign Language Camps. The recordings were coded using The Observational System for Instructional Analysis IV (Hough et al., 1980) and a descriptive listing of conversational management strategies devised by Kramsch (1981). The researcher chose these codings because they offered a way to code events, or occurrences of the variables, with accuracy and flexibility that allowed a complete and real description of the variables as used by students in their conversations.

OSIA IV is composed of thirteen categories which are mutually exclusive and require a coded entry every five seconds or sooner if a new event begins. According to Hough (1980), the use of OSIA IV provides the researcher a method ". . . capable of describing critical aspects of instruction in the richest possible ways" (p. i). Although Kramsch makes a comparison between classroom and naturally occurring conversations, the listing of conversational management strategies is not designed to be used as a research instrument. No previous reliability and validity studies have been reported using the listing as a research instrument. For this reason, its categories are embedded as descriptive subscripts within the more reliable and valid instrument of OSIA IV.

Kramsch (1981) found through the comparison of the rights and duties of the classroom teacher and of speakers in naturally

occurring conversations that the discourse used by the teacher in the classroom closely paralleled the strategies used to sustain a natural conversation. A basic requisite for a conversation to begin and continue is that of turn-taking in which one of the participants makes an opening move showing a readiness to interact with the other conversational participant(s). The initial speaker can choose the topic, prime the topic, steer the direction of the topic, change the topic, and has the option of choosing the next speaker. If the floor is given up by the speaker, other participants may respond.

In the classroom the teacher makes the move indicating a readiness to teach, directs the attention of the students, chooses the topic of the lesson, and provides information. The chain of events in the moves of opening (taking the floor) and turn-taking are very similar in a natural conversation and in teacher-to-student interaction in the classroom.

Another comparison between classroom interaction and natural conversation can be made on the basis of negotiating for meaning to promote proper communication. After the second speaker in a conversation has made an utterance, the initial speaker accepts the utterance or requests clarification. After this series of moves, conversational management strategies such as checking, cooperative repair work, back-channeling activities, and buying time take place. The use of time allows the participant to process the previously said information and/or think of a response. The time pause may be

silence or the utterance of words such as ah, umm, or uh to hold the turn.

In the classroom, negotiating is the process of follow-up and answering. After a response has been made, the teacher or another student can acknowledge, solicit clarification, judge correctness or incorrectness, or sense some unspoken information from the response. Thinking occurs that buys time for the teacher or student for purposes of processing, and a strong similarity between natural conversation and classroom interaction exists.

The thirteen categories that comprise OSIA IV parallel those used to make the classroom comparison with natural conversations. A key feature of OSIA IV is its adaptability and flexibility in its 16 user-defined subfunctions and 20 user-defined subscripts that allow OSIA IV to be adapted to categorize any variable. OSIA IV can be adapted to code any finite degree of that variable that may emerge from a naturally occurring conversation.

Although OSIA IV is designed to describe the basic aspects of instruction, the established relationship between the classroom interactions and naturally occurring interactions between students has been supported by Hough (1980) and Kramsch (1981). A primary purpose of OSIA IV is to use the interactional analysis approach to the collection of information to study verbal interactions in the classroom or in a natural setting.

Variables

The variables that were studied were human, material, and temporal resources that occurred in the observations of the students in the Spanish Camp. Human resources were the participants in a conversation using material and temporal resources. Material and temporal resources were described by the thirteen categories of OSIA IV. These variables were observed, described and compared, not manipulated, as to how they were used by students in conversations.

The human resources were students and teachers, called participants, in conversations that occurred in simulated settings. The OSIA IV provided a system to identify selected student variables through the use of subfunction notations. Three additional descriptions were applied to the student variable, corresponding to the number of years of Spanish studied (Spanish I or II and Spanish III) and the number of speakers. Students who had completed either their first- or second-year of Spanish were coded as S_V with the blank representing a category code that will be explained under temporal resources. Students who had completed three years or more of Spanish were coded as S. If two or more students made an utterance at the same time, it was coded as Q. If a participant other than students entered the conversation, usually the teacher, then utterances made by that person were coded as T.

The human variables and their source codes are summarized below:

<u>Variable</u>	<u>Code</u>
Participant other than student in first- or second-year language level group	T_M or T_AM
Participant other than student in third-year language level group	T or T_A
Student Participants	
First- or second-year students of Spanish	S_V or S_AV
Third-year students of Spanish	S or S_A
Group	Q or Q_A

The material resources that were used by the human resources in conversations were the thirteen categories of OSIA IV: thinking, sensing, manipulating artifacts, initiating information, responding, soliciting clarification, soliciting, judging correctness, personal positive judgment, acknowledging, judging incorrectness, personal negative judgment, and instructionally nonfunctional. The category of thinking is considered a management strategy and was described as a temporal resource. In this study sensing was defined as using one's five senses to receive information from other sources. In OSIA IV this category was coded as 2. A student action of sensing was coded as S2 and an action by someone other than a student was coded as T2. The other OSIA categories were coded in a similar manner. The OSIA IV possesses a descriptor of \underline{x} to indicate interactive exchanges between students in any of the categories used in this

study. The following sample conversation illustrates the use of these categories and their codes:

Jim: How many students are there in the camp?
(soliciting and coded as S7)

Amy: Twenty-six students.
(responding and coded as S5)

This conversation was coded as S7yS5.

In addition to material and human resources, the last resource was temporal under which the wait-time variable occurred and described best in OSIA IV as Category 1, thinking. Thinking was defined as the period of time in which a participant silently reflected on some aspect of the conversation or used "filler-words" to hold the conversational turn. Wait-time was coded as S1V, S1, or Q1 for students while other was coded as T1.

Wait-time was described in its relationship to the twelve categories detailed in material resources. The time interval that occurred after the use of one of the twelve OSIA categories between speaker changes was designated as inter-speaker wait-time, measured to the nearest tenth of a second. An example of this interaction is:

Amy: In which city is the camp going to be held?
(solicitation--S7)

a pause of 2.9 seconds--(wait-time--S1#28)

Alyson: In Richmond.
(responding--S5)

This is written as S7yS1#W#28yS5 in OSIA IV coding. The # symbol in OSIA IV coding precedes the subscript code.

Intra-utterance wait-time was designated as the time interval that occurred within an utterance and measured to the nearest tenth of a second. This conversational exchange is illustrated by the following sample:

Alyson: How much ** money ** does the camp cost?
 (soliciting information--S7--with intra-utterance
 wait-time)

Amy: Eighty or ninety dollars.
 (responding--S5)

Double asterisks denote wait-time.

This is written as S7\$CS1S7\$RS1S7\$RyS5 in OSIA IV coding. All the variables and their codes are summarized in Table 4.

The duration of any coded event in OSIA IV is noted by the use of the symbol # followed by a number. Events were coded every five seconds in OSIA IV or whenever a new event began. For example, S6 represented a student solicitation for clarification of five seconds or less duration. If the solicitation lasted for ten seconds, S6#1 would be the entry code. This use of OSIA IV coding was used for all events except wait-time.

The coding of duration of events in OSIA IV was modified to accurately measure the duration of wait-time. Research by Rowe (1973a, 1973b, 1973c, 1986), Lake (1973), Tobin and Capie (1980), Shrum (1982, 1985a, 1985b) has shown that the duration of wait-time is less than the five second-second interval normally used in OSIA IV coding. The coded entries of S1, S1V, Q1, and T1 representing wait-time were coded in intervals of one-tenth of a second of wait-time. Each additional one-tenth of a second duration was coded

Table 4
List of Coded Variables

Variables	Source Code	Category Code	Subfunction Code	Subscript Code
Human Variables				
Student				
First- or second-year language student	S		V	
Third-year or more language student	S		-V	
Group	Q			
Teacher/Researcher for first- or second-year student group	T		M	
Teacher/Researcher for third-year student group	T		-M	
Material/Process Variables				
Initiating information		4		
Responding		5		
Soliciting clarification		6		
Soliciting		7		
Judging correctness		8		
Personal positive judgment		9		
Acknowledging		10		
Judging incorrectness		11		
Personal negative judgment		12		
Instructional nonfunctional		13		

Table 4 (continued)

Variables	Source Code	Category Code	Subfunction Code	Subscript Code
Natural completion				A
Interrupting to take floor				B
Change topic/request information				C
Select next speaker				D
Give the floor				E
Check aspects of interaction				F
Metacomment				G
Expanding through generalization				H
Internal linking				I
External linking				J
Request clarification				K
Match understanding				L
Cooperative repair work				M
Back-channel				N
Buying time				O
Simple response				P
Occurrence of intra-utterance wait-time in utterance				R
Native language			A	
Target language			-A	
Temporal Variables				
Inter-speaker wait-time				W
Intra-utterance wait-time				-W

with the symbol # and a number. For example, a student wait-time lasting nine-tenths of a second was coded S1#8.

Instrumentation

The Observational System for Instructional Analysis IV (Hough, 1980) was used to analyze wait-time events and other conversational management strategies as they occurred in conversations. This use of OSIA IV was supported by Hough's (1980) contention that instructing and learning takes place regardless of the setting and of the participants and Kramsch's (1981) statement that students should "speak like the teacher." The researcher chose this analysis system because it offered a way to code events with accuracy and flexibility that allowed a complete description of the strategies used by students in their conversations. The OSIA IV offered the researcher nearly 250,000 possible descriptors for coding a conversation. The researcher had the option of choosing among four foci, five instructional contexts, three instructional functions, 13 categories, 16 subfunctions, and 20 subscripts.

The researcher chose from among four foci that determined what would be analyzed as well as the recording of code symbols. The four foci in OSIA IV as determined by Hough (1980) were the instructional setting, the teacher, the individual student, and other.

The instructional setting described the context from which the data were collected. The majority of the data collected occurred in a group setting common of naturally occurring conversations. In collecting data on conversational interactions, the simulated class

setting was involved. The adaptability and flexibility of OSIA IV permitted the coding of various settings. The five settings are as follows (Hough et al., 1980):

<u>Instructional Setting</u>	<u>Definition</u>
Class	A setting that involves all or a significant portion of the persons (teachers and students) in an instructional activity (p. 12).
Group	A setting that involves a relatively few students and may or may not involve the teacher (p. 12).
Tutorial	A setting that involves two people (a dyad) in an instructional situation in which one or both persons assume the responsibility for facilitating the learning of the other (p. 13).
Independent	A setting primarily characterized by one person working in "psychological detachment from others in a way that facilitates one's own learning (p. 13).
Other	A setting that is not a class, not a group, not a dyad, and not an independent instructional setting (p. 14).

The following codes are used by the OSIA IV in recording the instructional setting:

Class	C
Group	G
Tutorial (dyad)	D
Independent	I
Other	O

The heart of OSIA IV is the thirteen categories that are mutually exclusive and inclusive events. The categories and their codes in OSIA IV are defined on the following pages (Hough et al., 1980):

Categories of OSIA IV

<u>Category</u>	<u>Code</u>	<u>Definition</u>
Thinking	1	Any nonappraisal behavior in which a person is apparently reflecting on (thinking about) some substantive or managerial aspect of classroom instruction. The behavior is essentially one of being consciously in communication with oneself (p. 24). This category was designated as wait-time.
Sensing	2	Any nonappraisal behavior in which a person uses one's senses (seeing, hearing, feeling, tasting, smelling) to take in information from an external source. The behavior is essentially one of being in sensory contact with one's external environment (p. 27).
Manipulating	3	Any nonappraisal behavior in which one manipulates artifacts (works with) instructional artifacts (curricular-instructional materials). The behavior is essentially one of being in tactile contact with materials in the process of doing something with the materials (p. 33).
Initiating	4	Any spoken, unspoken or mediated nonappraisal information behavior that presents substantive or managerial information to another or others (p. 33).

Responding	5	Any spoken, unspoken or mediated nonappraisal behavior that is evoked by an element in the instructional setting (p. 37).
Soliciting clarification	6	Any nonappraisal behavior (spoken, unspoken or mediated) that evokes or is clearly intended to evoke from another person a response that reveals the fuller meaning of an antecedent behavior of that other person or a product of his behavior (p. 40).
Soliciting	7	Any manifest (spoken, unspoken or mediated) nonappraisal behavior that evokes or is clearly intended to evoke a response from another person in the instructional situation (p. 43).
Judging correctness	8	Any manifest behavior (spoken, unspoken or mediated) that responds or reacts to an antecedent behavior of the self or another, by judging the behavior or the product of behavior to have been logically, empirically or normatively correct to some degree. Publicly accepted criteria are invoked or could be invoked to support the judgment (p. 5).
Personal positive judgment	9	Any manifest behavior (spoken, unspoken or mediated) that responds or reacts to a person (self or another), . . . to a product of such behavior (appearing in the instructional setting) by expressing a personal, positive judgment about the person, behavior or product of behavior. The criteria for making the judgment are personal and arise from the feeling states or value preferences of the person doing the judging (p. 7).
Acknowledging	10	Any manifest behavior (spoken, unspoken or mediated) that responds or reacts to a person (self or other), an antecedent behavior of the self, or of another, or to a product of such behavior (appearing in the instructional situation) by recognizing the person, behavior, or product in ways that indicate that the person, behavior

		product has been perceived. No judgment is explicitly expressed (p. 9).
Judging incorrectness	11	Any manifest behavior (spoken, unspoken or mediated) that responds or reacts to an antecedent behavior of self or another or to a product of such behavior . . . by judging the behavior, or the product of behavior to have been logically, empirically or normatively incorrect in some degree. Publicly accepted criteria are invoked or could be invoked to support the judgment (p. 13).
Personal negative judgment	12	Any manifest behavior (spoken, unspoken or mediated) that responds or reacts to a person (self or other), an antecedent behavior or to a product of such behavior . . . by expressing a personal, negative judgment about the person, behavior or product of behavior. The criteria for making the judgment are personal and arise from the feeling states or value preferences of the person doing the judging (p. 16).
Instructionally Non-functional	13	All instances of teacher or student behavior that are not clearly related in a functional way to instruction or classroom management (p. 47).

A feature of OSIA IV that made it so adaptive and flexible was its user-defined subfunctions (n = 16) and subscripts (n = 20). The availability of these subfunctions allowed the researcher to refine information about instructional functions. The subfunctions and their user-defined meanings that were used are as follows:

<u>Subfunction Code</u>	<u>Definition</u>
V	First- or second-year Spanish student
-V	Third-year Spanish student
M	Teacher of first- or second-year student
-M	Teacher of third-year student

A	Native language interview setting
-A	Target language conversation and planning settings

The use of subscripts allowed the researcher to make distinctions within a category. The researcher was able to refine any of the thirteen categories of OSIA IV in great detail. Any letter of the alphabet or single numerical character could be used in subscripting. The subscript in OSIA IV was always preceded by a \$ sign for computer data analysis purposes. The subscripts and their user-defined meanings, which are the conversational management strategies, that were used are as follows (Kramsch, 1981):

<u>Subscript Code</u>	<u>Definition</u>
A	Natural completion points
B	Taking the floor/interrupting to take the floor
C	Nominate/steer/change topic/requesting information
D	Select next speaker
E	Give the floor
F	Check tactical aspects of interaction
G	Metacomment
H	Expanding through amplification/generalization/contrast examples/consequences
I	Internal linking and structuring by announcing future points or by returning to previous points
J	External linking to previous point made by partner/adding a point/paraphrase

K	Request clarification
L	Check, match understanding
M	Cooperative repair work
N	Back-channel activities: repetition, tag question, summarizing/reactive listening
O	Buying time, mitigating
P	Simple response/acknowledgment
R	Conversational management strategy noted; indicates presence of intra-utterance wait-time

The letters Q, S, and I were not used as subscript codes as they were source codes in the OSIA IV coding system. Explanations of the user-defined meanings and examples of the subscript codes are in Appendix I.

In addition to OSIA IV, the researcher used the Letter of Explanation to Parents and Participants (Appendix A), Statement of Informed Consent Form (Appendix B), and the Human Subjects Exemption Request (Appendix H) to secure permission to collect data from the conversations of the students involved in this study.

Data Collection

Conversations of and interviews with campers who attended the Spanish Camp of the Foreign Language Camps held at Virginia Polytechnic Institute and State University in Blacksburg, Virginia, were audio recorded. The Informed Consent forms of Spanish students who had permission to participate in the study were separated into three groups: first-year students, second-year students, and

third-year students. Four students were randomly chosen from each of the first- and second-year groups. From the third-year group, eight students were randomly chosen. The sixteen students chosen to participate in the study were divided into four groups that remained constant throughout the data collection. The homogeneity of each group was based on the level of Spanish that each participant had completed, their interest in using Spanish to communicate, and their willingness to participate in the study.

Each of the four groups were involved in three conversational settings. The teacher-controlled conversation setting was designed to simulate a classroom environment to gather data on classroom interactions. The similarities were: (a) The teacher controlled the interactions; (b) there was a wide range of conversational abilities; and (c) there were many instances of the solicitation-response interaction. The differences from the regular classroom were: (a) the students were motivated to use Spanish to communicate; (b) the type of personnel involved in the Camp; and (c) the expectations of the students and personnel of each other.

The student-controlled planning setting was designed to simulate a natural environment where students could converse freely to gather data on naturally occurring conversations. The Camp was designed to simulate an immersion experience where the students would be able to interact in an informal setting as if in the target country.

The researcher-controlled interview setting was designed to simulate a classroom setting where the participants were able to

converse in a structured conversation, but free to interact with each other at any point during the conversation. This setting is different from the true classroom setting for the same reasons as for the teacher-controlled setting.

Audiotape recordings were made of 12 conversations during the week of the Camp. Typescripts were made of each tape to provide written records of the conversational settings. Coding of the conversations was done promptly using OSIA IV and the descriptive listing of conversational management strategies to control compounding effects that could have occurred.

Experimental Procedures

The design of a study and the choice of the instrument used for data analysis must be concerned with validity and reliability to be assured that the instrument is measuring what it is intended to measure and to establish that the same analysis can be conducted by other trained users with consistent results. There are several validity concerns such as face validity, construct validity, and phenomenal validity. Two of the reliability concerns are interrater reliability and observer drift.

The face validity of the Observational System for Instructional Analysis IV and its application to the second-language setting was established in the previous description of OSIA IV. Other studies have been conducted using OSIA IV with second-language settings, thereby establishing face validity. Two other validity concerns were construct validity and phenomenal validity.

Construct validity was established to ascertain whether the researcher understood the specific categories the instrument was designed to measure. In this study, Dr. Judith Shrum was the criterion observer to establish construct validity between the researcher and the OSIA IV instrument. A typescript of 100 isolated and unambiguous events (Appendix E) taken from the data was submitted to the criterion observer for coding. These events, occurrences of the variables, were representative of the human, material, and temporal variables used in the study. The judgments of the criterion observer were assumed to be consistent with the definitions of the categories of OSIA IV. The researcher coded the same typescript using Scott's (1955) coefficient, a simple percentage agreement of 0.97 was established. Appendix G shows the computation of this figure.

Phenomenal validity concerned the degree of agreement between the people who were involved in the conversation and the researcher in their perceptions of the recorded events. Samples of recorded conversations (Appendix D) were submitted to the conversational participants for their agreement on the way the researcher coded their utterances. A list of simplified definitions of the thirteen categories of OSIA IV (Appendix C) as developed by Shrum (1982) was given to each conversational participant to use in the coding agreements. An agreement of 95% between the researcher's coding and those of the participants was established using Scott's (1955) coefficient. Appendix G shows the computation of this figure.

During the months following the data collection, the researcher and the criterion observer, Dr. Judith Shrum, established interrater reliability, or criterion-related reliability. The researcher coded events from a 10-minute segment of a recorded conversation and submitted a typescript of the segment of conversation to the criterion observer for verification of the accuracy in coding. Since the coded conversations included OSIA IV strategies and conversational management strategies, an interobserver reliability rating was obtained for each strategy. Using Scott's (1955) coefficient (κ), the interobserver reliability for OSIA strategies was established at $\kappa = 90\%$ and for conversational management strategies at $\kappa = 90\%$. The computation of this coefficient is in Appendix G.

Observer drift was also a threat to reliability. As a large number of events are coded over a period of time, an observer/rater has a tendency to shift events from one code to another. To control for observer drift, the researcher coded five minutes of a representative segment from the tapes at three intervals in the data-coding process: once at the beginning, once in the middle, and once at the end of the process. Using Scott's (1955) coefficient (κ), intraobserver reliability coefficients were calculated over the first and second codings, the second and third codings and the first and third codings. For the OSIA categories agreements of 95% were found between the first and second codings, 97% between the second and third codings and 95% between the first and third codings. For

the conversational management strategies (Kramsch, 1981), agreements of 95% were found between the first and second codings, 95% between the second and third codings, and 92% between the first and third codings indicating that there was very little observer drift over the time periods for either instrument. The computation of Scott's (1955) coefficients for these percentages of agreement are in Appendix G.

Data Analysis

The researcher was interested in the use of and duration of wait-time when used alone and with various conversational management strategies. The computer-analysis package that is part of OSIA IV uses matrix and timeline displays that show relationships and patterns between coded events. Hough et al., (1980) explained the value of these displays in the following manner:

Matrix displays are designed to give a picture of instructional patterns, and are particularly useful in studying interactive relationships and instructional strategies. The data in matrix displays are ordered so as to present quantitative information regarding the occurrence of patterns of events and behaviors. Timeline displays give graphic information about patterns of events and behaviors, and have the advantage of preserving the chronological sequence of events. Both contain data about the summed duration of categories of events (called pools) and the summed frequencies of instructional moves (called chains). Pool and chain data are the basis of all OSIA displays (p. 3).

With these displays, frequency counts, mean lengths of wait-time for each strategy, and standard deviations were calculated for the relationship between wait-time and the human and material/process variables. Analyses of variance were performed on the collected data

to determine if a relationship existed between the human and material variables and the temporal variables.

Summary

This study was a description and comparison of the use of wait-time as a conversational management strategy. The relationships that existed between human, material, and temporal resources in second-language conversations were described and compared. The two temporal variables, inter-speaker wait-time and intra-utterance wait-time, as used by the human variables, students or other participants, in conjunction with the material variables were examined for possible relationships.

The researcher collected occurrences of wait-time and other conversational management strategies on tape recordings that were made by campers in the Spanish Camp of the Virginia Tech Foreign Language Camps. OSIA IV and a descriptive listing of conversational management strategies were used to code the recorded conversational events. Wait-time was measured using a digital stopwatch to the nearest tenth of a second while all other events were measured to the nearest five-second interval.

The computer-analysis package that was part of OSIA IV was used to analyze the chain of events containing wait-time used with other conversational management strategies. The pools and chains were basic to all OSIA IV displays. Each element of the chain was analyzed for frequency counts, mean length of duration, and the standard deviations. Analyses of variance were performed to

determine if a relationship existed between the human, material and the temporal variables.

IV. RESULTS

Introduction

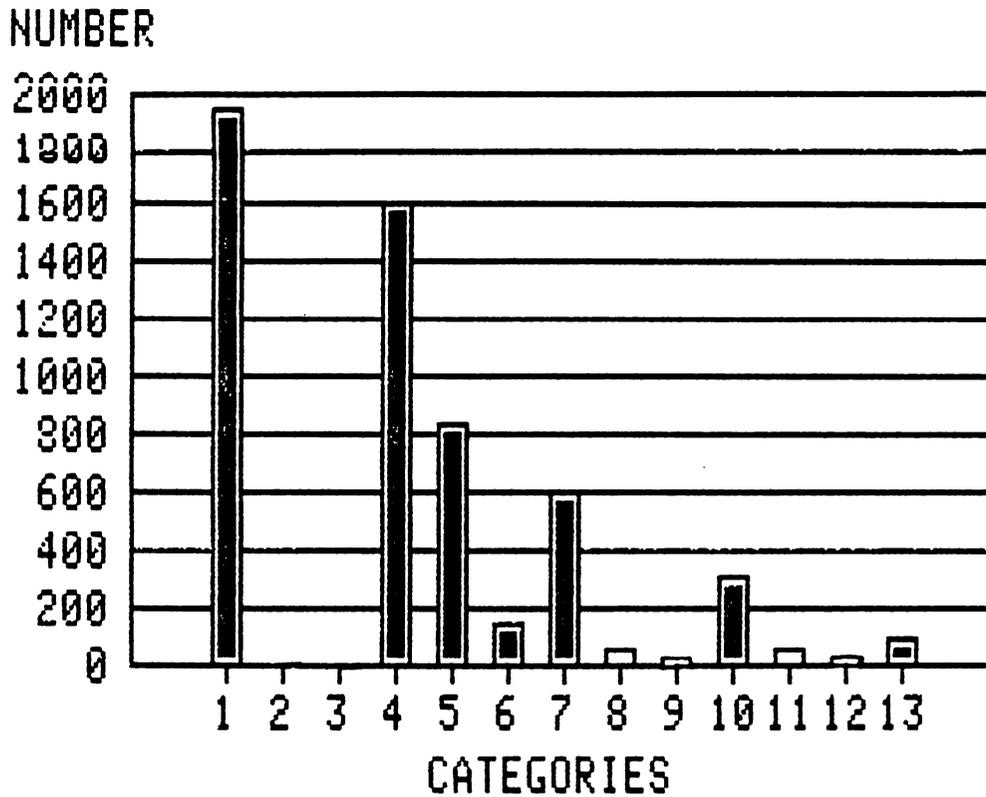
In this study, twelve conversational sessions comprised of first-, second-, and third-year Spanish students were audio-recorded in an informal setting at the Foreign Language Camps at Virginia Polytechnic Institute and State University. These twelve audio-recordings contain conversations in the participants' native language, English, and their target language, Spanish. This chapter presents the findings obtained from an examination of the events coded using the analysis system of The Observational System for Instructional Analysis and a descriptive listing of conversational management strategies devised by Kramsch (1981). The first section of the chapter presents an overview of the findings for mean lengths of wait-time for inter-speaker and intra-utterance occurrences. A description of the findings of wait-time in combination use with other conversational management strategies is included. The next section reports the mean length of wait-time as used in the conversational settings in the target language and the native language. Wait-time is described as it occurred in the recorded sessions of conversation, planning and interview among each of the four groups of first-, second- and third-year Spanish students. The third section reports the conversational management strategies as used in the OSIA categories. The fourth section describes and compares wait-time and other conversational management strategies as

they occurred in the audio-recorded sessions. The last section of this chapter summarizes the findings of this study. Throughout this chapter, the word group is synonymous with the students' language level.

Overview of Findings

The audio recordings contained a total 5770 events that were coded using The Observational System for Instructional Analysis and a conversational management strategy descriptive listing by Kramsch (1981). The coded events thinking, initiating, responding, solicitation for clarification, solicitation, and acknowledging represented 95% of the coded events in this study. The remaining 5% were from five OSIA categories that included judging correctness, personal positive judgment, judging incorrectness, personal negative judgment, and instructionally nonfunctional events.

Of the six OSIA categories that represented 95% of the coded events ($n = 5470$), thinking, the most frequent event (34%, $n = 1959$), was wait-time coded as T1, S1, Q1. Initiating information, coded as T4, S4, Q4, was the second highest coded event (28%, $n = 1600$). In descending order, responding (T5, S5, Q5) represented 14% ($n = 837$) of the events; solicitation (T7, S7, Q7) was 11% ($n = 610$) of the events; acknowledging (T10, S10, Q10) represented 5% ($n = 311$) of the events; and finally 3% ($n = 153$) of the events were represented by the category solicitation for clarification (T6, S6, Q6). Figure 1 graphically represents these data as coded using the OSIA IV.



Categories:

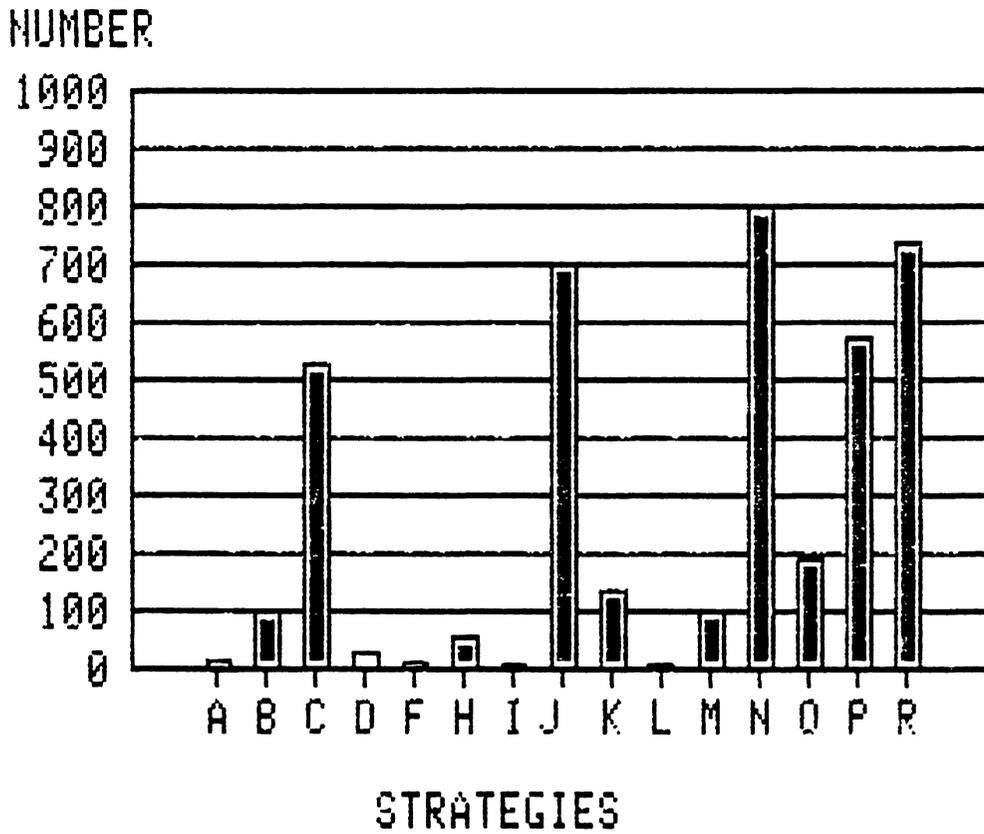
- | | |
|------------------------------|------------------------------------|
| 1 - Thinking/wait-time | 7 - Soliciting |
| 2 - Sensing | 8 - Judging Correctness |
| 3 - Manipulating Artifacts | 9 - Personal Positive Judgment |
| 4 - Initiating Information | 10 - Acknowledging |
| 5 - Responding | 11 - Judging Incorrectness |
| 6 - Soliciting Clarification | 12 - Personal Negative Judgment |
| | 13 - Instructionally Nonfunctional |

Figure 1. Total moves by OSIA categories.

The primary concern of this study was the duration, or the mean length, of inter-speaker wait-time and intra-utterance wait-time. Of the 1762 total wait-time coded events, inter-speaker wait-time occurred in 38% (n = 668) of the events. Intra-utterance wait-time occurred in 62% (n = 1094) of the events. Mean inter-speaker wait-time was 2.41 seconds (S.D. = 1.83) and mean intra-utterance wait-time was 1.57 seconds (S.D. = 1.14).

A secondary concern of this study was the use of conversational management strategies during utterances by second-language students. The data were analyzed using the listing of strategies identified in Figure 2. The pauses coded as wait-time under OSIA IV were not included in the coding of conversational management strategies data. This was done to keep the temporal and process variables separate. There were 4006 coded events in which speakers used conversational management strategies. The five strategies representing 83.9% (n = 3363) of the total events were those of requesting information coded as \$C, external linking to previous point coded as \$J, back-channel activities coded as \$N, simple response coded as \$P, and the presence of intra-utterance wait-time indicating that the speaker paused after beginning to use a conversational management strategy coded as \$R. The other ten conversational management strategies represented 16.1% (n = 643) of the coded events. Figure 2 graphically represents the occurrences of all conversational management strategies.

The two conversational management strategies that represented the greatest number of occurrences were back-channel activities coded



- | | |
|--------------------------------------|-------------------------------------------------------|
| A - Natural completion | K - Request clarification |
| B - Taking the floor | L - Match understanding |
| C - Change topic/request information | M - Cooperative repair work |
| D - Select next speaker | N - Back-channel activities |
| F - Check aspects of interaction | O - Buying time |
| H - Expanding through amplification | P - Simple response/ acknowledgment |
| I - Internal linking | R - Indication of occurrence of intra-utterance pause |
| J - External linking | |

Figure 2. Total moves by Conversational Management Strategies.

as \$N (20.1%, n = 805) and the presence of intra-utterance wait-time coded as \$R (18.5%, n = 743). An example of back-channel activities is the student who said, "Sí, es la verdad (Yes, that's the truth)." The presence of intra-utterance wait-time is represented by the student who said, "Especialmente ** ese campo (Especially that camp)." Double asterisks indicate intra-utterance wait-time. The high occurrence of back-channel activities indicates that the participants used this strategy heavily in conversations for this study. The frequent occurrence of the presence of intra-utterance wait-time (\$R) signifies that the conversational participants paused many times within an utterance to think or reflect before proceeding with the remainder of the utterance.

Wait-Time Used With OSIA Categories

Inter-Speaker versus Intra-Utterance by Conversational Setting

The wait-time data reported in the various settings were considered a dependent variable. All other variables of the study concerning the wait-time data were considered independent variables and were not manipulated. The research question for this section was:

How is wait-time used by students in three conversational settings in the target language and native language?

As reported in the preceding section, mean length of all wait-time occurrences was 1.89 (S.D. = 1.40) seconds and involved two types of wait-time: inter-speaker and intra-utterance. Each of the four teacher-controlled conversation settings was designed to

simulate a classroom atmosphere and involved a teacher and four students. In this setting in the target language, the mean-length of inter-speaker wait-time was 2.48 (S.D. = 1.97) seconds. In the same setting the mean length of intra-utterance wait-time was 1.69 (S.D. = 1.27) seconds. The same groups of students participated in a student-controlled planning setting designed to simulate informal conversational interactions among students with no adult influence. In this setting in the target language, students accumulated a mean length of inter-speaker wait-time of 2.61 (S.D. = 2.05) seconds. The mean length of intra-utterance wait-time was 1.60 (S.D. = 1.22) seconds. The third setting, the researcher-controlled interview setting, was conducted in English by the researcher. This setting was designed to simulate the participants' involvement in a classroom as they interacted with the researcher in their native language. In this setting a shorter mean length wait-time was reported than in the other two settings. For the inter-speaker occurrences, a mean length wait-time of 1.91 (S.D. = 1.15) seconds was found. The mean length of intra-utterance wait-time was 1.17 (S.D. = .55) seconds. Table 5 presents the data by setting and type of wait-time.

To determine whether the differences between these means represented any significant effects or interactions, a two-way ANOVA was performed on the data in Table 5. Results of the ANOVA are with Table 5. The null hypotheses tested were:

1. There is no significant effect attributable to conversational setting upon the mean lengths of inter-speaker wait-time versus intra-utterance wait-time.

Table 5
 Mean Lengths of Inter-Speaker and Intra-Utterance
 Wait-Time by Conversational Setting

Setting	Inter-Speaker \bar{x} sec. (n)	Intra-Utterance \bar{x} sec. (n)	Totals \bar{x} sec. (n)
Conversation	2.48 (229)	1.69 (419)	1.97 (648)
Planning	2.61 (293)	1.60 (511)	1.97 (804)
Interview	1.91 (146)	1.17 (164)	1.52 (310)
Totals	2.41 (668)	1.57 (1094)	$\bar{\bar{x}}_{gm}$. 1.89 (1762)

S.D. = 1.52

Results of a Two-Way ANOVA for Mean Lengths of
 Inter-Speaker and Intra-Utterance Wait-Time
 by Conversational Setting
 (Accompanies Data in Table 5)

Source	SS	DF	MS	F	Fcv
Setting	0.41	2	0.20	28.05*	2.99
Wait-Time	1.07	1	1.07	146.75*	3.84
Interaction	0.02	2	0.01	1.40	2.99
Within	3079.22	1756	0.00		
Total	3451.56	1761			

* $p < .05$

2. There is no significant interaction between conversational setting and wait-time.

The graph in Figure 3 illustrates an ordinal relationship between the type of wait-time by conversational setting. The mean length of wait-time was significantly greater in inter-speaker occurrences than in intra-utterance occurrences regardless of conversational setting. In other words, the greater mean length wait-time occurred in inter-speaker wait-time. The mean length of intra-utterance was shorter, but more frequent (1094 occurrences) than inter-speaker wait-time (668 occurrences) indicating that speakers used intra-utterance wait-time frequently, but for short durations. Results of the two-way ANOVA showed that the first hypothesis was rejected as there was a significant F-ratio at the $p < .05$. The row means and column means were too great to attribute to random sampling fluctuation. The F-ratio for setting had significance indicating there is a significant effect upon mean lengths of wait-time attributable to the setting. The significant F-ratio ($p < .05$) for column effect indicates the type of wait-time affects the mean length of wait-time. Results of the two-way ANOVA also showed that there was no interaction between the variables at the $p < .05$ level. The second null hypothesis was not rejected.

In the following sections, inter-speaker and intra-utterance wait-times are reported by the various conversational settings. Each of these is further divided according to the level a student has completed in Spanish classes.

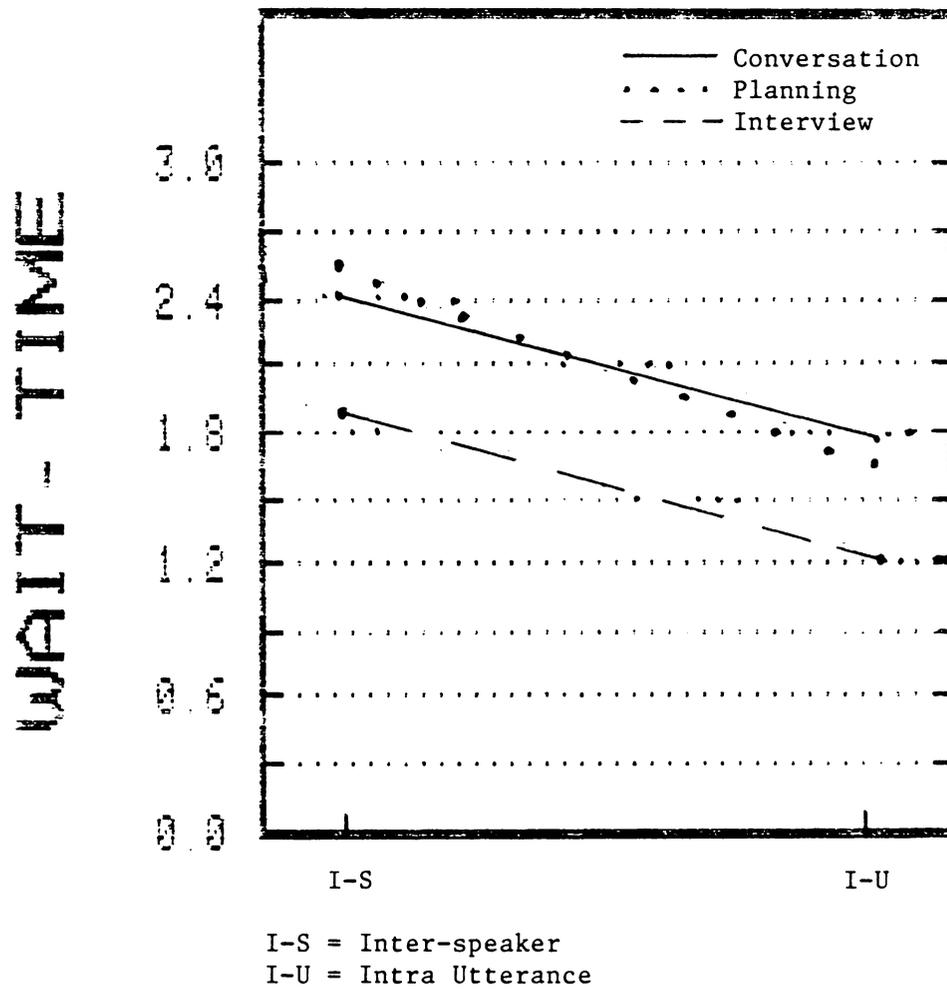


Figure 3. Mean length in seconds of inter-speaker and intra-utterance wait-time by conversational setting.

Teacher-Controlled Conversation Setting

The data analyzed for this section was collected from a setting where a teacher directed questions to and interacted with the students. Conversation was allowed to be interactive between students and teacher and students. The data collected was grouped into two levels--students who had completed first- and second-year Spanish and those who had completed the third year of Spanish. All discussions concerning wait-time data and other conversational management strategies were grouped in a similar fashion for clarity and continuity.

The teacher-controlled conversations conducted in the target language contained 648 occurrences of wait-time. The mean length of all wait-time occurrences for the conversational setting was 1.97 seconds (S.D. = 1.52). Within this mean length of 1.97 seconds were two different wait-time occurrences: inter-speaker and intra-utterance. For the first- and second-year Spanish group the mean-length of inter-speaker wait-time was 2.51 seconds (S.D. = 2.06). The mean length of intra-utterance wait-time was 1.52 seconds (S.D. = 1.06). There were 72 occurrences of wait-time where the teacher made pauses within utterances with a mean-length wait-time of 1.67 seconds (S.D. = 1.42).

The third-year group, under teacher control, reported a mean length of inter-speaker wait-time of 2.45 seconds (S.D. = 1.89) and a mean length of intra-utterance wait-time of 1.48 seconds (S.D. = 0.84). The teacher used 135 occurrences of intra-utterance

wait-time for a mean length of 2.00 seconds (S.D. = 1.65). Table 6 shows the mean-length wait-time and the number of occurrences for each type of wait-time for the two language level groups. Figure 4 graphically illustrates the mean wait-time by group levels.

The null hypotheses that were tested for the data for the conversation setting were:

1. There is no significant difference attributable to years enrolled on mean lengths of inter-speaker and intra-utterance wait-time.
2. There is no significant difference attributable to the type of wait-time on the mean length of wait-time.
3. There is no significant interaction between years enrolled and wait-time.

A two-way ANOVA was performed on the data in Table 6 to test the null hypothesis. Results of the ANOVA are with Table 6. The first null hypothesis was not rejected as there was no significance difference at the $p < .05$ when the wait-time means were averaged across group levels. The second null hypothesis was rejected as there was a significant difference ($p < .05$) on the mean length of wait-time attributable to the type of wait-time. The third null hypothesis was not rejected at the $p < .05$ level as there were no interactions between student group and wait-time.

In addition to the mean lengths of wait-time, nominal data regarding the use of wait-time with the various OSIA categories were collected. Wait-time when used by the teacher alone involved only intra-utterance occurrences. The moves from teacher to student included only inter-speaker wait-time. The student-to-student moves

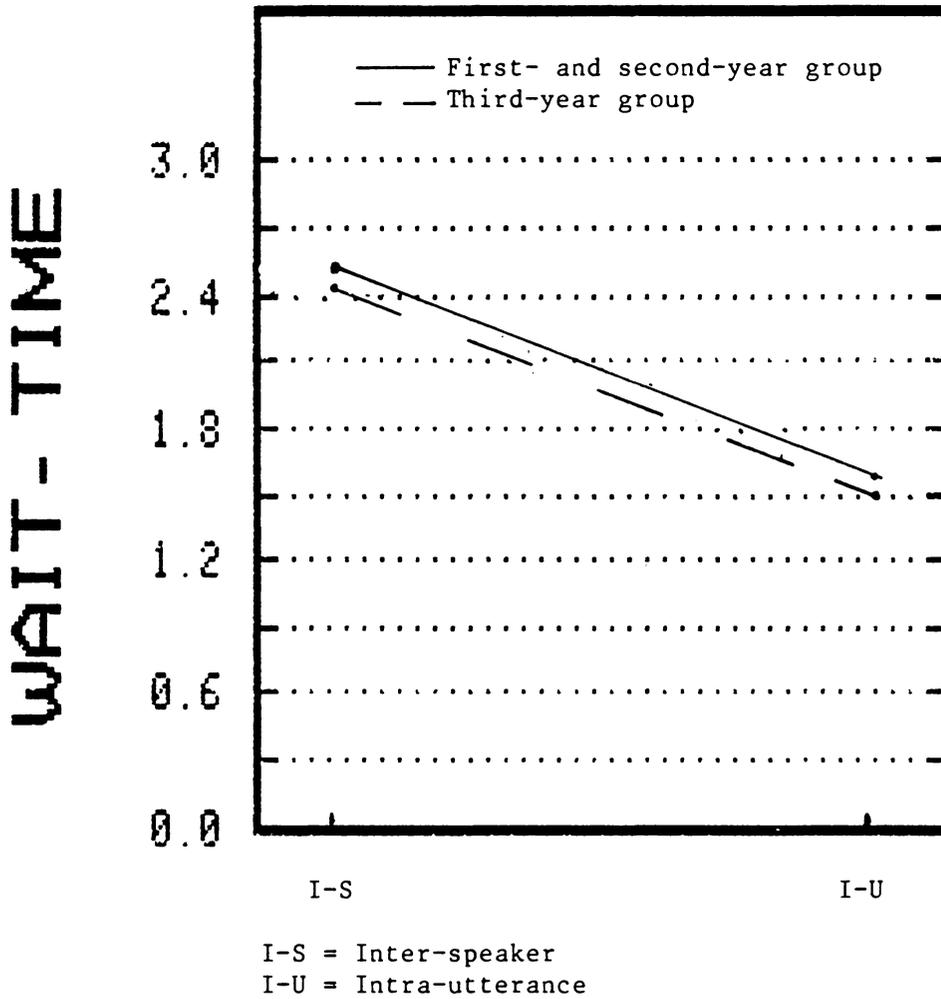


Figure 4. Mean length in seconds of inter-speaker and intra-utterance wait-time by group level in the conversation setting.

Table 6

Mean Lengths of Wait-Time in the Conversation
Setting by Student Group Level

Group	Inter-Speaker \bar{x} sec. (n)	Intra-Utterance \bar{x} sec. (n)	Totals \bar{x} sec. (n)
1st & 2nd year Spanish	2.51 (111)	1.52 (130)	1.98 (241)
3rd year Spanish	2.45 (118)	1.48 (81)	2.05 (199)
Totals	2.48 (229)	1.50 (211)	\bar{X}_{gm} . 2.01 (440)

S.D. = 1.52

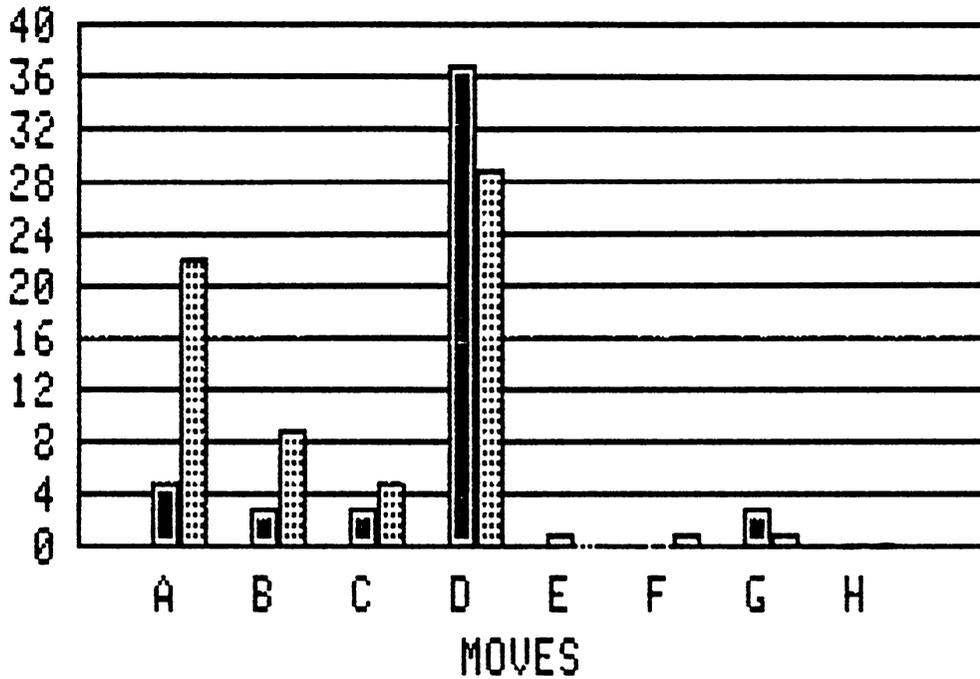
Results of a Two-Way ANOVA for Mean Lengths of
Wait-Time in the Conversation Setting
by Student Group Level
(Accompanies Data in Table 6)

Source	SS	DF	MS	F	Fcv
Setting	0.00	1	0.00	0.12	3.86
Wait-Time	0.96	1	0.96	49.24*	3.86
Interaction	0.00	1	0.00	0.00	3.86
Within	906.52	436	0.01		
Total	1014.26	439			

* $p < .05$

include inter-speaker and intra-utterance wait-times. A matrix analysis using the OSIA Analysis package was conducted to identify the moves in the following figures. Figure 5 represents the moves involving wait-time for the intra-utterance moves of the teacher in the first- and second-year group and the third-year group. Teacher initiation followed by teacher intra-utterance wait-time (T4-T1) and teacher solicitation followed by teacher intra-utterance wait-time (T7-T1) moves occurred most often in both groups. An example of the T4-T1 move was the teacher who said, "Pero tienes que ** mostrar a los otros (But you have to show it to the others)." Double asterisks denote intra-utterance wait-time. The T7-T1 move is represented by the teacher who said, "¿Cuál es la otra palabra que M. nos dijo ** para aretas? (What is the other word that M. told us for earrings?)." Double asterisks denote intra-utterance wait-time. Figure 6 represents the moves from teacher to students which was classified as part of the inter-speaker wait-time in the first- and second-year group and third-year group. The initiating and solicitation moves followed by wait-time were the most frequent in both groups: teacher initiation followed by inter-speaker wait time (T4-S1) and teacher solicitation followed by inter-speaker wait-time (T7-S1). The T4-S1 move is represented by the teacher who said, "Tú puedes cambiarlo (You can change it)." Wait-time followed the teacher utterance. An example of the move T7-S1 is the teacher who asked, "¿Nieve mucho? (Does it snow a lot?)." Wait-time followed the question. Figure 7 represents the moves from student-to-student

NUMBER



■ 1ST & 2ND YEAR ▨ 3RD YEAR

A = T4-S1 C = T6-S1 E = T8-S1 G = T10-S1
 B = T5-S1 D = T7-S1 F = T9-S1 H = T11-S1

S1 - Student-controlled wait-time
 T4 - Teacher initiation
 T5 - Teacher response
 T6 - Teacher request for clarification
 T7 - Teacher solicitation

T8 - Teacher judgment of correctness
 T9 - Teacher positive judgment
 T10 - Teacher acknowledgment
 T11 - Teacher judgment of incorrectness

Figure 6. Occurrences of OSIA moves involving inter-speaker wait-time in the conversation setting.

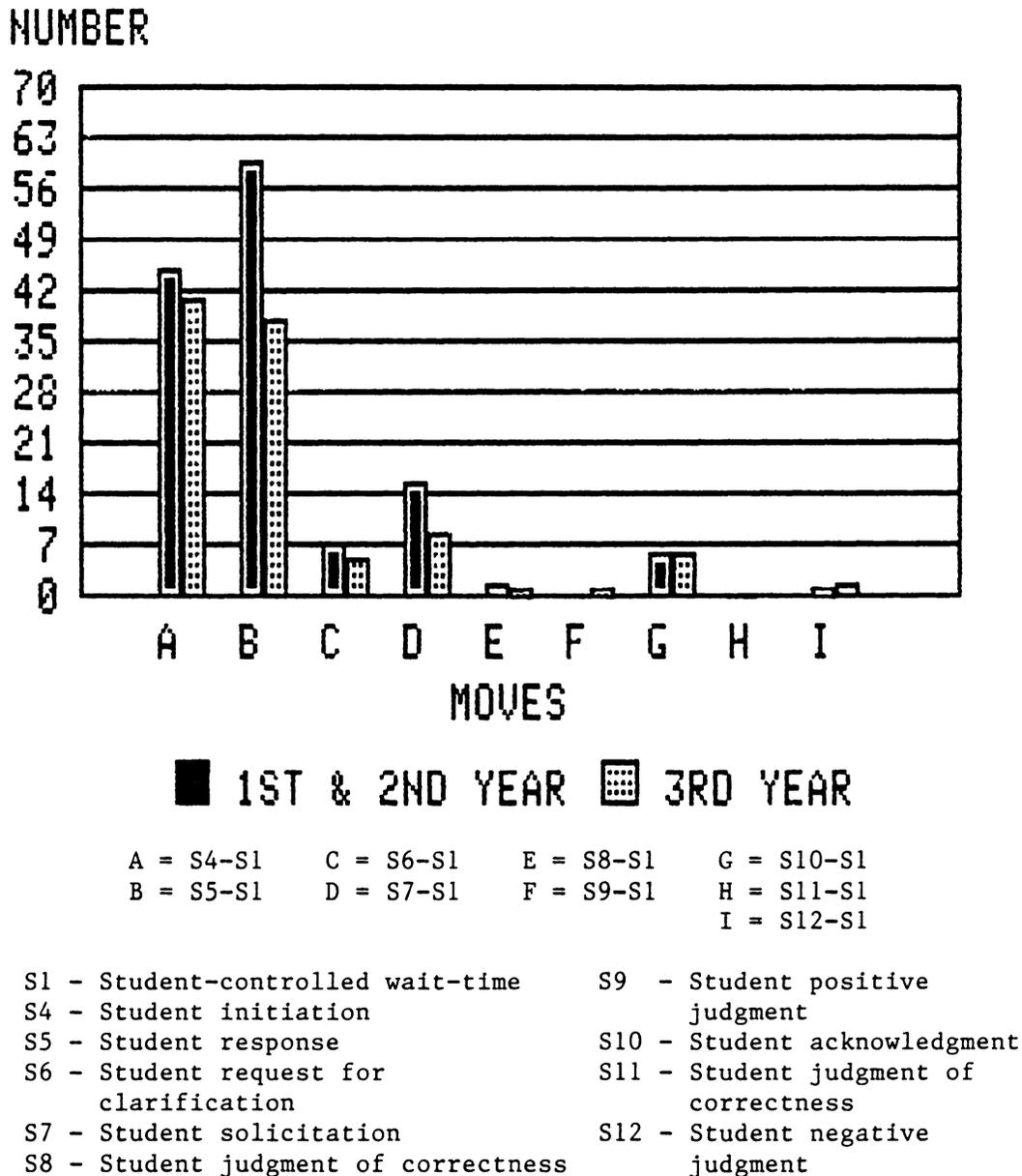


Figure 7. Occurrences of OSIA moves involving student inter-speaker and/or intra-utterance wait-times for the conversation setting.

that involved both intra-utterance and inter-speaker wait-times for both groups. The responding move followed by wait time was the most common, while the initiating move followed by wait-time was the second most common. Student response followed by student-controlled wait-time (S5-S1) was the most common. An example of this move is the student who said, "No sé (I don't know)." Wait-time followed the student response. Student initiation followed by student-controlled wait-time (S4-S1) was the second most common. This move is represented by the student who said, "Es grande (It's big)." Wait-time followed the statement. Solicitation and initiation moves were used extensively in the conversation setting in combination with wait-time.

The following statements summarize the results of the teacher-controlled conversation setting:

1. Inter-speaker wait-time was discernibly longer than intra-utterance wait-time.
2. The type of wait-time--inter-speaker and intra-utterance--had a discernible effect upon the mean length of wait-time.
3. The solicitation and initiation moves were frequently used by teachers and students.

Student-Controlled Planning Setting

In this setting, students were in control of planning for an assigned event that could be held. There was no teacher or other adult involved in this planning session. The purpose of this setting was to simulate the conversational participants speaking in an informal setting. Conversation was interactive and any one of the

four students in the original four groups was allowed the opportunity to take the floor and to direct the conversation.

The student-controlled planning setting in the target language contained 804 occurrences of wait-time. The mean length of all wait-time occurrences during the planning setting was 1.97 seconds (S.D. = 1.52) representing inter-speaker and intra-utterance wait-times. For the first- and second-year group the mean length of inter-speaker wait-time used was 2.20 seconds (S.D. = 1.62). The mean length of intra-utterance wait-time was 1.38 seconds (S.D. = 1.19).

The third-year group reported a mean length of inter-speaker wait-time of 2.84 seconds (S.D. = 2.29). In contrast the mean length of intra-utterance wait-time for the students was 1.74 seconds (S.D. = 1.24). The mean length of inter-speaker and intra-utterance wait-times and number of occurrences for each group are reported in Table 7. Figure 8 graphically illustrates the mean wait-time by language levels.

The null hypotheses that were tested for the data for the planning setting were:

1. There is no significant difference attributable to language level on mean lengths of inter-speaker and intra-utterance wait-time.
2. There is no significant difference attributable to the type of wait-time on the mean length of wait-time.
3. There is no significant interaction between language level and wait-time.

Table 7

Mean Lengths of Wait-Time in the Planning
Setting by Student Group Level

Group	Inter-Speaker \bar{x} sec. (n)	Intra-Utterance \bar{x} sec. (n)	Totals \bar{x} sec. (n)
1st & 2nd year Spanish	2.20 (106)	1.38 (206)	1.66 (312)
3rd year Spanish	2.84 (187)	1.74 (305)	2.17 (492)
Totals	2.61 (293)	1.59 (511)	\bar{X}_{gm} . 1.97 (804)

S.D. = 1.52

Results of a Two-Way ANOVA for Mean Lengths of
Wait-Time in the Planning Setting
by Student Group Level
(Accompanies Data in Table 7)

Source	SS	DF	MS	F	Fcv
Setting	0.24	1	0.24	21.30*	3.85
Wait-Time	0.92	1	0.92	78.54*	3.85
Interaction	0.01	1	0.01	1.67	3.85
Within	1638.46	800	0.01		
Total	1855.25	803			

* $p < .05$

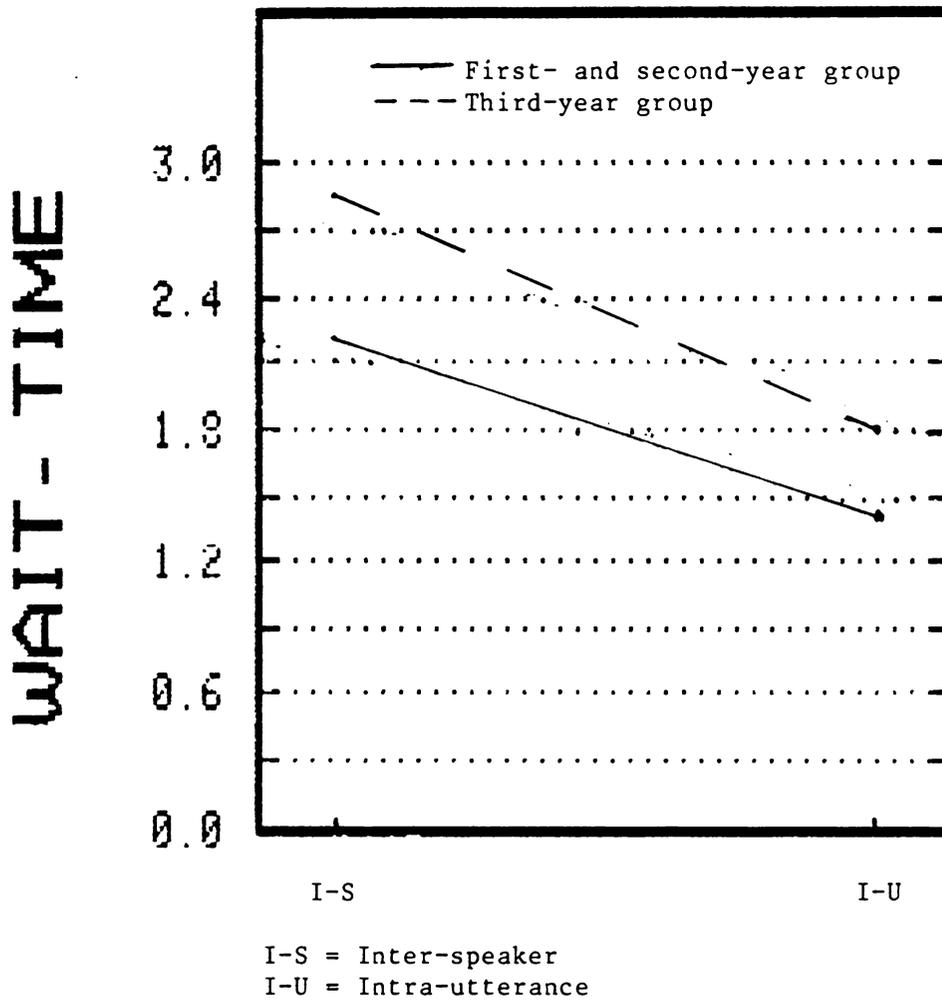


Figure 8. Mean length in seconds of inter-speaker and intra-utterance wait-time by language level in the planning setting.

A two-way ANOVA was performed on the data in Table 7 to test the null hypotheses. Results of the ANOVA are with Table 7. There were significant ($p < .05$) effects attributable to language level on the mean length of wait-time and the first null hypothesis was rejected. The second null hypothesis was rejected as there was a significant F-ratio ($p < .05$) for the between columns effects of types of wait-time on the mean length of wait-time. The two-way ANOVA showed no significant interaction between language level and wait-time and the third null hypothesis was not rejected.

Nominal data regarding the use of wait-time with various OSIA categories were also collected. Figure 9 represents the moves involving both inter-speaker and intra-utterance wait-time for student-to-student moves. There were 2.2 as many occurrences of intra-utterance wait-time uses as inter-speaker wait-time uses for the first- and second-year group as determined by the OSIA subscript analysis of the data. There were 1.6 as many occurrences of intra-utterance wait-time uses as inter-speaker wait-time uses in the third-year group as determined by the OSIA subscript analysis of the data.

The combination move of initiating and wait-time (S4-S1) was the most frequent in the student-controlled planning setting. An example of S4-S1 move is when the student said, "No hay bastante espacio (There isn't enough space)." Wait-time followed the statement. The second most frequent move was that of solicitation followed by wait-time (S7-S1). This move is represented by the student who said,

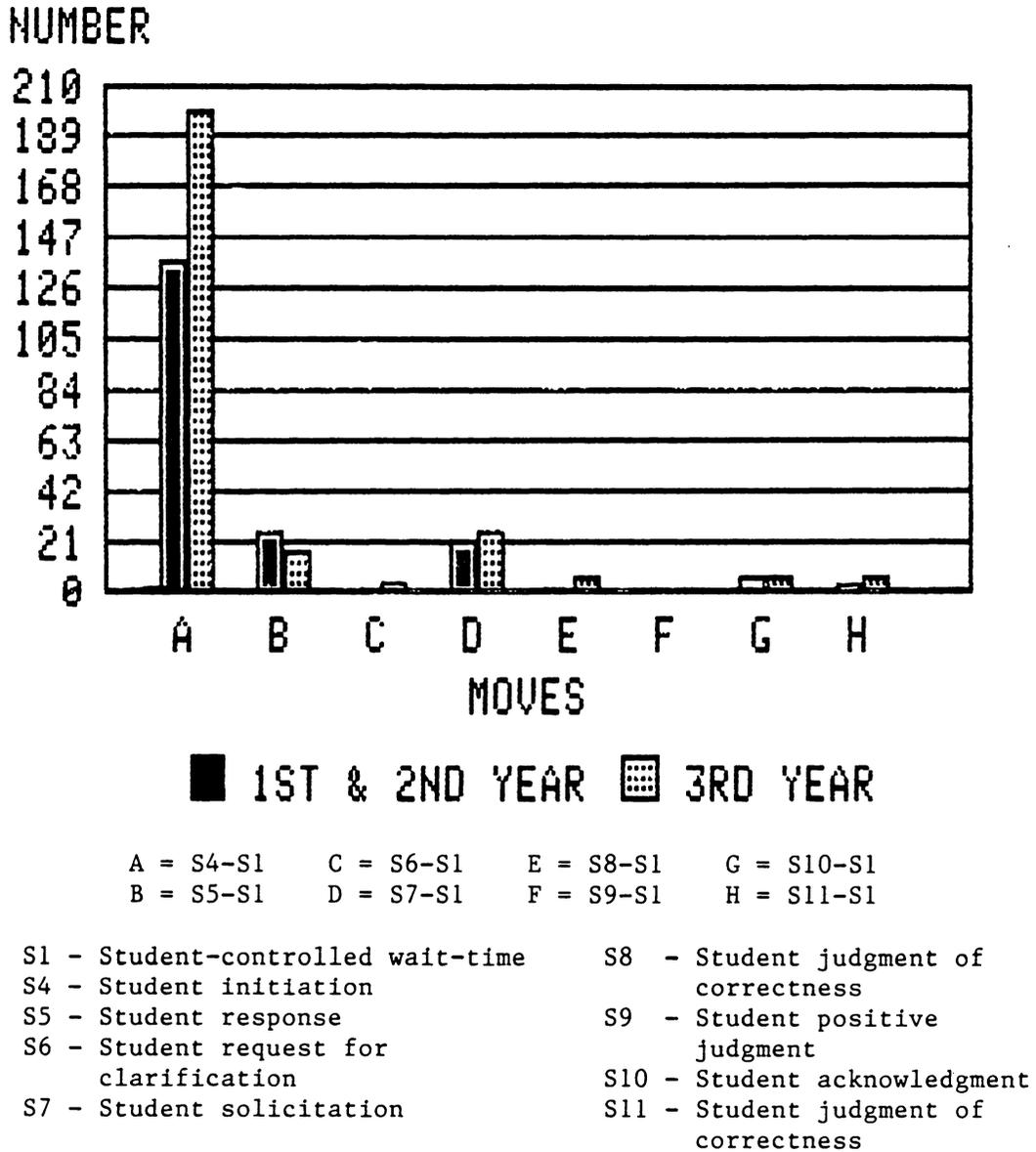


Figure 9. Occurrences of OSIA moves involving both inter-speaker and intra-utterance wait-times for the planning setting.

"¿Pero con todas las sillas? (But with all the chairs?)." Wait-time followed the student question. The third most frequent move was that of responding followed by wait-time (S5-S1). An example of this move is the student who said, "Para las canciones (For the songs)."

Wait-time followed the response. These findings agree with those concerning OSIA moves in the conversation setting. The moves of initiating, solicitation, and responding with wait-time were the most frequent moves for all participants.

Results of the student-controlled planning session are:

1. There is a discernible effect upon the mean length of wait-time attributable to the number of years enrolled in the language.
2. There is a discernible effect upon the mean length of wait-time attributable to the inter-speaker wait-time.
3. The moves of responding, initiating and solicitation were used frequently.

The next section describes the findings in a researcher-controlled interview setting in the students' native language, English. After these findings are reported, a comparison of data between the target language and native language follows.

Researcher-Controlled Interview Setting

The interview setting was conducted in the native language of the students and the researcher. The researcher served as the interviewer. The students answered questions from the researcher, but they were allowed to interact with each other. This setting was conducted to gather data on how the students used conversational management strategies and wait-time in their native language.

The researcher-controlled interview setting conducted in the students' native language, English, contained 310 occurrences of wait-time. The mean length of all wait-time occurrences was 1.52 seconds (S.D. = 0.83). As in the data from the other settings, this data contained inter-speaker wait-time coded as S1AV#W or S1A#W and intra-utterance wait-times from the researcher and the students coded as S1AV, T1AM, S1A, T1A, or Q1AV.

The first- and second-year group reported a mean length of inter-speaker wait-time of 1.80 seconds (S.D. = 1.11). The intra-utterance mean length wait-time used for this group was 0.99 seconds (S.D. = 0.45). There were 22 occurrences of wait-time in which the researcher made pauses within his utterances. The mean length of researcher wait-time was 1.17 seconds (S.D. = 0.62).

The third-year group reported a mean length of inter-speaker wait-time of 1.99 seconds (S.D. = 1.17). The mean length of intra-utterance wait-time was 1.39 seconds (S.D. = 0.72). The researcher paused 24 times while speaking for a mean length wait-time of 1.30 seconds (S.D. = 0.47). Table 8 reports the mean length wait-times of inter-speaker and intra-utterance pauses and the number of occurrences. Figure 10 graphically illustrates the mean wait-time by language levels.

The null hypotheses that were tested for the data collected for the researcher-controlled interview setting were:

1. There is no significant difference attributable to group levels on mean lengths of inter-speaker and intra-utterance wait-time.

Table 8
 Mean Lengths of Wait-Time in the Interview
 Setting by Student Group Levels

Group	Inter-Speaker \bar{x} sec. (n)	Intra-Utterance \bar{x} sec. (n)	Totals \bar{x} sec. (n)
1st & 2nd year Spanish	1.80 (60)	.99 (73)	1.36 (133)
3rd year Spanish	1.99 (86)	1.39 (46)	1.78 (132)
Totals	1.91 (146)	1.14 (119)	\bar{X}_{gm} . 1.57 (265)

S.D. = .83

Results of a Two-Way ANOVA for Mean Lengths of
 Wait-Time in the Interview Setting
 by Student Group Levels
 (Accompanies Data in Table 8)

Source	SS	DF	MS	F	Fcv
Setting	0.08	1	0.08	10.20*	3.89
Wait-Time	0.49	1	0.49	58.29*	3.89
Interaction	0.01	1	0.01	1.29	3.89
Within	139.67	261	0.01		
Total	181.86	264			

* $p < .05$

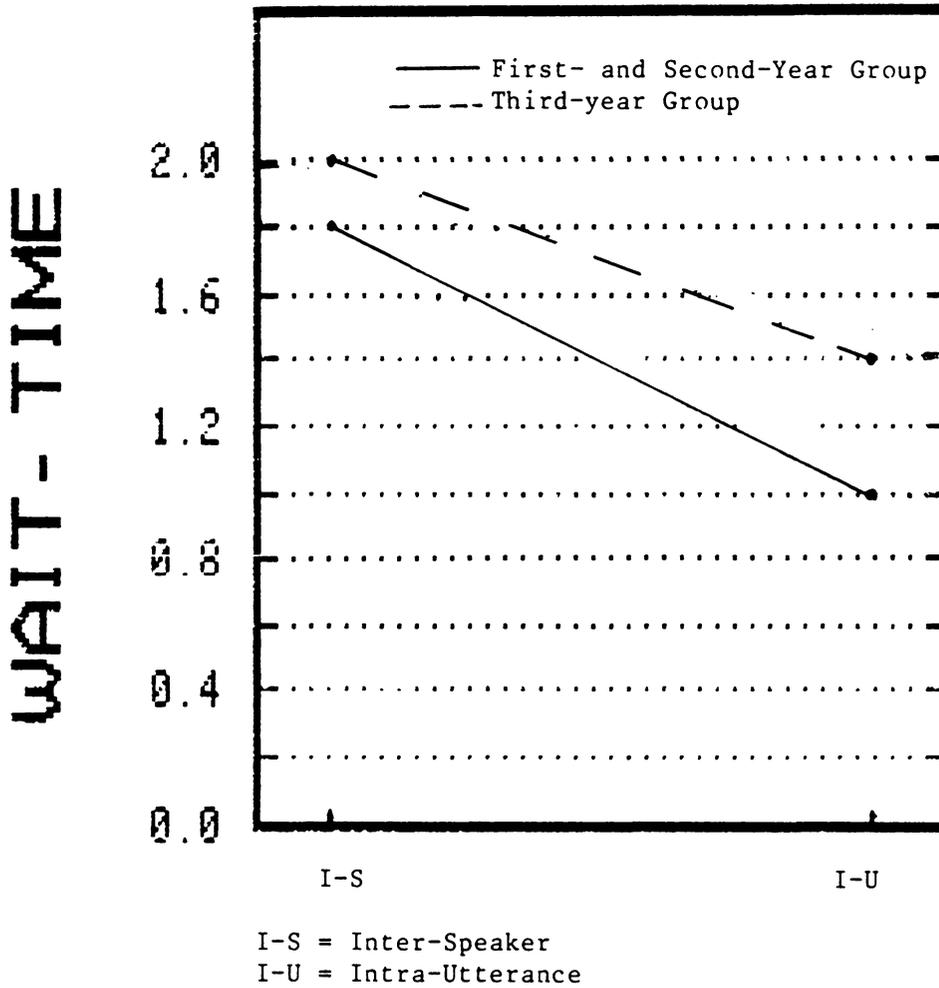


Figure 10. Mean length in seconds of inter-speaker and intra-utterance wait-time by language level in the interview setting.

2. There is no significant difference attributable to the type of wait-time on the mean length of wait-time.
3. There is no significant interaction between language level and wait-time.

A two-way ANOVA was performed on the data in Table 8 to test the null hypotheses. Results of the ANOVA are in Table 8. The first null hypothesis was rejected as the two-way ANOVA showed significant ($p < .05$) effects attributable to group language levels on the mean length of wait-time. The means for wait-time by language level were too great to attribute to random sampling fluctuation. There was a significant F-ratio ($p < .05$) for the wait-time effects regarding the type of wait-time. The second null hypothesis was rejected. The third null hypothesis, however, was not rejected as no significant ($p < .05$) interactions occurred between language level and wait-time.

As in the other settings, nominal data regarding the use of wait-time with various OSIA categories were collected. The researcher used wait-time within his utterances. Figure 11 illustrates the moves with intra-utterance wait-time for the first- and second-year group and the third-year group. The move on the part of the researcher of solicitation containing intra-utterance wait-time of the researcher (T7-T1) was the most frequent. An example of this move is the researcher who said, "Was that at the beginning ** or now?" Double asterisks denote intra-utterance wait-time. The move of initiating containing intra-utterance wait-time (T4-T1) was the second most common in the interview setting. This move is represented by the researcher who said, "In

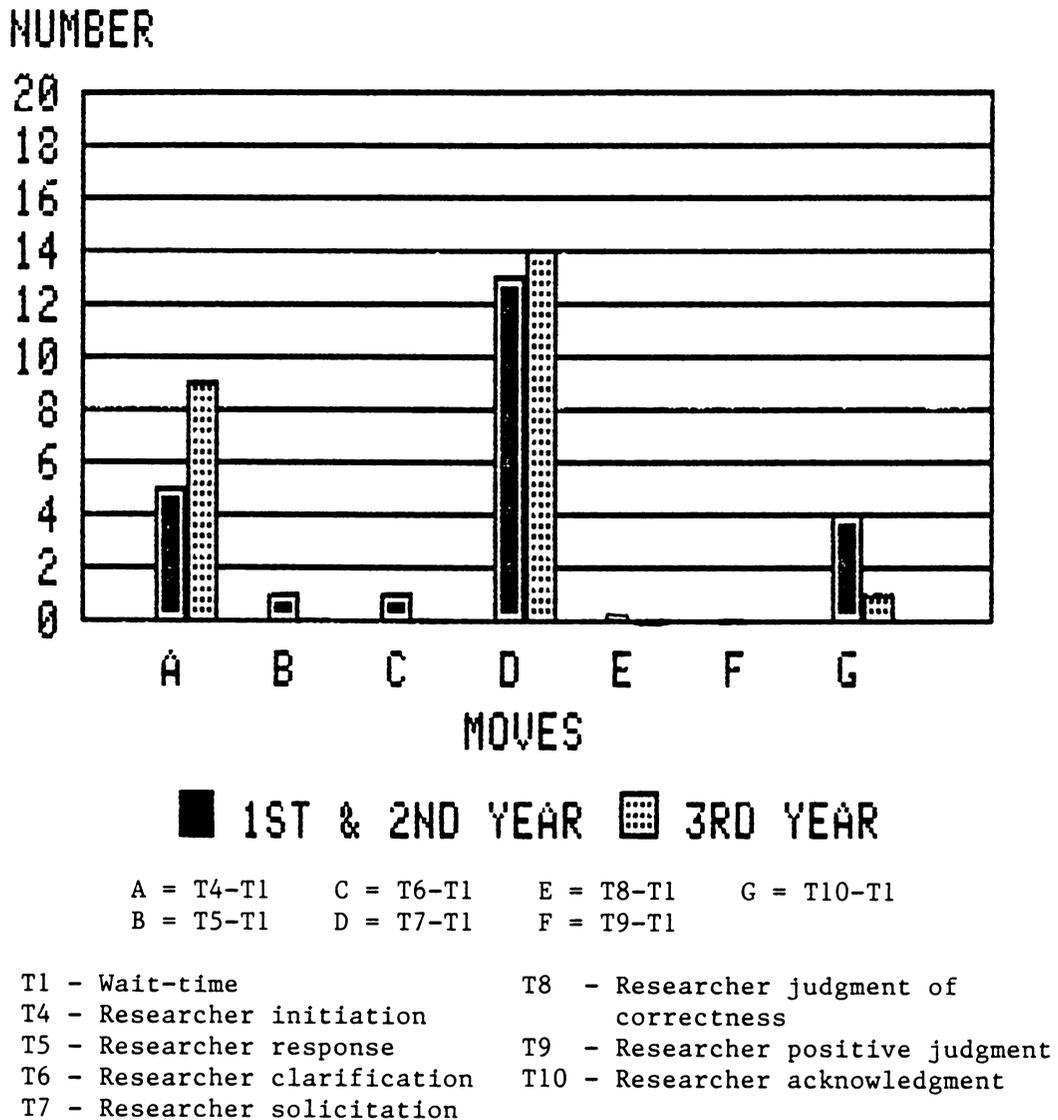


Figure 11. Occurrences of OSIA moves involving intra-utterance wait-time of the researcher in the interview setting.

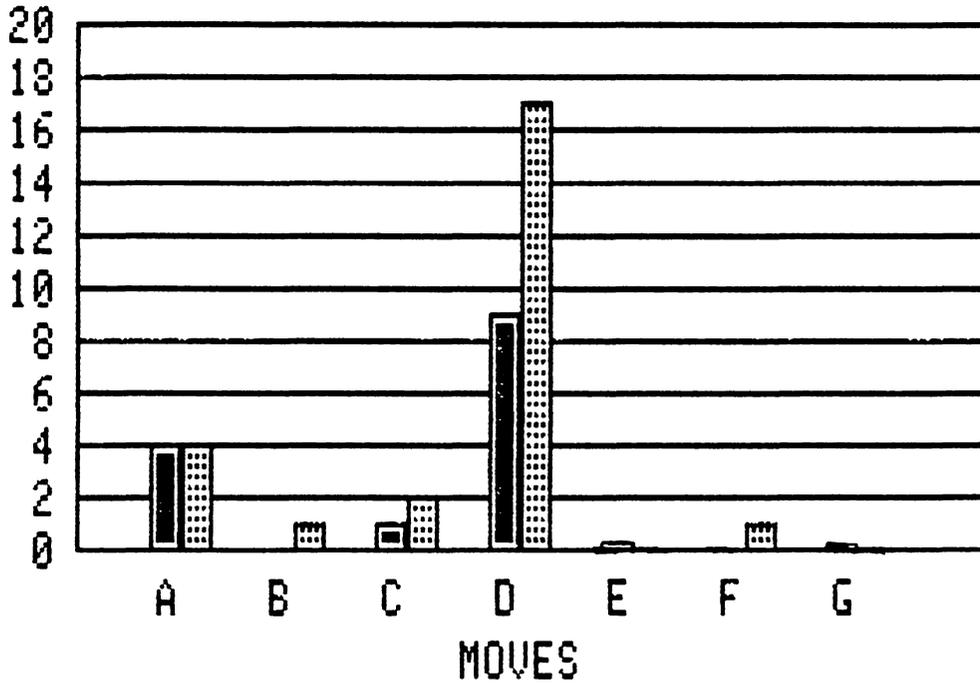
spirit, ** but not body." Double asterisks denote intra-utterance wait-time. Figure 12 represents the moves from researcher to student that were coded as a part of the inter-speaker wait-time in the first- and second-year group and the third-year group. As in the case of the researcher moves, the moves of solicitation and initiation in combination with wait-time (T7-S1 and T4-S1) were the most frequently used respectively. Figure 13 illustrates the moves from student to student which includes both inter-speaker wait-time and intra-utterance wait-time for the first- and second-year group and the third-year group. The bar graph shows that among students who conversed in English wait-time is most frequently combined with the moves of responding and initiation (S5-S1 and S4-S1). An example of the student responding move followed by inter-speaker wait-time (S5-S1) is "I think it is." The student initiating move followed by inter-speaker wait-time (S4-S1) is represented by "You had a singing part."

Results of the researcher-controlled interview session are:

1. The language level of the participants has a discernible effect upon the mean length of wait-time. Advanced students accorded each other a longer mean length wait-time than did first- and second-year students.
2. There is a discernible effect upon the mean length of wait-time attributable to inter-speaker wait-time.
3. The moves of initiating, soliciting, and responding were used frequently.

The following statements summarize the results obtained from the data on wait-time as it relates to inter-speaker and intra-utterance uses

NUMBER



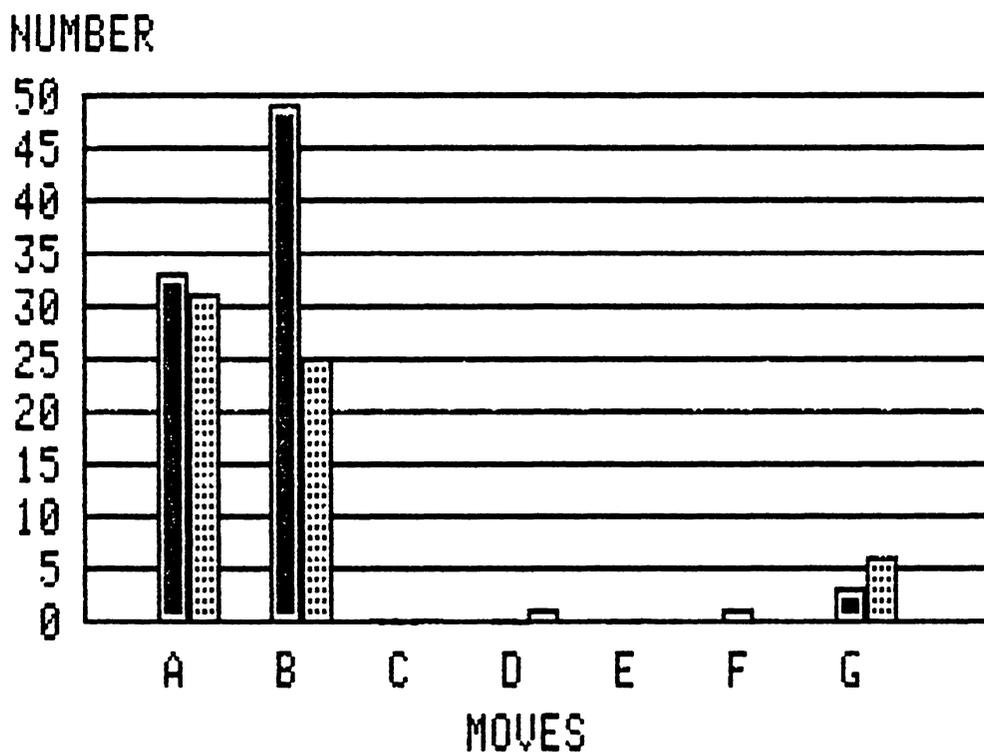
■ 1ST & 2ND YEAR ▨ 3RD YEAR

A = T4-S1 C = T6-S1 E = T8-S1 G = T10-S1
 B = T5-S1 D = T7-S1 F = T9-S1

S1 - Student-controlled wait-time
 T4 - Researcher initiation
 T5 - Researcher response
 T6 - Researcher request for clarification
 T7 - Researcher solicitation

T8 - Researcher judgment of correctness
 T9 - Researcher positive judgment
 T10 - Researcher acknowledgment

Figure 12. Occurrences of OSIA moves involving inter-speaker wait-time in the interview setting.



■ 1ST & 2ND YEAR ▨ 3RD YEAR

A = S4-S1 C = S6-S1 E = S8-S1 G = S10-S1
 B = S5-S1 D = S7-S1 F = S9-S1

S1 - Student-controlled wait-time	S7 - Student solicitation
S4 - Student initiation	S8 - Student judgment of correctness
S5 - Student response	S9 - Student positive judgment
S6 - Student request for clarification	S10 - Student acknowledgment

Figure 13. Occurrences of OSIA moves involving inter-speaker and intra-utterance wait-time as used by students in the interview setting.

by group level. A summary of the combination of OSIA moves and wait-time is reported:

1. The mean length of inter-speaker wait-time was discernibly greater than intra-utterance wait-time in all groups and all settings.
2. The mean length of inter-speaker wait-time was discernibly greater for the third-year group than for the first- and second-year group in all settings.
3. The mean length of intra-utterance wait-time was greater for the third-year group in the planning and interview settings than for the first- and second-year group. However, mean length of intra-utterance wait-time was greater for the first- and second-year group in the conversational setting.
4. The mean length of wait-time was discernibly affected by inter-speaker wait-time in all settings. The longer the mean length of inter-speaker wait-time, the more significant ($p < .05$) was the difference between inter-speaker and intra-utterance wait-times.
5. The OSIA moves of solicitation, initiation, and responding in combination with wait-time occurred most frequently.

Comparison of Mean Lengths of Wait-Time by Setting

To test for significant differences ($p < .05$) attributable to settings, comparisons of mean lengths of wait-time across settings are reported. ANOVAs were performed on the data to test the null hypotheses posited. The settings compared and tested were conversation, planning, and interview.

Target Language

A comparison of settings within the target language was first conducted. As there was no teacher influence in the planning setting, only mean lengths of wait-time involving students are

discussed. For the conversation setting in the target language, the mean length of inter-speaker wait-time was 2.48 seconds and the intra-utterance wait-time was 1.69 seconds. The students in the planning setting used a mean length of inter-speaker wait-time of 2.61 seconds. The mean length of intra-utterance wait-time was 1.60 seconds. Table 9 reports the mean lengths of wait-times for these two settings. Figure 14 graphically illustrates the mean wait-time lengths by the setting. The data were divided into language levels by the setting and tested for differences. Tables 10 and 11 report the mean lengths of wait-time of the first- and second-year group and of the third-year group. The null hypotheses tested were:

1. There is no significant difference attributable to the setting on mean lengths of inter-speaker and intra-utterance wait-time within the target language.
2. There is no significant difference attributable to the setting on mean lengths of inter-speaker and intra-utterance wait-time by language level within the target language.
3. There is no significant difference attributable to the type of wait-time on the mean lengths of wait-time.
4. There is no significant interaction between conversational setting and wait-time.

Two-way ANOVAs were performed on the data in Tables 9, 10, and 11 to test the null hypotheses. Results of the ANOVAs are with the respective tables. The summary ANOVA tables showed that there were no significant differences ($p < .05$) in mean length wait-time that can be attributed to the setting. The first null hypothesis was not rejected. For the first- and second-year groups there was no significant difference ($p < .05$) in wait-time due to the setting.

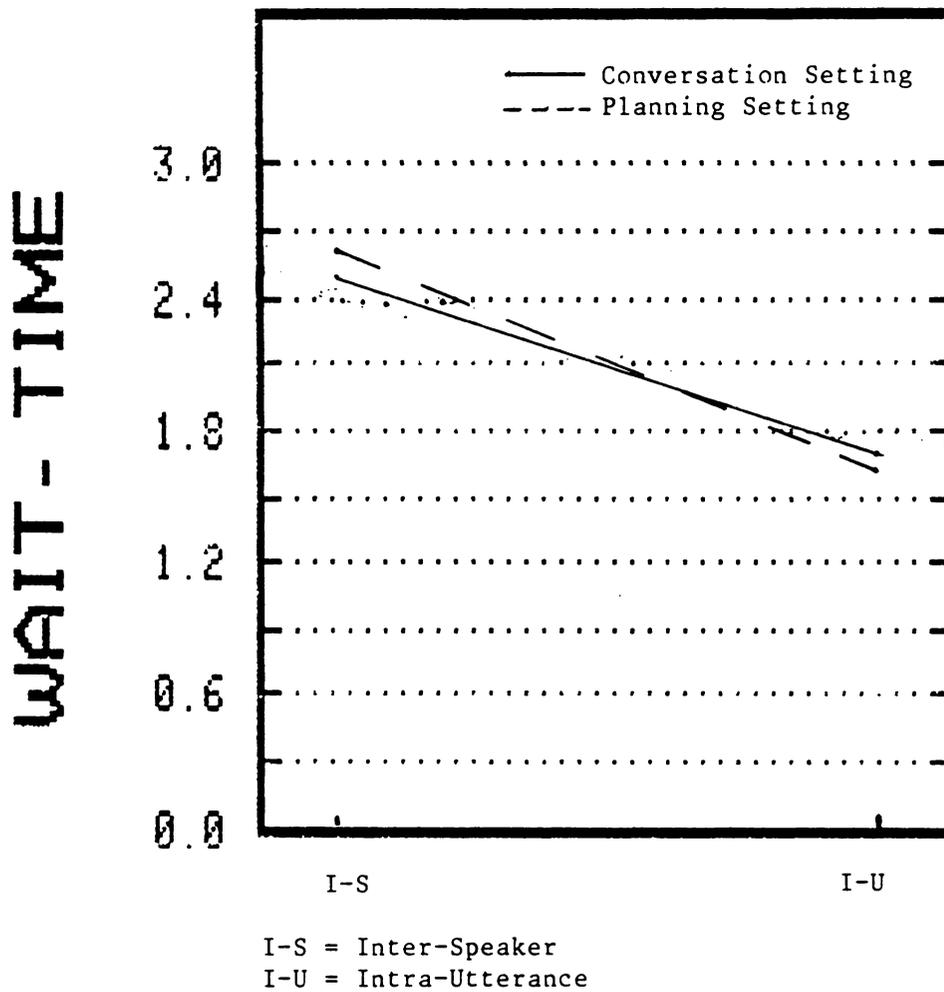


Figure 14. Mean length in seconds of inter-speaker and intra-utterance wait-time by the conversation and planning settings.

Table 9
Mean Lengths of Wait-Time
of Students by Setting

Setting	Inter-Speaker \bar{x} sec. (n)	Intra-Utterance \bar{x} sec. (n)	Totals \bar{x} sec. (n)
Conversation	2.48 (229)	1.69 (419)	1.97 (648)
Planning	2.61 (293)	1.60 (511)	1.97 (804)
Totals	2.55 (522)	1.64 (930)	\bar{X}_{gm} . 1.97 (1452)

S.D. = 1.97

Results of a Two-Way ANOVA for Mean Lengths of
Wait-Time of Students by Setting
(Accompanies Data in Table 9)

Source	SS	DF	MS	F	Fcv
Setting	0.00	1	0.00	0.03	3.85
Wait-Time	0.81	1	0.81	72.23*	3.85
Interaction	0.01	1	0.01	1.07	3.85
Within	5356.99	1448	0.01		
Total	5631.18	1451			

* $p < .05$

Table 10
Mean Lengths of Inter-Speaker and Intra-Utterance
Wait-Time of 1st and 2nd Year Group by Setting

Setting	Inter-Speaker \bar{x} sec. (n)	Intra-Utterance \bar{x} sec. (n)	Totals \bar{x} sec. (n)
Conversation	2.51 (111)	1.52 (130)	1.98 (241)
Planning	2.20 (106)	1.38 (206)	1.66 (312)
Totals	2.36 (217)	1.43 (336)	\bar{X}_{gm} . 1.80 (553)

S.D. = 1.97

Results of a Two-Way ANOVA for Mean Lengths of
 Inter-Speaker and Intra-Utterance Wait-Time of
 First- and Second-Year Group by Setting
 (Accompanies Data in Table 10)

Source	SS	DF	MS	F	Fcv
Setting	0.05	1	0.05	2.23	3.85
Wait-Time	0.81	1	0.81	36.21*	3.85
Interaction	0.00	1	0.00	0.31	3.85
Within	2282.14	660	0.92		
Total	2573.03	663			

* $p < .05$

Table 11
 Mean Lengths of Inter-Speaker and Intra-Utterance
 Wait-Time of 3rd Year Group by Setting

Setting	Inter-Speaker \bar{x} sec. (n)	Intra-Utterance \bar{x} sec. (n)	Totals \bar{x} sec. (n)
Conversation	2.45 (118)	1.48 (81)	2.05 (199)
Planning	2.84 (187)	1.74 (305)	2.16 (492)
Totals	2.69 (305)	1.69 (386)	\bar{X}_{gm} . 2.13 (691)

S.D. = 1.97

Results of a Two-Way ANOVA for Mean Lengths of
 Inter-Speaker and Intra-Utterance Wait-Time
 of Third-Year Group by Setting
 (Accompanies Data in Table 11)

Source	SS	DF	MS	F	Fcv
Setting	0.10	1	0.10	3.95*	3.85
Wait-Time	1.07	1	1.07	40.06*	3.85
Interaction	0.00	1	0.00	0.15	3.85
Within	2495.41	687	0.02		
Total	2677.82	690			

* $p < .05$

However, for the third-year group there was a significant F-ratio which indicated that the setting did contribute to the difference in mean length wait-time. As a result, the second null hypothesis was not rejected for the first- and second-year group, but for the third-year group, it was rejected. The third null hypothesis was rejected because the difference in mean length wait-time across the columns was too great to be contributed random sampling fluctuations. The fourth null hypothesis was not rejected as there was no significant F-ratio indicating interaction between the conversational setting and wait-time.

Conversation and Interview Settings

To further test the effects of settings upon mean-length of wait-times, a description and comparison of data between target language and the native language of the students follow. Any results involving the use of wait-time by the teacher and/or researcher are not reported in this section. The conversation setting had a mean length inter-speaker wait-time of 2.48 seconds and a mean length intra-utterance wait-time of 1.69 seconds. The interview setting conducted in English reported a mean length of inter-speaker wait-time of 1.91 seconds. The mean length of intra-utterance wait-time was 1.17 seconds. Table 12 reports the mean lengths of the wait-times for the two settings. Figure 15 graphically represents the mean length wait-time by setting. The data were divided into one group of first- and second-year students and a second group of

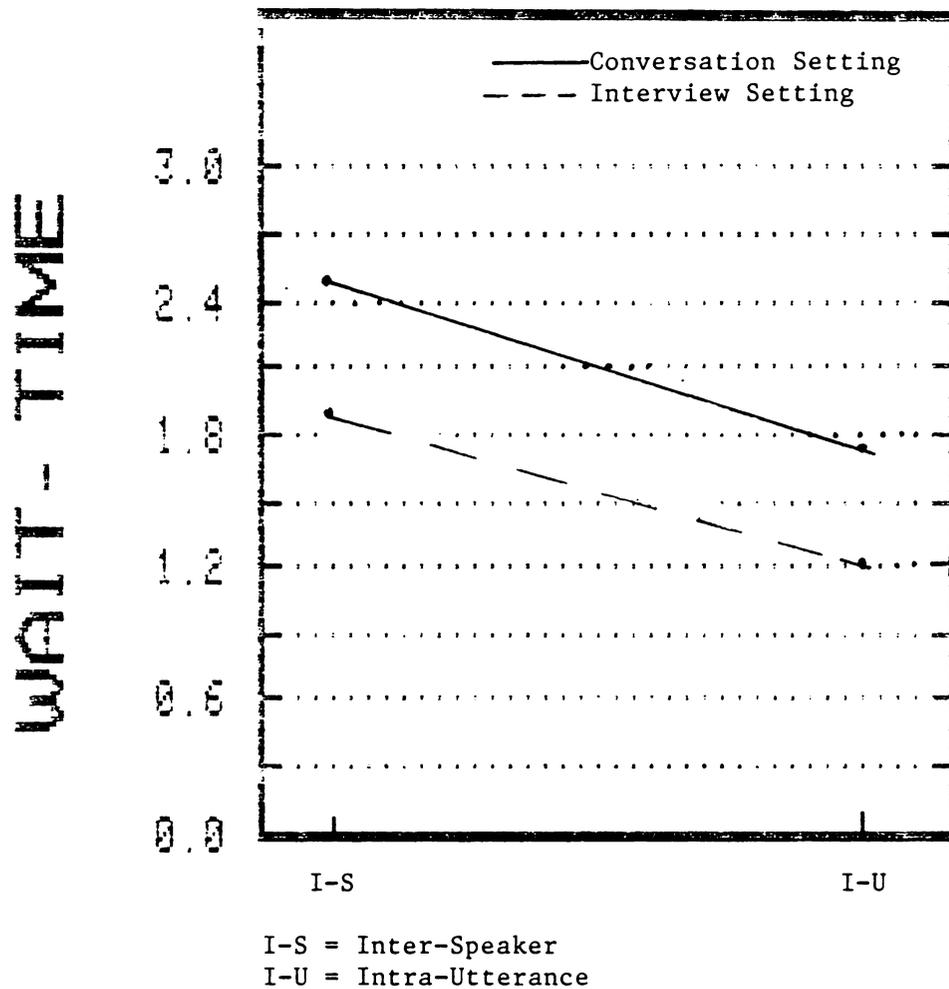


Figure 15. Mean length in seconds of inter-speaker and intra-utterance wait-time by the conversation and interview settings.

Table 12
Mean Lengths of Wait-Time
of Students by Setting

Setting	Inter-Speaker \bar{x} sec. (n)	Intra-Utterance \bar{x} sec. (n)	Totals \bar{x} sec. (n)
Conversation	2.48 (229)	1.69 (419)	1.97 (648)
Interview	1.91 (146)	1.17 (164)	1.52 (310)
Totals	2.26 (375)	1.54 (583)	\bar{x}_{gm} . 1.82 (958)

S.D. = 1.30

Results of a Two-Way ANOVA for Mean Lengths of
Wait-Time of Students by Setting
(Accompanies Data in Table 12)

Source	SS	DF	MS	F	Fcv
Setting	0.29	1	0.29	40.28*	3.85
Wait-Time	0.58	1	0.58	79.36*	3.85
Interaction	0.00	1	0.00	0.08	3.85
Within	1428.33	954	0.00		
Total	1617.32	957			

* $p < .05$

third-year students. Tables 13 and 14 illustrates this data. The null hypotheses tested were:

1. There is no significant difference attributable to the settings on mean lengths of inter-speaker and intra-utterance wait-time by language used.
2. There are no significant differences attributable to the settings on mean lengths of inter-speaker and intra-utterance wait-time by language level by the language used.
3. There is no significant difference attributable to the type of wait-time on the mean length of wait-time.
4. There is no significant interaction between conversational setting and wait-time.

Three two-way ANOVAs were performed on the data in Tables 12, 13, and 14 to test the null hypotheses. Results of the ANOVAs are with the respective tables. The first two null hypotheses were rejected as the two-way ANOVA showed significant ($p < .05$) main effects. The means for the setting and wait-time when averaged across each other were too great to be contributed to random sampling fluctuations. The third null hypothesis was also rejected when the F-ratio for the column effect upon wait-time was significant ($p < .05$). There were no significant ($p < .05$) interactions noted, and the fourth null hypothesis was not rejected.

Planning and Interview Settings

The third comparison of settings was between the planning setting and the interview setting. The mean length of inter-speaker wait-time for the planning setting was 2.61 seconds and 1.60 seconds for the intra-utterance wait-time. In the interview setting, the

Table 13
 Mean Lengths of Inter-Speaker and Intra-Utterance
 Wait-Time of 1st and 2nd Year Group by Setting

Setting	Inter-Speaker \bar{x} sec. (n)	Intra-Utterance \bar{x} sec. (n)	Totals \bar{x} sec. (n)
Conversation	2.51 (111)	1.52 (130)	1.97 (241)
Interview	1.80 (60)	.99 (72)	1.36 (132)
Totals	2.26 (1.71)	1.33 (202)	\bar{X}_{gm} . 1.76 (373)

S.D. = 1.30

Results of a Two-Way ANOVA for Mean Lengths of
 Inter-Speaker and Intra-Utterance Wait-Time
 of First- and Second-Year Group by Setting
 (Accompanies Data in Table 13)

Source	SS	DF	MS	F	Fcv
Setting	0.28	1	0.38	23.11*	3.86
Wait-Time	0.81	1	0.81	48.70*	3.86
Interaction	0.00	1	0.00	0.48	3.86
Within	519.45	369	0.01		
Total	628.68	372			

* $p < .05$

Table 14
 Mean Lengths of Inter-Speaker and Intra-Utterance
 Wait-Time of 3rd Year Group by Setting

Setting	Inter-Speaker \bar{x} sec. (n)	Intra-Utterance \bar{x} sec. (n)	Totals \bar{x} sec. (n)
Conversation	2.45 (118)	1.48 (81)	2.06 (199)
Interview	1.99 (86)	1.39 (46)	1.78 (132)
Totals	2.26 (204)	1.45 (127)	\bar{X}_{gm} . 1.95 (331)

S.D. = 1.30

Results of a Two-Way ANOVA for Mean Lengths of
 Inter-Speaker and Intra-Utterance Wait-Time
 of Third-Year Group by Setting
 (Accompanies Data in Table 14)

Source	SS	DF	MS	F	Fcv
Setting	0.07	1	0.07	3.64	3.86
Wait-Time	0.61	1	0.61	29.68*	3.86
Interaction	0.03	1	0.03	1.64	3.86
Within	501.16	327	0.02		
Total	557.70	330			

* $p < .05$

students used a mean length of inter-speaker wait-time of 1.91 seconds. The mean length of intra-utterance wait-time was 1.17 seconds. Table 15 reports the mean lengths of the wait-times for the two settings. Figure 16 graphically illustrates the mean length wait-time by setting. Tables 16 and 17 report the data for the two language level groups. The null hypotheses tested were:

1. There is no significant difference attributable to the settings on the mean lengths of inter-speaker and intra-utterance wait-time by language used.
2. There is no significant difference attributable to the settings on mean lengths of inter-speaker and intra-utterance wait-time by language level by language used.
3. There is no significant difference attributable to the type of wait-time on the mean length of wait-time.
4. There is no significant interaction between conversational setting and wait-time.

Three two-way ANOVAs were performed on the data in Tables 15, 16, and 17. Results of the ANOVAs are with the respective tables. The two-way ANOVA tables showed that there were significant ($p < .05$) main effects on wait-time by setting. The first and second null hypotheses were rejected. The type of wait-time showed a significant F-ratio ($p < .05$) upon the mean length of wait-time. The third null hypothesis was also rejected. The fourth null hypothesis was not rejected as there was no significant ($p < .05$) interaction between the setting and wait-time. The results of this section are:

1. There is no discernible difference in the mean length of wait-time between the conversation and planning settings when both student language level groups were considered.

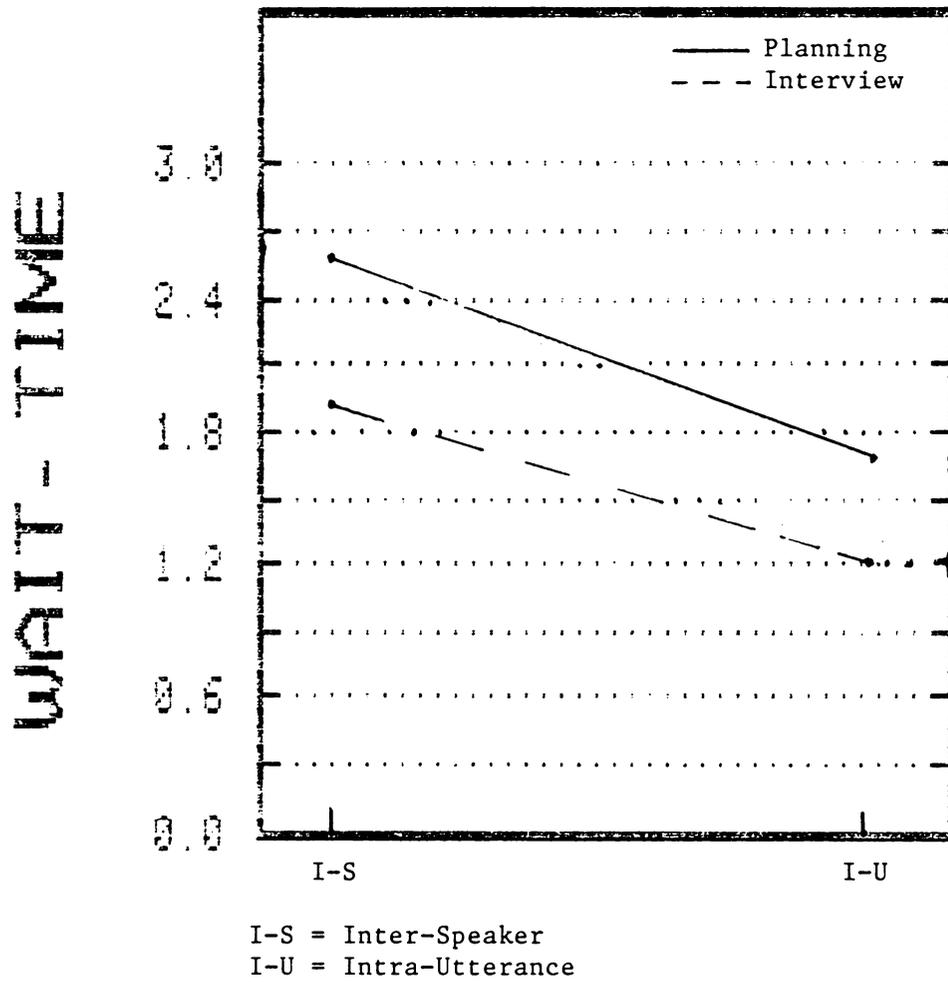


Figure 16. Mean length in seconds of inter-speaker and intra-utterance wait-time by the planning and interview settings.

Table 15
Mean Lengths of Wait-Time
of Students by Setting

Setting	Inter-Speaker \bar{x} sec. (n)	Intra-Utterance \bar{x} sec. (n)	Totals \bar{x} sec. (n)
Planning	2.61 (293)	1.60 (511)	1.97 (804)
Interview	1.91 (146)	1.17 (164)	1.52 (310)
Totals	2.38 (439)	1.50 (675)	\bar{x}_{gm} . 1.84 (1114)

S.D. = 1.33

Results of a Two-Way ANOVA for Mean Lengths of
Students by Setting
(Accompanies Data in Table 15)

Source	SS	DF	MS	F	Fcv
Setting	0.31	1	0.31	46.08*	3.85
Wait-Time	0.76	1	0.76	110.52*	3.85
Interaction	0.01	1	0.01	2.63	3.85
Within	1679.11	1110	0.00		
Total	1968.78	1113			

* $p < .05$

Table 16
 Mean Lengths of Inter-Speaker and Intra-Utterance
 Wait-Time of 1st and 2nd Year Group by Setting

Setting	Inter-Speaker \bar{x} sec. (n)	Intra-Utterance \bar{x} sec. (n)	Totals \bar{x} sec. (n)
Planning	2.20 (106)	1.38 (206)	1.66 (312)
Interview	1.80 (60)	.99 (72)	1.36 (132)
Totals:	2.05 (166)	1.30 (278)	\bar{X}_{gm} . 1.57 (444)

S.D. = 1.33

Results of a Two-Way ANOVA for Mean Lengths of
 Inter-Speaker and Intra-Utterance Wait-Time
 of First- and Second-Year Group by Setting
 (Accompanies Data in Table 16)

Source	SS	DF	MS	F	Fcv
Setting	0.15	1	0.15	8.65*	3.86
Wait-Time	0.66	1	0.66	36.83*	3.86
Interaction	0.00	1	0.00	0.00	3.86
Within	707.72	440	0.01		
Total	783.62	443			

* $p < .05$

Table 17
 Mean Lengths of Inter-Speaker and Intra-Utterance
 Wait-Time of 3rd Year Group by Setting

Setting	Inter-Speaker \bar{x} sec. (n)	Intra-Utterance \bar{x} sec. (n)	Totals \bar{x} sec. (n)
Planning	2.84 (187)	1.74 (305)	2.16 (492)
Interview	1.99 (86)	1.39 (46)	1.78 (132)
Totals	2.57 (273)	1.69 (351)	\bar{X}_{gm} . 2.08 (624)

S.D. = 1.33

Results of a Two-Way ANOVA for Mean Lengths of
 Inter-Speaker and Intra-Utterance Wait-Time
 of Third-Year Group by Setting
 (Accompanies Data in Table 17)

Source	SS	DF	MS	F	Fcv
Setting	0.36	1	0.36	22.60*	3.86
Wait-Time	0.72	1	0.72	45.36*	3.86
Interaction	0.069	1	0.06	3.92*	3.86
Within	940.56	620	0.01		
Total	1102.02	623			

*p < .05

2. There is a discernible difference in the mean length of wait-time between the conversation and planning settings when only the third-year group is considered.
3. There is a discernible difference in the mean length of wait-time between the conversation and interview settings when the group means were averaged together and when they were considered in separate groups.
4. There is a discernible difference in the mean length of wait-time between the planning and interview settings when the group means were averaged together. There were also differences when the groups were divided into two groups--first- and second-year group and third-year group.
5. There were no interactions between the conversational settings and wait-time.

The mean lengths of wait-time in various settings in English and Spanish are but one of the foci of this study. Another focus of this study is the conversational management strategies that are used by students and teachers as they participate in oral dialogues.

Conversational Management Strategies Used with OSIA Categories

In the overview to this chapter, it was reported that the data were coded according to OSIA categories and by conversational management strategies to identify the strategy used by the participants as they conversed. Figure 3, shown earlier, graphically represents the total occurrences of the strategies as used by the students and teacher. The research question for the conversational management strategies was:

What conversational management strategies are used in the three conversational settings in the target language and native language?

Conversation Setting

In the conversation setting for the first- and second-year group, the conversational management strategy used most often was steering and requesting information (\$C, n = 152). The second most used strategy was simple response (\$P, n = 136) with back-channel activities (\$N, n = 131) third. When the data are broken down into teacher or student usage, the teachers used steering and requesting information (\$C) the most and the students used simple response (\$P) most frequently. A representative example of a teacher requesting information (\$C) is "¿Te gusta los dos ? (Do you like the two?)." An example of a student response (\$P) is "No me gusta esquiar (I don't like to ski)." Figure 17 illustrates the conversation strategies used in the first- and second-year group.

Data for the third-year group were somewhat different with regard to conversational management strategies used. In the total conversation setting the back-channel strategy (\$N, n = 151) was used most frequently. The second most frequent strategy was the notation that intra-utterance wait-time had occurred (\$R, n = 137). The statement "Es la verdad (That's the truth) is an example of back-channel activities (\$N). "Para los padres ** y los estudiantes" is an example of the occurrence of intra-utterance wait-time (\$R). Double asterisks denote intra-utterance wait-time. Figure 18 represents the data for the third-year group. Back-channel activities (\$N), requesting information (\$C), simple response (\$P),

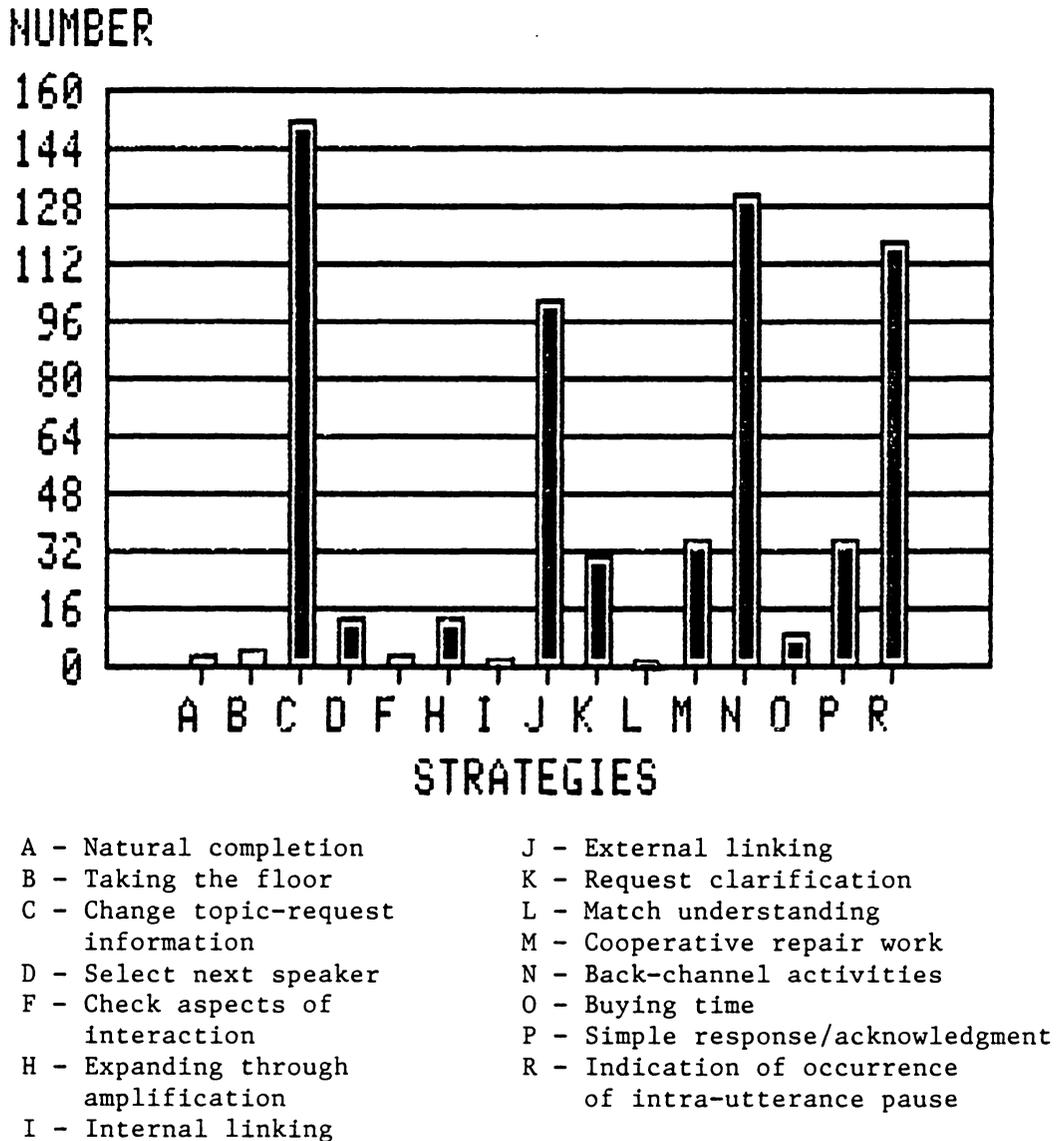


Figure 17. Conversational Management Strategies used by the first- and second-year group in the conversation setting.

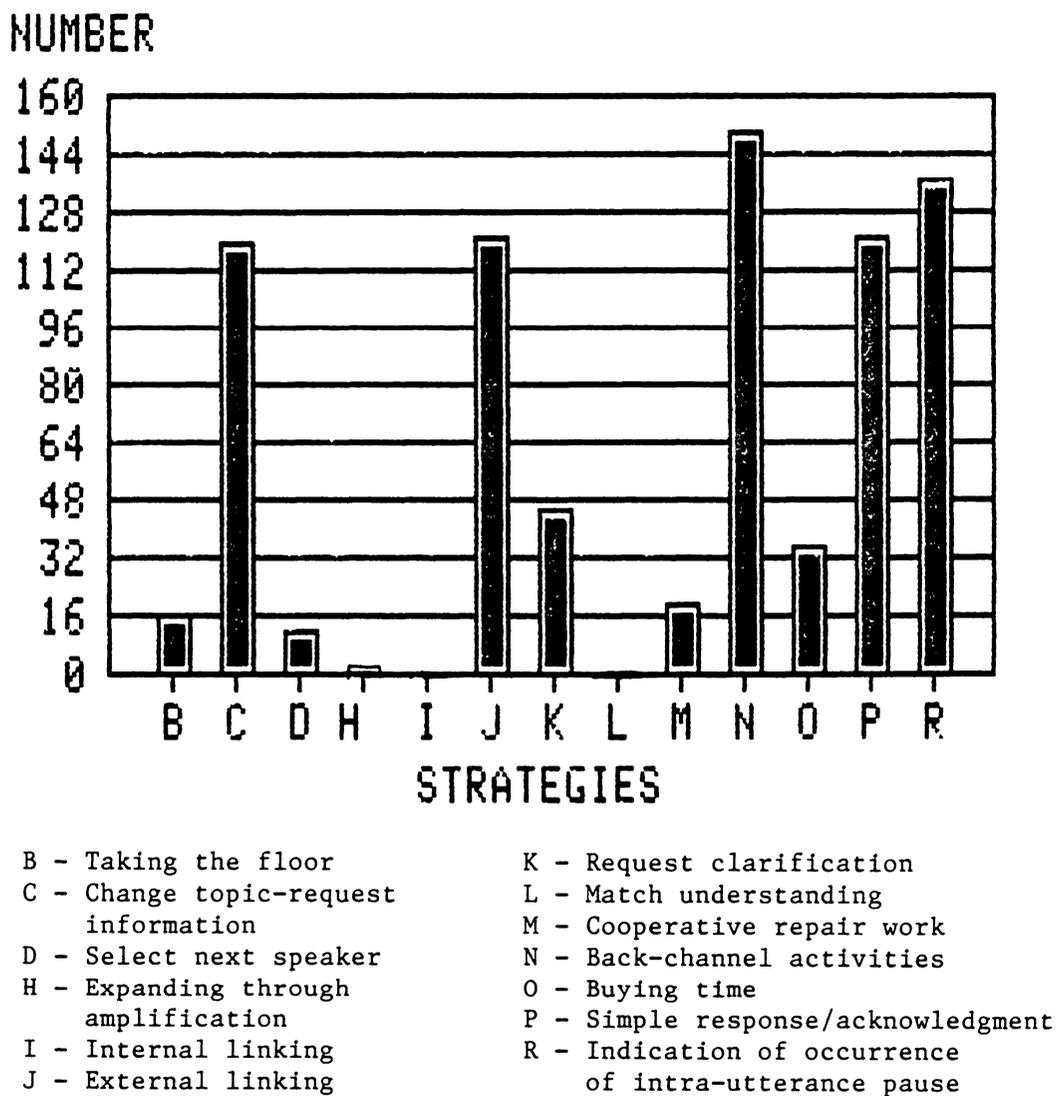


Figure 18. Conversational Management Strategies used by the third-year group in the conversation setting.

occurrence of intra-utterance wait-time ($\$R$), and external linking ($\$J$) were the most commonly used conversational strategies.

Planning Setting

In the planning setting there was no teacher present to influence or direct the conversation. The students in the first- and second-year group used the conversational management strategies of back-channeling ($\$N$, $n = 174$), external linking ($\$J$, $n = 156$), and repetition of strategy interrupted by intra-utterance wait-time ($\$R$, $n = 155$) more frequently than any others. The moves that were used most often with these strategies were $S4\$J$, $S10\$N$, and $S4\$R$. The following utterances are representative examples of external linking ($\$J$), back-channeling ($\N), and occurrence of intra-utterance wait-time ($\$R$): (a) "Ricitos de oro es Goldilocks (The phrase 'Ricitos de oro' is Goldilocks)", ($\$J$); (b) "¡Nada! (Nothing!)," ($\$N$); and (c) "Yo tengo muchas cintas ** aquí (I have many tapes here)," ($\$R$). Figure 19 illustrates the frequency of usage for this group.

The students in the third-year group followed the same pattern as the students in the first- and second-year group in regard to the most frequently used conversational strategies in the planning setting. In this group occurrence of intra-utterance wait-time ($\$R$) ($n = 212$) was the most used strategy followed by back-channeling ($\$N$) ($n = 183$) and external linking ($\J) ($n = 153$). When matched with the OSIA moves, the most commonly used moves were $S4\$R$, $S10\$N$, and $S4\$J$. The statement, "Primero, ** 'Eres Tú' (First, 'It's You')," represents

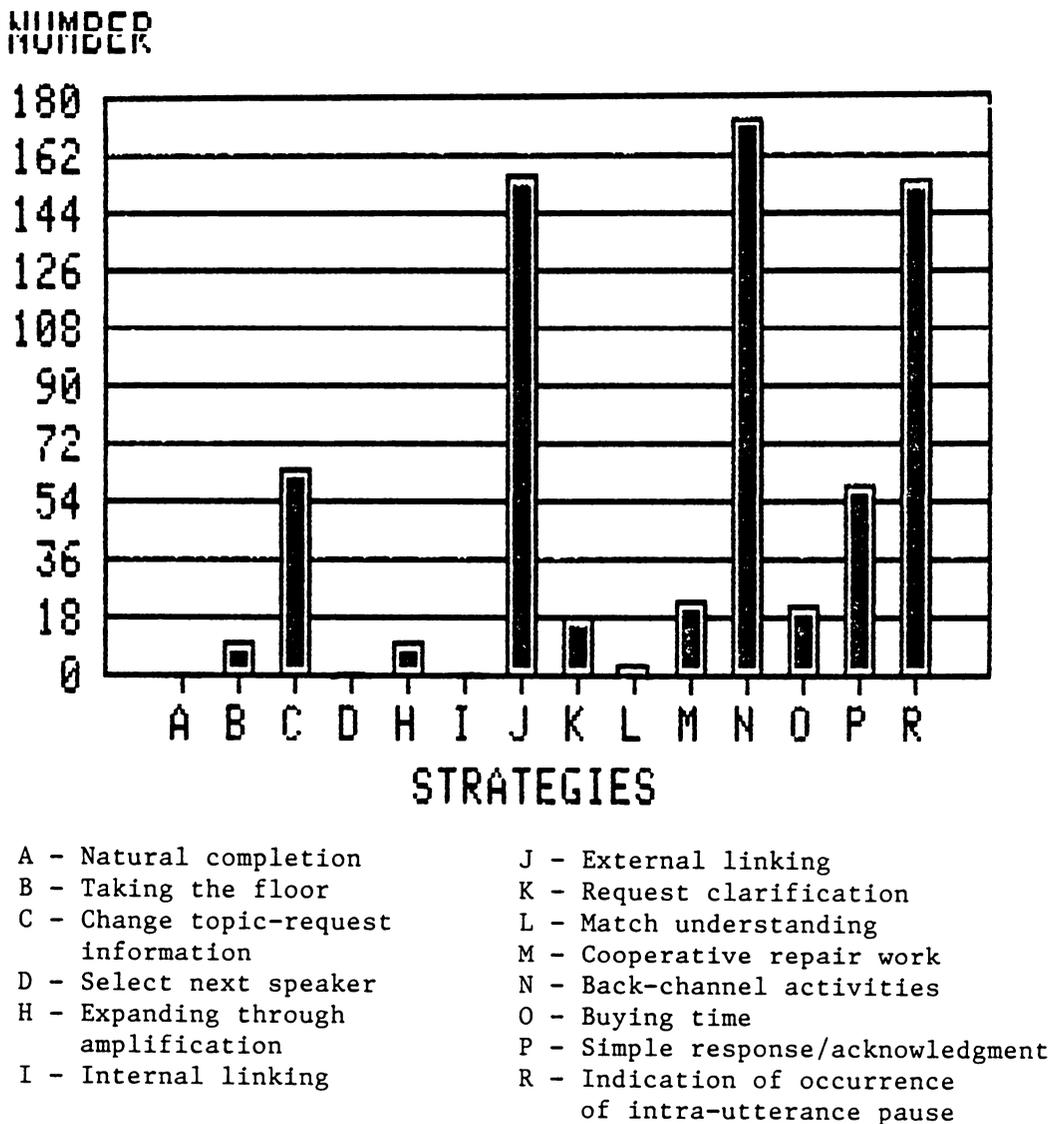


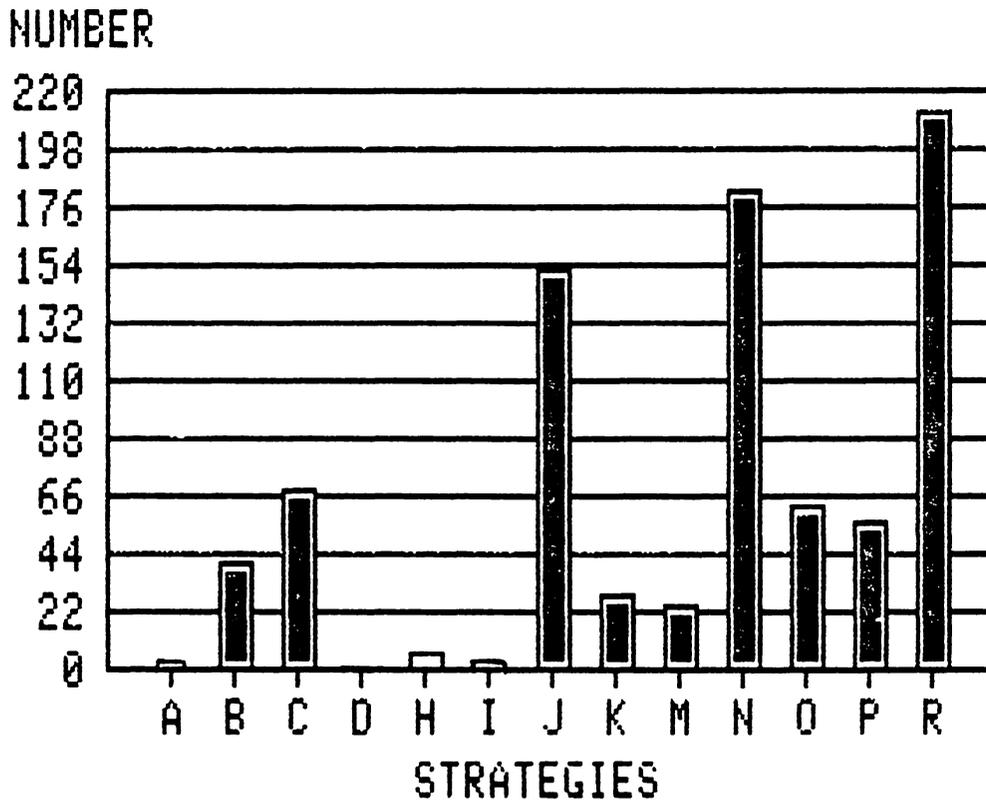
Figure 19. Conversational Management Strategies used by the first- and second-year group in the planning setting.

the occurrence of intra-utterance wait-time ($\$R$). Back-channeling ($\N) is represented by "¡Veinticinco! (Twenty-five!)." An example of external linking ($\$J$) is "Diez a veinte minutos para el drama (Ten to twenty minutes for the play). Figure 20 represents the data frequency of conversational management strategies for this third-year group.

Interview Setting

The third setting for the conversational management strategy data was the interview setting conducted in English. In this setting the researcher was present to direct the conversation during the interview. The students in the first- and second-year group used most frequently the conversational strategies of simple response ($\$P$) ($n = 105$), external linking ($\J) ($n = 98$), and back-channeling ($\$N$) ($n = 82$). The moves that were used most often with these strategies were $S4\$J$, $S5\$P$, $S4\$N$ and $S10\$N$. An example of a student response ($\$P$) for this setting is "I liked volleyball." External linking ($\$J$) is represented by the statement, "It's been three months since I was exposed to Spanish." Back-channeling ($\$N$) is represented by "And here I am getting culture." Figure 21 graphically represents this data.

The data for the third-year group in the interview setting reflected that this group used the conversational management strategies of simple response ($\$P$) ($n = 102$), back-channeling ($\N) ($n = 86$), and external linking ($\$J$) ($n = 72$). These strategies were combined with the following OSIA moves: $S5\$P$, $S10\$N$, $S5\$N$, and $S4\$J$.



- | | |
|--------------------------------------|-------------------------------------------------------|
| A - Natural completion | J - External linking |
| B - Taking the floor | K - Request clarification |
| C - Change topic-request information | M - Cooperative repair work |
| D - Select next speaker | N - Back-channel activities |
| H - Expanding through amplification | O - Buying time |
| I - Internal linking | P - Simple response/acknowledgment |
| | R - Indication of occurrence of intra-utterance pause |

Figure 20. Conversational Management Strategies used by the third-year group in the planning setting.

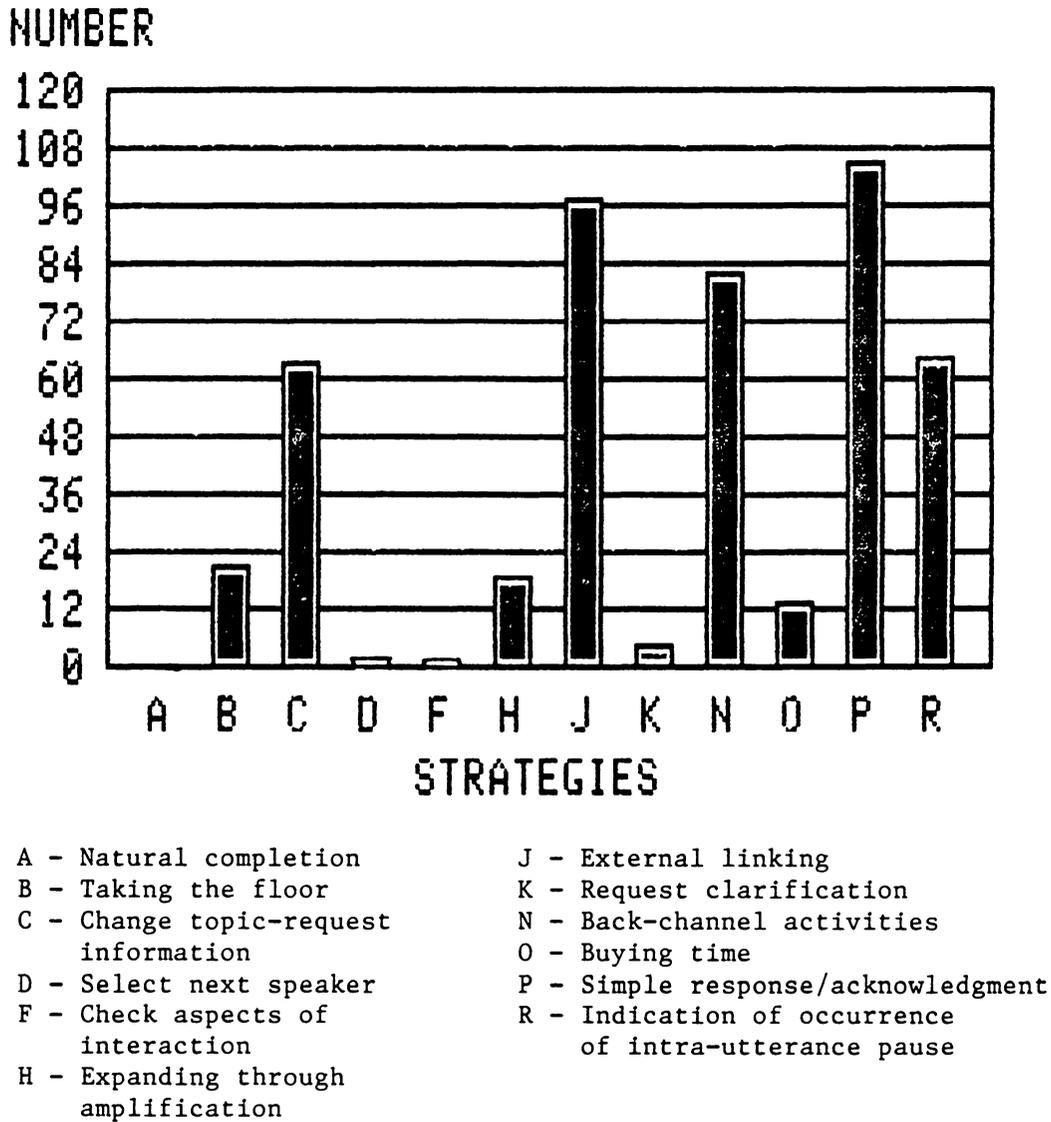


Figure 21. Conversational Management Strategies used by the first- and second-year group in the interview setting.

The conversational management strategy of simple response ($\$P$) is represented by the student who said, "It's been hectic." An example of back-channeling activities ($\$N$) is "Oh, I'm sorry." External linking ($\$J$) is represented by the statement "Yeah, we've been here before." Figure 22 illustrates this data in a graph.

The following statements summarize the data findings in regard to the conversational management strategies used:

1. The most frequently used conversational management strategy was back-channeling activities/reactive listening ($\$N$).
2. Back-channeling activities ($\$N$) occurred most often with the OSIA move "T10, S10, or Q10." Student acknowledgment with reactive listening ($S10\$N$) was used in 189 utterances.
3. Indication of the occurrence of intra-sentence wait-time ($\$R$) was the second most frequently used strategy. This strategy indicates that there was an occurrence of intra-utterance wait-time in which the speaker paused and then continued the utterance. This strategy occurred in the "T4, S4, or Q4" moves more often than any other OSIA move, i.e., student initiation of information involving intra-utterance wait-time ($S4\$R$).

Comparison of the data from the conversation and planning settings with the interview setting data show that the conversational management strategies of simple response ($\$P$), back-channeling ($\N), and external linking ($\$J$) frequently occurred in each setting. Although one setting is in the target language and the other is in the native language, the same conversation strategies are used as illustrated in Figures 23 and 24.

A third focus of this study is the description and comparison of the combination use of wait-time and other conversational

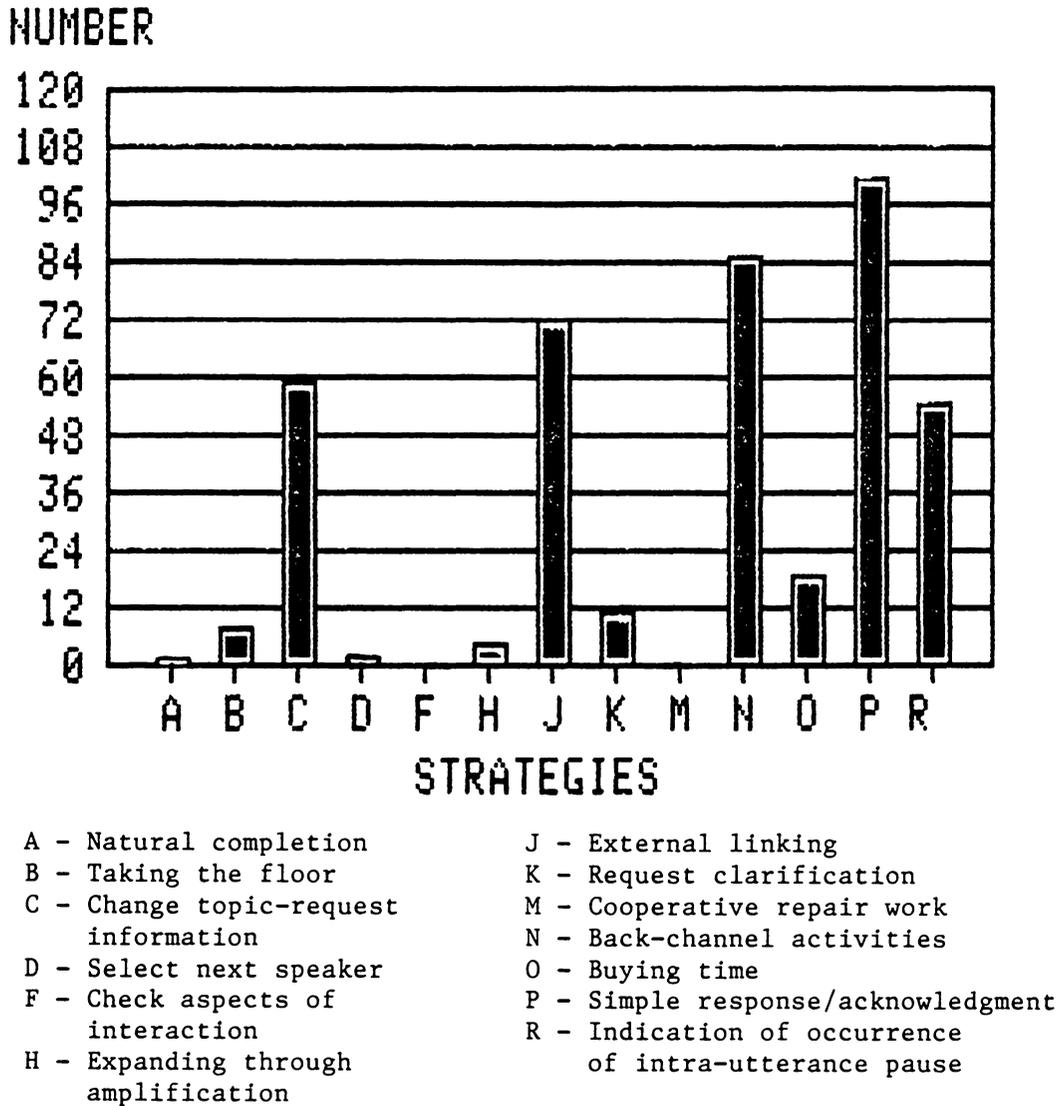


Figure 22. Conversational Management Strategies used by the third-year group in the interview setting.

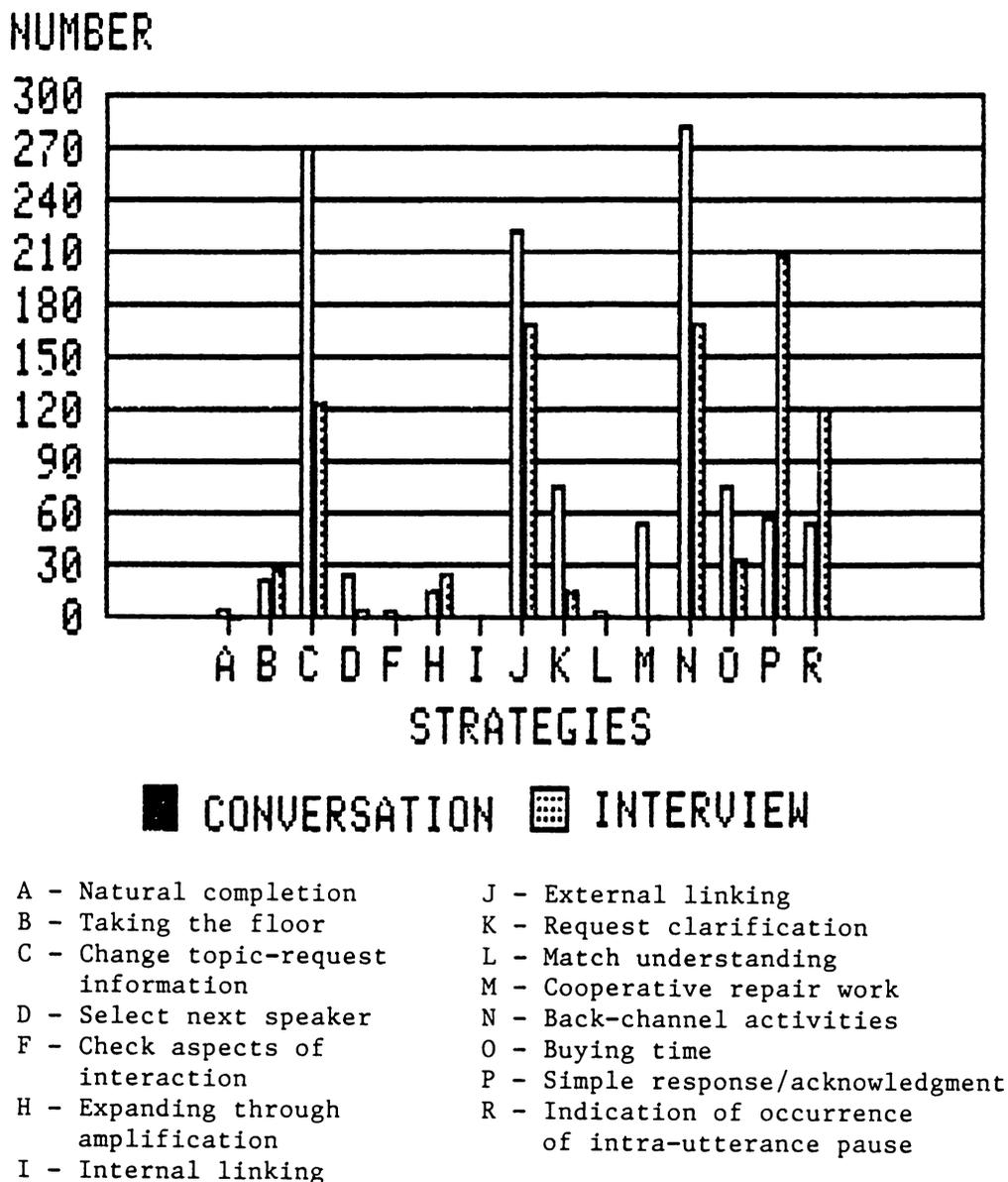


Figure 23. Conversational Management Strategies as used in the conversation setting and the interview setting.

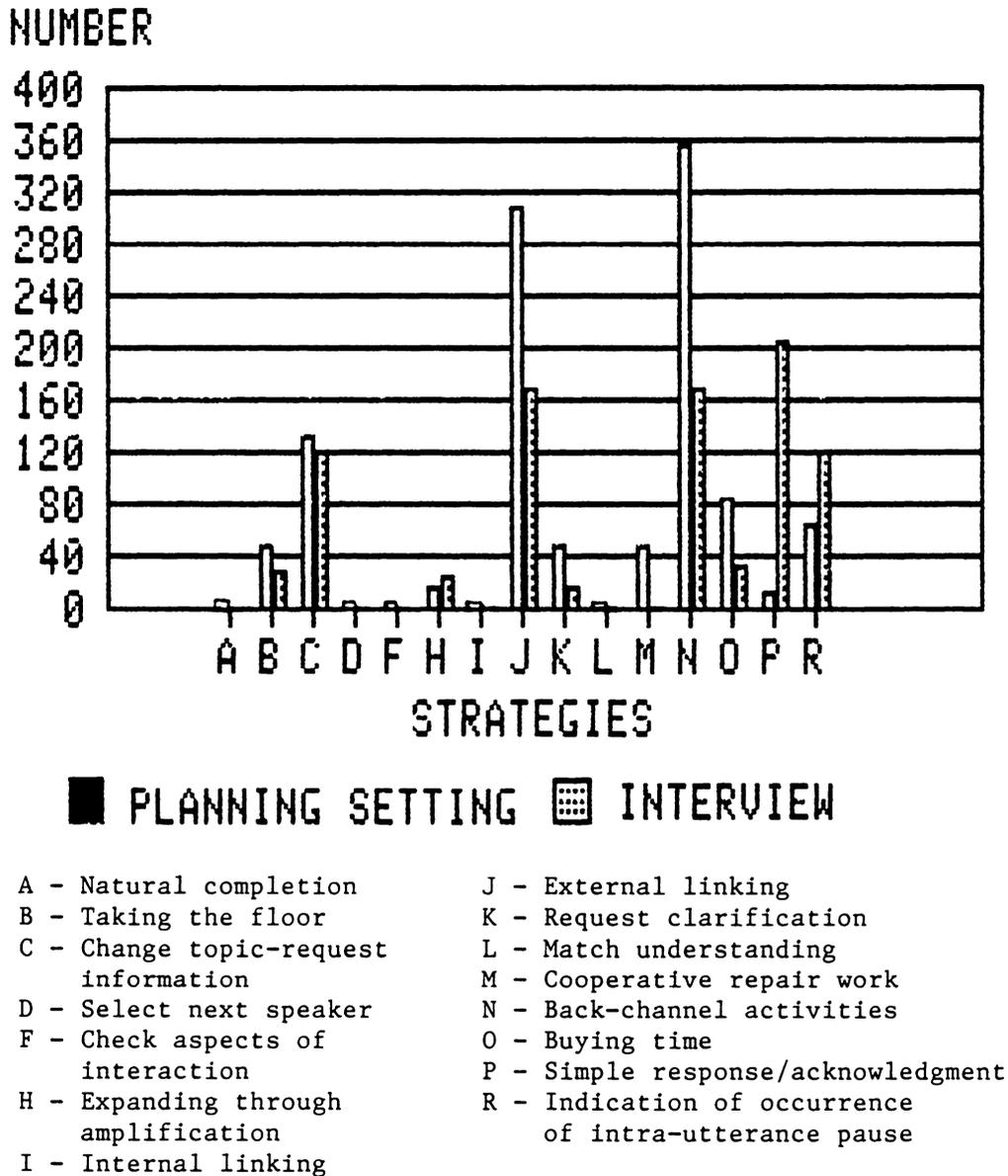


Figure 24. Conversational Management Strategies as used in the planning setting and the interview setting.

management strategies in inter-speaker and intra-utterance situations. Each variable has been described and compared separately in the previous sections. The next section is a report of the data on their combined use.

Wait-Time Used with Other Conversational Management Strategies

Mean lengths of inter-speaker and intra-utterance wait-time in the three audio-recorded conversational settings have been described and compared. The conversational management strategies used in the three settings have also been described and compared. This leads the study to the last three secondary research questions of the study:

1. How are wait-time and other conversational management strategies used together in three conversational settings in the target language and native language?
2. Is there a relationship between wait-time and other conversational management strategies used by students when they study additional years of language?
3. Is there a relationship between the use of wait-time in combination with other conversational management strategies in the target and native languages?

To describe and compare the data, the researcher conducted a chain analysis, part of the OSIA Analysis Program, on the data set by conversational setting. The first setting analyzed was the teacher-controlled conversation in the target language.

The Conversation Setting

The conversation setting involved inter-speaker wait-time that followed the teacher's utterances and that which followed students' utterances. The data were further divided into two groups according

to the language level of the participants: (a) first- and second-year group, and (b) third-year group. Table 18 reports the chains that are composed of the OSIA move with the conversational management strategy which preceded the inter-speaker wait-time. Table 18 shows the mean length of the wait-time in each chain and the number of occurrences of the chain during the recorded conversation session.

In the first- and second-year group, the teacher-used chain with the greatest mean length wait-time was T4M\$JS1V\$W with a mean length of 4.2 seconds of wait-time. An example of this chain is a teacher who said, "Tú puedes cambiarlo (You can change it)." Wait-time followed the teacher utterance. In this chain the teacher initiated information using the strategy of external linking followed by inter-speaker wait-time. In the same group the chain initiated by a student with the greatest mean length wait-time of 4.6 seconds was S7V\$CS1V\$W. An example of this chain is a student who said, "¿A dónde vas para tu almuerzo? (Where are you going for your lunch?)." Wait-time followed the student utterance. This chain represents a student solicitation using the strategy of requesting information followed by inter-speaker wait-time. The teacher-used chain with the greatest number of occurrences was T7M\$CS1V\$W (n = 23) in which the teacher said, "¿Te gusta luchar? (Do you like to fight?)." Wait-time followed the teacher utterance. This chain represents a teacher solicitation using the strategy of requesting information followed by inter-speaker wait-time. The student-used chain with the

Table 18

Mean Lengths of Wait-Time, Standard Deviations, and
Frequencies by Type of Chain in the Conversation Setting

Type of Chain	Wait-Time in Seconds	Standard Deviation	Frequency
<u>By First- and Second-Year Group:</u>			
T4M\$JS1V\$W*	4.2	2.6	2
T4M\$RS1V\$W	1.1	0.0	1
T5M\$PS1V\$W	1.3	0.0	1
T6M\$KS1V\$W	3.4	6.5	2
T7M\$CS1V\$W	1.8	1.1	23
T7M\$DS1V\$W	3.4	2.3	2
T7M\$RS1V\$W	1.8	6.7	4
T8M\$NS1V\$W	2.9	0.0	1
T10M\$NS1V\$W	3.3	2.2	3
S4V\$CS1V\$W	2.8	0.0	1
S4V\$JS1V\$W	2.4	0.8	5
S4V\$NS1V\$W	2.4	0.0	1
S4V\$RS1V\$W	1.8	0.5	4
S5V\$PS1V\$W	3.2	1.7	17
S5V\$RS1V\$W	2.2	0.7	4
S6V\$KS1V\$W	1.1	0.2	4
S7V\$CS1V\$W	3.5	3.0	6
S7V\$MS1V\$W	1.4	0.5	4
S7V\$RS1V\$W	2.0	0.5	3
S10V\$NS1V\$W	1.7	0.5	3
S12V\$NS1V\$W	0.7	0.0	1
<u>Third-Year Group:</u>			
T4\$JS1\$W	2.6	1.5	7
T4\$NS1\$W	2.9	0.0	1
T4\$RS1\$W*	4.3	2.1	10
T5\$NS1\$W	1.6	0.0	1
T5\$PS1\$W	1.7	0.6	6
T6\$KS1\$W	1.4	0.3	4
T7\$CS1\$W	1.6	0.7	14
T7\$DS1\$W	1.3	0.0	1
T7\$RS1\$W	2.1	0.4	2
T9\$NS1\$W	1.4	0.0	1

Table 18 (continued)

Mean Lengths of Wait-Time, Standard Deviations, and
Frequencies by Type of Chain in the Conversation Setting

Type of Chain	Wait-Time in Seconds	Standard Deviation	Frequency
T10\$NS1\$W	1.2	0.0	1
S4\$JS1\$W*	4.3	2.4	5
S4\$NS1\$W	1.4	0.4	2
S4\$RS1\$W	3.1	1.7	5
S5\$NS1\$W	1.0	0.0	1
S5\$PS1\$W	2.8	2.2	15
S5\$RS1\$W	1.8	0.0	2
S6\$KS1\$W	2.2	1.2	4
S7\$CS1\$W	2.2	1.0	4
S7\$MS1\$W	1.3	0.5	3
S8\$NS1\$W	2.2	0.0	1
S10\$NS1\$W	1.7	0.3	5
S12\$NS1\$W	1.3	0.0	2

*Significantly different at $p < .05$ from all chains below $\bar{x} = 2.4$.

greatest number of occurrences was S5U\$PS1U\$W ($n = 17$). An example of this chain is one in which the student said, "No sé (I don't know)." Wait-time followed. This chain represents a student response using the strategy of responding followed by inter-speaker wait-time.

In the third-year group of the conversation setting, the teacher-initiated chain T4\$RS1\$W ($\bar{x} = 4.3$ seconds) represented the chain with the greatest mean length wait-time. An example of this chain is one in which the teacher said, "Tiene que ** tener lo menos tiempo entre ** cada presentación, ** por eso ellos tienen que presentar (You have to have the least time between each presentation, that's why they have to present it)." Wait-time followed and was part of the chain. Double asterisks denote intra-utterance wait-time. This chain represents a teacher initiation of information that involved intra-utterance wait-time followed by inter-speaker wait-time. The chain S4\$JS1\$W ($\bar{x} = 4.3$ seconds) with the greatest mean length wait-time was a student-initiated chain. An example of this chain is one in which the student said, "Y uno de cada grupo (And one from each group)." A student initiation with external linking followed by inter-speaker wait-time is represented by this chain. The most frequently used chains were T7\$CS1\$W ($n = 14$) and S5\$PS1\$W ($n = 15$). An example of the chain T7\$CS1\$W is one in which the teacher said, "Pero tú, ¿qué piensas? (But you, what are you thinking?)." Wait-time followed the teacher utterance. In this chain the teacher solicited information followed by inter-speaker wait-time. An example of the second chain, S5\$PS1\$W, is where the

student said, "No sé (I don't know)." This chain was one in which the student responded with a simple acknowledgment followed by inter-speaker wait-time. The information from this teacher-controlled conversation setting is compared with a student-controlled planning setting in the target language. The null hypothesis tested was:

There are no significant differences among individual chains attributable to the combination use of certain conversational management strategies and wait-time.

A Newman-Keuls Test was performed on the data to test for significant differences. The chains asterisked in Table 18 were found to be significantly different at $p < .05$ with those having a mean length wait-time of less than 2.4. Therefore, the null hypothesis was rejected.

The Planning Setting

In this setting, the students were given a planning task in which they were to use the target language. There was no teacher influence present during the planning setting. The students themselves controlled who would speak, how long they would speak, and the direction of the recorded session. Table 19 illustrates the chains, the mean length of wait-time, standard deviation, and the frequency of occurrences of the chain.

The data from the first- and second-year group revealed that the greatest mean wait-time (4.0 seconds) occurred within the chain S4V\$CS1V\$W. An example of this chain is one in which the student said, "El moda (The style)." Wait-time followed the student

Table 19

Mean Lengths of Wait-Time, Standard Deviations, and
Frequencies by Type of Chain in the Planning Setting

Type of Chain	Wait-Time in Seconds	Standard Deviation	Frequency
<u>By First- and Second-Year Group:</u>			
S4V\$CS1V\$W*	4.0	3.3	4
S4V\$JS1V\$W	2.6	2.2	15
S4V\$NS1V\$W	2.9	1.4	5
S4V\$RS1V\$W	2.2	1.1	16
S5V\$NS1V\$W	3.3	1.1	3
S5V\$PS1V\$W	1.2	0.6	6
S6V\$KS1V\$W	1.6	0.6	3
S7V\$CS1V\$W	1.7	1.3	13
S7V\$MS1V\$W	1.3	0.4	6
S7V\$4S1V\$W	1.9	1.4	4
S10V\$NS1V\$W	1.9	0.9	8
<u>Third-Year Group:</u>			
S4\$BS1\$W***	4.9	3.6	3
S4\$CS1\$W	1.7	0.8	3
S4\$JS1\$W	3.0	2.0	19
S4\$MS1\$W	1.6	0.0	1
S4\$NS1\$W	3.7	1.4	3
S4\$RS1\$W	2.5	1.4	24
S5\$NS1\$W	2.3	0.5	6
S5\$PS1\$W	3.1	2.7	17
S5\$RS1\$W	3.0	0.5	3
S6\$KS1\$W	1.7	0.8	9
S7\$CS1\$W	2.1	1.0	18
S7\$MS1\$W	2.0	0.7	2
S7\$RS1\$W**	4.3	3.2	7
S8\$NS1\$W	3.0	2.0	6
S10\$BS1\$W	1.8	2.1	3
S10\$NS1\$W	2.9	2.0	22
S11\$NS1\$W	2.4	1.0	2
S11\$NS1\$W	1.7	0.3	2

* Significant difference $p < .05$ from all chains below $\bar{x} = 1.5$

** Significant difference $p < .05$ from all chains below $\bar{x} = 2.0$

*** Significant difference $p < .05$ all other chains

utterance. This chain is a student initiating information by steering or changing the topic followed by inter-speaker wait-time. The students used the chain, S4U\$RS1U\$W (n = 16), most frequently in the planning setting. This chain is represented by the utterance in which the student said, "Quiero ser un ** ricitos de oro (I want to be Goldilocks)." Wait-time followed. Double asterisks denote intra-utterance wait-time. This chain is the student initiating information with intra-utterance wait-time followed by inter-speaker wait-time.

The third-year group reflected much the same information. The chain S4\$BS1\$W as used by the students had the greatest mean length wait-time of 4.9 seconds. An example of this chain is where the student said, "Canciones (Songs)." Wait-time followed the utterance. This represents the student initiating information by interrupting to take the floor followed by inter-speaker wait-time. The student-used chain with the most occurrences was S4\$RS1\$W (n = 24). An example of this chain is one in which the student said, "Especialmente ** ese campo (Especially that camp)." Wait-time followed the utterance. Double asterisks denote intra-utterance wait-time. This represents a student initiating information with intra-utterance wait-time that was followed by inter-speaker wait-time. The null hypothesis tested was:

There are no significant differences among individual chains attributable to the combination use of certain conversational management strategies and wait-time.

A Newman-Keuls Test was performed on the data to test for significant differences. The chains asterisked in Table 19 were found to be significantly different at $p < .05$ with those having a mean length wait-time of less than 1.5 seconds. The null hypothesis was rejected. The last recorded setting was the researcher-controlled interview setting.

The Interview Setting

In the interview setting, the researcher interviewed students in each of the groups in the native language, English, to establish conversational patterns in their own language. Students were allowed to interact with each other as well as with the researcher outside of the question-answer sequence. The data for the setting are represented in Table 20.

The researcher and the students in the first- and second-year group used the following chains that contained the greatest mean length wait-times: T4AM\$NS1AV\$W (\bar{x} = 1.8 seconds) and S5AV\$RS1AV\$W (\bar{x} = 2.5 seconds). An example of the first chain was one in which the researcher said, "Yeah, the rest of you for those sports." Wait-time followed the utterance. In this chain the researcher initiated information by using back-channel activities followed by inter-speaker wait-time. An example of the second chain, S5AV\$RS1AV\$W, is where a student said, "I like one hour in the morning ** and one in the evening." Wait-time followed. Double asterisks denote intra-utterance wait-time. This chain was a student responding with the response strategy having intra-utterance

Table 20

Mean Lengths of Wait-Time, Standard Deviations, and
Frequencies by Type of Chain in the Interview Setting

Type of Chain	Wait-Time in Seconds	Standard Deviation	Frequency
<u>By First- and Second-Year Group:</u>			
T4AM\$JS1AV\$W	1.7	0.0	1
T4AM\$NS1AV\$W	1.8	0.4	2
T7AM\$CS1AV\$W	1.7	0.7	2
S4AV\$JS1AV\$W	1.7	1.3	9
S4AV\$NS1AV\$W	1.8	1.0	4
S4AV\$RS1AV\$W	1.9	0.2	2
S5AV\$HS1AV\$W	1.4	0.0	1
S5AV\$PS1AV\$W	1.6	0.6	10
S5AV\$PS1AV\$W	2.5	0.0	1
S10AV\$NS1AV\$W	2.4	1.3	4
<u>Third-Year Group:</u>			
T4A\$JS1A\$W	2.6	0.0	1
T7A\$CS1A\$W	1.6	0.6	10
T7A\$RS1A\$W	2.1	1.3	4
S4A\$JS1A\$W	2.0	2.0	8
S4A\$RS1A\$W	1.3	0.0	1
S5A\$NS1A\$W	1.6	0.0	1
S5A\$PS1A\$W	1.8	0.4	17
S5A\$RS1A\$W	1.5	0.3	2
S7A\$CS1A\$W	1.5	0.0	1
S10A\$NS1A\$W	2.4	1.0	10

At $p < .05$ no one chain was significantly different from any other chain.

wait-time followed by inter-speaker wait-time. The chains with the most occurrences were S4AV#JS1AV#W (n = 9) and S5AV#PS1AV#W (n = 10). An example of the first chain was the student who said, "Everybody's got to consider the culture of the country." Wait-time followed. This chain represents a student initiating information with the strategy of external linking followed by inter-speaker wait-time. The second chain, S5AV#PS1AV#W, was represented by the student who said, "Yeah, free time!" Wait-time followed the utterance. This was a student responding using the response strategy followed by inter-speaker wait-time.

In the third-year group, the researcher-initiated chain T4A#JS1A#W with a mean length wait-time of 2.6 seconds and the student-initiated chain of S10A#NS1A#W (\bar{x} = 2.4 seconds) represented the chains with the greatest mean lengths of wait-time. An example of the first chain was the researcher who said, "Some good things." Wait-time followed. The researcher-initiated chain was one of initiating information using external linking followed by inter-speaker wait-time. The chain, S10A#NS1A#W, was the student who said, "Yeah!" This chain was a student making an acknowledgment using a reactive listening strategy followed by inter-speaker wait-time. The most frequently used researcher chain was T7A#CS1A#W with 10 occurrences represented by the researcher who said, "How has the week gone for each of you this week?" Wait-time followed. This chain was the researcher making a solicitation using a requesting strategy followed by inter-speaker wait-time. The most frequently

used student chain was S5A\$PS1A\$W (n = 17) represented by the student who said, "I don't know." Wait-time followed the utterance. This chain was a student responding with an acknowledgment strategy followed by inter-speaker wait-time. The null hypothesis tested was:

There are no significant differences among individual chains attributable to the combinations of certain conversational management strategies and wait-time.

A Newman-Keuls Test was performed on the data to test for significant differences among the chains in Table 20. There were no significant differences at $p < .05$ and the null hypothesis was not rejected.

A comparison was made between the data to determine if there were any significant differences among the conversational settings when certain conversational management strategies were used with wait-time. The null hypothesis tested was:

There are no significant differences between conversational settings when the combination use of certain conversational management strategies and wait-time is considered.

A Newman-Keuls Test was performed on the data in Tables 18, 19, and 20. The population mean of the interview setting is significantly different from the conversation and planning settings. However, there is no significant difference in the population means of the conversation and planning settings. Therefore, the null hypothesis was rejected at $p < .05$ when the language differences were considered. The null hypothesis was not rejected at the $p < .05$ when language differences were not a variable.

The following summary statements can be made concerning the combination of OSIA moves and conversational management strategies:

1. The OSIA moves of initiating and requesting information with the conversational management strategies of taking the floor, requesting information, external linking, back-channel activities, and intra-utterance wait-time were combined most often when the temporal variable, inter-speaker wait-time, was considered.
2. The OSIA move of responding with the conversational management strategy of acknowledgment occurred in four of six comparisons as the most frequent student moves when the temporal variable, inter-speaker wait-time, was considered.
3. The inter-speaker wait-times were of a shorter mean length in the interview setting than in the conversation and planning settings.

Summary of Hypotheses Results

The findings of this study are summarized below.

1. Are differences in wait-time associated with differences in setting?

	<u>Yes</u>	<u>No</u>
Conversation	x	
Planning	x	
Interview		x

2. Are differences in wait-time associated with differences in language level?

	<u>Yes</u>	<u>No</u>
Conversation		x
Planning	x	
Interview	x	

3. Are differences in wait-time associated with differences in the type of wait-time?

	<u>Yes</u>	<u>No</u>
Conversation	x	
Planning	x	
Interview	x	

4. Are differences in wait-time with certain conversational management strategies associated with differences in setting?

	<u>Yes</u>	<u>No</u>
Conversation	x	
Planning	x	
Interview	x	

5. Are differences in wait-time with certain conversational management strategies associated with differences in language level?

	<u>Yes</u>	<u>No</u>
Conversation	x	
Planning	x	
Interview		x

Summary of Findings

In this study 5770 events were coded to study the use of wait-time and other conversational management strategies in a target language, Spanish, and the native language of the students, English. Wait-time comprised 34% of the coded events. There were two types of wait-time that were described and compared in this study: inter-speaker and intra-utterance. The mean length of all wait-time occurrences were 1.89 seconds (S.D. = 1.40). When broken down, mean inter-speaker wait-time was 2.41 seconds (S.D.= 1.83) and mean intra-utterance wait-time was 1.57 seconds (S.D. = 1.14). The study intended to determine the mean lengths of each of these wait-times and its variability, the types of conversational moves and conversational management strategies used by teachers and students, and finally the combination use of wait-time and conversational strategies.

The first research question was:

How is wait-time used in three conversational settings in the target language and the native language?

The results of the study showed that there were significant effects ($p < .05$) between wait-time type, the conversational settings, and the two language level groups. The mean lengths of wait-time averaged across group language levels and/or conversational setting were too great to be attributable to random sampling fluctuations. However, there were no discernible interactions between wait-time and conversational setting and/or group level. Wait-time was used most extensively with the OSIA moves of initiation and solicitation.

The second research question was:

What conversational management strategies are used in the different conversational settings in the target language and the native language?

The results showed that the conversational management strategies of nominating, steering, and requesting information ($\$C$), external linking ($\J), back-channel activities and reactive listening ($\$N$), and the repeated occurrences of intra-utterance wait-time ($\$R$) were each used more than 500 times. The notation of intra-utterance wait-time occurred in all language levels and settings most often in the initiating information move. The reactive listening strategy occurred in the OSIA move of acknowledgement.

The third research question was:

How are wait-time and other conversational management strategies used together in different conversational settings in the target language and the native language?

The description of these findings were limited to a nominal listing of the chains in which wait-time followed the last move of a previous utterance. This wait-time is reported as inter-speaker wait-time. The frequency of occurrences of a particular chain was noted in addition to the determining of the mean length of inter-speaker wait-time used in that chain. Overall, the chains reported in the interview setting, which was in English, had a shorter inter-speaker wait-time than in the other settings in Spanish. The data also showed that the OSIA moves of initiating and requesting information occurred most frequently with the conversational management strategies of taking the floor and requesting information ($\$C$), external linking ($\J), back-channel activities and reactive listening ($\$N$), and the notation of intra-utterance wait-time ($\$R$).

V. DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

Included in the chapter are a brief review regarding statement of purpose and the problem, summary of the procedures of the study, and a summary of the findings, conclusions, recommendations and implications.

A common bond of all people is the use of the human language to communicate. Skills for linguistic communication are essential for career or social purposes. Conversation, the most basic of these skills, can occur in a variety of settings. The three settings examined in this study were a simulated classroom setting with a teacher in control of the conversational development, an informal setting where students interacted with each other without teacher control, and an interview setting where the researcher controlled the interactions.

A conversation develops through the use of time and other conversational management strategies. Once the opening move is made in the conversation, various conversational management strategies are used by the participants to continue the development of the conversation until the closing move is made by one of the participants. During a conversation, pauses occur between speakers (inter-speaker wait-time) or within a speaker's utterance (intra-utterance wait-time).

Statement of the Problem

This study was conducted to describe and compare the use of wait-time and other conversational management strategies in their native language, English, and in their target language, Spanish. Understanding wait-time and other conversational management strategies may enable teachers to help students develop improved conversational skills. An increase in student use of Spanish in classroom and informal settings can be achieved when the classroom teacher helps students to be aware of the advantages of using time and other conversational management strategies to improve their conversations.

Procedure

The data source for this study consisted of twelve conversations audio-recorded at the Virginia Tech Foreign Language Camps in July, 1986. Sixteen student campers whose native language was English and whose target language was Spanish participated in this study. Students were assigned to four groups of four students each on the basis of the number of years they had studied Spanish. The groups remained constant throughout the data collection. The three different conversational settings were: (a) a teacher-controlled conversation session conducted in the target language, (b) a student-controlled planning session, and (c) a researcher-controlled interview session in the native language of the researcher and students.

The Observational System for Instructional Analysis IV (Hough, 1980) and a descriptive listing of conversational management strategies developed by Krasmich (1981) were used to code the data. The data were analyzed using the OSIA IV computer analysis program which provides a Subfunction Analysis, a Matrix Analysis, and a Subscript Analysis for a description and comparison of the data.

The following major research question was posed:

How are wait-time and other conversational management strategies used by students in conversational settings in the target language and the native language?

Corollaries to the major research question were five secondary research questions:

1. How is wait-time used by students in three conversational settings in the target language and native language?
2. What conversational management strategies are used in three conversational settings in the target language and native language?
3. How are wait-time and other conversational management strategies used together in three conversational settings in the target language and native language?
4. Is there a relationship between wait-time and other conversational strategies used by students in the target language when they study additional years of language?
5. Is there a relationship between the use of wait-time in combination with other conversational management strategies in the target and native languages?

Summary of Findings

This researcher, guided by the research questions, drew the following findings from the analyzed data:

1. The average mean length inter-speaker wait-time for the three conversational settings was 2.41 seconds.
2. The average mean length intra-utterance wait-time for the three conversational settings was 1.57 seconds.
3. The students used longer mean length inter-speaker and intra-utterance wait-times in the conversational settings using the target language, Spanish, than in the conversational setting using their native language, English.
4. Speakers paused more frequently and for shorter periods of time within their own utterances (intra-utterance wait-time) than they did between the utterances of different speakers (inter-speaker wait-time).
5. Advanced Spanish students accorded each other longer pauses between utterances than first- and second-year students.
6. Students used intra-utterance wait-time in two ways: (a) by pausing between sentences within their conversational turn and (b) by pausing one or more times within a single utterance.
7. The students used the conversational management strategies of changing the topic/requesting information, linking to previous points, and back-channeling activities/reactive listening most frequently as they gave and asked for information.

Conclusions

Based upon the findings of this study, the researcher formed four conclusions. A brief narrative follows each conclusion.

Conclusion One

The conversational management strategy of wait-time is a naturally occurring phenomenon in student-to-student interactions in their target and native languages.

The students were not informed that wait-time was a conversational management strategy that should be used in their interactions with each other. Wait-time events comprised 34% (n = 1959) of all coded events and were present in all settings regardless of language or control by teacher, students, or the researcher.

Conclusion Two

Wait-time as a conversational management strategy differs according to the conversational setting.

The students used a longer mean length wait-time in the target language, Spanish, than in their native language, English. In the conversational setting and the planning setting the students used a mean length wait-time of 1.97 seconds in each, while in the interview setting a mean length wait-time of 1.52 seconds was observed. This finding is contrary to that of Shrum's 1982 study. In that study, it was reported that a longer mean length wait-time followed solicitations and responses in the native language than in the target language. The difference in this finding could be attributed to the settings and the level of motivation of the students involved in the two studies. The setting in Shrum's study was a classroom in a school building, while the settings in this study were simulated within the context of a foreign language camp. The students who

attended the Foreign Language Camps at Virginia Tech were motivated to use the target language as the primary mode of communication. Because of the necessity to use Spanish to communicate, there were more opportunities for wait-time strategies to be used in this study.

Conclusion Three

Students who are in advanced levels of second language study use a longer mean length wait-time than students who are in lower levels of a second language.

Because they are learning many new aspects of a second language and much is unfamiliar to them, one might expect first- and second-year students to use longer mean length wait-time as they process previously stated information and formulate responses. On the contrary, this study found that third-year students used a longer mean length wait-time in their conversations. In attempting to identify reasons for this finding, one could speculate that beginning language students are limited in their knowledge of the language and do not have as many grammatical and cultural aspects to consider while conversing in the language. Further, the instruction in a beginning second-language classroom is conducted at a rapid pace, as shown in the work of Shrum (1982) who reports a mean length of post-solicitation wait-time of 1.91 seconds and a mean duration of post-response wait-time of 0.73 seconds in beginning second-language classes. Advanced second-language students possess a greater number of grammatical, cultural, and conversational abilities to which they must attend while interacting in the second language. Since the use of time is a naturally occurring phenomenon in conversations,

advanced students may have used more time as a conversational management strategy than beginning second-language students in order to sort through the additional pieces of information acquired.

Conclusion Four

Intra-utterance wait-time is a conversational management strategy that is under the control of the speaker and is often used during a speaker's turn.

The mean length of intra-utterance wait-time in the three conversational settings was 1.57 seconds ($n = 1094$ events), indicating that students used this particular kind of wait-time as a conversational management strategy within their own utterances. It is probable that they used this time to process what they had just said, to sort through many possible cultural considerations, grammatical aspects and conversational strategies available to them to correctly finish the sentence. In classrooms, teachers interpret these pauses as indications that students need help to complete utterances. If teachers interrupt the pause before students have actively processed the options, opportunities for students to converse in the target language are lost and students may be more reluctant to attempt to converse in the target language.

Recommendations and Implications

The primary concern of this study was the use of wait-time as a conversational management strategy by second-language students while engaged in conversations using their target language, Spanish, or their native language, English. Shrum (1982, 1985a, 1985b)

confirmed the existence of wait-time in second-language classrooms. The present study not only supported Shrum's finding but further established that wait-time is a temporal variable used by students in their conversations among each other inside the classroom and, more importantly, outside the classroom. Wait-time does occur in teacher-controlled conversations (formal classroom interactions) and in student-controlled conversations (informal, natural interactions).

Recommendation One

Further research is called for on the use of the temporal variable, inter-speaker wait-time, in the target language and native language.

This researcher identified and named the two wait-times as inter-speaker wait-time and intra-utterance wait-time. Studies of inter-speaker wait-time have been the focus of work in several disciplines. Inter-speaker wait-time is most similar to Shrum's second-language post-solicitation and post-response wait-times (1982, 1985a, 1985b) and Rowe's wait-time I and wait-time II (1974). The temporal variable, wait-time, occurred after all conversational moves, not just after solicitations and responses. A possible research question is:

What are the differences in the mean lengths of inter-speaker wait-time after each kind of student conversational moves?

If there are differences, the second-language classroom teacher needs to emphasize the need to pause after certain categories of moves. Students use time in the native language to gain conversational

control, and they need to learn how to use time in a similar manner in the target language.

Recommendation Two

Descriptive research on the temporal variable of intra-utterance wait-time needs to be conducted.

One of the exciting and promising areas of future research for second-language studies is that of examining and describing the temporal variable identified here as intra-utterance wait-time, the pause that a speaker makes within a single utterance or the pause between two utterances within the same conversational move. In this study, there are two kinds of intra-utterance wait-time: that which occurs between two sentences of a speaker without a change in speakers and that which occurs within a speaker's single utterance. An example of the pause within a single utterance is: The meals and the ** the ** pay for the teachers ** and advisers. An example of a pause between two utterances within the same move is: It is only a weekend. ** Not all week. Double asterisks denote the occurrence of intra-utterance wait-time.

Although the mean length of intra-utterance wait-time was shorter than that of inter-speaker wait-time, (2.41 seconds vs. 1.57 seconds), it was used 426 more times than inter-speaker wait-time. Intra-utterance wait-time is an important variable available for use by second-language students when they are attempting to speak in the target language. It is likely that during intra-utterance wait-time speakers most likely choose vocabulary and structure to formulate a

move. The use of inter-speaker wait-time is most likely where the student processes the previous utterance of another speaker and where the student begins an utterance. Once the utterance begins, thought-processing occurs in the time provided by the intra-utterance wait-time.

Recommendation Three

Teachers should be trained to allow a longer intra-utterance wait-time.

Intra-utterance wait-time comprised 62 percent of all coded wait-time events and is an often-used conversational management strategy. Second-language teachers need to be aware of this variable when teaching students to use the target language. The teacher may interpret hesitation by a second-language student as the need for help to finish the utterance, when the student is probably thinking about how to finish and/or continue the utterance. An opportunity for the student to use the target language is taken away by the teacher who does not understand the value of intra-utterance wait-time. The mean length of intra-utterance wait-time by the students in the target language was 1.64 seconds, much less than the three-second criterion wait-time discussed earlier. If second-language teachers extend their minimum wait-time to a criterion level of three seconds, students would have the opportunity to use intra-utterance wait-time to finish their utterances. Achievements such as longer utterances, more utterances, attending to each other's conversations, etc., could occur in the second-language

classroom. Second-language students also need to be informed about the value and frequency of use of intra-utterance wait-time and to recognize that such hesitation is not a reflection upon their knowledge and ability to use the target language.

Three possible questions for future study by second-language researchers are:

1. Is there a relationship between the use of intra-utterance wait-time and the academic performance level of second-language students?
2. Is there a difference in the length of intra-utterance wait-time when used by non-native speakers of the target language and by native speakers of that language?
3. Is there a difference in the length of intra-utterance wait-time when used in an informal classroom setting and a formal classroom setting?

Through ethnographic interviews of students observed using intra-utterance wait-time, the following questions could be asked in order to provide answers to wait-time questions and a basis for future research:

1. What was on your mind when you paused in these instances? The interviewer would provide the student with an audio-recording of the utterances under study.
2. Do you use intra-utterance wait-time when using the target language in the classroom?
3. Do you use the target language outside the second-language classroom?
4. Are you aware that you use intra-utterance wait-time when speaking?
5. What do you do when other students hesitate?

To further study the effects of intra-utterance wait-time, separation of the variable into two kinds of occurrences needs to occur: those within a single utterance and those between sentences spoken by the same speaker. A research question for future study is:

Is there a relationship between inter-speaker wait-time, intra-utterance wait-time occurring within a single utterance, and intra-utterance wait-time occurring between sentences within a speaker's move?

An additional area not explored in this study was the use of other conversational management strategies in combination with intra-utterance wait-time. Many of the questions posed for future research on wait-time can be expanded to include conversational management strategies. Possibilities for future research are numerous in the observation, description, and comparison of the effects of the three types of wait-time by students and their interaction effects.

Recommendation Four

Students should be taught to use skillfully the other conversational management strategies of initiating, responding, and soliciting information while conversing in the target language.

Other conversational management strategies are as commonly and subconsciously used as is wait-time. People use conversational management strategies to begin, continue, control, or end a conversation. Skill in using conversational management strategies in the native language allows a person to become a better conversationalist. Second-language students need to be taught how to use skillfully other conversational management strategies in the

target language. After wait-time, the most frequent strategies used by the participants in this study were changing the topic, requesting information, external linking to previous points, back-channel activities which included reactive listening and tag questions, and simple response/acknowledgment. The participants in each of the four groups were able to sustain a 20- to 30-minute conversation among themselves during the planning setting. If these students were able to do this without teacher influence, students in a second-language classroom under teacher control should be able to maintain a conversation in the target language. The key element to interaction among students in classrooms is a flexible teacher who allows conversations in which the use of wait-time and other conversational management strategies can occur. When second-language teachers and students combine wait-time with other conversational management strategies, powerful techniques are available for learning to use the target language.

The exciting potential for developing student proficiency in the target language must not be allowed to obscure the necessity for continued dispassionate study of the variables involved. There is still room for descriptive studies of wait-time and conversational management strategies in second-language classrooms. While the temptation to conduct manipulative studies looms near, this field requires more basic understanding of possible relationships among wait-time and other language-use variables.

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APPENDICES

Appendix A

Letter of Explanation to Parents and Participants

TO: Parents and Campers Involved in Foreign Language Camps at
Virginia Tech (Spanish Camp)

FROM: David E. Coffman, Doctoral Candidate at Virginia Tech

SUBJECT: Participation in Data Collection for Doctoral Dissertation

DATE: July 12, 1986

I would like to take this opportunity to introduce myself and to explain the purpose of this letter. At the present, I am both a teacher of Spanish at Martinsville High School in Martinsville, Virginia, and a doctoral candidate in Curriculum and Instruction with Dr. Judith L. Shrum as the chair of my dissertation committee. In order to progress with my dissertation, I need to collect data from students speaking Spanish. To facilitate this data collection process, I have chosen the Spanish Camp of the Foreign Language Camps to be held at Virginia Tech July 26-August 2.

The data collection process will involve choosing a group of students from the Spanish Camp and recording these conversations in Spanish. The tapings will be done during their conversation groups, task-oriented planning sessions, and post-taping interviews. In these settings, the topical content is not of interest and will not be reported. I am only interested in studying the way the students express themselves in Spanish when involved in conversations. Dr. Shrum, Executive Director of the Camp, and Ms. Janice Kaufman, Director of the Camp, have given their permission for me to use the Camp and its facilities to collect the data. However, I need your consent to allow your child, if selected, to be a part of my study. If you agree to this request, please read and sign the attached permission form. When you and your child register on Saturday, July 26, in Slusher Tower at Tech, I will be there to collect the forms and to answer any questions that you may have concerning the study.

Thank you for your consideration in this matter. I am looking forward to meeting you and all the Spanish campers on the 26th of July.

jtc

Appendix B

Statement of Informed Consent

I give my permission for my child, _____, to participate in the tape-recorded data collection by David Coffman at the Foreign Language Camps at Virginia Tech, July 26 through August 2, 1986. I understand that there will be no negative reaction from the camps against my child if he or she does not participate. Also, my child has the right to withdraw from the data collection process without penalty at any time.

The data will be analyzed to describe and compare conversational management strategies that language students use while conversing in Spanish. This data will be used to improve the teaching of conversational Spanish in the classroom.

The names of the participants on the tapes will not be used in any reporting of this research.

 Signature of Parent/Guardian

 Signature of Camper

 Date

 David E. Coffman, Researcher

Appendix C

List of Simplified Definitions of the
Basic Thirteen Categories of OSIA IV

<u>Category Number</u>	<u>Category Name</u>	<u>Definition</u>
1	Thinking	A person is silently reflecting on something that was said or is using a conversational management strategy to buy time.
2	Sensing	A person uses the senses (seeing, hearing, feeling, testing, smelling) to take in information.
3	Manipulating artifacts	A person works with instructional materials.
4	Initiating information	A person presents information to others.
5	Responding	A person acts or speaks because someone else has evoked this action.
6	Soliciting clarification	A person asks for a fuller meaning of a previous response.
7	Soliciting	A person asks for a response from another person; may be a question, command, or gesture.
8	Judging correctness	A person indicates that a response or statement by someone else is correct.
9	Personal positive judgment	A person uses her/his own criteria to judge another person in a positive way.
10	Acknowledging	A person indicates that s/he has perceived another person or action.

Appendix C (continued)

<u>Category Number</u>	<u>Category Name</u>	<u>Definition</u>
11	Judging incorrectness	A person indicates that a response or statement by someone else is incorrect.
12	Personal negative judgment	A person uses her/his own criteria to judge another person in a negative way.
13	Instructionally non-functional	Any action or statement that is not clearly related to instruction.

Appendix D

100 Unambiguous Isolated Events for Phenomenal Validity(Researcher and Student Rating)

Bold print denotes coded events of actual student utterances.

<u>Number</u>	<u>Events</u>
1	Quiero un ricitos de oro. / I want to be Goldilocks.
2	¿Cómo se dice brown? / How do you say brown?
3	S ₁ : ¿Cómo se dice brown? / How do you say brown? S ₂ : Pardo. / Brown.
4	Y nariz--y nariz grande. / And a nose--and a large nose.
5	Osos--Osos tengo--Osos tienen nariz grande. / Bears-- Bears I have--Bears have a large nose.
6	Pequeño nariz y grande orejas. / A small nose and large ears.
7	¿Cómo se dice teeth? / How do you say teeth?
8	Eres un ricitos de oro. / You are Goldilocks.
9	Él tiene un grade boca. / He has a large mouth.
10	T: ¿Cuáles? / Which? S: Fue el presidente de club español el año pasado y Beta Club, el club de historia. / I was president of the Spanish Club last year and the Beta Club and the History Club.
11	¿Cómo se dice scratches? / How do you say scratches?
12	T: ¿Con chicos o chicas? / With boys or girls? S: Solo con personas que yo seguro que puedo ganar. / Only with persons that I am sure I can win.

Appendix D (continued)

- 13 T: J., ¿De dónde eres? / Where are you from?
S: Soy de Bristol. / I am from Bristol.
- 14 Tuvimos que hablar de esto en el grupo de conversación. /
We had to talk about this in a conversation group.
- 15 T: ¿Qué escribes? / What are you writing?
S: Umm--poetry. Un poco. / Poetry. A little.
- 16 T: ¿Dónde deseas ir? / Where do you want to go?
S: ¿Qué? / What?
- 17 T: ¿A dónde? / Where?
S: No sé. / I don't know.
- 18 Voy a comer a Gilley's o el Hokie House. / I'm going to
eat at Gilley's or the Hokie House.
- 19 ¿Dónde está su novio? / Where is your boyfriend?
- 20 T: ¿Dónde está su novio? / Where is your boyfriend?
S: Está en Mechanicsville. / He is in Mechanicsville.
- 21 ¿Qué necesita? / What do you need?
- 22 S₁: ¿Qué necesita"? / What do you need?
S₂: Sí, sí, rojo, azul, amarillo, negro. / Yes, yes, red,
blue, yellow, and black.
- 23 ¿Dónde vamos a tener este baile? / Where are we going to
have this dance?
- 24 Hay condición de aire pero no hay mucho--mucho espacio. /
There's air conditioning but not much--much space.
- 25 Madrid es muy muy difícil to decorate. / Madrid is very
very difficult to decorate.
- 26 Y la noche--es fresco. / And the night--it's cool.

Appendix D (continued)

- 27 Posiblemente las clases de cocinar pueden preparar la comida para el baile. / Possibly the cooking classes can prepare the food for the dance.
- 28 Y tenemos a hacer algo--nachos o quesadillas y podemos cortarlos en muchas / And we have to make something--nachos or cheese straws and we can cut them in many
- 29 S₁: Necesitamos muchos / We need many
S₂: Muchos, pues podemos trabajar dos días. / Many, well we can work two days.
- 30 Pero tenemos papas fritas y hamburguesas. / But we have french fries and hamburgers.
- 31 Y hay dos clases cada día. So tenemos seis--seis preparadors de comida cada--cada día. / And there are two classes each day. So we have six--six food preparers each--each day.
- 32 Tú hablas muy bien, P. / You talk very well, P.
- 33 ¿Cómo se dice T-shirt? / How do you say T-shirt?
- 34 S₁: ¿Cómo se dice T-shirt? / How do you say T-shirt?
S₂: Camiseta. T-shirt.
- 35 Necesita la música para el baile? / Do we need music for the dance?
- 36 Vamos a tener un--una banda o--o un tocadisco? / Are we going to have a--a band or--or a record player?
- 37 S₁: Vamos a tener un--una banda o--o un tocadisco? / Are we going to have a--a band or--or a record player?
S₂: ¿Qué es banda? / What is a band?
- 38 El año pasado, yo fui a un campo similar a este y tienen una banda y fue horrible. / Last year I went to a camp similar to this and they have a band and it was horrible.

Appendix D (continued)

- 39 Siempre tienen música y videos y pueden ver. / They always have music in videos and they can see.
- 40 Hay grande television en Siberia. / There is a large television in Siberia.
- 41 Yo tengo muchas cintas aquí. / I have many tapes here.
- 42 ¿Quién para el MC? / Who for the MC?
- 43 S₁: ¿Quién para el MC? / Who for the MC?
S₂: No sé. / I don't know.
- 44 S₁: ¿Quién para el MC? / Who for the MC?
S₂: No sé. / I don't know.
S₃: Alguien que sabe de / Someone that knows how
- 45 Los estudiantes deben hablar porque en el pasado los consejeros del francés hablan mucho. / The students should talk because in the past year the french counselors talk a lot.
- 46 Podemos tener los estudiantes que no están en La Gala para los MC's y porque no es un / We can have the students that are not in the Gala Show for the MC's and because it is not a
- 47 Yo pensé que L. y M. fueron buenos. / I thought that L. and M. were good.
- 48 S₁: ¿Conoces? / Do you know him?
S₂: Um—él está en mi piso. / Um—he is on my floor.
- 49 ¿Qué vamos a hacer con los microphones para drama? / What are we going to do with the microphones for the play.
- 50 ¿Qué vamos a hacer? / What are we going to do?
- 51 S₁: ¿Qué vamos a hacer? / What are we going to do?
S₂: Tenemos planear la actividades de la Gala. / We have to plan the activities for the Gala.

Appendix D (continued)

- 52 ¿Qué canciones? / What songs?
- 53 S₁: ¿Qué canciones? / What songs?
S₂: ¿De los tres lenguas? / Of the three languages?
- 54 S₁: ¿Qué canciones? / What songs?
S₂: ¿De los tres lenguas? / Of the three languages?
S₃: De español. / Of Spanish.
- 55 Yeah, that's good.
- 56 Necesitamos faldas para las chicas y tenemos la música. /
We need skirts for the girls and we have the music.
- 57 ¿Qué es la palabra para routine? / What is the work for
routine?
- 58 ¿Está bien el drama? / Is the play ok?
- 59 ¿Cuántos minutos necesitan para las canciones? / How many
minutes do they need for the songs?
- 60 S₁: ¿Cuántos minutos en total por canciones? / How many
total minutes for the songs?
S₂: Quince minutos / Fifteen minutes.
61. S₁: Diez a veinte minutos para el drama. / Ten to twenty
minutes for the play.
S₂: Y cinco por aerobics. / And five for aerobics.
- 62 ¿Le gusta campos de lengua? / Don't you like language
camps?
- 63 S₁: ¿No te gustan? / Don't you like them?
S₂: Estoy aburridos en campos de lenguas. / I am bored
in language camps.
- 64 ¿Le gustan los profesores de españoles? / Don't you like
Spanish professors?

Appendix D (continued)

- 65 Y yo perdí mi llave. / And I lost my key.
- 66 ¿Qué día empieza el campo? / What day does the camp begin?
- 67 S₁: ¿Qué día empieza el campo? / What day does the camp
begin?
- S₂: En el seis de agosto. / On the 6th of August.
- 68 ¿En el viernes en el—el tarde? / On Friday in the—in
the afternoon.
- 69 Y sal . . . salgen domingo a las cinco. / And le . . .
leave Sunday at 5.
- 70 ¿Y dónde? / And where?
- 81 Yo sé que V.T. es popular, pero es rural. / I know that
V.T. is popular but it is rural.
- 72 W & M es bonita. / W & M is pretty.
- 73 ¿Cuántos dólares cuestan el campo? / How many dollars
does the camp cost?
- 74 How much does it cost?
- 75 S₁: How much does it cost?
- S₂: Oh! Ciento dolares. / Oh! \$100.
- 76 ¿Cuántos estudiantes en el campo? / How many students in
the camp?
- 77 Él dice que esta mañana nosotros necesitamos unas otras. /
He says that this morning we needed some others.
- 78 T: ¿Así que no te gusta la cocina? / So you don't like the kitchen?
- S: Sí, sí me gusta la cocina. / Yes, yes I like the kitchen.
- 79 Me gusta volibal. / I like volleyball.
- 80 M. es el muchacho solo en el clase. / M. is the only boy in
class.

Appendix D (continued)

- 81 T: ¿Qué—qué hacen? De que se trata? / What—what are they doing?
What is it about?
- S: Would you repeat it please?
- 82 T: ¿Tú eres Tubbs? / Are you Tubbs?
- S: No! Crockett.
- 83 ¿Es verdad que tú es horrible en futbol? / Is it true that you are
horrible in football?
- 84 T: ¿Quién va a ganar entre uds. dos? / Who's going to win between you two?
- S: No, no juego bien y ella juega magnífico. / No, I don't play well
and she plays magnificent.
- 85 J. y yo hacemos una torte de papas y cebolleros. / J. and
I are making a potato and onion omelet.
- 86 ¿Cómo se dice "peel"? / How do you say "peel"?
- 87 No sabemos el nombre del periódico. / We don't know the name of the
newspaper.
- 88 S₁: Todos mi nombres para el periódico esta absurdos. / All my names
for the paper are boring.
- S₂: ¿Qué pasa? / What is it?
- S₁: ¡El gallino! ¡Cock-a-ddodle-do! / The chicken!
Cock-a-doodle-do!
- S₂: Sí. / Yep.
- S₁: Es estúpido. / It's stupid.
- 89 Todos mi nombres para el periódico está absurdos. / All
my names for the newspaper are boring.
- 90 T: Sí. / Yes.
- S: L. es una chica muy muy inteligente. / L. is a
very very intelligent girl.
- T: Sí. Tiene--tiene un 4.0 GPA. / Yes. She has--she
has a 4.0 GPA.

Appendix D (continued)

- 91 Ella habla en todo español, todo el tiempo. / She talks in all Spanish, all the time.
- 92 S: Ah Surfside.
- T: ¿Dónde es eso? California? / Where is that? California?
- S: no, en el Carolina del Sur. / No, in South Carolina.
- 93 Todas las personas en Martinsville van a Myrtle Beach. / All the people in Martinsville go to Myrtle Beach.
- 94 T: ¿Qué tú haces el 3 de August? / What are you doing the 3rd of August?
- S: Manejo para seis horas--horas--cuando yo voy a mi casa. / I'm driving for six hours when I'm going to my house.
- 95 T: ¿Qué--qué--qué--qué--es eso? / What--what--what--what is that?
- S: Es un nuevo reloj. / It is a new watch.
- 96 T: Pero, ¿Qué es lo que tienes delante? / But what is that you have in front?
- S: El Swatchguard. / The Swatchguard.
- 97 T: Eh, explícame. No entiendo ¿Qué es Swatch? / Eh, explain it to me. I don't understand What is a Swatch?
- S: Es una reloj de plástica. / It is a plastic watch.
- 98 Martinsville es cerca de aquí? / Is Martinsville near here?
- 99 S₁: ¿Martinsville es cerca de aquí? / Is Martinsille near here?
- S₂: Dos horas. / Two hours.
- 100 Pero yo conozco a algunos chicos de Gloucester. / But I know some boys from Gloucester.

Appendix E

100 Unambiguous Isolated Events for Construct Validity(Criterion Observer and Researcher)

Bold print denotes coded events of actual student utterances.

<u>Number</u>	<u>Events</u>
1	Quiero un ricitos de oro. / I want to be Goldilocks.
2	¿Cómo se dice brown? / How do you say brown?
3	S ₁ : ¿Cómo se dice brown? / How do you say brown? S ₂ : Pardo. / Brown.
4	Y nariz—y nariz grande. / And a nose—and a large nose.
5	Osos—Osos tengo—Osos tienen nariz grande. / Bears—Bears I have—Bears have a large nose.
6	Pequeño nariz y grande orejas. / A small nose and large ears.
7	¿Cómo se dice teeth? / How do you say teeth?
8	Eres un ricitos de oro. / You are Goldilocks.
9	Él tiene un grande boca. / He has a large mouth.
10	T: ¿Cuáles? / Which? S: Fui el presidente de club español el año pasado y Beta Club, el club de historia. / I was president of the Spanish Club last year and the Beta Club and the History Club.
11	¿Cómo se dice scratches? / How do you say scratches?
12	T: ¿Con chicos o chicas? / With boys or girls? S: Solo con personas que yo seguro que puedo ganar. / Only with persons that I am sure I can win.
13	T: J., ¿De dónde eres? / Where are you from? S: Soy de Bristol. / I am from Bristol.

Appendix E (continued)

- 14 Tuvimos que hablar de esto en el grupo de conversación. /
We had to talk about this in a conversation group.
- 15 T: ¿Qué escribes? / What are you writing?
S: Umm—poetry. Un poco. / Poetry. A little.
- 16 T: ¿Dónde deseas ir? / Where do you want to go?
S: ¿Qué? / What?
- 17 T: ¿A dónde? / Where?
S: No sé. / I don't know.
- 18 Voy a comer a Gilley's o el Hokie House. / I'm going to
eat at Gilley's or the Hokie House.
- 19 ¿Dónde está su novio? / Where is your boyfriend?
- 20 T: ¿Dónde está su novio? / Where is your boyfriend?
S: Está en Mechanicsville. / He is in Mechanicsville.
- 21 ¿Qué necesita? / What do you need?
- 22 S₁: ¿Qué necesita? / What do you need?
S₂: Sí, sí, rojo, azul, amarillo, negro. / Yes, yes, red,
blue, yellow, and black.
- 23 ¿Dónde vamos a tener este baile? / Where are we going to
have this dance?
- 24 Hay condición de aire pero no hay mucho—mucho espacio. /
There's air conditioning but not much—much space.
- 25 Madrid es muy muy difícil to decorate. / Madrid is very
very difficult to decorate.
- 26 Y la noche—es fresco. / And the night—it's cool.
- 27 Posiblemente las clases de cocinar pueden preparar la comida
para el baile. / Possible the cooking classes can prepare
the food for the dance.

Appendix E (continued)

- 28 Y tenemos a hacer algo--nachos o quesadillas y podemos
cortarlos en muchas / And we have to make something--
nachos or cheese straws and we can cut them in many . . .
- 29 ¿Has visto a alguien guapo en este grupo del campamento o
no? / Have you seen anyone handsome in this camp group
or not?
- 30 Pero tenemos papas fritas y hamburguesas. / But we have
french fries and hamburgers.
- 31 Y hay dos clases cada día. So tenemos seis--seis preparadors
de comida cada--cada día. / And there are two classes each
day. So we have six--six food preparers each--each day.
- 32 Tú hablas muy bien, P. / You talk very well, P.
- 33 ¿Cómo se dice T-shirt? / How do you say T-shirt?
- 34 S₁: ¿Cómo se dice T-shirt? / How do you say t-shirt?
S₂: Camiseta. / T-shirt.
- 35 ¿Necesita la música para el baile? / Do we need music
for the dance?
- 36 ¿Vamos a tener un-una banda o--o un tocadisco? / Are we
going to have a--a band or--or a record player?
- 37 S₁: ¿Vamos a tener un--una banda o--o un tocadisco? /
Are we going to have a--a band or--or a record player?
S₂: ¿Qué es banda? / What is a band?
- 38 El año pasado, yo fui a un campo similar a este y tienen
una banda y fue horrible. / Last year I went to a camp
similar to this and they have a band and it was horrible.
- 39 Siempre tienen música y videos y pueden ver. / They always
have music in videos and they can see.
- 40 Hay grande television en Siberia. / There is a large
television in Siberia.
- 41 Yo tengo muchas cintas aquí. / I have many tapes here.
- 42 ¿Quién para el MC? / Who for the MC?

Appendix E (continued)

- 43 S₁: ¿Quién para el MC? / Who for the MC?
 S₂: No sé. / I don't know.
- 44 S₁: ¿Quién para el MC? / Who for the MC?
 S₂: No sé. / I don't know.
 S₃: Alguien que sabe de / Someone that knows
 how
- 45 Los estudiantes deben hablar porque en el pasado los
 consejeros del francés hablan mucho. / The students
 should talk because in the past year the french
 counselors talk a lot.
- 46 Podemos tener los estudiantes que no están en La Gala
 para los MC's y porque no es un / We can have
 the students that are not in the Gala Show for the MC's
 and because it is not a
- 47 ¿Es la verdad? / Is it the truth?
- 48 S₁: ¿Conoces? / Do you know him?
 S₂: Um--él está en mi piso. / Um--he is on my floor.
- 49 ¿Qué vamos a hacer con los microphones para drama? /
 What are we going to do with the microphones for the play?
- 50 ¿Qué vamos a hacer? / What are we going to do?
- 51 S₁: ¿Qué vamos a hacer? / What are we going to do?
 S₂: Tenemos planear la actividades de la Gala. / We
 have to plan the activities for the Gala.
- 52 ¿Qué canciones? / What songs?
- 53 S₁: ¿Qué canciones? / What songs?
 S₂: ¿De los tres lenguas? / Of the three languages?

Appendix E (continued)

- 54 S₁: ¿Qué canciones? / What songs?
 S₂: ¿De los tres lenguas? / Of the three languages?
 S₃: De español. / Of Spanish.
- 55 Yeah, that's good.
- 56 Necesitamos faldas para las chicas y tenemos la música. /
 We need skirts for the girls and we have the music.
- 57 ¿Qué es la palabra para routine? / What is the word for
 routine?
- 58 ¿Está bien el drama? / Is the play ok?
- 59 ¿Cuántos minutos necesitan para las canciones? / How
 many minutes do they need for the songs?
- 60 S₁: ¿Cuántos minutos en total por canciones? / How
 many total minutes for the songs?
 S₂: Quince minutos. / Fifteen minutes.
- 61 S₁: Diez a veinte minutos para el drama. / Ten to twenty
 minutes for the play.
 S₂: Y cinco por aerobics. / And five for aerobics.
- 62 ¿Le gusta campos de lengua? / Don't you like language
 camps?
- 63 S₁: ¿No te gustan? / Don't you like them?
 S₂: Estoy aburridos en campos de lenguas. / I am bored
 in language camps.
- 64 ¿Le gustan los profesores de español? / Don't you like
 the Spanish professors?
- 65 Y yo perdí mi llave. / And I lost my key.
- 66 ¿Qué día empieza el campo? / What day does the camp begin?
- 67 S₁: ¿Qué día empieza el campo? / What day does the camp
 begin?
 S₂: En el seis de agosto. / On the 6th of August.

Appendix E (continued)

- 68 ¿En el viernes en el--el tarde? / On Friday in the--in
the afternoon.
- 69 Y sal . . . salgen domingo a las cinco. / And le . . .
leave Sunday at 5.
- 70 ¿Y dónde? / And where?
- 71 T: ¿Dónde vives? / Where do you live?
- S: En Fairfax County. Soy del capital. / In Fairfax
County. I'm from the capital.
- 72 T: Y tú, ¿De dónde eres? / And you, where are you
from?
- S: Glouchester. Cinco y media horas pero /
Clouchester. Five and one half hours but
- 73 ¿Cuántos dólares cuestan el campo? / How many dollars does
the camp cost?
- 74 How much does it cost?
- 75 S₁: How much does it cost?
- S₂: Oh! Ciento dolares. / Oh! \$100.
- 76 ¿Cuántos estudiantes en el campo? / How many students
in the camp?
- 77 Él dice que esta mañana nosotros necesitamos unas otras. /
He says that this morning we needed some others.
- 78 T: ¿Así que no te gusta la cocina? / So you don't like
the kitchen?
- S: Sí, sí me gusta la cocina. / Yes, yes I like the
kitchen.
- 79 Me gusta volibal. / I like volleyball.
- 80 M. es el muchacho solo en el clase. / M. is
the only boy in class.

Appendix E (continued)

- 81 T: ¿Qué--qué hacen? ¿De qué se trata? / What--what are they doing? What is it about?
S: Would you repeat it please?
- 82 T: ¿Tú eres Tubbs? / Are you Tubbs?
S: ¡No! Crockett.
- 83 Es verdad que tú es horrible en fútbol? / Is it true that you are horrible in football?
- 84 T: Tendré que preguntarle a D. a ver si es verdad. / I will have to ask D. to see if it is true.
S: ¿Qué? / What?
- 85 J. y yo hacemos una torte de papas y cebolleros. / and I are making a potato and onion omelet.
J.
- 86 ¿Cómo se dice "peel"? / How do you say "peel"?
- 87 No sabemos el nombre del periódico. / We don't know the name of the newspaper.
- 88 S₁: Todos mi nombres para el periódico está absurdos. / All my names for the paper are absurd.
S₂: ¿Qué pasa? / What is it?
S₁: ¡El gallino! ¡Cock-a-doodle-do! / The chicken! Cock-a-doodle-do!
S₂: Sí. / Yep.
S₁: Es estúpido. / It's stupid.
- 89 Este campo termina en el dos día de Agosto. / This camp ends on the second day of August.
- 90 T: Sí. / Yes.
S: L. es una chica muy muy inteligente. / L. is a very very intelligent girl.
T: Sí. Tiene--tiene un 4.0 GPA. / Yes. She has--she has a 4.0 GPA.

Appendix E (continued)

- 91 Ella habla en todo español, todo el tiempo. / She talks in all Spanish, all the time.
- 92 S: Ah Surfside.
T: ¿Dónde es eso? California? / Where is that? California?
S: No, en el Carolina del Sur. / No, in South Carolina.
- 93 Todas las personas en Martinsville van a Myrtle Beach. / All the people in Martinsville go to Myrtle Beach.
- 94 T: ¿Qué tú haces el 3 de August? / What are you doing the 3rd of August?
S: Manejo para seis horas--horas--cuando yo voy a mi casa. / I'm driving for six hours which I'm going to my house.
- 95 T: ¿Qué--qué--qué--qué es eso? / What--what--what--what is that?
S: Es un nuevo reloj. / It is a new watch.
- 96 T: Pero, ¿Qué es lo que tienes delante? / But what is that you have in front?
S: El Swatchguard. / The Swatchguard.
- 97 T: Eh, explícame. No entiendo ¿Qué es Swatch? / Eh, explain it to me. I don't understand What is a Swatch?
S: Es una reloj de plástica. / It is a plastic watch.
- 98 Martinsville es cerca de aquí? / Is Martinsville near here?
- 99 S₁: ¿Martinsville es cerca de aquí? / Is Martinsville near here?
S₂: Dos horas. / Two hours.
- 100 Pero yo conozco a algunos chicos de Gloucester. / But I know some boys from Gloucester.

Appendix F

10-Minute Conversation used for Interrater Reliability

SPANISH IIIIB PLANNING SETTING

Note: *(Number)* denotes wait-time and its length. Wait-time in actual student utterances is recorded in seconds.

S7\$C	S1: ¿Le gusta campos de lengua?
y S1#11	*1.2*
y S5\$P	S2: Pues sí.
z S5\$P S1#6 S12\$n	S1: Sí. *.7* No me gusta.
y S6\$K S6\$K	S3: ¿No me gusta? . . . ¿No te gustas?
y S5\$P	S1: Estoy aburrido en campos de lenguas.
y S1#12	*1.3*
y S10\$N	S3: Sí.
y S1#15	*1.6*
y S4\$J S1#6 S4\$R	S1: Especialmente *.7* ese campo.
y S1#42	*4.3*
y S4\$J	S3: Me gusta más o menos.
y Q13\$N	G: (giggle)
z S7\$C	S2: ¿Le gustan los profesores de español?
y S1#17	*1.8*
y S5\$P	S3: J. y Señor L. es muy simpático. M.
y S5\$N	S4: Si.
y S4\$J S1#24 S4\$J S1#12 S4\$R S1#6 S4\$R S1#74 S4\$C S1#21 S4\$R S1#7 S4\$R S1#23 S7\$C S1#14 S7\$R S1#42 S7\$C	S3: Y the C. family. *2.5* Pero *1.3* yo *.7* perdí mi llave *7.5* en el fin de semana. *2.2* El campo de lengua *.8* el proximo verano, *2.4* ¿qué día *1.5* empieza? *4.3* ¿Qué día

empieza el campo?

y S5\$P S1: En el seis de agosto.

y S1#40 *4.1*

y S10\$N S3: Oh, en el seis agosto.

y S8\$N S1: Sí.

y S4\$J S3: En el mil novecientos ochenta y siete.

y \$1#24 *2.5*

y S10\$N S4: Sí.

y S1#23 *2.4*

y S6\$K S1#11 S6\$R S1#11 S3: ¿En el--el viernes *1.2* en el-- el tarde? *1.2* O en la mañana?

y S6\$K S5\$P S2: Mañana.

y S5\$P S4: En la mañana.

y S4\$I S2: y

y S1#25 *2.6*

y S7\$C S1: ¿Cuántos días?

y Q5\$P G: Tres. Tres. Sí.

y S5\$H S1#4 S5\$R S1#11 S5\$R S2: Well, *.5* dos, el sábado y domingo y *1.2* tarde de viernes.

y Q5\$N G: Sí. Sí. Sí.

y S4\$J S1#6 S4\$R S1#4 S4\$R S1\$0 S1#19 S4\$R S1#71 S4\$R S1#19 S4\$R S2: Llevé *.7* to arrive *.5* Llego los estudiantes viernes y umm *2* a la tarde *7.2* a las *2* tres.

y S10\$N S3: Sí.

y S6\$K S2: ¿Tres?

y S5\$P S4: Sí.

y S4\$J S1#* S4\$R S1#19
 S1\$0 S1#33 S4\$R S1#10
 S4\$R S1#39 S4\$R

y S10\$N

y S4\$J

y S10\$N

y S7\$C

y S1#27

y S5\$P

y S1#13

y S11\$N

y S4\$J S1#19 S4\$R S1#5
 S4\$R S1#17 S4\$R S1#23

y S4\$B

y S8\$N

y S11\$N S1#11 S4\$J

y S8\$A

y S1#25

y S4\$J

y S1#20

y S6\$K

y S1#27

y S6\$K

y S6\$K

y S1#16

y Q13\$N

y S10\$A

S2: y *.9* sal *.7* salgen *2* umm
 3.4 domingo *1.1* a las *4*
 cinco.

S3: Sí.

S2: Cuatro o cinco.

S4: Sí.

S2: ¿Y dónde?
 2.8

S3: A Va. Tech.
 1.4

G: No . . . no.

S2: Es *2* tan, *.6* too? *1.8*
 tan *2.4* . . .

S3: Grande.

S4: Sí.

S2: No, *1.2* too far away.

S4: Sí.

2.6

S1: Ahh, en me garaje.
 2.1

S2: ¿Cómo?
 2.8

S3: ¿Pequeño?

S1: ¿Mi garaje?
 1.7

G: (laugh)

S2: Ay, ay, ay.

y S4\$J S1: un chiste.

y S1#37 *3.8*

y S7\$C S3: ¿Pues dónde?

y S1#53 *5.4*

y S5\$P S1#10 S5\$R S1: En el--una universidad o *1.1* en una . . .

y S1#35 *3.6*

y S4\$J S1#13 S4\$R S2: En una universidad--es más *1.9* más fácil.

y S8\$N S4: Sí.

y S1#33 *3.4*

y S4\$J S1\$0 S1#12 S7\$C S2: Pero, ¿um *1.3* una universidad S1#11 S1\$0 S1#10 S5\$P popular? *1.2* umm *1.1* yo sé S1#10 S5\$R que *1* Virginia Tech es popular pero es rural.

y S8\$N S3: Sí.

y S8\$N S1\$0 S2: Verdad. Umm . . .

y S1#40 *4.1*

y S4\$J S1: Y . . .

y S4\$B S2: En la ciudad.

y S1#14 *1.5*

y S6\$K S1: ¿Qué ciudad?

y S1#28 *2.9*

y S5\$P S3: En la universidad de Richmond.

y S1#20 *2.1*

y S4\$N S2: Es posible.

y S1#55 *5.6*

y S4\$J S3: William and Mary es bonita.

y S8\$N S1#10 S8\$R S4: Sí, sí *1.1* sí . . . (giggle)
 y S1#24 *2.5*
 y S4\$N S3: Pues William and Mary . . .
 y S4\$B S2: Cerca de yo, too.
 y S1#56 *5.7*
 y S4\$J S4: Es posible que . . .
 y S1#15 *1.6*
 y S7\$C S1#19 S7\$R S1#10 S7\$R S3: ¿Cuántos *2* dólares *1.1*
 cuestan el campo?
 y S1#27 *2.8*
 y S7\$C S1#5 S7\$R S1: Ellos duermen en el *.6* en el
 universidad . . .
 y Q5\$B G: Sí.
 y S7\$C S1: . . . o en su casas?
 y S5\$P S1#35 S5\$R S2: Dependiente un *3.6* en la
 universidad.
 y S10\$N S3: Sí.
 y S1#22 *2.3*
 y S4\$J S2: Gusta (como) aquí.
 y S10\$N S3: Sí.
 y S1#33 *3.4*
 y S1\$0 S1#26 S4\$C S2: Umm *2.7* dinero.
 y S4\$J S1#& S4\$R S1#23 S3: Las comidas, las comidas y el
 S4\$R S1#22 S4\$R *1.8* el *2.4* paga para los
 profesores *2.3* y consejeros.
 y S1#48 *4.9*
 y S4\$J S1\$0 S1#39 S4\$R S2: No sé umm *4* cuánto *1.3* dinero
 S1#12 S4\$R S1#10 S4\$r S1\$0 *1.1* pero uh *7.4* y ay ay
 S1#73 S4\$R S1#55 S4\$r *5.6* no mucho.

y S8\$N S1#16 S4\$J S1#16 S4\$J S3: Sí. *1.7* Es solo un fin de semana. *1.7* No todo el fin de semana.

y Q8\$N G: Sí.

y S1#30 *3.1*

y S4\$J S1#6 S4\$R S1#25 S9\$N S2: Ciento *.7* cien. *2.6* Es posible.

y S8\$N S1#19 S4\$J S3: Sí. *2* Ochenta o noventa.

y S1#25 *2.6*

y S4\$J S2: Uno.

y S1#53 *5.4*

y S7\$C S1: ¿Qué cuestan este campo?

y S6\$K S2: ¿Cómo?

y S1#14 *1.5*

y S7\$K S1: ¿Qué cuestan este campo?

y S6\$C S6\$K S2: What is the purpose? Is that what you're saying?

y S5\$P S1: (How much does it cost?)

y S10\$N S1#7 S5\$P S3: Oh! *.8* Ciento dólares.

y S5\$P S1#6 S5\$R S2: Cien o less *.7* menos.

y S8\$N G: Sí.

y S1#23 *2.4*

y S8\$N S1#10 S4\$J S1#35 S7\$C S1#6 S7\$M S3: Sí, *1.1* es posible. *3.6* ¿Qué clases de clases? *0.7* ¿Qué tipo de clases?

y S5\$P S2: Lenguas.

y S10\$N S5\$P S3: Sí. Y actividades.

y S1#42 *4.3*

y S4\$J S1#12 S4\$R S1#14 S4\$R S2: La más *1.3* popular lenguas *1.5* son . . .
 y S4RB S1#15 S4\$R G: Español, francés *1.6* y aleman.
 y S1#16 *1.7*
 y S11\$N S3: Oh, no aleman.
 y S1\$O S1#14 S4\$J S1#13 S4\$R S2: Ah, *1.5* aleman es *1.4* no ofrecer en Gloucester . . .
 y S\$\$B S3: O Martinsville.
 y S10\$N S4\$J S1#17 S4\$R S1#16 S4\$R S2: Sí. So *1.8* yo no sé *1.8* cuanto popular aleman es, *1.7* pero . . .
 y S1#60 *6.1*
 y S7\$B S1#22 S7\$C S1#6 S7\$R S3: Pues, *3.3* ¿cuántos estudiantes *1.7* en el campo?
 y S1#29 *3*
 y S5\$P S1: Veintiseis.
 y S10\$N S6\$K S2: Claro que sí. Veinte y seis?
 y S5\$P *1.4*
 y S10 \$N S1: Oh, sí.
 y S13\$N S3: (giggle)
 y S1#14 *1.5*
 y S4\$J S1#12 S4\$R S2: Claro que si dependente *1.3* en la universidad.
 y S8\$N S3: Sí
 y S1\$O S1#14 S4\$J S2: Umm *1.5* más poco que este campo.
 y S1#10 *1.1*
 y S8\$N S3: Oh, sí!
 y S1#15 *1.6*

y S4\$J S1#11 S4\$R S1#10
 S1\$0 S1#19 S4\$R S1#27
 S4\$R S1#81 S7\$M

S2: Posible que *1.2* muchos pequenos
 1.1 uh *2* campos *2.8* para
 este día *8.2*. What is "around"
 in Spanish?

y S5\$M

S1: Alrededor.

y S8\$N S1#11 S4\$J

S2: Sí, *1.2* R.

y S5\$N

S3: Sí, sí.

y S1\$0 S1#19 S4\$J

S2: Umm *2* no mucho viaje.

y S5\$N

S3: Sí.

y S1#22

2.3

y S4\$J S1#31 S4\$R S1#12
 S4\$R

S2: Pero *3.2* profesores, from de
 1.3 Virginia también.

y S8\$N

S4: Sí.

y S1#25

2.6

y S4\$J S1#31 S4\$R

S2: De el colegios y *3.2*
 universidad también.

y S8\$N S1#19 S7\$C S1#19
 S7\$R

S3: Sí. *2* y *1* qué actividades?

y S5\$P

S4: Cooking.

z S5\$P S1#19 S5\$R

S3: Cocina *1.8* y deportes.
 (can't hear dialogue)

z S5\$P S1#6 S5\$R

S3: Flamenco baile *.7* baile, baile
 flamenco.

y S1#26

2.7

y S4\$J S1#19 S4\$R S1#11
 S4\$R S9\$N

S4: Flamenco *1* baile *1.2* no se
 popular en Aleman. Creo que sí.

y Q10\$N

G: Sí. (laughter)

y S4\$J

S4: Para español.

y S10\$N

S2: Sí.

TRANSLATION OF SPANISH IIIB PLANNING SETTING

- S1: Do you like language camps?
- S2: Well, yes.
- S1: Yes, I don't like them.
- S3: Don't I like them? . . . (I mean,) Don't you like them?
- S1: I'm bored in language camps.
- S3: Yes.
- S1: Especially that camp.
- S3: I like it more or less.
- G: (giggle)
- S2: Do you like the Spanish teachers?
- S3: J. and Mr. L. are very nice. M. also.
- S3: And the C. family. But I lost my key at the end of the week. The language camp next summer--what day does it begin? What day does it begin?
- S1: On the 6th of August.
- S3: Oh, on the 6th of August.
- S1: Yes.
- S3: In 1987.
- S4: Yes, on Friday in the afternoon? Or in the morning?
- S2: The morning.
- S4: In the morning.
- S2: And
- S1: How many days?
- G: Three. Three. Yes.
- S2: Well, two, Saturday and Sunday and Friday afternoon.

G: Yes. Yes. Yes.

S2: Wore . . . to arrive . . . the students arrived Friday and umm afternoon at three.

S3: Yes.

S2: Three?

S4: Yes

S2: And leave umm Sunday at five.

S3: Yes.

S2: Four or five.

S4: Yes.

S2: And where?

S3: At Virginia Tech.

G: No. No. No.

S2: It is too, too? Too . . .

S3: Big.

S4: Yes.

S2: No, too far away.

S4: Yes.

S1: Oh. In my garage.

S2: What?

S3: Small?

S1: My garage?

G: (laughter)

S2: Ay, ay, ay.

S2: A joke.

S3: Well, where?

- S1: In the . . . a university or in a
- S2: In a university--it is more . . . easier.
- S4: Yes.
- S2: But umm a popular university? Umm, I know that Virginia Tech is popular but it is rural.
- S3: Yes.
- S2: Right. Umm . . .
- S1: And . . .
- S2: In the city.
- S1: What city?
- S3: The University of Richmond.
- S2: It is possible.
- S3: William and Mary is pretty.
- S4: Yes, yes, yes.
- S3: Well, William and Mary . . .
- S2: Near me, too.
- S4: It is possible that . . .
- S3: How many dollars does the camp cost?
- S1: They sleep at the university . . .
- G: Yes.
- S1: . . . or in your homes.
- S2: Depends on the university.
- S3: Yes.
- S2: Like here.
- S3: Yes.
- S2: Umm . . . money.

S3: The meals, the meals and the--the--pay for the teachers and advisers.

S2: I don't know umm how much money but aye, aye, not much.

S3: Yes. It is only a weekend--not all the weekend.

G: Yes.

S2: One hundred dollars. It is possible.

S3: Yes, 80 or 90.

S2: One.

S1: How much does this camp cost?

S2: What is the purpose? Is that what you're saying?

S1: How much does it cost?

S3: Oh, \$100.

S2: One hundred or less.

S3: Yes, that is possible.

S3: What kind of classes? What kind of classes?

S2: Languages.

S3: Yes, and activities.

S2: The most popular languages are . . .

G: Spanish, French, and German.

S3: Oh, no German . . .

S2: Oh. German is not offered in Gloucester . . .

S3: Or Martinsville.

S2: Yes, I don't know how popular German is but . . .

S3: Well, how many students in the camp?

S1: Twenty-six.

S2: Of course. Twenty-six?

- S1: Oh, yes.
- S3: (giggle)
- S2: Of course, it depends on the university.
- S3: Yes.
- S2: Umm, smaller than this camp.
- S3: Oh, yes.
- S2: It is possible that many smaller camps for this day. What is "around" in Spanish?
- S1: Around (alrededor).
- S2: Yes, R.
- S3: Yes, yes.
- S2: Umm, not much of a trip.
- S3: Yes.
- S2: But teachers from Virginia also.
- S4: Yes.
- S2: From the colleges and universities and universities also.
- S3: Yes, and what university?
- S4: Cooking.
- S3: Cooking and sports.
- S3: Flamenco dancing, dancing, dancing Flamenco.
- S4: Flamenco dancing is not popular in Germany, of course.
- G: Yes.
- S4: For Spanish.
- S2: Yes.

Appendix G

Validity and Reliability Worksheets

Interobserver Agreement Worksheet
 Comparison of Researcher's Codings to Codings by Students
 Observations: One Hundred Isolated Unambiguous Events

	Categories														
	1	2	3	4	5	6	7	8	9	10	11	12	13		
Percentages for Students	0	0	0	37	28	4	28	0	3	0	0	0	0	100	Total Percentages for Students
Percentages for Researcher	0	0	0	38	27	4	27	0	3	0	0	1	0	100	Total Percentages for Researcher
Differences of Percentages between Students and Researcher	0	0	0	1	1	0	1	0	0	0	0	1	0	4	Difference of Percentages/ Students and Researcher

Number of Tallies for Researcher and Students = 100

$$\begin{aligned}
 &= \frac{P_o - P_e}{100 - P_e} & P_o &= 96 & P_e &= 26 \\
 &= \frac{96 - 26}{100 - 26} \\
 &= .946 \\
 &= .95
 \end{aligned}$$

Interobserver Agreement Worksheet
 Researcher to Criterion Observer
 Observations: One Hundred Isolated Unambiguous Events

Categories

	1	2	3	4	5	6	7	8	9	10	11	12	13		
Percentages for Criterion Observer	0	0	0	34	28	5	29	1	2	0	0	1	0	100	Total Percentages for Criterion Observer
Percentages for Researcher	0	0	0	34	28	5	29	0	3	0	0	1	0	100	Total Percentages for Researcher
Differences of Percentages/ Criterion and Researcher	0	0	0	0	0	0	0	1	1	0	0	0	0	2	Differences of Percentages/ Criterion and Researcher

Number of Tallies for Both Observers = 100

$$\begin{aligned}
 &= \frac{P_o - P_e}{100 - P_e} & P_o &= 98 & P_e &= 25 \\
 &= \frac{98 - 25}{100 - 25} \\
 &= .97
 \end{aligned}$$

Interobserver Agreement Worksheet
 Comparison of the Researcher's Codings to those of the Criterion Observer
 Observation: Ten Minutes of Conversation

		Categories															
		1	2	3	4	5	6	7	8	9	10	11	12	13			
Number of Tallies for Criterion Observer		143	0	0	85	40	11	30	23	0	14	3	0	2	351	Total Tallies for Criterion Observer	
Percentages for Criterion Observer		41	0	0	24	11	3	9	7	0	4	1	0	1	101	Total Percentages for Criterion Observer	
Number of Tallies for Researcher		146	0	0	90	37	14	25	20	2	16	3	1	3	357	Total Tallies for Researcher	
Percentages for Researcher		41	0	0	25	10	4	7	6	1	4	1	1	1	101	Total Percentages for Researcher	
Differences of Percentages for Criterion Observer and Researcher		0	0	0	1	1	1	2	1	1	0	0	1	0	8	Difference of Percentages of Criterion Observer and Researcher	
								$P_o = 93$								$P_e = 28$	
																$= \frac{P_o - P_e}{100 - P_e}$	
																$= \frac{93 - 28}{100 - 28}$	
																$= .90$	

Interobserver Agreement Worksheet
 Comparison of the Researcher's Codings to those of the Criterion Observer
 Observation: Ten Minutes of Conversation

		Categories															
		A	B	C	D	H	I	J	K	M	N	O	P	R			
Number of Tallies for Researcher		2	7	17	0	1	1	38	13	3	47	8	24	58	219	Total Tallies for Researcher	
Percentages for Researcher		1	3	8	0	1	1	17	6	1	22	4	11	26	101	Total Percentages for Researcher	
Number of Tallies for Criterion Observer		3	5	20	1	2	5	35	13	4	49	9	26	53	225	Total Tallies for Criterion Observer	
Percentages for Criterion Observer		1	2	9	1	1	2	16	6	2	22	4	12	24	102	Total Percentages/ Criterion Observer	
Differences of Percentages for Researcher and Criterion Observer		0	1	1	1	0	1	1	0	1	0	0	1	2	9	Difference of Percentages Researcher and Criterion Observer	

$$\begin{aligned}
 &= \frac{P_o - P_e}{100 - P_e} & P_o &= 92 & P_e &= 19 \\
 &= \frac{92 - 19}{100 - 19} \\
 &= .90
 \end{aligned}$$

Intraobserver Agreement Worksheet
 First (1) and Midpoint (2) Observations of Sample Conversations Using OSIA

	Categories														
	1	2	3	4	5	6	7	8	9	10	11	12	13		
Number of Tallies for Observation 1	58	0	0	49	20	9	20	1	0	14	1	0	7	179	Total Tallies for Observation 1
Percentages for Observation 1	32	0	0	27	11	5	11	1	0	8	1	0	7	100	Total Percentages for Observation 1
Number of Tallies for Observation 2	58	0	0	49	21	8	21	1	0	14	0	0	7	179	Total Tallies for Observation 2
Percentages for Observation 2	32	0	0	27	12	4	12	1	0	8	0	0	4	100	Total Percentages for Observation 2
Differences of Percentages for Observations 1 and 2	0	0	0	0	1	1	1	0	0	0	1	0	0	4	Difference of Percentages 1 and 2

$$\begin{aligned}
 &= \frac{P_o - P_e}{100 - P_e} & P_o &= 96 & P_e &= 23 \\
 &= \frac{96 - 23}{100 - 23} \\
 &= .95
 \end{aligned}$$

Intraobserver Agreement Worksheet
Midpoint (2) and Final (3) Observations of Sample Conversations Using OSIA

	Categories														
	1	2	3	4	5	6	7	8	9	10	11	12	13		
Number of Tallies for Observation 2	58	0	0	49	21	8	21	0	0	14	0	0	7	179	Total Tallies for Observation 2
Percentages for Observation 2	32	0	0	27	12	4	12	1	0	8	0	0	4	100	Total Percentages for Observation 2
Number of Tallies for Observation 3	58	0	0	48	21	8	21	2	0	13	1	0	7	179	Total Tallies for Observation 3
Percentages for Observation 3	32	0	0	27	12	4	12	1	0	7	1	0	4	100	Total Percentages for Observation 3
Differences of Percentages for Observations 2 and 3	0	0	0	0	0	0	0	0	0	1	1	0	0	2	Difference of Percentages 2 and 3

$$\begin{aligned}
 &= \frac{P_o - P_e}{100 - P_e} && P_o = 98 && P_e = 23 \\
 &= \frac{98 - 23}{100 - 23} \\
 &= .97
 \end{aligned}$$

Intraobserver Agreement Worksheet
 First (1) and Final (3) Observations of Sample Conversations Using OSIA

	Categories														
	1	2	3	4	5	6	7	8	9	10	11	12	13		
Number of Tallies for Observation 1	58	0	0	49	20	9	20	1	0	14	1	0	7	179	Total Tallies for Observation 1
Percentages for Observation 1	32	0	0	27	11	5	11	1	0	8	1	0	4	100	Total Percentages for Observation 1
Number of Tallies for Observation 3	58	0	0	48	21	8	21	2	0	13	1	0	7	179	Total Tallies for Observation 3
Percentages for Observation 3	32	0	0	27	12	4	12	1	0	7	1	0	4	100	Total Percentages for Observation 3
Differences of Percentages for Observations 1 and 3	0	0	0	0	1	1	1	0	0	1	0	0	0	4	Differences of Percentages 1 and 3

$$\begin{aligned}
 &= \frac{P_o - P_e}{100 - P_e} && P_o = 96 && P_e = 23 \\
 &= \frac{96 - 23}{100 - 23} \\
 &= .95
 \end{aligned}$$

Intraobserver Agreement Worksheet
 First (1) and Midpoint (2) Observations of Sample Conversations Using
 Conversational Management Strategies

	Categories														
	A	B	C	D	H	I	J	K	M	N	O	P	R		
Number of Tallies for Observation 1	0	1	15	2	1	25	8	0	2	24	5	15	26	124	Total Tallies for Observation 1
Percentages for Observation 1	0	1	12	2	1	20	6	0	2	19	4	12	21	100	Total Percentages for Observation 1
Number of Tallies for Observation 2	0	1	17	2	1	25	7	0	2	24	5	15	25	124	Total Tallies for Observation 2
Percentages for Observation 2	0	1	14	2	1	25	7	0	2	19	4	12	20	101	Total Percentages for Observation 2
Differences of Percentages for Observations 1 and 2	0	1	2	0	0	0	0	0	0	0	0	0	1	4	Difference of Percentages 1 and 2

$$\begin{aligned}
 &= \frac{P_o - P_e}{100 - P_e} && P_o = 96 && P_e = 16 \\
 &= \frac{96 - 16}{100 - 16} \\
 &= .95
 \end{aligned}$$

Intraobserver Agreement Worksheet
 Midpoint (2) and Final (3) Observations of Sample Conversations Using
 Conversational Management Strategies

	Categories														
	A	B	C	D	H	I	J	K	M	N	O	P	R		
Number of Tallies for Observation 2	0	1	17	2	1	25	7	0	2	24	5	15	25	124	Total Tallies for Observation 2
Percentages for Observation 2	0	1	14	2	1	20	6	0	2	19	4	12	20	101	Total Percentages for Observation 2
Number of Tallies for Observation 3	0	1	18	2	1	23	6	0	2	25	5	16	25	124	Total Tallies for Observation 3
Percentages for Observation 3	0	1	14	2	1	19	5	0	2	20	4	13	20	101	Total Percentages for Observation 3
Differences of Percentages for Observations 2 and 3	0	1	0	0	0	1	1	0	0	1	0	1	0	5	Difference of Percentages 2 and 3

$$\begin{aligned}
 &= \frac{P_o - P_e}{100 - P_e} & P_o &= 96 & P_e &= 15 \\
 &= \frac{96 - 15}{100 - 15} \\
 &= .95
 \end{aligned}$$

Intraobserver Agreement Worksheet
 First (1) and Final (3) Observations of Sample Conversations Using
 Conversational Management Strategies

		Categories														
		A	B	C	G	H	I	J	K	M	N	O	P	R		
Number of Tallies for Observation 1		0	1	15	2	1	25	8	0	2	24	5	15	26	124	Total Tallies for Observation 1
Percentages for Observation 1		0	1	12	2	1	20	6	0	2	19	4	12	21	100	Total Percentages for Observation 1
Number of Tallies for Observation 3		0	1	18	2	1	23	6	0	2	25	5	16	25	124	Total Tallies for Observation 3
Percentages for Observation 3		0	1	14	2	1	19	5	0	2	20	4	13	20	101	Total Percentages for Observation 3
Differences of Percentages for Observations 1 and 3		0	0	2	0	0	1	1	0	0	1	0	1	1	7	Difference of Percentages 1 and 3

$$\begin{aligned}
 &= \frac{P_o - P_e}{100 - P_e} && P_o = 93 && P_e = 16 \\
 &= \frac{93 - 16}{100 - 16} \\
 &= .92
 \end{aligned}$$

Appendix H

Human Subjects Exemption Request

COLLEGE OF EDUCATION



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061 - 8498

DIVISION OF CURRICULUM AND INSTRUCTION

July 25, 1986

M E M O R A N D U M

TO: Dr. Thomas Sherman

FROM: David Coffman *DC*

RE: HUMAN SUBJECTS EXEMPTION REQUEST

Since human language binds people together, conversational management skills are essential for successful linguistic communication. Learning to talk and to interact are conversational skills developed in the process of language acquisition. The process of learning to communicate in a second language has been likened to that of language acquisition in a native language.

Among the conversational management strategies that are commonly employed is the use of pauses. During a pause, a speaker may buy time to keep the conversational channels open, or organize thoughts, or cognitively search for the correct expression to use as a response. This pause is referred to as wait-time.

This study will describe and compare wait-time as it is used in conversational managements by students in both their native language and a target language, Spanish, while communicating. The study will combine classroom observation and ethnographic research methodologies to collect the data. While classroom settings are convenient for data collection, it has been shown (Kramsch, 1981) that language used in the classroom is substantially different in its communication functions from language that occurs in informal or natural settings. To describe and compare this difference, the Virginia Tech Foreign Language Camps will be used as the data collection location. The Camps were chosen because the campers are immersed in a second-language culture where communication in the target language is used. This setting will enable the students to converse without teacher influence. Data sources will be tape recordings and oral face-to-face interviews with the students.

David Coffman
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July 25, 1986

The tapings will involve recordings of four groups of four students in three different conversational sessions. One session will have each group involved in a setting to simulate a classroom setting where the conversation is structured by an adult. This session will be conducted in Spanish. The same four groups will be taped in a second session while the students are involved in a task-oriented conversational setting without adult influence. This session will also be in Spanish. The third session will involve tapings of the same four groups of students and the researcher during an interview after the first and second sessions to identify the conversational management strategies and the use of wait-time that emerge in their native language, English.

It is important to explore conversational management strategies in conjunction with wait-time to gain an understanding of how students learn a second language. A common goal of second-language teachers and students is to communicate in the target language. A part of the process of communication in the target language can be understood through the study of student-to-student interactions and teacher-influenced interactions. Ultimately, improved conversational skills in the classroom can be developed and achieved.

CERTIFICATION OF EXEMPTION OF PROJECTS
INVOLVING HUMAN SUBJECTS

Principal Investigator(s) David E. Coffman

Department(s) EDCI

Project Title The Use of Wait-Time and Conversational Management Strategies In Three

Source of Support: Conversational Settings For Second-Language Students.
Departmental Research Sponsored Research Proposal No. _____

1. The criteria for "exemption" from review by the IRB for a project involving the use of human subjects and with no risk to the subject is listed below. Please initial all applicable conditions and provide the substantiating statement of protocol.
- a. The research will be conducted in established or commonly established educational settings, involving normal education practices. For example:
 - a) Research on regular and special education instructional strategies;
 - b) Research on effectiveness of instructional techniques, curricula or classroom management techniques.
 - b. The research involves use of education tests (cognitive, diagnostic, aptitude, achievement), and the subject cannot be identified directly or through identifiers with the information.
 - c. The research involves survey or interview procedures, in which:
 - a) Subjects cannot be identified directly or through identifiers with the information;
 - b) Subject's responses, if known, will not place the subject at risk of criminal or civil liability or be damaging to the subject's financial standing or employability;
 - c) The research does not deal with sensitive aspects of subject's own behavior (illegal conduct, drug use, sexual behavior or alcohol use);
 - d) The research involves survey or interview procedures with elected or appointed public officials, or candidates for public office.
 - d. The research involves the observation of public behavior, in which:
 - a) The subjects cannot be identified directly or through identifiers;
 - b) The observations recorded about an individual could not put the subject at risk of criminal or civil liability or be damaging to the subject's financial standing or employability;
 - c) The research does not deal with sensitive aspects of the subject's behavior (illegal conduct, drug use, sexual behavior or use of alcohol).
 - e. The research involves collection or study of existing data, documents, records, pathological specimens or diagnostic specimens, or which:
 - a) The sources are publicly available; or
 - b) The information is recorded such that the subject cannot be identified directly or indirectly through identifiers.
2. I further certify that the project will not be changed to increase the risk or exceed the exempt condition(s) without filing an additional certification or application for approval by the Human Subjects Review Board.

Note: If children are in any way at risk while this project is underway, the chairman of the IRB should be notified immediately in order to take corrective action.

Signature: Principal Investigator(s) Date Signature: Principal Investigator(s) Date

Optional Approval) Signature: Board Chairman/Authorized Reviewer Date

Appendix I

User-Defined Meanings and Examples of Subscript Codes

USER-DEFINED MEANINGS AND EXAMPLES OF SUBSCRIPT CODES

<u>Subscript Code</u>	<u>Explanation of User-Defined Meanings</u>	<u>Examples from Data</u>
A	The point where a conversation naturally ends.	A: Well, it's near me. B: Me, too. A: How much money does it cost?
B	A student takes the floor by beginning the conversation or takes the floor by interrupting the present speaker.	A: If you have to be where . . . B: (interrupting) The church is interesting and the child is small.
C	A student controls the conversation through suggesting or guiding the interactional process. The student also controls the conversation by making a solicitation for information.	A: Do you remember Goldilocks?
D	A present speaker selects the next speaker by calling on the person to respond.	Teacher: Mary, what do you do in school?
E	A present speaker yields the floor to another speaker.	No occurrences in data.
F	A speaker summarizes the previous utterances by suggesting agreement or disagreement of all participants.	A: It appears that we all disagree on the dance location.
G	A speaker paraphrases the content of the previous utterances.	No occurrences in data.

<u>Subscript Code</u>	<u>Explanation of User-Defined Meanings</u>	<u>Examples from Data</u>
H	A speaker provides more insight into the previous conversation through amplifying, generalizing, using contrasting examples, or explaining consequences.	A: I was the president of the Spanish Club last year, the Beta Club and History Club.
I	A speaker offers a conclusion by framing future conversational topics or by summing up the previous topic.	A: I hope that you don't get beaten.
J	A speaker returns to a previous point within the same conversational topic.	A: I can eat ice cream all day.
K	A speaker requests that another speaker clarify a previous utterance.	A: Why did you do that?
L	Speakers use brainstorming and paraphrasing techniques to raise the level of agreement and knowledge of the conversational topic.	A: Let's agree where we are going to have the dance.
M	Speakers work together to complete sentences, supply missing words, or correct grammatical aspects of an utterance.	A: How do you say "scratches"?

<u>Subscript Code</u>	<u>Explanation of User-Defined Meanings</u>	<u>Examples from Data</u>
N	A series of activities in which speakers voice opinions, sum up or comment on previous utterances. Listeners also reactively respond to or echoe previous utterances.	A: Villa Alegre! B: Oh! C: No! D: I don't think so.
O	A speaker buys time by rephrasing, hesitating, generalizing or using "filler words."	A: Umm, well . . . what do you mean?
P	A speaker in a brief and simple manner answers questions or responds to a previous utterance.	A: The swatchguard?
R	A speaker uses a conversational management strategy in beginning an utterance, pauses, and then continues using the same conversational management strategy.	A: Do you (pauses) drive rapidly?

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