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The relationship between metalinguistic awareness and reading comprehension in English among Spanish-speaking junior high school students

Parashar, Madhu S., Ph.D.
The Ohio State University, 1991

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THE RELATIONSHIP BETWEEN METALINGUISTIC AWARENESS AND READING COMPREHENSION IN ENGLISH AMONG SPANISH SPEAKING JUNIOR HIGH SCHOOL STUDENTS

DISSERTATION

Presented in partial fulfillment of the requirements for the Degree Doctor of Philosophy in the Graduate School of the Ohio State University

By

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* * * * *

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To my parents, Brahm Dev Sharma and Indira Sharma, and loving sisters, Vijay and Adarsh, and dear husband Ravi, who in their unique have always loved me.
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CHAPTER I

THE PROBLEM

Introduction

One of the debates in communicative language teaching involves the direct instruction of grammar in foreign language classrooms. Littlewood (1980) states: "One of the most characteristic features of communicative language teaching is that it pays systematic attention to functional as well structural aspects of language" (p. 11). Canale and Swain (1980) identify grammatical competence as one of the four dimensions of communicative competence that needs to be developed among second language (L2) learners through communicative language teaching. Emphasis on the development of grammatical competence, and attention to functional as well as structural aspects of language in communicative language teaching, implies that knowledge about the structure of language (rules of the form of language, phonology, syntax, etc.) is crucial in order to achieve competence in, speaking, listening, reading, and writing.
Rutherford and Sharwood Smith (1985) emphasize the importance of "Consciousness Raising" (a deliberate attempt to draw the learner's attention to the formal properties of the target language) in the acquisition of grammatical structures. Similarly, Bialystok (1981) proposes a framework that has some role for explicit grammar in the development of target language competence. In contrast to these views that grammar should be taught explicitly in the classroom, are views espoused by Krashen and Terrell (1983), for example. They propose that the only role for the explicit discussion of grammar is in instructional materials used in assignments outside the classroom. These juxtaposing views characterize the current debate in language pedagogy.

It appears that native speakers acquire knowledge about their native language (L1) grammar "naturally" in that they learn the linguistic sound system, structures, meaning, words and rules for putting them together, without being taught, and without being aware of rules. Moreover, their unconscious ability to speak and understand, to make judgments about the grammaticality and ungrammaticality of sentences, and to correct ungrammatical sentences demonstrates their knowledge of the rules of their language. These abilities imply that native speakers have implicit knowledge about the rules of their language. But teachers and researchers do not know whether explicit
knowledge is necessary for native speakers in order to communicate in their language.

In summary, some may argue that the goal of communicative language learning and teaching is to develop competency in the various language modes, and that explicit grammatical knowledge is not used for communicative purposes. According to this argument, it is not necessary for the L2 learner to have explicit knowledge of syntactic rules, also known as metalinguistic awareness. In contrast, others, who support the view that explicit awareness of grammatical knowledge is necessary for L2 acquisition, argue that native speakers do have an implicit knowledge of syntactic rules and the functions and relationships of words in a sentence. According to this argument, then, because metalinguistic awareness is a component of the native speaker's linguistic competence, L2 instruction should emphasize the development of grammatical competence.

Even in a native language, explicit knowledge of grammatical rules is developed only after one has mastered speaking skills. Because one develops reading, writing, and metalinguistic skills in school in the process of literacy learning, they are considered to be secondary skills. It remains unclear, however, whether explicit knowledge of grammar is required for acquiring reading and writing skills in a language, or whether there is any
relationship between the development of metalinguistic awareness and literacy skills. Data to support the notion that explicit grammar knowledge is necessary for learning to read and write in L1 as well as L2 are lacking.

Statement of the Problem

In L2 classrooms it is a general practice that much instructional time is spent on teaching and practicing explicit grammatical rules. There is an implicit belief that grammatical competence is of critical importance in L2 comprehension. There is no empirical research, however, that supports the notion of teaching explicit grammar or the notion that the L2 learner's ability to state a rule ensures the ability to use that knowledge in real communicative situations, such as conversation, reading, and writing. Theoretically, development of grammatical competence may be stated as a justification for such classroom practice; in reality, however, no data exist to justify the major emphasis on teaching explicit grammar. In other words, no empirical evidence in the L2 field exists to support continuing or discarding this practice in L2 classrooms or to verify whether it is worth spending much time on teaching this aspect of language.

The present study is an attempt to investigate and explicate metalinguistic awareness and its relationship to L2 reading comprehension. It focuses on the metalinguistic
awareness and ESL reading comprehension of Spanish-speaking young adults. It is hoped that the results of this study will provide insights that will help in answering an important question: To what extent does metalinguistic awareness facilitate learning to read and comprehend effectively in a second language? Insights from linguistic theory, cognitive psychology, metalinguistic research, L1 and L2 reading research provide the bases for this study.

Theoretical Bases

Metalinguistic Awareness

Terms, such as "linguistic concept" (Downing, 1971; and Robeck, 1978), "metalinguistic competence" (Evan 1975), and "linguistic awareness" (Mattingly, 1979) appear to be synonymous with metalinguistic awareness. Mattingly (1979) considers metalinguistic awareness not so much a matter of consciousness, but of access, which is probably largely unconscious. He argues that the linguistically aware person has access to his knowledge of the grammatical structure of sentences, which is tacit knowledge.

The question, "What is metalinguistic awareness?" has drawn the attention of linguists, psycholinguists, experimental and child psychologists, and educators. Chomsky (1979) conceives metalinguistic awareness as an abstract system and defines it as a language user's internalized system of rules in relation to their phonetic
and semantic representations. Cazden (1974) views metalinguistic awareness in pragmatic terms and defines it as "the ability to make language forms opaque and attend to them in and for themselves" (p. 29). She considers it a special kind of performance that makes special cognitive demands and seems to be less universally acquired than speaking and listening skills.

According to Ryan (1980), metalinguistic awareness includes the ability to focus attention upon the form of language in and of itself, rather than merely as a vehicle by which meaning is conveyed. Similar views have been expressed by Karpova (1955), and Vygotsky (1934, 1962) who refer to metalinguistic awareness as an ability to objectively analyze language structures, and to separate the message of the sentence from the format.

Authors may differ somewhat with respect to how they define and use this term; however, they appear to be in general agreement as to its meaning. For example, Bateson (1976) refers to metalinguistic awareness as those explicit or implicit messages where the subject of discourse is the language. Hake (1980) and Lundberg (1978) interpret it in the terms of focus on control over language forms. Dale (1976) defines metalinguistic awareness "...as the ability to think about language and to comment on it, as well as to produce and to comprehend it" (p. 127). Blachowicz (1978) calls metalinguistic awareness "...awareness of language
and linguistic concepts" (p. 825). Fowles and Glanz (1977) describe metalinguistic awareness as the ability to manipulate language as an object. Read (1978) views the primary linguistic skills speaking and listening as similar to knowing something, and metalinguistic skills to knowing that one knows it.

Masny and d'Anglejan (1985) consider metalinguistic awareness as a part of language competence and define it as an individual's ability to match, intuitively, spoken or written utterances with his or her knowledge of language. They argue that this tacit knowledge can be made explicit through the outward expression of linguistic judgments. Cummins (1987) refers to metalinguistic awareness as the awareness of certain properties of language and the ability to analyze linguistic input, for instance, to make language forms the object of focal attention and to look at language rather than through it to the intended meaning. The above discussion suggests that metalinguistic awareness requires an ability to go beyond linguistic competence and to judge one's own and others' linguistic performance at an abstract level.

Several theoretical frameworks that elucidate the nature and development of metalinguistic awareness, and metalinguistic performance in a native language, have emerged (e.g., Bialystok & Ryan, 1985; Karmiloff-Smith, 1986; Marshall & Morton, 1978; and Van Kleek, 1982). But
there does not exist any theoretical model that exclusively explains the development of metalinguistic awareness and the relationship between knowledge of structure (grammar) and function-related skills (speaking, understanding, reading, and writing) in an L2.

**Development of Metalinguistic Awareness: A Cognitive View**

As a result of developmental psychologists' concern about the issues of metalinguistic awareness, its development, relationship with beginning reading, and role in language learning, researchers have been seeking explanations for metalinguistic development and for some interrelationship among metalinguistic ability, reading, and general cognitive growth (Ryan & Ledger, 1984). Metalinguistic awareness, because it calls for additional cognitive skills, such as an ability to decenter, and reflect, is considered as an ability that is distinct from speaking and listening. Gleitman and Gleitman (1979) argue that it can be deduced from differences seen in adult metalinguistic sophistication, and that these cognitive skills develop in children at different rates.

Luria (1946) and Vygotsky (1934, 1962), who relate metalinguistic awareness to other learning such as literacy learning, distinguish between two stages of knowledge acquisition. Vygotsky (1932) states that concept development in the child is simultaneous and unconscious,
and that it comes gradually under the child's active
control. Because reading and writing are separated from
natural language settings, they require deliberate control
of various language activities. School beginners have
competence in speech and listening but lack awareness of
their linguistic activity. This aspect of cognitive
development has been stated by Luria (1946) in the "glass
window theory" (cited in Downing & Leong, 1982). She
states:

"The first important period in a child's
development is characterized by the fact that,
while actively using grammatical speech and
signifying with words the appropriate objects and
actions, the child is still not able to make the
word and verbal relations an object of his
consciousness. In this period a word may be used
but not noticed by the child, and it frequently
seems as a glass window through which the child
looks at the surrounding world without making the
word itself an object of his consciousness and
without suspecting that it has its own existence,
its own structural features (p. 61)."

During the last decade several theoretical models that
explain the development of metalinguistic awareness in L1
have emerged. Van Kleek (1982) developed a cognitive
framework that explains development of metalinguistic
abilities. She suggests that Piaget's (1976) model of
cognition can be utilized for gaining better insights into
the development of metalinguistic abilities and their
relationships with metacognition. The foundation of this
framework rests upon Piaget's theoretical position on "the ability to reflect," the process by which a child comes to perceive subject and object as separate. According to this framework, both metalinguistic and metacognitive skills are dependent on similar cognitive processes of decentering and reversibility, which also distinguish processes of the pre-operational and concrete-operational periods.

Several skills that emerge during the preoperational stage serve to enhance communicative skills. The focus of these skills is on the success of the goal of using language as a communicative tool rather than on the language itself. Moreover, the pre-operational child's tendency to center (ability to attend to only one aspect of a given situation at a time) allows him/her to focus on only one aspect of language at a time, either the form of language or the other aspects of the message, but not both simultaneously. The ability to decenter and the reasoning skills that emerge during the concrete-operational stage allow the child to perform successfully on metalinguistic tasks that involve either form manipulation alone or form and content manipulation simultaneously.

Marshall and Morton (1978) explain the process of metalinguistic awareness in terms of "repairing." They suggest that awareness arises out of devices for "fault finding." They contend that awareness corresponds to the operation of an error-detecting mechanism that has access
to subparts of the primary linguistic comprehension and production systems. The child passes from error detection to specific error location and then to error repair. In contrast to the Van Kleek model, the Marshall and Morton model has no developmental component. Hence, in this model, the information processing approach to child language is not developmental.

The metacognitive framework developed by Bialystok and Ryan (1985a) explains the relationship among three domains of language use: conversation, reading and writing, and the ability to solve metalinguistic problems in terms of two skill components: cognitive control and analyzed linguistic knowledge. These skills are believed to develop along a continuum. In this model the cognitive control dimension refers to an executive function that selects and controls the language information suitable to the task solution. Thus, this dimension may be perceived as resembling the Piagetian notion of decentering, which involves the ability of the individual to ignore a salient attribute in order to direct attention elsewhere and coordinate multiple cues relevant to the problem solution task (Inhelder & Piaget, 1964).

Bialystok and Ryan (1985a) argue that under their model those tasks that require the individual to pay sufficient attention to meaning usually require little cognitive control. Conversely, those tasks that require attention to
form and coordination of information related to the form and meaning, require a moderate amount of control; and those tasks that involve strict attention to language structure require a high level of cognitive control.

The analyzed linguistic knowledge dimension, according to Bialystok and Ryan (1985), refers to the extent to which the language user's knowledge of the relationship between form and meaning has become objective and explicit. Such analysis of language knowledge, in turn, results in an increase in one's ability to express that knowledge. Most tasks, including conversation, reading, writing, and metalinguistic awareness, do require some degree of knowledge of these component skills, which Bialystok and Ryan strongly believe cannot develop independently of each other.

According to this framework, in order to construct meaning from the text, one must progress through a series of stages. These stages include analyzed knowledge (realizing that print conveys meaning in the same way as speech); analyzed knowledge and control (attending to the printed features such as, letters, letter combination, punctuation, and relating these to linguistic features and interpreting them); and achievement of cognitive control (incorporating attention to forms with a goal of constructing meanings).
If Bialystok's and Ryan's model is applied to L2 contexts, it implies that reading in an L2 requires that the learner establish appropriate analyzed knowledge of the language structure, particularly phoneme-grapheme correspondences and grammatical structures. Although reading requires a higher level of analyzed linguistic knowledge than that required for conversation, an L2 learner who has mastered reading in one language may not have an initial problem establishing such analyzed concepts such as phonemes, words, and sentences. As Ausubel, Novak, and Hanesian (1978) and others claim, one learns new information by attaching it to knowledge already in the brain, it can be inferred, then, that if one has knowledge (implicit or explicit) of L1 structures, learning/understanding L2 structures that are similar will be facilitated (but not directly transferred—if that were the case, there would not be evidence of interlanguage).

Karmiloff-Smith's (1986) three-phase framework for skill acquisition or development describes the child's development of skills as based on three phases of representation. These phases are: (a) implicit, in which knowledge about language is not structured; (b) explicit 1, in which the implicit knowledge is structured, but is not accessible to consciousness; and (c) explicit 2, in which knowledge becomes explicit and is fully accessible to consciousness for reflection. Karmiloff-Smith argues that
during the process of language acquisition, children are constantly analyzing and structuring knowledge, and moving it through these three phases of representation. She views language acquisition within the broader framework of human problem-solving. Each level in this framework is associated with the ability to solve increasingly difficult problems. This framework emphasizes the distinction between implicitly defined representations and progressive explicit representations at several levels of processing, which culminate in the possibility of conscious access.

Of the above mentioned theoretical frameworks, the metacognitive framework of Bialystok and Ryan (1985) seems to present the most comprehensive view of the four language skills. Reading and metalinguistic awareness require analyzed knowledge as well as a high level cognitive control. This framework may provide some grounds for research investigating the relationship between metalinguistic awareness and reading comprehension in an L2.

L1 Reading Comprehension

Cognitive psychologists and psycholinguists hold the view that knowledge of language is necessary but not sufficient to understand utterances unless the listener/reader can also activate his/her prior knowledge. Bransford and McCarrell (1974) state that a person, in
spite of having knowledge of language, may fail to comprehend an utterance unless he makes the necessary cognitive contributions. What is implied from the above is that in addition to language knowledge, there are other components that contribute to the comprehension process.

Reading has been characterized as "an interaction between a reader and text" (Smith, 1982, p. 11), and as "a psycholinguistic guessing game" (Goodman, 1967), in which readers make minimal use of language cues, selected from perceptual input to make hypotheses about the text. Hypotheses are made based on readers' prior knowledge of the world, which is stored in their cognitive structure. Spiro, Bruce, and Brewer (1980) stressed hypothesis testing as an important aspect in the process of reading. Current views on reading emphasize that reading is a meaning-seeking, tentative, selective, and constructive process (Goodman, 1976; Rumelhart, 1977; Smith, 1972; 1978, 1982), and it is the reader who brings meaning to the text (Goodman, 1985; Stanovich, 1980). The notion that the reader is actively involved in the process of reconstructing of meaning makes reader-related knowledge as important as the text itself in the process of comprehension (Goodman, 1985).

Schema theory has been the focus of reading research since the early 1970's. Bartlett (1932) defined schema as "an active organization of past reactions and experiences
which are always operating in any well-developed organism" (Bartlett, p. 201). In his interactive model, Rumelhart (1980) refers to schema as "the building blocks of cognition," and states that when readers read a text they use their schemata to construct or reconstruct the meaning. Goodman (1985) states that in order to get meaning, the reader uses the least amount of available text information necessary in relation to his or her existing linguistic and conceptual schemata.

Research done by Anderson et al. (1977) illustrates that depending on the availability of the type of the schema, often more than one interpretation of a text are possible. Anderson (1978), and Anderson and Pichert (1978) emphasize the importance of the role of schemata for aiding the reader in providing a basis for assimilating text information, making inferential elaboration that fills the gap in messages, allocating attention to important text elements, searching memory in an orderly way, formulating a summary of information, and making inferences in spite of having forgotten some of the details.

Reading and Metalinguistic Knowledge. Metalinguistic knowledge has been considered essential for reading acquisition (Liberman, Mattingly, & Shankweiler, 1978; Massaro, 1975; and Samuels, 1977; among others). Data collected by Goodman (1976) support the fact that readers' guesses about the words they read are based on both the
linguistic context of what they are reading and extralinguistic knowledge.

Metalinguistic knowledge that includes lexical, syntactic, and text structure knowledge has been considered necessary for the understanding and production of language. In other words, the reader uses his syntactic, lexical, and text structure knowledge in order to form a representation of the text. The linguistic knowledge enables the reader to represent selected aspects of world knowledge, and to organize information into larger chunks. Interactive models of reading developed by Ruddell and Speaker (1985), and Rumelhart (1977) recognize the importance of the role of linguistic knowledge in the process of reading comprehension.

Knowledge from Research in L2 Reading

Much of L2 reading research, which is based on theoretical models of reading in L1, has focused on the importance of schema theory, and the influence of the reader's culture on comprehension. Bartlett (1932) hypothesized that readers make interpretations based on their own culture when reading texts from other cultures, thereby making what natives would call "mistakes" in interpretations.

Research by Steffenson, Joag-Dev, and Anderson (1979, 1984) not only supports the hypothesis that cultural
background influences comprehension, but also emphasizes that availability of appropriate schemata has an effect on the quality and amount of comprehension. In their study, for example, subjects from the United States and India read passages about typical weddings in those countries. Interpretations were found to be influenced by the subjects' cultural origin. The researchers concluded that background knowledge and beliefs affect how discourse is comprehended and recalled. Results of other L2 studies by Bernhardt (1984, 1986a, 1986b), Carrell (1983), Hudson (1982), and Johnson (1981), among others, parallel those reported by Steffenson et al.

In recent years, L2 researchers have focused their attention on the issue of command of language and its effects on reading comprehension. Shiffrin and Schneider (1977) suggest that unfamiliar language and schemata result in controlled processing, which interferes with limited memory capacity. In other words, a nonnative reader with a limited command of the target language will have insufficient cognitive attention available for systematic arrangement of information and comprehension.

Bernhardt's (1986) constructivist model, which was generated on the basis of recall-protocol data collected from college level L2 learners of German, French, and Spanish, recognizes the importance of language competency and its effects on the process of reading comprehension.
This model, which is based on the understanding of reading as an interactive process, schematizes reading comprehension as an interaction between text-based and extratext-based components. The text-based components are word recognition, phonemic/graphemic decoding, and syntactic feature recognition. The extratext-based components include intratextual perception, prior knowledge, and metacognition.

Bernhardt and Berkemeyer (1988) emphasize the importance of syntactic feature recognition in L2 reading. They report that in the case of L2 learners of German, a lack of vocabulary did not interfere with the process of comprehension as much as a lack of knowledge about the relation of vocabulary words to each other (syntax). They suggest a need for emphasis on syntax as a meaning carrier. Barnett (1986), who examined the interaction between syntax, lexica, and recall of short French texts concluded that interaction between knowledge of syntax and vocabulary allows a reader to understand text.

**Recall Protocol.** Several tasks, such as probe questions, true-false questions, multiple-choice questions, and recall-protocols (oral/written), have been used to measure reading comprehension in L1 as well as in L2. Looking from an information processing perspective, reading comprehension involves "the interaction of text and context of various kinds, including linguistic, prior knowledge,"
situational, attitudinal, and task context, among others" (Spiro 1980, p. 246). Wells (1986) argues that an instrument, selected to measure L2 reading comprehension needs to reflect the interactive nature of the reading process. Among frequently used measures of comprehension, free recall has been considered as "the most straightforward assessment of the result of the text-reader interaction" (Johnston 1983, p. 54). Furthermore, Johnston (1983) claims that free recall gives some information about the way the readers integrate the stored information and some of the strategies they use to retrieve that information. The above view on the nature of recall-protocol is supported by Bernhardt (1984). She strongly argues in favor of the use of immediate recall and considers recall-protocols as one of the most efficient measures of comprehension in that it reflects the interactive nature of reading comprehension process.

Metalinguistic Awareness and Reading Comprehension

Metalinguistic awareness has been cited as critical for success in L1 reading (Liberman & Shankweiler, 1972; Liberman, Flower, & Fischer, 1977; Mattingly, 1979). It is recognized that metalinguistic abilities facilitate the learner in acquiring comparatively difficult and deliberate skills, such as reading and writing in a native language (Mattingly, 1979; Ryan, 1980; and Vygotsky 1962, among many others).

Theoretically, it is claimed that metalinguistic abilities facilitate the acquisition of integrative skills, such as conversation, reading, and writing and solving metalinguistic problems in the L2 (Bialystok, & Ryan, 1985). Bialystok and Ryan, for example, argue that analysis of linguistic knowledge, a component of metalinguistic awareness, facilitates a learner in structuring, organizing, and explicating his/her implicit knowledge of language. Functional uses of language, such as reading and writing in a native as well as a second language, require a more analytic or explicit knowledge of the same linguistic system that was used implicitly in conversation (Bereiter & Scardamalia, 1982; Carpenter and Just, 1975, 1977).

Previously stated discussions suggest that metalinguistic awareness is important in the acquisition of literacy skills in L1 and L2. There is a need, however, to
question the validity of L2 classroom practices devoted to the explicit teaching of grammar and the hypothetical relationship between variables, such as metalinguistic awareness and reading comprehension.

The Purpose of the Study

The primary purpose of the present study is to explain the nature of metalinguistic awareness and reading comprehension; and to investigate the relationship between the metalinguistic awareness and reading comprehension in English among nonnative speakers of English with varying proficiency levels in different academic levels. More specifically, this study will address the following questions:

Is there any difference in the metalinguistic awareness of nonnative speakers of English who are at different proficiency levels in different academic levels, as measured by scores on a grammaticality judgment test?

Is there any difference in the reading comprehension of nonnative speakers of English who are at different proficiency levels in different academic levels, as measured by scores on recall protocols?

Is there any relationship between the metalinguistic awareness and reading comprehension of nonnative speakers of English who are at different proficiency levels in
different academic levels, as measured by scores on a grammaticality judgment test, and recall-protocols?

Significance of the Study

The importance of the role of metalinguistic awareness in reading comprehension and learning a foreign language is emphasized by Read (1978) who states, "the performances of adapting, manipulating, segmenting, correcting, and judging language seem to play a significant role in at least three processes: learning to read and write, learning a nonnative language and responding to social expectations" (p. 66). Ryan (1980) emphasizes the importance of developing metalinguistic skills for efficient reading in the L2 and strongly supports the notion that awareness of the grammatical rules underlying language may also be a prerequisite for the attainment of reading proficiency. In other words, reading may require a degree of metalinguistic awareness that is not necessary for effective speaking and listening in everyday interaction.

In recent years L2 researchers have focused their attention on investigating the development of metalinguistic awareness in L2 learners. A number of researchers have explored aspects of metalinguistic awareness among adult learners. For example, Hamayan (1978), Masny (1979), and Sorrace (1985) studied the relationship among metalinguistic awareness and
comprehension and production; Bialystok and Frohlich (1978), Cohen and Robin (1976), Schachter, Tyson and Diffley, (1976) examined the relationship among metalinguistic and language-specific and learner-related variables; and Bialystok (1979), Gass (1983), Singh, d'Anglejan, and Carroll (1982) explored the use of implicit and explicit knowledge in making grammaticality judgments. Studies involving an investigation of metalinguistic awareness and its relationship to reading comprehension in English as a Second Language (ESL) in Spanish-speaking young adults are, however, unavailable.

Although relevance of research in the area of metalinguistic awareness in L2 learning has been strongly established, the available L2 studies on metalinguistic awareness (Bialystok, 1979; Schachter, 1976; Singh and d'Anglejan 1984; Snow & Meijer, 1977; and Sorrace, 1985) explore the metalinguistic performance of learners of English and French as a second language in general. Subjects of these studies have been adult native speakers of various languages such as German, Dutch, English, and Hindi, but not Spanish speakers at the junior high school level. Moreover, none of the above mentioned studies have explored the relationship between metalinguistic awareness and L2 reading comprehension from the perspective of predicting the level of reading comprehension from metalinguistic awareness.
The significance of the present study lies in the fact that it will be the first study investigating the metalinguistic awareness of Spanish-speaking young-adult learners of ESL. Secondly, this will be the first large-scale investigation of the relationship between metalinguistic awareness and reading comprehension, with the exception of Bialystok's (1988) study, which investigated these two variables from another perspective. Furthermore, viewed from a literacy perspective, the results of this study may provide further knowledge of the role that metalinguistic awareness plays in the literacy learning of ESL/EFL students, particularly at the junior high school level.

As stated earlier, much of the instructional time in a foreign language classroom is spent on explicit grammar instruction; this study will be the first of its kind to probe this very controversial issue confronted by advocates of communicative language teaching. It is hoped that the results of this study will provide important information about whether it is worth spending time on explicit grammar instruction in the L2 classroom. Thus, from a pedagogical perspective, it is expected that the results of this study may have an impact on ESL curriculum planning, preparation of instructional materials, and teaching methodologies. In addition, this study will provide information on the development of interlanguage. The metalinguistic judgment
test will provide information about the grammar knowledge and ability to make judgments about the English language. Interview data, in addition to providing an explanation of why a subject judge a sentence as ungrammatical, will also validate the information provided in the grammatical judgment test. The explanation of subjects about the ungrammaticality of sentences will reflect their interlanguage.

Assumptions

The present study is based on the following assumptions:

Subjects in the different groups are at relatively similar levels of proficiency within the grade levels.

Subjects will have the requisite prior knowledge of the content of the reading text.

Individual instructors administering the tests will carefully follow the instructions of the researcher.

Subjects' placements into various proficiency levels are an accurate reflection of the level of their proficiency of English.

Subjects will answer the grammaticality judgment test and reading comprehension test to the best of their capacities.
Definitions of Terms

The following terms as used in the present study are defined as follow:

**Metalinguistic awareness** - the ability of the subjects to make judgments about the grammaticality and ungrammaticality of written sentences in English, reflected in the individual variation in scores, as measured by the grammaticality judgment test. Metalinguistic awareness in this study will be measured by a grammaticality judgment test that will consist of a written test and individual interviews with subjects.

**Reading Comprehension** - reading comprehension is defined as measured in the form of a recall protocol written in Spanish by the subjects immediately after they read the passage in English.

**Recall Protocol** - the recall-protocol, a product measure, is defined as measure of retention in which subjects are asked to write down in Spanish as much as they can remember about the English passage immediately after they finish reading.

**Proposition** - proposition is defined as a single unit in the reading passage marked by pauses taken by native speakers of English during normally paced reading.

**Authentic Text** - an authentic text will be defined as a text created by a native speaker of English and intended to be read by native speakers of English. The text will be
chosen from an English newspaper, magazine, or book. The text will not be edited or simplified by the researcher.

**Instructional Level** - instructional levels are defined by grade level. Three grade levels, seventh, eighth, and ninth will be used for this study.

**Proficiency levels** - proficiency levels are defined as the beginning, intermediate, and advanced levels of English instruction in which the subjects are enrolled at the time of conducting this study.
CHAPTER II
REVIEW OF THE LITERATURE

Introduction

The purpose of this study is to explore and describe metalinguistic awareness and reading comprehension in English as a second language and to investigate the relationship between metalinguistic awareness and reading comprehension. A review of the literature related to various aspects of research on metalinguistic awareness and reading comprehension, (aspects such as, metalinguistic awareness and language acquisition, L1 and L2 research on metalinguistic awareness, metalinguistic awareness and literacy learning, measures of metalinguistic awareness, and the relationship between metalinguistic awareness and reading) has provided insights into the selection of appropriate methodology for this research. Literature reviewed in this chapter is arranged in the following sections: L1 research on metalinguistic awareness; metalinguistic awareness and literacy learning; grammaticality judgment as a measure of metalinguistic awareness; L1 research using grammaticality judgments; L2 research using metalinguistic research; and research
related to the relationship between metalinguistic awareness and reading comprehension.

The use of the term "metacognition" is common these days in literature related to cognitive and developmental psychology. Although concerns about aspects of metacognition emerged early in this century, the widespread use of this term did not begin until the 1970s. The importance of the role of metacognition in memory, comprehension, attention, communication, and general problem solving tasks has been well recognized (Flavell, 1978). Furthermore, researchers (e.g., Leong, 1981; Tunmer, Herriman, & Nesdale, 1988) interested in language and reading have recognized the importance of metacognitive awareness. Metalinguistic awareness comes under the rubric of metacognition; it includes the knowledge and control dimension of cognition. These aspects have been an object of concern of psychologists in this century (Lawson, 1984). Vygotsky (1962) refers to the importance of reflection upon cognitive activity:

The activity of consciousness can take different directions; it may illuminate only a few aspects of thought or an act. I have just tied a knot—I have done so consciously. Yet I cannot explain how I did it, because my awareness was centered on the knot rather than on my own motions—the how of my action. When the later becomes the object of my awareness, I shall have become fully conscious. We use consciousness to denote awareness of the activity of the mind—the consciousness of being conscious. A pre-school child who, in response to the question, "Do you know your name?" tells his
name lacks this self awareness: He knows his name but is not conscious of knowing it. (p. 91).

Hence, according to Vygotsky (1962), "consciousness of being conscious," or, in other words, the awareness of "knowledge of the how of ones action" is the key feature of metacognitive knowledge. Similarly, it may be argued that while using language for communication, one uses language unconsciously without paying attention to the processes one is using to process the incoming and outgoing information, because the language user's attention is centered on getting the message through rather than on the processes involved in language use.

Metalinguistic awareness among children and adults may exist at two levels: (a) it may be just borderline awareness; (b) it may be the result of the process of reflection on language. Examples of the first type of metalinguistic awareness are self-corrections, which are frequently observed in adult speech as well as in children's speech. Self-correction in speech by the speaker indicates that s/he is aware that what s/he is about to say or begins to say is inappropriate or incorrect. Similarly, explicit reflection, the other level of metalinguistic awareness, may be observed in children and adults. Language users' awareness of the linguistic rules of language and their ability to formulate intuitions about the structure of grammaticality of sentences are
behaviors that reflect the level of metalinguistic awareness that emerges as a result of the process of reflection on language.

**L1 Research on metalinguistic Awareness**

There appears to be two positions relating metalinguistic awareness and first language acquisition. According to one position metalinguistic awareness is related to the primary language acquisition process and skills, which implies that there is a greater relationship between the primary language skills and metalinguistic skills because they interact developmentally. This view is supported de Villier and de Villier (1974), Foss and Hake (1978), Clark (1978) among others. The other position suggests that metalinguistic awareness is closely related to secondary language acquisition skills, such as literacy learning (reading and writing). According to this view metalinguistic awareness develops at a later stage and seems to be related to cognitive development. This view is supported by Gleitman, Gleitman, and Shipley (1972), Gleitman and Gleitman (1979), Snow (1977), Levelt, Sinclair and Jarvella (1978), and Read (1978).

A number of L1 developmental studies having children as subjects have been conducted in the past decades. Most of these studies were concerned with explaining when or at what stage of their life children are able to make
judgments about the language. For example, Slobin (1978), in a developmental study, observed his daughter's development of language awareness from the ages of two years and nine months to five years and seven months. He reported that various aspects of language awareness, such as self correction, rephrasing in the course of ongoing speech, commenting on the speech of others, explicit questions about speech and language, and response to direct questions about language appear in children between the ages of two and six. He further stated that his daughter had developed a sense about the grammaticality in that although she rarely used in her spontaneous speech some of the irregular past tense verb forms, she was clearly aware of the correct forms when she was asked in a test-like situation.

In another L1 study dealing with children, Gleitman, Gleitman, and Shipley (1972) made use of role playing to convey difficult instructions to the subjects. Three children, aged about thirty months, were given simple imperatives that were either well-formed (e.g. Bring me the ball) or of deviant word-order (e.g. Ball me the bring). The subjects were asked to judge the sentences as "good" or "silly." They were required to repeat sentences that they thought were "good" and "fix up" the ones they considered "silly." The subjects could discriminate between well-formed and deviant sentences, although not 100% of the
time; they accepted over 50% of the wrong-word order sentences as "good." The results of this study suggest that children as young as two years old are capable of detecting and altering ungrammaticality. Gleitman et al. concluded that children had awareness of word-order rule. The researchers did not state, however, whether children can provide any explanation for their awareness in terms of any rule. One may argue that the children may have internalized the concept of word order in a sentence but not the rule. At this stage, metalinguistic awareness may be at a low level.

De Villiers (1972), using a modified procedure of Gleitman et al.'s research, did a study with eight children whose linguistic ability was measured in terms of Mean Length of Utterance. The subjects in this study played a game with two puppets in which each subject helped to teach one puppet, who "said things all the wrong way around," how to talk properly. The puppet spoke correctly or reversed the word order of imperatives, and the children had to judge the utterance as "right" or "wrong." The children were also asked to tell the right way to say it.

The results of the above study suggest that the least advanced children could quite accurately distinguish the semantically anomalous sentences, though they could not correct them; whereas slightly more advanced children could both accurately judge as wrong semantically anomalous
sentences and correct them. In addition, the slightly more advanced children could selectively reject and correct the reversed word-order imperatives, but their corrections seemed to be guided by semantic considerations, as with the subjects of the Gleitman et al. study. Only the most advanced children were able to give word order corrections to the reversed word-order imperatives.

Scholl and Ryan (1975) used a performance measure in the form of pointing to a choice of speaker in their study. They found that the responses of 24 five-year-old and 24 seven-year-old children varied as a function of the grammatical complexity of stimulus sentences. In this study, subjects were required to judge sentence stimuli of two types (negatives and wh-word questions), each having three levels of grammatical complexity, two primitive and one well-formed. After each stimuli presentation, the subject was to point to the adult or the child in picture, depending on who was judged to have produced that utterance. They found that the performance of two groups did not differ for the question stimuli. The subjects pointed to the adults more frequently as the grammatical complexity of wh-word questions increased. In response to the negative sentences, it was found that the older children attributed more well-formed sentences to adults than primitive ones, whereas the younger subjects attributed fewer well-formed negative sentences to adults.
Scholl and Ryan concluded that this procedure helped children to demonstrate their ability to distinguish grammatically well-formed from primitive sentences. The results of the study indicate that it is comparatively easier to identify correct sentences in a native language. One possible explanation for a such a phenomenon may be that learners are exposed to well-formed sentences first, and, therefore, they internalize well-formed sentences earlier. Because semantically or syntactically well-formed sentences do not demand much analytical knowledge on the part of learners, it is comparatively easier to make correct judgments about semantically or syntactically well formed sentences. The question is whether the same can be true in a second language.

In the process of learning a native language, though one is exposed to well-formed sentences, it is generally observed that in earlier stages of language acquisition learners tend to produce more sentences that are deviant or incomplete. The more one is exposed to the target language and practices the language, the more his or her language production approximates native-like discourse. Hake (1980), in a longitudinal study using several measures and a variety of items, attempted to correlate these with cognitive development and collected data on children's judgments of the acceptability of utterances according to syntactic and semantic criteria. He noticed that children
between four to five years of age were not able to explain their acceptability ratings, whereas eight-year-olds passed the 90% level for judgment of presumed deviant sentences. On the basis of the results of this study, Hake suggests that the metalinguistic ability required in these tasks is the same ability as that whose development underlies the emergence of concrete operations. There was an improvement with age in performance on the judgment task, and these judgment skills appear to correlate with the children's entry into the Piagetian concrete-operational stage of cognitive development.

Ryan, McNamara, and Kenny (1977) investigated the relationship between various aspects of linguistic awareness and early reading ability. In two experimental studies, performance of subjects on all linguistic awareness tasks, except for word tapping, showed a substantial advantage of better readers over poorer students. Subjects of the studies were ten male and ten female children each in first and second grades with mean ages of 6.3 and 7.6. years, respectively. Performance on metalinguistic tasks of ten children having reading scores below the median was compared with that of the ten children having scores above the median. It was found that the children above the median made fewer errors on word discrimination and a multigrammatical function task. A significant correlation was also found between the higher
reading scores and three tasks: the word discrimination task, the sentence comparison task, and the multifunction word task (.65, .65, and .62, respectively).

Summary

The research discussed above provides information on developmental aspects of metalinguistic awareness in the L1. L1 research on the development of metalinguistic awareness is important because it provides a theoretical base for the L2 research on metalinguistic awareness. Most of the early L2 studies dealing with an investigation of metalinguistic awareness have used L1 studies as models.

The research discussed above suggests that children between the ages of two and six develop metalinguistic abilities to make judgments about language and other aspects of language awareness such as self-correction, re-phrasing, and commenting on the speech of others. Furthermore, young children may have awareness of word-order rules, but they may not be able to provide any explanation for that awareness. These studies imply that in a native language the ability to intuit about the grammaticality of sentences appears before the development of the ability to state intuition-based rules.

The results of these studies also suggest that young children may be able to reject sentences that have a deviant word order, and might be able to provide a correct sentence by making appropriate changes. It is suggested
that the principle that generally guides children to make such decisions is semantically based. As children grow older, their metalinguistic skills improve, and this improvement correlates with their entry into Piagetian concrete-operational stages of cognitive development.

Metalinguistic Awareness and Literacy Learning

Vygotsky (1962) states that written speech is a separate linguistic function that differs from oral speech in structure as well as in mode of functioning. Even its minimal development requires a high level of abstraction. He further states, "our studies show that it is the abstract quality of written language that is the main stumbling block, not the under-development of small muscles or any other mechanical obstacle" (p. 98-99). According to Bewell and Straw (1981), in order to cope with the abstract quality of written language and to understand the concept of word, the child must have reached a particular level of cognitive and linguistic development.

It seems that investigations related to metalinguistic awareness and reading have been influenced by Vygotsky's statement regarding written language. As a result, various opinions regarding the relationship between reading and linguistic awareness have emerged. For example, Liberman et al. (1977), Mattingly, (1979), and Shankweiler and
Liberman (1972) consider linguistic awareness a critical pre-requisite for success in literacy learning.

The general findings in the literature support the view that there is a correlation between the development of metalinguistic ability and learning to read. Some researchers have interpreted this relationship causally: metalinguistic ability is a prerequisite for learning to read (Rozin & Gleitman, 1977; Ryan, 1980; among others). Mattingly (1972) contends that reading ability ultimately depends on linguistic awareness. Although linguistic awareness is claimed to be an important condition for reading, little empirical evidence has been presented to support this notion. Liberman et al., (1977) who interpret the relationship between reading and metalinguistic awareness in terms of causality, argue that a spurt in the awareness of phoneme segmentation at the onset of reading instruction reflects a causal relationship, and they interpret this causality as reciprocal; that is, linguistic awareness is important for reading and, at the same time, learning to read helps to develop linguistic awareness.

Perfetti, Beck, and Hughes (1982) conducted a study in which they compared children in a "direct code" instructional program with children in a basal program. The children were tested throughout the year on phoneme synthesis and deletion tasks. The researchers found that irrespective of instructional method, the ability to
synthesize phonemes is necessary but not sufficient for reading to occur. They concluded that phonetic knowledge is important for reading and that reading is important for developing phonetic awareness; in other words, the relationship is one of mutual facilitation. In another study, Perfetti, Beck, Bell, and Hughes (1982) suggested that although explicit knowledge of the phonemic structure of the spoken word is necessary for learning to read, the relationship between phonemic awareness and the ability to read is reciprocal.

Vellutino and Scanlon (1987), on the basis of the results of two studies, provide experimental evidence for a causal relationship between linguistic coding deficits and learning disabilities. They argue that deficiencies in phonological coding and phonemic segmentations are a direct cause of deficiencies in word identification. Morais, et al. (1979), hold a different view. They found that awareness of phoneme segmentation did not develop either spontaneously or independently of instruction in reading. They did a study with two groups of adults who had not learned to read in childhood. The treatment group received literacy training, but the control group did not. When tested afterwards, the control group was not able to perform successfully on a simple awareness task, whereas the treatment group was able to complete the same task fairly readily. The researchers concluded that linguistic
 awareness may be a consequence of reading instruction. There conclusions were supported in a subsequent study (Alegria, Pignot, & Morais, 1982).

In contrast to Vellutino and Scanlon's (1987) claim, Henderson (1982) believes that linguistic awareness may not be necessary for reading, but that the ability to become aware may be a prerequisite instead. Ehri (1975) holds a different view and emphasizes the relevance of reading to the solution of metalinguistic tasks. Menyuk (1984) argues that reading depends not just on "how much one knows" but rather on the reader's "degree of knowledge" of any particular structure. In the view of Bialystok and Ryan (1984), this degree of knowledge of any particular structure would reflect on the extent of the analysis knowledge of language. Within the metacognitive framework of Bialystok and Ryan (1985) for the development of language skills, neither metalinguistic skills nor literacy skills are developed causally; rather, both are considered to develop along the two skill components, namely, cognitive control and analyzed linguistic knowledge.

The development of analyzed knowledge proceeds in response to a number of factors, a key one of which is literacy. Literacy itself, while requiring a specified degree of analyzed knowledge, promotes at the same time, the further analysis of linguistic knowledge (Ehri, 1979; Prefetti, Beck & Hughes, 1982). Similar conclusions that
metalinguistic awareness is developed through the act of learning to read and write have been reported by Francis (1973) and Evans (1977). In their study of Vai speakers in Africa, Scribner and Cole (1981) found significant differences in the ability of adult subjects to correct grammatically deviant sentences and their ability to judge their correctness. Although all subjects could complete the judgment task, only the literate subjects could complete the correction task, irrespective of the subjects' experience with schooling.

Ryan and Bialystok (1984) argue that the correction tasks require a greater degree of analyzed knowledge than judgment tasks, though they both make similar demands on control. They claim that the literate subjects had greater analyzed knowledge than their counterparts. Scribner and Cole (1981) also offer a similar interpretation: "Literacy alters individuals' internal representations of language" (p. 187). Although it is clear from the above that linguistic awareness is related to reading in some way, it is not clear what role it plays in developing reading skills or what linguistic processes common to both metalinguistic and reading tasks are responsible for this relationship (Bialystok, 1988).

Summary

It is suggested that linguistic awareness is critical for literacy learning in first and second languages. There
are several views regarding the relationship between reading and metalinguistic awareness. The correlation between reading and metalinguistic ability has been interpreted as causal, and metalinguistic awareness is considered an important condition for reading. Little evidence to support this notion, however, is presented. It is also suggested that the relationship between literacy learning and metalinguistic ability is reciprocal. Some researchers hold the view that the acts of learning to read and write stem from the development of metalinguistic awareness. Within the metacognitive framework for the development of language skills, the relationship between literacy learning and metalinguistic skills is not interpreted as causal. It is suggested that both skills develop along with the two skill components, namely, cognitive control and analyzed linguistic knowledge.

**Grammaticality Judgments as a Measure of Metalinguistic Awareness and Interlanguage**

Metalinguistic abilities are difficult to measure. As with the definitions of metalinguistic ability noted earlier, the tasks used to evaluate metalinguistic awareness are highly diverse. Metalinguistic tasks refer to those language tasks that demand a high level of analyzed linguistic knowledge and an ability to reflect on language as an object (Bialystok and Ryan, 1985; Cazden,
1979). Grammaticality judgment tasks have been used to evaluate the metalinguistic awareness of native speakers of a language, nonnative speakers of a second language, and bilinguals.

In the past twenty years, linguists and language acquisition researchers have elicited metalinguistic judgments about language structure and use. The term "metalinguistic judgment" has been used in a broader sense in that it includes not only statements of native and nonnative language users, but also intuitions, opinions or attitudes, perception of segmentations of words into sound, and categorical or abstract knowledge about language, its structure, and its uses (Chaudron 1983). In the literature related to language research and theoretical linguistics, judgments of grammaticality have played a significant role. Chomsky (1964) insists that a linguistic theory is descriptively adequate "when it gives a correct account of the linguistic intuitions of the native speakers, and specifies the observed data (in particular) in terms of significant generalizations that express underlying regularities in the language" (p. 20).

This ability to make judgments regarding grammaticality includes a speaker's ability to distinguish grammatical from ungrammatical sentences, to analyze syntactic relations, to perceive synonymity among sentences, and to recognize ambiguity in sentences. The basic assumption in
the above arguments is that speakers of a language have an awareness about whether or not a given sentence is grammatical. Of course, differences in individuals' metalinguistic awareness exist, depending on the stage of language development, literacy, exposure to more than one language, proficiency level.

Although a distinction has been made between the use of the terms grammaticality and acceptability in that grammaticality is a concept that belongs to the study of competence and acceptability to the study of performance, in language acquisition research both the terms "competence" and "performance" have been used to determine the metalinguistic awareness of native and nonnative speakers (Chomsky, 1965). Recognition of the fact that metalinguistic awareness refers to competence as well as performance aspects of language lends support to the notion that metalinguistic awareness involves the process of "knowing," and awareness of this "knowledge" of knowing, and that metalinguistic awareness is linguistic competence that is reflected in some kind of linguistic performance.

Despite being considered secondary to other kinds of linguistic behaviors (i.e., speaking and listening) and to other kinds of linguistic intuitions, from developmental, pragmatic and methodological points of view, grammatical judgments (syntactic intuitions) are seen as a valuable source of information about the system of a learner's
language for theoretical linguists, psycholinguists, and language researchers (Snow & Meijer (1977). Elicitation of grammatical judgments, for example, has been used to test the adequacy of descriptive grammars of a given language by Kuno (1976), Mohan (1977) and others. Psycholinguists have used native speakers' judgments as indirect indicators of differences in language structures. According to Chaudron (1983), metalinguistic judgments are used among other uses, to ascertain the nature of individuals' general metalinguistic awareness, to study how source and target language grammars interact in the development of interlanguage, and to determine what this interaction indicates about the structure and operation of linguistic awareness itself.

Because an L2 learner's interlanguage cannot be accessed directly, the learner's metalinguistic judgments or intuitions of grammaticality in the L2 may provide some information about his/her interlanguage. According to Arthur (1980), Bialystok, (1981), and Gass (1983), a sentence which is judged to be grammatical by an L2 learner should be considered as being in agreement with the learner's interlanguage. Following a similar line of thinking, Sorrace (1985) states "...that the evolution of learners' intuitions largely reflects the development of interlanguage knowledge" (p. 240). At the same time she cautions researchers to evaluate carefully the degree of
consistency between judgment and underlying knowledge. The information about L2 learners' interlanguage provided by metalinguistic judgments can be analyzed to investigate the internal consistency of the learner's transitional grammar in terms of what one knows and produces and to investigate its external consistency in terms of what one produces and what is expected to be produced according to the target grammar.

Summary

The research discussed above suggests that as a result of the L2 learning process, there should be an increase in the metalinguistic ability of L2 learners and that metalinguistic awareness among bilingual adult learners should be higher than that of monolingual adults and children learning an L2. Measuring metalinguistic awareness is not an easy task. Diverse tasks have been used to evaluate various aspects of the metalinguistic awareness of native as well as nonnative speakers of a language. Because L2 teaching and learning use the theoretical framework of L1 as a model, tasks used for measuring the metalinguistic ability of native speakers may provide L2 researchers and teachers with some insights for preparing appropriate tasks for measuring L2 metalinguistic awareness.

The metalinguistic judgments used to measure metalinguistic awareness include the statements of language users, intuitions, opinions, abstract knowledge about
language. The ability to make a judgment about grammaticality includes the ability to distinguish grammatical from ungrammatical sentences, to analyze syntactic relations, and to recognize ambiguity in sentences. Although grammaticality judgments are considered to be of secondary importance in comparison to other language use skills, they do provide important information about the interlanguage of L2 learners. Moreover, they provide information about the interaction between native and target language grammars in the development of interlanguage.

L1 Research using Grammaticality Judgments

Maclay and Sleater (1960), in an attempt to explore differences among types of metalinguistic judgments, studied native speakers' ability to discriminate among concepts of grammaticality, meaningfulness, and ordinariness. Three groups of 57 university students, who were native speakers of English, were subjects for this study. Six groups of test sentences with different combinations were used for this study. The subjects were asked to judge the grammaticality, meaningfulness, and ordinariness of the sentences on a dichotomous scale (yes/no). On the basis of the results of this study, Maclay and Sleater concluded that judgments regarding these aspects are largely independent of one another.
Hill (1961) conducted a study for the purpose of investigating two positions held by transformational linguists on the issue of grammaticality, namely, a grammar must generate all grammatical utterances, and native speakers are reliable judges of grammaticality. The subjects of this study were ten adult native speakers of English. They were asked to judge the grammaticality of a set of arbitrarily selected sentences by accepting or rejecting them. Hill reported that there was a variability among the subjects as to the degrees to which and grounds upon which they judged sentences. He concluded that subjects' judgments were affected by too many peculiarities and idiosyncracies. He further suggested that reliability of judgments is improved when sentences are judged in a relational structure with one another.

Coleman (1965) investigated degrees of grammaticality. He asked subjects to rank each of ten sentences on a scale from most to least grammatical. Results of his study revealed that the ranking of grammatically deviant sentences seems to be a function of degrees of grammaticality, and that native speakers have the ability to rank ungrammatical sentences along a scale of grammaticality. Furthermore, he suggested that the notion of grammaticality can help solve the problem of how native speakers understand deviant sentences.
Danks (1969), who was concerned about the understanding of deviant sentences, and whose objective was to determine the factors involved in the comprehension of such sentences, studied two groups of native speakers of English. In one group the subjects were asked to rank the comprehensibility of sentences on a ten-point scale using grammaticalness, meaningfulness, and familiarity as criteria. The other group was asked either to demonstrate comprehension of the sentences or to correct the grammar or meaning. The results showed that grammaticality and meaningfulness had the greatest effect on the comprehensibility of sentences.

Quirk and Svartvik (1966) investigated the judgments of acceptability of various grammatically deviant and correct sentences. In this study, the performance of two groups of English Honors and Geography students on judgments of acceptability was compared. Subjects were asked to rate orally-presented sentences on a three-point scale as natural, unnatural, and uncertain. Results showed that there was a general agreement between the two groups, and that there was more agreement as to which sentences were deviant among members of the geography group.

Vetter, Volovecky, and Howell (1979) replicated in part the study by Sleater et al. (1960) concerning the judgment of grammaticality. Vetter et al. also investigated the reliability of grammatical judgments of native speakers and
the factors involved in such judgments. The subjects of their study were 152 high school students (three groups), who were asked to judge a series of 36 word sequences on the dimension of grammaticalness, meaningfulness, and ordinariness. Results of the study failed to confirm the results reported by Maclay et al. and supported the notion that these three types of judgments are not independent of each other.

Nagata (1988), in a three-experiment study, investigated the relativity of linguistic intuitions in judgments. In the first experiment, he examined the effect of a repetition treatment on judged grammaticality of isolated sentences. The subjects of the study were twelve native speakers of Japanese who were students of Okayama University, Japan. They judged the relative grammaticality of isolated sentences twice, receiving a repetition treatment between two judgments. The result of the experiment indicated that grammaticality judgments were affected by the repetition treatment, and direction of change was towards ungrammaticality.

In the second experiment, Nagata examined whether a change in criterion also occurs in grammaticality judgment of sentences when each sentence is embedded in a context and a repetition treatment follows. The findings of this experiment showed that a change in judgment occurred for the ungrammatical sentences, but no significant change
occurred for grammatical sentences. In the third experiment, Nagata examined the overall effects of context on the judged grammaticality of sentences. The subjects of this study were asked to judge the grammaticality of the sentences embedded in the context both before and after the repetition treatment. Results of this experiment indicated no change in judgment criteria. Nagata suggested that linguistic intuitions as revealed in grammaticality judgments are not absolute, but relative, in that they are easily influenced by repetition and other variables such as embedded context.

Summary

The research reviewed in this section indicates that native speakers' judgments regarding grammaticality, meaningfulness, and ordinariness of sentences are affected by several factors such as idiosyncrasies. It is suggested that in order to increase the reliability of the grammaticality judgments, sentences should be judged in relation to one another. Furthermore, native speakers have an ability to rank ungrammatical sentences in their language along a scale of grammaticality. The notion of grammaticality may help the researcher in answering the question: "how do native speakers understand deviant sentences?"

The research reviewed in this section also provides support for the notion that grammaticality and
meaningfulness affect the comprehensibility of sentences. Grammaticality judgments are affected by the repetition treatment, and usually the direction of change is toward ungrammaticality. Linguistic intuitions as revealed in grammaticality judgments are not absolute, but relative. They are influenced by repetition and other variables.

L2 Research using Grammaticality Judgments

During the last fifteen years, L2 acquisition researchers have focused more attention on learners than on teachers. Learners' errors are looked upon as a part of learners' interlanguage systems rather than as drawbacks. Learners' explanations of their performance errors may provide useful insights concerning the production of errors and their interlanguage systems. The study of learners' errors is also important from a pedagogical point of view. Allwright (1975), for example, argues that the learner cannot learn in class without knowing when an error is made by him or by someone else. He further emphasizes that it is the responsibility of the teacher to provide information about the second language and to react to errors whenever it is appropriate to do so. Similarly, for a teacher to be able to teach effectively and efficiently, it is important to know why L2 learners make particular errors and what explanation L2 learners offer for their errors. L2 studies
on metalinguistic judgments have focused on this aspect of language learning.

Cohen and Robbins (1976) investigated learners' errors in verb-form, teacher-correction, and student-explanation of errors and interlanguage background. The subjects of their study, three Chinese students learning English as a second language, were asked to evaluate their own written errors, locating and correcting them, if possible. The result of the study revealed the diversity of grammatical awareness even among three learners whose native language was the same. The subjects' explanation and justification for a number of their errors suggests that the learners had an adequate level of metalanguage for explaining their errors. In some cases, however, they were not able to justify their errors. For example, when they were speculating about the reason for an error they commented that they really did not remember why they made that error.

In order to describe the competence of L2 learners adequately and to identify their particular learning strategies, Schachter, Tyson, and Diffley (1976) emphasize taking into consideration the actual performance of L2 learners as well as their intuitions about the target language. Schachter et al. elicited grammaticality judgments on sentences containing relative clauses from a group of 100 high-intermediate and advanced ESL students from five L1 backgrounds: Arabic, Chinese, Japanese,
Persian and Spanish. The subjects were asked to make judgments about the grammaticality and ungrammaticality of a set of sentences. Each sentence consisted of either a relative clause, an object relative clause, or an object of the preposition relative clause. For each relative clause structure, the test consisted of four sentences with relative clauses composed by native speakers of English, and two sentences with malformed relative clauses composed by non-natives. The researchers found that the two groups had a tendency to accept their own L1 type errors. Whereas all groups judged each other's errors randomly, they judged L2 correct sentences as grammatical. The researchers concluded that the errors based on each group's L1 reflected the intermediate level of the subjects' interlanguage.

In another study Zydatiss (1977), quoted in Chaudron (1983), asked high school German-speaking ESL students to give their opinion on sentences according to a four-point scale by agreeing or disagreeing with each sentence. He reported that subjects tended to identify correct L2 sentences correctly, but that they had some difficulty in correctly identifying sentences with certain syntactic structures.

Snow and Meijer (1977) studied the ability of native and nonnative Dutch speakers to make judgments regarding word order in sentences. The subjects of their study
represented three groups. Two groups consisted of Dutch native speakers with extremely varying degrees of linguistic training, and one group consisted of nonnative Dutch speakers. Each group was asked to make a judgment regarding the word order of sentences on the same three-point rating and rank order scale. The researchers found that all groups were internally consistent in rank-ordering the items, (nonnative speakers being least consistent and linguists the most). They also reported a great deal of within-subject variability among the other two groups.

Schmidt and McCreary (1977) compared the subjects' own immediate production with judgments of grammaticality. Subjects of this study consisted of six groups. The first five groups were native speakers of English and included sixth graders, high school students, university students in Hawaii, freshmen students enrolled in English, and high school English teachers. The sixth group consisted of nonnative English speakers from Egypt. Three related measures were used in this study. The first was a performance test in which the subjects were presented orally with 25 sentences. After each sentence, the subjects were provided with a clue and asked to make any changes to make the sentence a "good sentence" that they might use themselves. On the second test, the subjects were asked to choose one of the two or three ways of
"saying the same sentence." Then they were asked to check the form of the sentence that they used most frequently. The sentences used on this test were the same as those used in the first task. On the third test they were asked to check the syntactic variants that were "correct," regardless of whether they themselves used the forms. The results of the study suggest that native speakers were inconsistent in comparing their "superstandard" judgments with their actual use and reported use, whereas the nonnative speakers were more consistent in their "superstandard" judgments throughout.

Another study that used the metalinguistic judgment test was conducted by Tucker and Sarofim (1979). The objective of their research was to investigate the various facets of the metalinguistic awareness of nonnative speakers, such as the sensitivity of adult L2 learners to judge deviant sentences in English from the standpoint of grammaticality, acceptability, and irritability. The task for this study consisted of two lists of twenty-eight sentences that included four exemplars within each of seven error categories: articles, prepositions, word-order, number, deletion of object pronoun, tense (errors typically made by Egyptian students), and errors typically made by French Canadians. On each list there were fourteen well-formed and fourteen deviant sentences. The subjects of the
study, 18 Arabic speaking adult ESL learners, performed three tasks.

In the first task, the subjects listened to a tape-recorded version of the twenty-eight sentences read aloud, and judged the grammaticality and acceptability of each sentence using two five-point rating scales. In the second task, after listening to a second recording containing only the fourteen deviant sentences from the first task, subjects were asked to judge on a five-point scale whether or not each sentence irritated them. In the third task, which consisted of a list of the sentences used in the first two tasks, subjects were asked to draw a line underneath the error in each sentence, and correct it if they could.

The results of this study indicate that the advanced Egyptian students were able to distinguish between well-formed and deviant sentences and to rate the well-formed sentences as more acceptable than the deviant. The researchers reported that this rating was more pronounced when sentences were read by a native speaker. Moreover, all ratings shifted towards the more acceptable and more grammatical end of the scale when the sentences were presented by the native speaker. The researchers concluded that from a practical point of view, data on judgments are useful when the objective of investigation is how and why nonnative speakers perform as they do. In order to gain a
better insight of learners' overall proficiency, they suggest that the learner's ability to recognize deviant sentences is crucial.

Bialystok (1979) investigated the differential use of formal-explicit and intuitive-implicit knowledge in ESL grammaticality judgment tasks. The subjects of this study, three groups of native speakers of English learning French, were asked to judge deviant and correct sentences in French for grammaticality and error categorization. The results of the study indicate that grammaticality judgments are made initially on an intuitive basis and they may or may not be supported by the subject's knowledge of structures. Furthermore, the researcher reports that the ability to make judgments about grammaticality permits L2 learners to receive language input without constant analysis of its grammaticality.

Arthur (1980) investigated L2 learners' ability to locate errors. The subjects of the study, 149 adult learners of ESL, were asked to locate and underline the words or phrases that they thought contained an error, and to provide correction for errors in a written passage. On the basis of the results, Arthur found that less advanced learners made erroneous corrections of correct forms, whereas the more advanced learners did better on an error location task, though they were not better at correcting them. Furthermore, Arthur suggested that differences
between the native and nonnative speakers' judgments may be interpreted as a gauge of differences between the learners' transitional competence and the native speakers' competence.

Singh, d'Anglejan, and Carroll (1982) examined the issue of variability in the target language and its relation to learners' intuitions of acceptability. The subjects, three nonnative English-speaking groups (Hindi, Tagalog and Quebecois French) at the beginning and advanced levels, were asked to perform simple grammatical operations on a set of sentences and to judge the sentences on a three-point scale: acceptable, unacceptable, and no judgment. For two groups (Hindi and Tagalog), test items were typical errors selected from the written "inter-English" of educated learners of English (Hindi and Tagalog) and for the Quebecois French group test items were selected from items used in the Quirk and Svartvik's (1966) study. The results of their study indicated that beginners were unable to distinguish between normal and deviant sentences in the judgment task, whereas the advanced group demonstrated a greater ability to distinguish between normal and deviant sentences. On the basis of results of their study, the researchers suggest that in order to understand the nature and structure of interlanguage, L2 learners' intuitions about the grammaticality of their own production must be taken into account.
Gass (1983) investigated the function of grammaticality judgments in L2 acquisition. The subjects, intermediate and advanced ESL learners, were asked to give grammaticality judgments on the sentences written by them and those written by other students. They were also asked to locate the errors and correct them. The results of the study demonstrated that subjects had an ability to make appropriate judgments about the grammaticality of sentences and to correct the sentences that they judged to be ungrammatical. Moreover, the learner's proficiency level also affected the ability to make judgments about other learners' errors. For example, students at the advanced level were better at making judgments about other learners' errors than the intermediate level learners. The results also indicate that as L2 proficiency increases, learners develop the ability to identify and correct particular errors.

Masny and d'Anglejan (1985) investigated the statistical relationship among cognitive and linguistic variables and second language grammaticality judgments. The subjects of this study were advanced learners of ESL. The variables studied were cognitive style, intelligence, aptitude, proficiency, reading in L1, and metalinguistic awareness in L2. The researchers report that second language proficiency, second language achievement in the classroom and language aptitude were significant predictors
of a subject's ability to make grammaticality judgments. The results demonstrated that there was a significant correlation between the subjects' ability to correct ungrammatical sentences and L1 reading competence.

Sorrace (1985), in an experimental study, investigated the development of metalinguistic knowledge and its relationship with the knowledge and use of the second language. The subjects of this study were two groups of students at beginner and intermediate level of Italian as L2 at the Universities of Edinburgh and Strachclyde (Glasgow). The subjects were asked to perform three tasks: a judgment test, an oral picture description task, and an informal conversation with the interviewer.

In the judgment test, subjects were asked to judge a series of sentences as correct or incorrect, to make corrections, and to state the grammatical rule violated in each of the ungrammatical sentences. In the second task, the subjects were asked to describe a series of cartoons. They were asked to describe the cartoons first in English and then in Italian. In the third task, the subjects were asked to carry on a conversation about their life in Edinburgh. Sorrace reported that there seems to be a definite pattern of metalinguistic knowledge in L2 learners of Italian and that the learners produce and internalize pedagogical rules in distinct ways. In order to justify the growing interaction between the learners'}
metalinguistic knowledge and their productive use of L2, it is crucial that L2 teachers accept that formal knowledge of language can be applied in language production.

Summary

The research discussed in the above section shows that some indirect attempts have been made to investigate the role of language and cognitive processes in relation to L2 acquisition. It is claimed that metalinguistic awareness has a significant function for L2 learners, because it allows them to make a comparison between the native language and the target language, to self correct, and monitor their own output. Therefore, research related to L2 learner's ability to judge grammaticality is important for a better understanding of L2 language production skills in L2. Most L2 research related to metalinguistic awareness has explored the ability of L2 learners to make grammaticality judgments. With the exception of Sorrace's (1985) study, the knowledge about the possible relationship among metalinguistic awareness and interlanguage development and L2 production skills has emerged as a bi-product of L2 research.

L2 Research on Reading Comprehension and Metalinguistic Awareness

In the last two decades researchers, cognitive theorists and psycholinguists have focused their attention
on investigating nature and process of reading comprehension. Goodman (1967, 1976), Rumelhart (1977), and Smith (1972, 1978, 1982) emphasize the active nature of the reading process and support the view that it is the reader who brings meaning to text.

Reader's prior knowledge, also known as "background knowledge," has been considered one of the most important variable that affects comprehension. Anderson et al. (1977) suggest that prior knowledge or schema represents generic concepts underlying objects, events and action. The existence of relevant prior knowledge that is believed to play an important part in reading and listening comprehension, has been the focus of many L1 and L2 reading research studies. Findings of L2 reading research (Adams, 1982; Bernhardt 1984; Carrell, 1983;, Johnson, 1982; Lee, 1986; and Steffenson et al, 1979 among many others) are parallel to those of L1 reading research. All of these studies indicate that prior knowledge of context has an important impact on comprehension. They have all ignored the variable of prior linguistic knowledge. Theoretically, it is claimed that metalinguistic abilities facilitate the acquisition of skills related to communicative skills, such as reading, and writing (Bialystok, & Ryan, 1986). There does not exist any research in L2, however, that explores the relationship between metalinguistic awareness and reading comprehension.
Conclusions

Undoubtedly, it is evident that a considerable progress during the last two decades, in the area of L2 reading research. Researchers have shown some interest in to investigating the development of metalinguistic awareness in L2 learners. The previous review of literature is evidence that researchers have drawn their attention to investigate L2 metalinguistic awareness. There exists, however, a lack of research focusing on L2 reading comprehension and metalinguistic awareness research. The existing research pertaining to L2 metalinguistic awareness does not provide much information in resolving major controversies regarding the explicit teaching of grammar and its concomitant benefits to learners.

Researchers and educators have begun to realize the need for research that addresses issues, such as the relationship of metalinguistic awareness and language use skills, such as speaking and reading. Sorrace (1985) focuses on the development of metalinguistic awareness, and its relationship to speaking skills in the L2. Masny and D'Anglejan's (1985) research suggests that metalinguistic awareness is a reliable predictor of the development in second language competence. Yet up to now there has been no study that has focused on the investigation of the relationship between metalinguistic awareness and reading comprehension in L2 learning. Following the principles
investigated in the Sorrace and Masny and d'Anglejan studies the present study is designed to investigate precisely this relationship.
CHAPTER III
DESIGN AND PROCEDURES

Population and Sample Selection

This research was conducted at the American School of Puebla, Puebla, Mexico. The American School of Puebla, a private school, is similar to many public schools in Puebla in that it has to meet the requirements and educational standards set by the State Department of Education of Puebla; and it is different from most public schools in that it provides bilingual instruction.

The majority of the students who attend this school intend to go to the United States for higher studies or wish to attend La Universidad de Las Americas, a private university that requires students to take several courses of their major area of study in the English language. One of the objectives for students in this school, therefore, is to develop reading and writing skills in addition to speaking and listening skills of the English language.

For the purpose of this study, the population from which the sample was drawn consisted of junior high students at three levels of instruction—seventh, eighth,
and ninth grades, each containing three levels of proficiency—beginning, intermediate, and advanced levels. In the seventh grade these levels of proficiency in English were represented by the numbers 101, 102, and 103; in the eighth grade by 201, 202, and 203; and in the ninth grade by 301, 302, and 303. The subjects taking 101, 102, or 103 were assigned to these levels of proficiency on the basis of their performance on final exams in the sixth grade, if they had attended the Colegio Americano throughout the elementary years of education. The students who had received their elementary education in a school other than the Colegio Americano were assigned to these levels of proficiency on the basis of their performance on a placement test given at the time of admission to the junior high school.

The students who participated in this study were enrolled in the seventh, eighth, and ninth grades during the 1988-1989 academic year. There were two class sections of each proficiency level for each grade. Because it was not be possible to select a random sample from both sections at each proficiency level, the researcher randomly selected one intact class section to represent each proficiency level at each grade. The average number of students in each section was twenty five. Most of the students who participated in this study were in the range of 13-15 years of age, and that the number of
male and female students in each class section was not similar.

**Research Design and Variables**

This research was a descriptive-correlation study. The objective of this study was to explore and describe the nature of metalinguistic awareness and reading comprehension, and to investigate the relationship between these factors as they relate to English as a Second Language.

For the purpose of statistical analysis, a two between-subjects (level of proficiency and level of instruction) and two within-subjects (metalinguistic awareness and reading comprehension) design was used.

The first variable, instruction consisted of three levels:

1. Seventh Grade
2. Eighth Grade
3. Ninth Grade

The second variable, proficiency also consisted of three levels:

1. Beginning
2. Intermediate
3. Advanced

Each of the three levels of instruction was comprised of three levels proficiency: beginning, intermediate and
advanced. Thus, nine groups participated in this study (Figure 1).

<table>
<thead>
<tr>
<th>Variable B: Level of Proficiency</th>
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<tbody>
<tr>
<td>Beginning</td>
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<tr>
<td>Variable A:</td>
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<td>INSTRUCTION</td>
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<td>LEVEL</td>
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Grade 7

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Grade 8

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Grade 9

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Figure 1: Matrix for Instruction Level X Proficiency Level
Two dependent variables selected for this study were: (a) Scores on a grammaticality judgment test as measures by counting as correct the sentences that were accurately identified as either grammatical or ungrammatical; and (b) Scores on a reading comprehension test as measured by scores on immediate recall protocols written in Spanish. The scoring instrument for recall protocols was based on a weighted propositional analysis system.

**Materials**

For the purpose of this study, the researcher used two instruments: the reading comprehension test and the grammaticality judgment test.

*Reading Comprehension Test:* The reading comprehension test consisted of a passage selected from the Smithsonian (1985), an English magazine. The passage selected for the reading comprehension test was the one written in English by native speakers of English and intended for reading by adults and young adults in the United States (Appendix A). The selection of this authentic, expository passage in English was based on the guidelines set by Bernhardt (1986) that "the text contain approximately 200 words; i.e. one which is long enough to provide an actual experience with real connected discourse" (p. 108).
Subjects' immediate recall protocols were used to measure performance on the reading comprehension test. Johnston (1983) considers recall the "the most straightforward assessment of the results of the text-reader interaction" (p. 54). It reveals "something about the organization of the stored information...and about the retrieval strategies which the reader uses" (p. 55). It offers information about the "...method of reconstruction which the [reader] employs to encode information in a text" (Bernhardt, 1983, p. 31).

**Grammaticality judgment test:** A grammaticality judgment test constructed by the researcher, was used to measure the metalinguistic awareness of English. It had two parts: a written task, and an oral interview that was conducted by the researcher with the individual subjects after they had completed the written task. The written test consisted of a set of 40 isolated sentences in English (Appendix B). These sentences represented five grammatical-form classes: the past tense, the present tense, the present perfect tense, passive voice, and subject-verb agreement of English grammar. The grammatical-form classes included on this grammaticality judgement test were similar to the grammatical-form classes encountered in the passage selected for reading comprehension test.
There exists a substantial variability among researchers as to the percentage of grammatical versus ungrammatical forms to be represented in a grammaticality judgment test. The researcher used as a guideline the pattern used by a majority of the researchers earlier, such as Bialystok (1979), Bialystok and Frohlich (1978), Masny (1983), Masny and d'Anglejan (1985), and Sorrace (1985). The number of ungrammatical sentences in the grammaticality judgment tests used by these researchers represented more than 60% of the total sentences on the test. Therefore, of the total of 40 sentences in this written task, 15 sentences were grammatically correct and 25 sentences were grammatically incorrect. There were eight sentences pertaining to each grammatical-form class, and out of the eight sentences there were three grammatically correct and five grammatically incorrect sentences. In the written part of the grammaticality judgment test, the subjects were asked to read the sentences and judge whether or not the sentences were grammatical by writing their responses in the appropriate space provided on the test sheet.

In the second part of the metalinguistic judgment test, subjects were individually interviewed by the researcher. (Appendix C). A cassette tape recorder was used to record individual interviews. During the interview sessions, the researcher asked each subject to identify the ungrammatical part or parts of the sentence that s/he had marked as
ungrammatical. After a subject had identified the ungrammatical part, s/he was asked to explain why s/he considered that part as ungrammatical, and identify the English grammar rule that had been violated. Next, the subject was asked to correct the ungrammatical part of the sentence. Of the total interview data a random sample (20% of the interviews from each group, i.e. five to seven interviews from each level of seventh, eighth, and ninth grades) was selected and transcribed by the researcher.

Because identifying ungrammaticality in a sentence is considered to be more difficult than accepting and making a decision about the grammaticality of the sentence (Bialystok, 1988), it was hoped that the differences in metalinguistic awareness among the subjects would be revealed by the subjects' performance on this grammaticality judgment task. Furthermore, the objective of the interview was to seek information from the subjects on their metalinguistic awareness, and to examine whether or not what they had marked on the answer sheets as ungrammatical was consistent with their explanation of the ungrammaticality of a particular sentence. This part of the instrument, (interview), it was hoped, would not only validate the written form of the test, and tap subjects' metalinguistic awareness of English language, but would also provide some information about subjects' knowledge of the grammatical rules of English and their interlanguage
(also known as learner language) as reflected by their explanation of why they judged a sentence as ungrammatical, irrespective of whether or not the explanation was in agreement with English grammar.

The instruments and procedures used for this study were tested in a preliminary investigation. Prior to conducting a pilot study, the instruments and data collection procedures were field tested. After the metalinguistic test was constructed and passage for reading task was selected, they were given to a group of twenty graduate students who were taking Ag. Ed 888 at The OSU (Instrumentation and Procedures for Data Collection) during the Summer of 1988. The group was informed in detail about the research for which these instruments were to be used. These instruments were reviewed, discussed, and critiqued by the group in the class. Items on the grammaticality judgment test were revised and refined by the researcher after getting feedback from this group.

The content validity of the instruments was established by a panel of experts comprised of a group of three native English-speaking, graduate students who had been teaching English as a second language at The Ohio State University for several years. The grammaticality judgment test was reviewed by fellow colleagues to determine whether or not the instrument measured the same behavior as stated in the operational definition of the construct.
A pilot study on the grammaticality judgment test, reading test, and data collection procedures was conducted in the Summer of 1988 using 26 subjects who were a part of the intended population of this study. The main purpose of the pilot study was to evaluate the reliability and practicality of the instruments, and the appropriateness of data collection procedures. An item analysis was done on the data (pertaining to grammaticality judgment test) using an Item Analysis Program prepared by the Center of Measurement and Evaluation of The Ohio State University.

On the basis of the results of the item analysis, the test was modified and revised. Items with a low difficulty level, and low discrimination index were replaced with new and better items. Reliability coefficient estimates of .75 and .70 were calculated using the K-R 20, and K-R 21 formulas, respectively.

**Procedures for Data Collection**

The researcher contacted the English instructors of these groups earlier in the Fall of 1988 when data were to be collected. At that time the instructors were informed of the date of the tests and data collection procedures. The data collection procedures for this study were carried out in three phases (from October 26 to December 4, 1988). The first phase corresponded to the reading comprehension test, the second to the grammaticality judgment test, and
the third to the interview sessions. The data for the first two phases was collected on two consecutive days.

The instructors were advised to inform the students that the research was being conducted to see how well they could comprehend a text in English and make judgments about the grammaticality and ungrammaticality of sentences in the English language. The students were also told that they would not be graded on these tasks. Therefore, they should consider these tests like normal English class activities (Appendix D).

The First Phase

On the first day, during their English class, the subjects received the test packets containing the reading passage. The subjects were instructed to read the text as many times as they wished within the allotted time (15-20 minutes). After they had finished reading the text, the subjects were asked to place the reading passage in the test packet and write a recall-protocol in Spanish. While writing the recall-protocols, the subjects were not allowed to consult the passage(s). They were given a maximum of 20 minutes to write their recall protocols. After the subjects had finished writing the recall-protocol, they were asked to place the answer sheets in the packets, that were collected by their instructors (Appendix E).
The Second Phase

On the second day, the subjects received the grammaticality judgment test (Appendix B). The subjects were instructed to read each sentence, to identify and decide whether or not it was grammatical, and write their response for each sentence in the appropriate space provided on the test sheet (Appendix F). The duration of time allowed for this test was determined earlier in the pilot study. The subjects were allowed 45 minutes to write this test.

Before collecting interview data on the second part of the grammaticality judgment test, the researcher read the subjects' responses on the written part of the metalinguistic judgment test and scheduled the subjects for individual interview sessions. Each interview session approximately lasted for twenty minutes. It took five weeks to collect interview data. English class time and lunch-breaks were utilized for interview sessions.

The Third Phase

The third phase of the data collection procedures, that consisted of interview sessions with subjects, began three days after the written tests. During the interview sessions, the researcher showed the subject his/her test sheet and asked questions pertaining to a particular
sentence that the subject had marked as ungrammatical (Appendix C).

Data Collection and Instrumentation

Scoring Procedures for the Reading Comprehension Test:

A simple propositional analysis technique developed by Johnson (1970), in conjunction with Bernhardt's (1988) L2 model for scoring recall protocols was used for scoring the written recall protocols. Johnson's simple propositional analysis system is based on pausal units, or breath pauses. A group of eight raters, native English-speaking graduate students majoring in Foreign Language Education in the Department of Educational Studies at The Ohio State University, were asked to read the text and mark the places where they paused during normally paced reading. The raters performed their tasks individually. Each pause constituted a proposition. The acceptability of a pausal unit as a proposition was determined when a majority of the raters marked that portion as a pausal unit.

In this way, the text was listed in the form of propositions. Next, each rater was given a copy of the text listed in the form of propositions, and was asked to give a value to each proposition on a scale of one to four, (four representing the most important proposition, and one representing the least important proposition) in accordance with the importance of the proposition (Appendix G). An
interrater reliability index of .90 was calculated for the scoring instrument. Intrarater reliability index of the instrument was .96.

A Spanish translation of the text was prepared by the researcher, and was verified by two native speakers of Spanish at the Ohio State University (Appendix H). The Spanish version of the text was listed in the form of propositions in a pattern similar to that stated above by a native speaker of Spanish, and corresponding values were assigned to the propositions (Appendix I). This scoring instrument achieved an interrater reliability coefficient 0.885. The subjects' protocols were scored against this list of propositions. Bernhardt (1988) recommends this system for scoring protocols in a foreign language. It has many advantages over Meyer's (1985) propositional analysis system. For instance, it is more efficient, less time-consuming, and easier to develop and score, than Meyer's system. Moreover, it has similar reliability as that of Meyer's system. Before the recall protocol scores were subjected to statistical analyses, the researcher calculated intrarater reliability for the scores awarded to the recall protocols. The Pearson product-moment coefficient achieved a level of .924.
Scoring Procedures Grammaticality Judgment Test:

The written part of the metalinguistic test was scored by counting as correct the sentences that were accurately identified as either grammatical or ungrammatical. In other words, a grammatical sentence identified as grammatical and an ungrammatical sentence identified as ungrammatical was scored as correct. There was no negative scoring, for instance, subjects were not penalized for making incorrect judgments regarding the grammaticality or ungrammaticality of sentences. Reliability coefficient estimates of .75 and .73 were calculated for the grammaticality judgment test data using the K-R 20, and K-R 21 formulas, respectively.

The data from interviews were qualitative in nature. Interview data were transcribed by the researcher. Because the purpose of the interview data was to validate the information provided by the subjects on the written grammaticality judgment test, the data was not scored. The data was used to get insights about the subjects' knowledge about the ungrammaticality of the sentence; ability to identify the ungrammatical part correctly; ability to explain why s/he considered a sentence ungrammatical; and ability to correct ungrammatical sentences. In addition to the above, the information from the interview data was discussed in terms of the metalinguistic awareness of
various grammatical-form classes represented in the test, and interlanguage development.

Data Analysis

The data collected for this research was of two types: quantitative and qualitative. Hence, quantitative and qualitative analyses were performed. The following procedures were used to analyze the data:

Quantitative Analysis

The subjects' scores on the grammaticality judgment test and reading comprehension test constituted the data to be analyzed. Methods of analysis were analysis of variance, and correlation procedures. Two-way analysis of variance, and Pearson Product Moment Correlation analyses were performed on the quantitative data, using Statistical Analytical System (SAS) at The Ohio State University.

Analysis of variance (two-way analyses of variance) was utilized to determine if there were any differences in the mean scores on the grammaticality judgment test and reading comprehension test at different levels of proficiency and instruction. Tukey's post hoc test of significant difference was utilized to identify significant differences among groups' mean scores at levels of instruction and proficiency. Pearson Product Moment Correlation procedures were utilized to determine if there was any relationship between these two variables (metalinguistic awareness and
reading comprehension) at different levels of instruction and proficiency.

The following null hypotheses were tested in this study:

**HO 1:** There was no significant difference among the mean scores on metalinguistic judgment test at the three levels proficiency.

**HO 2:** There was no significant difference among the mean scores on metalinguistic judgment test at the three levels of instruction.

**HO 3:** There was no significant difference among the mean scores on reading comprehension test at the three levels proficiency.

**HO 4:** There was no significant difference among the mean scores on reading comprehension test at the three levels of proficiency.

**HO 5:** There was no significant correlation between the mean scores on reading comprehension and the metalinguistic awareness tests at the three levels of proficiency.

**HO 6:** There was no significant correlation between the mean scores on reading comprehension and metalinguistic awareness tests at the three levels of instruction.

**HO 7:** There was no significant correlation between the scores on metalinguistic awareness and reading comprehension tests.
Qualitative Analysis of Recall Protocols

Subjects' written protocols were qualitatively analyzed. Bernhardt (1985) and Johnston (1983) contend that quantitative methods for scoring protocols are product measures; they cannot fully indicate certain aspects of the comprehension such as interaction of various text-based and learner-based components of comprehension. Therefore, in order to gain better insight into the processes and to explain the nature of the subjects' reading comprehension, the researcher felt that in addition to the quantitative method of scoring recall protocols, a more complete method for qualitatively analyzing of the recall protocols was appropriate and necessary. A random sample of recall protocols (20% of those collected) from each proficiency level of seventh, eighth, and ninth grade was selected for the qualitative analyses. The recalls protocols were analyzed by employing Bernhardt's (1986) constructivist model. This model has been used to analyze protocols written by subjects after reading expository and literary texts (Bernhardt, 1986).

Qualitative Analysis of Data on interviews

The subjects' performance on the grammaticality judgment test in conjunction with interview data was studied to investigate their metalinguistic awareness of five grammatical-form classes represented on the test. Subjects' scores on the
grammaticality judgment test were analyzed to indicate the extent to which they reflect their knowledge of various aspects of metalinguistic awareness (aspects such as, subjects' ability to make judgment about ungrammaticality, provide an explanation of the ungrammaticality, and correct ungrammatical sentences).

Qualitative Analyses of the Relationship between the ability to make Grammaticality Judgment and Reading Comprehension

In order to get insights into the relationship between ESL learners' ability to make judgments about the grammaticality of sentences and reading comprehension, the interview data and recall protocol data were analyzed qualitatively. The purpose of these analyses was to investigate: to what extent the subjects' performance on the five grammatical form-classes was reflected in their direct reconstruction of the text, the recall protocols.

Pilot Study

A pilot study on the metalinguistic test, reading test, and data collection procedures was conducted in the Summer of 1988 using 26 subjects who were a part of the intended population of this study. The main purpose of the pilot study was to evaluate the reliability and practicality of the instruments, and the appropriateness of data collection
procedures. An item analysis was done on the data using an Item Analysis Program prepared by the Center of Measurement and Evaluation of The Ohio State University. On the basis of the results of the item analysis, the test was modified and revised. Items with a low difficulty level, and low discrimination index were replaced with new and better items. Reliability coefficient estimates of .75 and .70 were calculated using the K-R 20, and K-R 21 formulas, respectively.

Three questions that were asked during individual interview sessions, the second part of the metalinguistic test--were constructed by the researcher. Due to the inability of the researcher to pilot test these questions on subjects from the intended population, these questions were tested on a group of nonnative English-speaking students studying in the Department of Education at The Ohio State University.

The main purpose for pilot testing the interview questions was to determine whether or not they were clearly and appropriately presented to subjects. As a result of the pilot test, a few minor changes were made to these questions. Pilot testing of the interview questions also gave the researcher an idea about the approximate time required for each interview.
CHAPTER IV
RESULTS AND DISCUSSION

Introduction

This study was undertaken to investigate the relationship that exists between metalinguistic awareness and reading comprehension in English as a Second Language and to describe metalinguistic awareness and reading comprehension in English among Spanish speaking junior high school students. In order to assess the relationship between metalinguistic awareness and reading comprehension, two variables, instruction and proficiency, were selected. The instruction variable had three levels, seventh, eighth and ninth grade. The second variable, proficiency, also had three levels, beginning, intermediate, and advanced.

Two dependent measures, grammaticality judgment scores and recall protocol scores, were used to assess metalinguistic awareness and reading comprehension, respectively. These dependent variables were subjected to analyses of variance and Pearson Product Moment Correlations. A random sample of the recall protocols and oral interviews (20% of those collected) was analyzed qualitatively.
In this chapter, the subjects' mean scores on the grammaticality judgment test that included sentences pertaining to five grammatical-form classes (past tense, present tense, present perfect tense, passive voice, and subject-verb agreement), and mean scores on the reading comprehension test will be presented first. These descriptive statistics will be followed by the results of the quantitative analyses of data: two-way analysis of variance; Tukey's post hoc test of significant differences for each dependent variable at the different levels of instruction and proficiency; and Pearson Product Moment Correlation Analyses. This report will be followed by a discussion of the results of these quantitative analyses.

In the following section a report on the results and discussion of the qualitative analyses of the interview data pertaining to the grammaticality judgment test will be presented. Subsequently, the results and discussion of the qualitative analyses of the data pertaining to recall protocols will be presented. Finally, a report on the results and discussion of the qualitative analyses concerning the relationship between the subjects' performance on the grammaticality judgement test and the reading comprehension test will be presented.
Table 1 illustrates the means of the grammaticality judgment test scores for the three levels of instruction (the seventh, eighth, and ninth grades) at the beginning, intermediate, and advanced levels of proficiency. Table 1 shows that the mean scores of the seventh grade subjects at the beginning, intermediate, and advanced level of proficiency were 18.8, 21.79, and 26.87, respectively. The
eighth graders at the beginning, intermediate, and advanced level achieved a mean score of 20.2, 21.24, 29.46, respectively. The mean scores of the ninth graders at the beginning, intermediate, and advanced level were 19.63, 23.52, and 27.29, respectively. In other words, there was a consistent increase in the scores on the grammatical judgment test across the three levels of instruction and levels of proficiency. As the levels of instruction and proficiency increased, the subjects' scores on the test also increased.

Data on the grammaticality judgment test provide information regarding the performance of the subjects on the five grammatical-form classes at different levels of instruction and proficiency. The seventh, eighth, and ninth grade subjects' mean scores on five grammatical-form classes are presented in Table 2, Table 3, and Table 4, respectively.
Table 2
Mean Scores on the Grammatical Form–Classes for Grade Seven at Three Levels of Proficiency

<table>
<thead>
<tr>
<th>Grammatical Form Classes</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past Tense</td>
<td>5.84</td>
<td>4.88</td>
<td>6.24</td>
</tr>
<tr>
<td>Present Tense</td>
<td>3.84</td>
<td>4.80</td>
<td>5.76</td>
</tr>
<tr>
<td>Present Perfect</td>
<td>3.20</td>
<td>3.60</td>
<td>5.04</td>
</tr>
<tr>
<td>Passive Voice</td>
<td>4.16</td>
<td>4.72</td>
<td>5.04</td>
</tr>
<tr>
<td>Sub/Verb Agreement</td>
<td>3.92</td>
<td>3.52</td>
<td>4.64</td>
</tr>
</tbody>
</table>

Table 3
Mean Scores on the Grammatical Form–Classes for Grade Eight at Three Levels of Proficiency

<table>
<thead>
<tr>
<th>Grammatical Form Classes</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past Tense</td>
<td>4.40</td>
<td>4.72</td>
<td>6.56</td>
</tr>
<tr>
<td>Present Tense</td>
<td>3.84</td>
<td>4.08</td>
<td>6.16</td>
</tr>
<tr>
<td>Present Perfect</td>
<td>3.60</td>
<td>3.68</td>
<td>5.52</td>
</tr>
<tr>
<td>Passive Voice</td>
<td>3.60</td>
<td>4.64</td>
<td>5.36</td>
</tr>
<tr>
<td>Sub/Verb Agreement</td>
<td>3.44</td>
<td>3.92</td>
<td>5.76</td>
</tr>
</tbody>
</table>
Table 4
Mean Scores on the Grammatical Form-Classes for Grade Nine at Three Levels of Proficiency

<table>
<thead>
<tr>
<th>Grammatical Form Classes</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past Tense</td>
<td>3.76</td>
<td>4.56</td>
<td>6.40</td>
</tr>
<tr>
<td>Present Tense</td>
<td>3.92</td>
<td>4.48</td>
<td>5.60</td>
</tr>
<tr>
<td>Present Perfect</td>
<td>3.52</td>
<td>4.56</td>
<td>4.40</td>
</tr>
<tr>
<td>Passive Voice</td>
<td>4.00</td>
<td>4.72</td>
<td>5.20</td>
</tr>
<tr>
<td>Sub/Verb Agreement</td>
<td>3.92</td>
<td>4.08</td>
<td>5.28</td>
</tr>
</tbody>
</table>

An examination of Table 2 shows that the seventh grade subjects at the beginning proficiency level scored lowest on the present perfect tense (3.2) and highest on passive voice (4.16). Both the intermediate and advanced level subjects scored lowest on subject-verb agreement (3.52, and 4.64, respectively); and they scored highest on past tense (4.88 and 6.24, respectively).

Mean scores of the eighth grade subjects on different grammatical form classes are listed in Table 3. The eighth grade subjects at the beginning proficiency level scored lowest on subject-verb agreement (3.44) and highest on past tense (4.40). Both the intermediate and advanced level subjects scored highest on past tense (4.72 and 6.56,
respectively), but they scored lowest on present perfect (3.68), and passive voice (5.36), respectively.

The ninth grade subjects' mean scores on different grammatical-form classes are listed in Table 4. The ninth grade subjects at the beginning proficiency level scored lowest on present perfect (3.52) and highest on passive voice (4.0); and both the intermediate and advanced level subjects scored highest on past tense (4.56, and 6.40, respectively), and lowest on subject verb agreement and present perfect (4.08, and 4.4, respectively).

Subjects' performance on accurately identifying grammatical and ungrammatical sentences was also studied. Table 5 shows that the subjects across all levels of instruction and proficiency scored higher on accurately identifying grammatically correct sentences than accurately identifying grammatically incorrect sentences. The seventh grade subjects at the beginning, intermediate, and advanced levels of proficiency, for example, accurately identified 55%, 69%, and 81%, respectively of the grammatically correct sentences; and they accurately identified 42%, 45%, and 58%, respectively of the grammatically incorrect sentences. The eighth grade subjects at the beginning, intermediate, and advanced levels of proficiency accurately identified 56%, 70%, and 85% of the grammatically correct sentences, and 46%, 42%, and 66% of the grammatically incorrect sentences. A similar pattern (a higher
percentage for accurately identifying grammatically correct sentences and lower percentage for identifying grammatically incorrect sentences) was observed among the ninth grade subjects across all three levels of proficiency. The ninth grade subjects at the beginning, intermediate, and advanced levels of proficiency accurately identified 63%, 75%, 79%, respectively, of the grammatically correct sentences, and 39%, 48%, and 60%, respectively, of the grammatically incorrect sentences.

Table 5
Percentage of the sentences accurately identified as Grammatical and Ungrammatical on the Grammaticality Judgment Test

<table>
<thead>
<tr>
<th>Grade 7</th>
<th>Beginning Level</th>
<th>Intermediate Level</th>
<th>Advanced Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammatical</td>
<td>55</td>
<td>69</td>
<td>81</td>
</tr>
<tr>
<td>Ungrammatical</td>
<td>42</td>
<td>45</td>
<td>58</td>
</tr>
<tr>
<td>Grade 8</td>
<td>Beginning Level</td>
<td>Intermediate Level</td>
<td>Advanced Level</td>
</tr>
<tr>
<td>Grammatical</td>
<td>56</td>
<td>70</td>
<td>85</td>
</tr>
<tr>
<td>Ungrammatical</td>
<td>46</td>
<td>42</td>
<td>66</td>
</tr>
<tr>
<td>Grade 9</td>
<td>Grammatical</td>
<td>Ungrammatical</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>75</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>48</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>
Results of the Reading Comprehension Test

Table 6 illustrates the mean scores on the reading comprehension test for three levels of instruction (the seventh, eighth, and ninth grades) at the beginning, intermediate, and advanced levels of proficiency. The seventh graders at the beginning, intermediate, and advanced levels of proficiency achieved a mean score of 29.53, 48.45, and 62.6, respectively. The eighth graders achieved a mean score of 36.53 at the beginning level; 46.8 at the intermediate level; and 73.61 at the advanced level of proficiency. The ninth graders achieved a mean score of 55.83 at the beginning level; 47.57 at the intermediate level; and 78.51 at the advanced level of proficiency. In other words, there was a consistent increase in reading comprehension scores across the three levels of instruction and the three levels of proficiency.
### Table 6
Mean Scores on the Reading Comprehension Test

<table>
<thead>
<tr>
<th>Proficiency Level</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning</td>
<td>26</td>
<td>29.53</td>
<td>12.88</td>
</tr>
<tr>
<td>Grade 7 Intermediate</td>
<td>33</td>
<td>48.45</td>
<td>22.93</td>
</tr>
<tr>
<td>Advanced</td>
<td>30</td>
<td>62.60</td>
<td>22.93</td>
</tr>
<tr>
<td>Beginning</td>
<td>15</td>
<td>36.53</td>
<td>14.30</td>
</tr>
<tr>
<td>Grade 8 Intermediate</td>
<td>15</td>
<td>46.80</td>
<td>27.21</td>
</tr>
<tr>
<td>Advanced</td>
<td>31</td>
<td>73.61</td>
<td>27.42</td>
</tr>
<tr>
<td>Beginning</td>
<td>18</td>
<td>55.83</td>
<td>21.31</td>
</tr>
<tr>
<td>Grade 9 Intermediate</td>
<td>19</td>
<td>47.57</td>
<td>26.57</td>
</tr>
<tr>
<td>Advanced</td>
<td>29</td>
<td>78.51</td>
<td>25.82</td>
</tr>
</tbody>
</table>

Maximum possible score = 184
Results of the Two-Way Analysis of Variance

H0 1: There will be no significant difference among the mean scores on the grammaticality judgement test at the three levels of proficiency. Table 7 shows that the two-way analyses of variance revealed significant differences among the mean scores for groups (instruction and proficiency). These differences among mean scores on the metalinguistic test for this sample are significant, \( F (8, 208) = 24.77, p < .0001 \). The main effect for proficiency was also found to be highly significant, \( F, (2, 208) = 87.91, p < .0001 \).

The two-way analyses of variance also revealed that any differences among the means scores at different levels of proficiency and instruction were not a result of an interaction between level of proficiency and instruction. In other words, there was no significant interaction between the levels of instruction and proficiency.

Tukey's post hoc test of significant differences (Table 8) revealed that the mean scores at the beginning, intermediate and advanced levels of proficiency are significantly different from each other. In other words, differences among the scores at the beginning and intermediate levels, the intermediate and advanced levels, and the beginning and advanced levels of proficiency are statistically significant. The results of the analysis of variance (Table 7) led to a rejection of the null
hypothesis of no significant difference in means scores at different levels of proficiency, $F(2, 208) = 87.91, p < .0001$.

Table 7
Two-Way ANOVA of Scores on the Grammaticality Judgment Test by Proficiency and Instruction

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>PR &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inst.</td>
<td>2</td>
<td>218.077</td>
<td>109.03</td>
<td>6.78</td>
<td>0.0014*</td>
</tr>
<tr>
<td>Prof.</td>
<td>2</td>
<td>2828.629</td>
<td>1414.31</td>
<td>87.91</td>
<td>0.0001*</td>
</tr>
<tr>
<td>InstxProf</td>
<td>4</td>
<td>141.934</td>
<td>35.48</td>
<td>2.21</td>
<td>0.0696</td>
</tr>
<tr>
<td>Error</td>
<td>208</td>
<td>3346.418</td>
<td>16.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>216</td>
<td>6535.059</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 8
Results of Tukey's Post Hoc Analysis of Significant Differences at Levels of Proficiency

<table>
<thead>
<tr>
<th>N</th>
<th>Proficiency Levels</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>Beginning</td>
<td>19.31c</td>
</tr>
<tr>
<td>67</td>
<td>Intermediate</td>
<td>22.02b</td>
</tr>
<tr>
<td>90</td>
<td>Advanced</td>
<td>27.97a</td>
</tr>
</tbody>
</table>

Note: Means with the same letter are not significantly different.

HO 2: There is no significant difference among the scores on the grammaticality judgment test at different levels of instruction. Table 7 shows that the two-way analysis of variance revealed significant main effects for the instruction variable (the seventh, eighth, and ninth grade), $F (2, 208) = 6.78$, $p < .0014$. These results demonstrate that the level of instruction contributes to the difference in the mean scores of these groups. Interaction between instruction and proficiency, however, was not found to be significant. The results of the analysis of variance lead to a rejection of the null hypothesis of no significant difference in mean scores on
the metalinguistic judgment test at different levels of instruction.

Tukey's post hoc test of significant differences (Table 9) demonstrates that the mean scores for the seventh grade are significantly different from the mean scores at eighth and ninth grades, but the mean scores for the eighth and ninth grade are not significantly different. In other words, the differences in the mean scores between the seventh grade and eighth grade, and seventh and ninth grades were statistically significant. The differences in the mean scores between eighth and ninth grades were not significant.

<table>
<thead>
<tr>
<th>N</th>
<th>Instruction Levels</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>7</td>
<td>22.57b</td>
</tr>
<tr>
<td>61</td>
<td>8</td>
<td>24.83a</td>
</tr>
<tr>
<td>66</td>
<td>9</td>
<td>24.33a</td>
</tr>
</tbody>
</table>

Note: Means with the same letter are not significantly different.
There will be no significant difference among the mean scores at different levels of proficiency on reading comprehension. A two-way analysis of variance (Table 10) revealed that there were significant differences among the mean scores on recall protocols at different levels of proficiency (beginning, intermediate and advanced), $F(8, 208) = 12.92, p < .0001$. In other words, differences in the mean scores on recall protocols were due to the level of proficiency.

The results of the two-way analysis of variance (Table 10) also revealed highly significant main effects for proficiency, $F(2, 208) = 37.24, p < 0.0001$. Results of Tukey's post hoc test of significant differences (Table 11) indicate that the mean scores at the beginning, intermediate, and advanced levels of proficiency are significantly different from each other. In other words, the differences in the mean scores at the three levels of proficiency are statistically significant. The results of analysis of variance led to a rejection of the null hypothesis of no significant difference among the mean scores on reading comprehension at different levels of proficiency.
Table 10
Two-Way ANOVA of Mean Scores on Recall Protocols

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>PR &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction</td>
<td>2</td>
<td>10447.51</td>
<td>5223.25</td>
<td>9.78</td>
<td>0.0001*</td>
</tr>
<tr>
<td>Proficiency</td>
<td>2</td>
<td>39792.75</td>
<td>19896.37</td>
<td>37.24</td>
<td>0.0001*</td>
</tr>
<tr>
<td>Inst X Prof</td>
<td>4</td>
<td>5006.30</td>
<td>1251.60</td>
<td>2.34</td>
<td>0.0561</td>
</tr>
<tr>
<td>Error</td>
<td>208</td>
<td>111141.09</td>
<td>534.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>216</td>
<td>166387.66</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11
Results of Tukey's Post Hoc Analyses of Significant Differences at Levels of Proficiency

<table>
<thead>
<tr>
<th>N</th>
<th>Proficiency Level</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>Beginning</td>
<td>38.96c</td>
</tr>
<tr>
<td>67</td>
<td>Intermediate</td>
<td>47.83b</td>
</tr>
<tr>
<td>90</td>
<td>Advanced</td>
<td>71.52a</td>
</tr>
</tbody>
</table>

Note: Means with the same letter are not significantly different.

HO 4: There is no significant difference among the mean scores on reading comprehension at different levels of
HO 4: There is no significant difference among the mean scores on reading comprehension at different levels of instruction. Highly significant main effects for instruction were reported (see Table 10), $F, (2, 208) = 9.78, p < .0001$. In other words, the levels of instruction (the seventh, eighth, and ninth grades) contribute to the differences among the mean scores on the reading comprehension test as measured by the scores on the recall protocols. Furthermore, the analysis of variance revealed that the interaction between the levels of proficiency and the levels of instruction was not significant, $F, (4, 208) = 2.34, p < .0561$. In other words, the interaction between levels of proficiency and instruction was not significant in reading comprehension.

The results of Tukey's post hoc test of significant differences illustrated in Table 12 indicate that differences among the mean scores for the seventh and eighth grades; and the seventh and ninth grades were found to be statistically significant; however, the differences between the mean scores for the eighth and ninth grades were not found to be statistically significant. These results led to a rejection of the null hypothesis of no significant difference among the mean scores at different levels of instruction.
Table 12
Results of Tukey's Post Hoc Analyses of Significant Differences at Levels of Instruction

<table>
<thead>
<tr>
<th>N</th>
<th>Instruction Levels</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>7</td>
<td>47.35b</td>
</tr>
<tr>
<td>61</td>
<td>8</td>
<td>57.90a</td>
</tr>
<tr>
<td>66</td>
<td>9</td>
<td>63.42a</td>
</tr>
</tbody>
</table>

Note: Means with the same letter are not significantly different.

Results of Pearson Product Moment Correlation Analyses

HO 5: There will be no correlation between mean scores on the grammaticality judgment test and on the reading comprehension test at different levels of instruction. The Pearson Product Moment Correlation coefficients reported in Table 13 indicate the correlation between the mean scores on the grammaticality judgment test and on the reading comprehension test (as measured by the scores on the recall protocols) at different levels of instruction. Correlation coefficients for these variables were $r = .357, p < .0003$ for the seventh grade; and $r = .447, p < .0003$ for grade eight. The correlation between the mean scores on the
recall protocols and the grammaticality judgment test for grade nine was not significant, $r = .132$, $p < .2892$. These results led to a rejection of the null hypothesis of no correlation between the mean scores on the grammaticality judgment test and the reading comprehension test at different levels of instruction.

Table 13
Pearson Product Correlation Coefficients between Means on the Recall Protocols and the Grammaticality Judgment Test at Levels of Instruction

<table>
<thead>
<tr>
<th>Instruction Levels</th>
<th>N</th>
<th>Correlation Coefficients</th>
<th>Level of Significance</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 7</td>
<td>90</td>
<td>.357</td>
<td>.0003*</td>
<td>.127</td>
</tr>
<tr>
<td>Grade 8</td>
<td>61</td>
<td>.447</td>
<td>.0003*</td>
<td>.199</td>
</tr>
<tr>
<td>Grade 9</td>
<td>66</td>
<td>.132</td>
<td>.2892</td>
<td>.017</td>
</tr>
</tbody>
</table>
HO 6: **There will be no correlation between mean scores on the grammaticality judgment test and on the reading comprehension test at different levels of proficiency.**

Table 14 shows the correlation coefficients for the scores on the grammaticality judgment test and on the recall protocols at different levels of proficiency. Correlations between these variables for the beginning level of proficiency (r = -.013, p < .9207), for the intermediate level (r = .030 p < .8037), and for the advanced level (r^2 = -.002, p < .9827) are reported in Table 14.

Although the correlation coefficients between the mean scores on the grammaticality judgment test and the recall protocols reported in Table 14 are negative, these correlations are not significant. Therefore, on the basis of results reported in Table 14, the null hypothesis of no relationship between reading comprehension and metalinguistic awareness at different levels of proficiency was retained.
Table 14
Pearson Product Moment Correlation Coefficients between the Mean Scores on the Grammaticality Judgment Test and the Recall Protocols at the Levels of Proficiency

<table>
<thead>
<tr>
<th>Proficiency Levels</th>
<th>N</th>
<th>Correlation Coefficients</th>
<th>Level of Significance</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning</td>
<td>60</td>
<td>-.013</td>
<td>.9207</td>
<td>.000</td>
</tr>
<tr>
<td>Intermediate</td>
<td>67</td>
<td>.030</td>
<td>.8037</td>
<td>.000</td>
</tr>
<tr>
<td>Advanced</td>
<td>90</td>
<td>-.002</td>
<td>.9827</td>
<td>.000</td>
</tr>
</tbody>
</table>

HO 7: There will be no correlation between metalinguistic awareness and reading comprehension. Results reported in Table 15 indicate that when the levels of instruction and proficiency are not taken into consideration, that is when all of the data are collapsed, there is a correlation between the mean scores on the grammaticality judgment test and the reading comprehension test. This correlation coefficient is $r = .35, p < .0001$. These results led to a rejection of the null hypothesis of no relationship between reading comprehension and metalinguistic awareness.
Table 15
Pearson Product Moment Correlation Coefficients
Between the Mean Scores on the Recall Protocols
and the Grammaticality Judgment Test

<table>
<thead>
<tr>
<th>Grammaticality Judgment Test</th>
<th>Recall Protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammaticality Judgment Test</td>
<td>0.35*</td>
</tr>
<tr>
<td>Recall Protocols</td>
<td>0.35*</td>
</tr>
</tbody>
</table>

N=217

Significant at p < .0001

$R^2 = .122$
Discussion of the Quantitative Analyses

The results of the grammaticality judgment test presented in Table 1 demonstrate that within each level of instruction the groups at a higher level of proficiency scored consistently higher than the groups at a lower level of proficiency. The seventh graders at the intermediate level of proficiency, for instance, scored higher than those at the beginning level of proficiency; and the subjects at the advanced level of proficiency scored higher than those at the intermediate level of proficiency.

Furthermore, the results presented in Table 1 show that within each level of proficiency the groups at a higher level of instruction did not score consistently higher than the groups at a lower level of instruction. The eighth graders at the beginning level of proficiency, for instance, scored higher than the seventh graders at the beginning level of proficiency; but the ninth graders at the beginning level of proficiency did not score higher than the eighth graders.

Similarly, the eighth graders at the intermediate level of proficiency scored higher than the seventh graders at the beginning level of proficiency; but the ninth graders at the intermediate level of proficiency did not score higher than the eighth graders. In other words, within each level of proficiency a higher level of instruction did not ensure a consistent increase in the subjects' scores on
the grammaticality judgment test. A graphic representation of the groups' mean scores on grammaticality judgment test, is presented in Figure 2.
Figure 2: Main Effects of Instruction Level and Proficiency Level as measured by the Grammaticality Judgment Test
The seventh, eighth, and ninth graders' scores on the five grammatical-form classes (past tense, present tense, present perfect tense, passive voice, and subject-verb agreement), included on the grammaticality judgment test, are presented in Table 2, Table 3, and Table 4. It is important to note here that all groups, with exception of the ninth graders at the beginning proficiency level, scored highest on identifying the grammaticality of the sentences pertaining to the past tense grammatical-form class. The subjects' higher scores on this grammatical-form class (See Table 2, Table 3, and Table 4) suggest that making accurate judgments about the grammaticality of sentences in the past tense was comparatively easier for most groups.

The grammatical-form classes on which the subjects scored the lowest scores include present perfect tense, passive voice, subject-verb agreement. Four groups (the seventh graders at the beginning level; the eighth graders at the intermediate level; and the ninth grade at the beginning, and advanced levels of proficiency) scored the lowest on identifying the grammaticality of sentences pertaining to present perfect tense. Four groups (the seventh graders at the intermediate, and advanced levels; eighth graders at the beginning level; and the ninth graders at the intermediate level of proficiency) scored lowest on accurately identifying the sentences with errors
subject-verb agreement. The subjects' lower scores on the sentences pertaining to the present perfect and subject-verb agreement grammatical-form classes suggest that making correct judgments about the grammaticality of the sentences pertaining to these grammatical-form classes was difficult for them.

The results reported in Table 2, Table 3, and Table 4 suggest that Spanish-speaking ESL learners, irrespective of their levels of proficiency and instruction, acquired knowledge of the English syntax and developed an ability to make judgments about the grammaticality of sentences in a strikingly similar order. These results lend support to the results reported by Dulay and Burt (1973, 1974) regarding the natural order in which L2 learners acquire certain syntactic and morphological structures. On the basis of results of their study Dulay and Burt (1973, 1974) reported that Chinese and Spanish ESL learners at different proficiency levels acquired certain syntactic and morphological structures in a similar order.

The groups' lower scores on identifying ungrammatical sentences and higher scores on identifying grammatical sentences across all three levels of proficiency instruction suggest that it is comparatively easier to make accurate judgments about the grammaticality of grammatical sentences than to make accurate judgments about the grammaticality of ungrammatical sentences. These results
support the findings reported by Bialystok (1979). Bialystok (1979) reported that the subjects of her study scored higher on identifying grammatically correct sentences and suggested that correct sentences are identified more easily than those with errors.

A careful examination of the results reported in Table 5 indicates that within each level of instruction the subjects at a higher level of proficiency performed consistently better than the less proficient subjects on accurately identifying grammatical as well as ungrammatical sentences. These findings suggest that proficiency in L2 is an important factor in the development of an ability to make accurate judgments about the grammaticality or ungrammaticality of sentences in L2.

The results of the reading comprehension test (Table 6) demonstrate that within each level of instruction the groups at a higher level of proficiency scored consistently higher than the groups at a lower level of proficiency. The seventh graders at the intermediate level of proficiency, for instance, scored higher than those at the beginning level of proficiency; and the subjects at the advanced level of proficiency scored higher than those at the intermediate level of proficiency. In a similar way, the eighth graders at the intermediate level of proficiency scored higher than those at the beginning level of proficiency; and the subjects at the advanced level of
proficiency scored higher than those at the intermediate level. In contrast to seventh and eighth graders, the ninth graders at the beginning level of proficiency scored higher than those at the intermediate level of proficiency; and the subjects at the advanced level of proficiency scored higher than those at the beginning and intermediate levels of proficiency.

Furthermore, the results presented in Table 6 indicate that, the beginning, intermediate and advanced proficiency level subjects across all the three levels of instruction (the seventh, eighth and ninth grades) scored consistently higher than those in the seventh grade. The eighth graders at the beginning, and advanced levels of proficiency, for instance, scored higher than the seventh graders at beginning, and advanced levels of proficiency; and the ninth graders at the beginning intermediate, and advanced levels of proficiency scored higher than the eighth graders at the similar levels of proficiency. The seventh graders at the intermediate level of proficiency, however, scored slightly higher than the eighth graders and ninth graders at the intermediate level of proficiency. In other words, with the exception of the intermediate proficiency level, there was a consistent increase in reading comprehension scores across all the levels of instruction and proficiency. Figure 3 presents a graphic representation of the groups' mean scores for the reading comprehension test.
Figure 3: Main Effects of Instruction Level and Proficiency Level as measured by the Reading Comprehension Test.
Results of the two-way analysis of variance presented in Table 7 and Table 10 indicated that there were significant differences among the mean scores on the grammaticality judgment test and the reading comprehension test for all three groups. Furthermore, it was indicated that the differences among the mean scores on the grammaticality judgment test and the reading comprehension test were due to the significant main effects for instruction and proficiency. The two-way analysis of variance, however, did not reveal any significant interaction between instruction and proficiency. In other words, the results of the two-way analysis of variance suggested that any differences in the mean scores on the grammaticality judgment test and the reading comprehension test were due to significant main effects for instruction and proficiency and were not due to an interaction between the levels of proficiency and instruction. Significant main effects for instruction and proficiency suggest that the subjects' level of cognitive maturity and level of language knowledge (proficiency) are important factors that contribute to the observed differences in the subjects' mean scores on the grammaticality judgment test and the reading comprehension test.

Tukey's post hoc tests of significant differences (Tables 8 and 9) were done to investigate the main effects
of instruction and proficiency. In other words, the purpose of the post hoc tests was to investigate the significant differences in the mean scores at all three levels of proficiency and instruction. The differences in the mean scores on the grammaticality judgment test among the beginning, intermediate, and advanced levels of proficiency were found to be highly significant. At the levels of instruction, the differences in the mean scores between the seventh and eighth grade were found to be highly significant. The differences in the mean scores between the eighth and ninth grades, however, were not found to be significant.

Consequently, in terms of grammaticality judgment, the seventh graders are distinct from the eighth and the ninth graders. The eighth and ninth graders, on the other hand, are less distinguishable from one another. These results, therefore, suggest that in order to make fine distinctions between the metalinguistic awareness of the eighth and ninth grade students, other measures of metalinguistic awareness (i.e., the tasks that require students to identify the ungrammatical part of the sentence and to make an ungrammatical sentences grammatical) are required.

Although the results of the two-way analysis of variance for the scores on the recall protocols (Table 10) did not reveal any significant interaction between the levels of instruction and proficiency, it is important to...
note that a slight ordinal interaction does exist between these variables (See Figure 3). A graphic presentation of the groups' means in Figure 3 demonstrates that the subjects in the ninth grade at the beginning level of proficiency scored slightly higher than the subjects at the intermediate level of proficiency in the same grade. Similarly, the subjects in the seventh grade at the intermediate level of proficiency scored slightly higher than the subjects in the eighth grade at the intermediate level.

Tukey's post hoc test of significant differences (see Table 11) among the mean scores on the reading comprehension test indicated that the scores on the three levels of proficiency were significantly different from one another. The mean scores for the seventh and eighth grades were significantly different from each other. Nevertheless, the mean scores for the eighth and ninth grades were not found to be significantly different (See Table 12).

Because the subjects' placement in a particular proficiency group was on the basis of their performance on a placement test given at the beginning of the school year, the failure of the two-way analysis of variance to detect a significant interaction between the variables of instruction and proficiency was anticipated. In other words, the subjects' scores on the reading comprehension
test and the grammaticality judgment test were expected to increase proportionately with the instruction and the proficiency levels. Lack of an interaction between the levels of instruction and the levels of proficiency for subjects' scores on the grammaticality judgment test and the reading comprehension test reported in Tables 7 and 10 suggests that the subjects' placement at different levels of proficiency was quite appropriate.

The results of the Pearson Product Moment Correlation Analysis (Table 13) revealed a low positive correlation between the scores on the grammaticality judgment test and the reading comprehension test at all levels of instruction. The correlation coefficients of the means for the seventh, eight and ninth graders were $r = .357, p < .0003$ and $r = .447, p < .0003$, and $r = .132, p < .2892$, respectively. Indices of the coefficients of determination obtained by squaring the correlation coefficients indicated that at the three levels of instruction (the seventh, eighth, and ninth grades) only 12.7%, 19.36%, and 1.74%, respectively of the variance in the scores on the reading comprehension test was explained by the variance in the scores on the grammaticality judgment test.

Furthermore, the results of the Pearson Product Moment Correlation Analysis (Table 14) revealed a low negative correlation between the mean scores on the grammaticality judgment test and the reading comprehension test at all the
levels of proficiency. The indices of the coefficients of determination indicated that at the three levels of proficiency (the beginning, intermediate and advanced) almost 0% of the variance in the scores on the reading comprehension test was explained by the variance in the scores on the grammaticality judgment test. In other words, at all levels of proficiency there is no correlation between the scores on the grammaticality judgment test and the scores on the reading comprehension test. These results suggest that at all levels of proficiency factors other than the subjects' ability to make judgments about the grammaticality of sentences may be responsible for differences in the subjects' scores on the reading comprehension test.

Results of another correlation analysis, when all of the data were collapsed, revealed a low correlation ($r = .35, p < .0001$) between the mean scores on the grammaticality judgment test and the reading comprehension test (Table 15). The indices of the coefficients of determination revealed that only 12% of the variance in the subjects' scores on the reading comprehension test were associated with the variance in their scores on the grammaticality judgment test.

In sum, the results of the three correlation analyses (at the levels of instruction, proficiency, and when all the data were collapsed) indicated either a low, or a low
negative, or no correlation between the means on the grammaticality judgment test and the means on the reading comprehension test. Succinctly, these results suggest that L2 learners' ability to make judgments about the grammaticality of sentences does not make a significant difference in their reading comprehension abilities. Moreover, these results strongly suggest that there must be other factors that are responsible for the differences among the subjects' scores on the reading comprehension test.

The accuracy of any prediction depends on the degree of the relationship between the variables being investigated, that is, the strength of the correlation between them. In the present study a correlation of .35 between the scores on the grammaticality judgment test and reading the comprehension test is not strong enough to be used to make any reliable predictions. In other words, results of a regression analysis that is based on a low correlation, such as .35, would not have a strong predictability. In the context of the present study, therefore, a low correlation between the scores on the grammaticality judgment test and the reading comprehension test did not warrant further analyses. No regression analyses on these data, therefore, were done.
Results of the Qualitative Analyses

In this section the results of the qualitative analyses of the data will be presented. For the purpose of this study a random sample, which consisted of 20% of the interview data and 20% of the recall protocols from each level of proficiency and each level of instruction, was selected for qualitative analyses. In addition, the purpose of the interviews was to validate the information provided by the subjects on the written part of the grammaticality judgment test. Sample interviews used for qualitative analyses are listed in Appendix J. The results of the qualitative analyses of the interview data as they relate to the subjects' performance on the five grammatical-form classes included on the grammaticality judgment test for the seventh, eighth, and ninth grades will be presented first. Subsequently, the results of the analyses of the subjects' performance on the reading comprehension test, as revealed by the qualitative analyses of the recall protocols will be discussed. Sample recall protocols used for the qualitative analyses are listed in Appendix K. Finally, a report on the results of the qualitative analyses of the relationship between the subjects' ability to make grammaticality judgments and reading comprehension will be presented. Sample data syntheses for qualitative analyses are displayed in Tables Appendix L.
The Results of the Analyses of the Interview Data

Grade Seven

In general, the subjects in the seventh grade at all levels of proficiency demonstrated their ability to identify the ungrammatical part in the sentences they had identified as ungrammatical. The subjects demonstrated that they had the abilities to explain the ungrammaticality, and to correct ungrammatical sentences pertaining to the past tense. Although many of the subjects at the beginning proficiency level could identify the ungrammatical part of a sentence, and could make the sentence grammatical, they lacked the ability to provide an explanation for the ungrammaticality of the sentence.

Subjects at the beginning level had problems not only identifying the ungrammatical part of the sentences pertaining to the present perfect and passive voice grammatical-form classes, they also had problems correcting the ungrammatical part, and providing an explanation for the ungrammaticality of the sentences pertaining to these grammatical-form classes. They did have an implicit knowledge about the ungrammaticality of the sentences, but confused the present perfect tense with the past tense. For example, one of the subjects at the beginning level of proficiency, who identified correctly the ungrammatical part in the sentence "The trash was threw all over...," neither knew how to make it grammatical nor could explain
why that particular word was ungrammatical (See Sample Interviews, Appendix J).

Furthermore, when asked why he/she thought it was ungrammatical, the subject's response was "I do not know the rule, or why it is ungrammatical, but it does not sound correct (No se el reglamento, o porque esta oracion es incorrecta, pero no suena bien.) Although very often the subjects at the intermediate and advanced proficiency level had an implicit knowledge about ungrammaticality pertaining to the present perfect tense, the passive voice, and they could correct the ungrammatical sentence; they, generally, failed to provide an explanation regarding why they thought the sentence was ungrammatical.

The interview data revealed that in many instances the seventh graders inaccurately identified grammatical sentences as ungrammatical, because they could not understand the idiomatic expressions, such as "break into the house," and the vocabulary, such as "homesick." For instance, one of the subjects commented "No se que es homesick. (I do not know what homesick is.)", while another subject commented, "No entiendo, porque los ladrones van a romper la casa? Ellos roban las cosas. (I don't understand why thieves will break the house. They steal things)." Furthermore, in several instances, when the semantics of a sentence did not match the subjects' world knowledge, they identified even a grammatical sentence as ungrammatical.
One of the subjects, for example, who marked a grammatically correct sentence that referred to rain in summer as ungrammatical, commented that the sentence is incorrect because "Here it does not rain in summer. (Aqui no se llueve en el verano.)"

**Grade Eight**

Qualitative analyses of the data revealed that across all three levels of proficiency the subjects in the eighth grade, like those in the seventh grade, not only identified accurately the ungrammatical sentences as ungrammatical, but they also identified several grammatical sentences as ungrammatical. Although the subjects at the beginning and intermediate levels had implicit knowledge about the ungrammaticality of the sentences in general, they frequently confused the present perfect with the past tense. As a result, they had problems identifying the ungrammatical part; correcting the sentences; and providing an explanation for the ungrammaticality of sentences pertaining to the present perfect and passive voice. One of the subjects, for example, in order to correct an ungrammatical sentence, such as "Have you ever visit Canada?" that required the use of present perfect tense, changed the sentence into past tense "Did you ever visit Canada?" This indicated that this particular subject knew
how to arrive at some kind of meaning by manipulating the syntax.

The analyses also revealed that the eighth graders at the advanced proficiency level had a better understanding of the grammaticality of the sentences pertaining to passive voice. In addition to identifying the ungrammatical sentences in the passive voice, these subjects could provide the correct forms for them; but they could neither state the grammatical rule violated in the sentence nor provide any explanation for the ungrammaticality of the sentence. Some of the subjects, for example, could identify the ungrammatical part "broke" in the sentence, "The house was broke into by the thieves," and correct it by supplying the correct form "broken;" but they failed to explain why they thought the sentence was ungrammatical. Some of the eighth grade subjects in the advanced proficiency level, however, in an effort to explain ungrammaticality, were able to provide some kind of explanation for the ungrammaticality of the sentences, though their explanation did not match the rules of English grammar.

Grade Nine

Ninth grade subjects in the beginning levels of proficiency, tended to find it difficult to articulate an explanation for the ungrammaticality of the sentences.
Beginning proficiency level subjects, nonetheless, could accurately identify ungrammatical sentences and make appropriate corrections to make the sentences grammatical; but in many instances they could not explain why they thought a sentence was ungrammatical. In most cases, as in the case of other groups, their answers consisted of the correct form of the word. The advanced proficiency level students, however, could provide an acceptable explanation for the ungrammaticality of the sentences they had identified as ungrammatical.

Subjects at the beginning and intermediate levels of proficiency had problems with the use of the third person singular marker "s" and the plural marker "s," and with subject-verb agreement. One of the subjects at the intermediate level, for example, identified the sentence, "Carlos visit his grandparents every weekend," as ungrammatical, correctly identified the ungrammatical form, and supplied the appropriate correction; but he stated that the sentence was ungrammatical because the word "grandparents" is a noun in plural number, therefore, the verb "visit" should have an "s" suffix. This explanation for why he thought this sentence was ungrammatical does not agree with the rules of English grammar. Similar explanations for the ungrammaticality of the sentence, "One of the children play by himself," were provided by seventh and eighth grade subjects at different levels of
proficiency. One subject, for example, claimed that the verb form "play" was ungrammatical because the word "children" is a plural noun, therefore, the verb form "play" should have an "s" suffix. These responses indicated that many subjects, irrespective of their levels of instruction or proficiency, had problems with subject-verb agreement pertaining to present tense.

Discussion

An investigation of the interview data revealed important information about the metalinguistic awareness of the subjects. The data revealed that across all the levels of instruction and proficiency the subjects not only accurately identified ungrammatical sentences as ungrammatical, but they also identified several grammatical sentences as ungrammatical. The analyses of the interview data revealed that the subjects' decision to judge a sentence as ungrammatical was influenced by any one of the following reasons. These reasons were: (a) the sentence did not sound right to them; (b) they had knowledge of why the sentence was ungrammatical; (c) they were unable to comprehend the sentence either because of its difficult vocabulary or syntax; and (d) there was a mismatch between the semantics of a sentence and the subjects' background knowledge.
Examination of the data on the responses to the question, "Can you identify the part that you think is ungrammatical in this sentence?" revealed subjects' overall metalinguistic awareness. Many seventh, eighth, and ninth graders at the beginning level of proficiency, who accurately identified the ungrammatical sentences as ungrammatical, demonstrated their abilities to identify the ungrammatical parts in the sentences. In many instances, when students were asked to identify the ungrammatical parts of grammatical sentences that they had erroneously identified as ungrammatical, they commented that they realized that they were wrong in identifying a grammatical sentence as ungrammatical.

For every sentence identified as ungrammatical, irrespective of its grammaticality, the subjects' responses to the question, "Why did you think this sentence was ungrammatical?" could always be characterized in one of the following ways: (a) an idiosyncratic explanation; (b) an inability to provide an explanation for ungrammaticality; (c) an acceptable explanation for the ungrammatical part of the sentence; and (d) a mismatch between the subjects' explanations and the rules of English grammar. Usually, the explanations characterized by (a), (b), and (c) were followed by an inability on the part of subjects to provide the grammatically correct version of the sentence.
The advanced level subjects, who identified ungrammatical sentences as ungrammatical, also demonstrated their ability to provide an explanation for the ungrammaticality and to make the sentence grammatical. Often the advanced level students could provide a somewhat acceptable explanation and a correct version of the sentence. Some subjects, however, could not verbalize the grammatical rule violated in the sentence. Their frequent response was that they did not know the grammatical rule, and that they had identified a particular sentence as ungrammatical because it did not sound right/correct to them. This type of response was common among the seventh, eighth, and ninth graders at the beginning and intermediate levels of proficiency.

Reber (1976), Reber and Allen (1978), and Reber and Lewis (1977) reported similar results in a series of studies in which subjects could not verbalize the rule system that influenced their judgment about the grammaticality of a string of letters. In terms of Bialystok's framework (1985) these subjects were using implicit knowledge, but they lacked the ability to either explicitly or implicitly recognize the part of the sentence that was ungrammatical. In other cases, although they could not explain why a sentence was ungrammatical, they could still provide some grammatical version of the sentence in question.
The developmental pattern for metalinguistic abilities among L2 learners of English as revealed by an examination of their interview data indicates four progressive stages: (a) an inability to identify ungrammatical sentences; (b) an ability to identify ungrammatical sentences; (c) an ability to identify and correct errors; and (d) an ability to verbalize grammatical rules. A similar pattern in the development of metalinguistic abilities has been reported by Bialystok (1982), Gass (1983), and Sorrace (1985) in their studies on the development of learners' intuitions. These researchers found that as L2 learners achieve proficiency, the learners progress from a "Gestalt-like" feeling for grammaticality to a more analytical ability to correct specific errors in ungrammatical sentences.

Bialystok (1979) reported that grammaticality judgments are made initially on an intuitive basis, whereas an ability to identify and correct errors and an ability to verbalize grammatical rules require explicit knowledge of the relevant structures of the language.

An examination of the analyses of interview data revealed that for most subjects the hardest part of the interview sessions was the articulation of the grammatical rule that had been violated in an ungrammatical sentence. These findings suggest that the ability to verbalize a rule appears during formal operational stage, the last stage of cognitive development. In addition, the qualitative
analyses of the interview data provided information about the development of subjects' interlanguage. On the basis of the subjects' explanations as to why they thought a sentence was ungrammatical the following example interlanguage rules emerged.

(a) Interrogative sentences in the past tense require verbs in the past tense. For example, "what did she ate for lunch?"

(b) When the subject is in the third person singular the verb does not have "s" or "es" suffix in the simple present tense. For example, "Carlos visit his grandparents every weekend."

(c) When the subject is in the third person plural the verb has "s" or "es" suffix in the simple present tense. For example, "When two people meet for the first time they shakes hand."

(d) In the formation of passive voice, the past tense form of both verbal elements is used. For example, "The paintings were sketched by the painter." and "The trash was threw all over by the motorist."
The Results of the Qualitative Analyses of the Recall Protocols

In this section the results of the qualitative analyses of the recall protocols will be presented. A report on the results of the qualitative analysis of the seventh graders will be presented first. This will be followed by a report on the qualitative analyses of the recall protocols for the eighth and ninth graders, respectively. For the purpose of this study, a random sample of 20% of the recall protocols per level of proficiency and level of instruction, was selected for qualitative analysis (Appendix K). The data were submitted to qualitative analyses according to the components in the constructivist model (Bernhardt, 1986). Bernhardt (1986) explains:

"The components of the model which is interactive in the same sense that the Rumelhart model is, are text-based and extra-text based in nature. Text-based components include word recognition (the attachment of [an incorrect] semantic value), phonemic/graphemic decoding (the recognition of words based on sound or visual mismatch such as mistaking Geld for Gold), and syntactic feature recognition (interpretation of the relationships between words). Extratext-based components include intratextual perception (the reconciliation of each part of the text with that which precedes and succeeds), prior knowledge (whether the discourse is sensible within the reader's cognitive network), and metacognition (the extent to which the reader is thinking about what he is reading, illustrated in the protocols by question marks and parenthetical expressions)," (1986, p. 105).
Grade Seven

The results of the qualitative analyses of the recall protocols demonstrate that syntactic features of the text affected the quality as well as quantity of the recalls of the seventh grade subjects across all levels of proficiency. The subjects' failure to recall several propositions, for example, can be attributed to the complex structures of the sentences (these complex structures primarily occurred in the middle portion of the text). As a result, most of the subjects ignored this portion of the text that posed problems for them.

In other instances, some subjects had a tendency to combine parts of different sentences together, and they used combining the parts of several sentences as a strategy to deal with syntactic feature recognition problems. Effects of syntactic feature recognition are evident in the reconstruction of the text. Three subjects at the beginning level of proficiency, for example, wrote "Tortilla desaparece cuando viene el pan ... (Tortilla disappears when bread comes...)"; and another subject at the advanced level wrote "Las gentes dejaron de usar tortillas cuando llego el pan. (People stop using tortillas when bread came...)") for a sentence that actually states "...at his table, Archbishop Flores finds that tortillas disappear long before the bread...)."
Similarly, another subject recalled the proposition "Along the city's romantic Paseo de Rio...," as "Paso del Rio era muy romantico. (The path of the river was very romantic)." In the above example the subject perceived the word "romantic" as a descriptor of "Paseo del Rio," rather than as a modifier of "Paseo del Rio." In like manner, "Paseo de Rio," a proper noun, was interpreted as a common noun "el paso del rio" (the path of the river) by many subjects at the beginning, intermediate, and advanced levels of proficiency. Another subject misinterpreted "Paseo de Rio" as "Hay un paseo por un rio" (There is a sidewalk by the river). The above stated examples suggest that the subjects' comprehension was affected by their inability to interpret the relationship between the words in sentences.

Furthermore, the subjects at the intermediate level of proficiency also experienced difficulties in interpreting the relationship between the words in sentences, and this inability to interpret the relationship between the words in sentences was reflected in qualitative analyses of the recall protocols. One subject (Subject #2) at the intermediate level of proficiency, for instance, interpreted "En Mexico a la tortilla le pone una salsa y es un taco. (In Mexico they put some salsa in a tortilla and it is a taco.)" for the text that stated "...Taco Polaco, a Polish sausage wrapped in a Mexican tortilla." Here the
student's recall seemed to be affected by syntactic feature recognition and other factors, such as the phonemic/graphemic similarities of the words "sausage" and "sauce." As a result, he interpreted the word "sausage" as "salsa" (sauce). Similarly, the word "Mexican" an adjective of tortilla was interpreted as "en Mexico" (in Mexico).

In the above examples phonemic/graphemic similarities between the words, "sausage" and "sauce" led the subjects to interpret the word "sausage" as "salsa," an equivalent of "sauce" in Spanish. In spite of their prior knowledge of the concept of a taco in Mexico, the subjects ignored that knowledge and interpreted the sentence that stated "...Taco Polaco, a Polish sausage which is wrapped in a Mexican tortilla." as "En Mexico a la tortilla le pone una salsa." (In Mexico in a tortilla they put some sauce; Subject #2, intermediate level) or "Taco Polaco es una tortilla revuelta en salsa polaca." (Taco Polaco is a tortilla wrapped in polish sauce; Subject #19, intermediate level.)

In addition to syntactic features, word-recognition factors also affected subjects' interpretations and perceptions of the text. The word "Summertime," for example, was interpreted as "en vacaciones" (in vacations.) Some of the subjects interpreted words such as, "football" as "soccer"; "Hispanics" as "los Mexicanos, Espanoles, and los Latinos (Mexicans, Spaniards, and Latin Americans);"
"Anglos" as "Americans;" and "Flores," a proper noun as "flores (flowers)" a common noun. Subject #20, for instance, in an attempt to summarize several sentences, wrote "Arreglan la mesa y sobre la mesa ponen las flores, tortillas, y salsa picante. (They set the table, put flowers, tortillas and hot sauce on the table.)" for a clause that actually states "Archbishop Flores finds that the tortillas disappear long before the bread, and at breakfast, he notes, 'Anglos seem to use more hot sauce than we do'." This interpretation of the text by this subject is a combination of several phrases and words that he understood and tried to put together into a sentence that made some sense.

Phonemic/graphemic similarities of words also affected students' recall abilities. Many subjects across beginning, intermediate, and advanced levels of proficiency, for example, perceived the word "fail" as "fell" and interpreted the word "fail" as "cayeron" (fell); they also perceived "to notice" as "noticia" and interpreted it as "news," (Subject #6, intermediate level; and Subject #12, advanced level.) As a result of a confusion between the phonemic/graphemic similarities of words in English, such as "fail" and "fall"; and false cognates in English and Spanish, such as, "notice" and "noticia," many students at the beginning, intermediate, and advanced level of proficiency misinterpreted the text.
as "Muchos visitantes cayeron en la noticia. (Many visitors fell in the news)" for a clause that actually states "Many visitors fail to notice..."

Subjects' intratextual perception also differed radically from the author's intended meaning. The subjects' intratextual perceptions combined with their background knowledge dictated how they interpreted the text. For example, Subject #25's (beginning proficiency level) intratextual perception of "...romantico Paseo de Rio" and "watering holes," combined with his background knowledge, resulted in a misinterpretation of the text. He interpreted the text as "Paseo del Rio era muy romantico, una puede dar vuelta en una lancha. (Paseo de Rio was very romantic, one can go around in a boat.)" This interpretation clearly demonstrates the effects of intratextual perception on the subject's comprehension.

Another example, that demonstrates the effects of subjects' intratextual perception on their recall, is the interpretation "Chile con carne es de San Antonio y el huevos revueltos con salsa son de Mexico. (Chile con carne is from San Antonio and scrambled eggs with salsa are from Mexico, Subject #6, intermediate level.)"

The subjects' prior knowledge about Hispanic culture and American culture also appears to have influenced their comprehension and recall of the text. For example, the interpretation, "El pan se comia mas en el desayuno que
tortilla. (They ate more bread than tortillas for breakfast)," is affected by the background knowledge the subjects had about the food habits of the people in the United States (i.e., In the United States they eat bread for breakfast.) Furthermore, interpretations, such as "Tortilla desaparece cuando viene el pan. (Tortilla disappears when bread comes)," and "El pan se comía en el desayuno. (They ate bread for breakfast)," demonstrate that it was not only syntactic feature recognition alone that was affecting the subjects' comprehension, but also prior knowledge, which the subjects had about the topic of the text, that influenced their ability to recall.

Metacognition also seemed to influence the comprehension and recall of the text. Although the subjects in the seventh grade did not give many clues about their metacognition in their recalls, a graphic illustration of a football game by one of the beginning proficiency level subjects indicates that the reader was using metacognitive strategies. The reader's interpretation of the football game in this text as "soccer" is perhaps a word-recognition problem that may be the result of the distinction they make in Mexico between "football" (soccer), and "American Football."

The statement, such as "El parafo es acerca de relaciones cultural entre los Anglos y los Hispanos... (the paragraph is about the intercultural relationship between
Anglos and Hispanics, Subject #6)," demonstrates that the subject did use metacognitive strategies in the process of comprehending the text. Additional comments like "Quien sabe, pero el texto trata de... (Who knows, but the text is about..., Subject #2);" and comments such as, "El habla de los lugares y la comida en San Antonio. (He talks about places and food in San Antonio, Subject #31)" also show metacognitive activity taking place in the process of comprehension.

**Grade Eight**

The influence of phonemic/graphemic similarities on the eighth graders' abilities to recall the text is evident in the interpretation of the words such as, "Polish sausage," and "fritos." Most subjects interpreted the words, "Polish sausage" as "salsa Polaca," (Polish sauce); and "fritos" as "frijoles," (beans). Many subjects across all levels of proficiency seemed to have trouble recognizing words even when phonemic/graphemic similarities were not present. For example, Subject# 17 interpreted the word, "Taco Polaco" as "a name of a place where they sell tacos."

Many subjects had a tendency to use past tense in their recall protocols. An example of the use of the past tense by subject #3 in his recall is "Las tortillas, el pan e otras cosas desaparecieron por el momento. (The tortillas, bread and other things disappeared for a moment)" for the
text that states "...the tortillas disappear long before the bread." Furthermore, qualitative analyses suggest that it was not only syntactic features that posed trouble for this subject, but word recognition also posed problems for him. Many subjects had difficulty interpreting the sentences that had passive voice structures. For example, Subject #25 wrote, "San Antonio invento la tortilla blanca. (San Antonio invented the white tortilla)" for a sentence that stated "The white tortilla was invented in San Antonio."

The eighth graders' prior knowledge about the illegal Mexicans in the United States; their impression of the American visitors to Mexico; and general knowledge about Hispanic issues in the United States seem to have influenced their recall of the passage. Many students did not look beyond their initial perception of the text, and they simply reconstructed it on the basis of what they recognized from the text and what they already knew. The Subject #8 (intermediate level), for instance, who believed the text to be about illegal Mexicans and Anglos in the U.S.A., interpreted the text in that context. He wrote "Muchos Hispanos y Anglos que eran ilegales ya estan nacionalizados y son utiles a su poblacion trabajando. (Many Hispanics and Anglos, who were illegal, are now nationalized, they are useful to the community while working)." In like manner, another subject (Subject #15),
who thought that the text was about an American visiting Mexico, recalled the text as a description of an American's visit to Mexico, and wrote "Los mexicanos eran muy atentos. El chile y las tortillas eran muy común en la comida. Le sirvieron chiles con carne e otros platillos; y ellos usaban tortillas en lugar del pan. (Mexicans were very attentive. Chile and tortillas were very common in food. They served him chile with meat and other dishes; and they used tortillas in place of bread)."

Metacognitive strategies also seem to have played an important role in eighth grade subjects' recall abilities. Many subjects began their recall protocols with a summary statement, "El texto trata de... ("The text is about... Subject #3);" "En este parafo leamos acerca de... (In this passage we read about...,Subject #3);" and "Este lectura es acerca de trata de un senor que visito Mexico... (This text is about a man who visited Mexico..., Subject #15)." These metacognitive strategies demonstrate that these subjects had achieved at least a global understanding of the text. It is noteworthy that metacognitive strategies used by the eighth graders were parallel to the ones used by the seventh graders.

**Grade Nine**

Like the seventh and eighth grade subjects, the ninth graders across all levels of proficiency had word-
recognition problems that led them to reconstruct the meaning of the text in a manner quite different from the meaning intended by the author. Misinterpretations of the words, such as "fail" as "cayeron" (fall); "to notice," as "noticia" (news); and "summertime" as "vacaciones" (vacations) are a result of poor word recognition. Subject #12, for example, interpreted the word, "summertime" as "vacaciones" (vacation); Subjects #7 and #15 perceived "to notice" as "noticia" (news); and subject #18 interpreted the word, "Hispanics" as "espanoles" (Spanish), and "native" as "indio" (indigenous); and Subject #19 transformed the word "doctors" as "doctorados" (doctorates).

In addition to the word-recognition features, syntactic features of the text posed difficulties in ninth grade subjects' comprehension and recall. Subject #7, who had problems with syntax (relationship of words in sentences), while struggling in an effort to make sense out of the words he comprehended, used his prior knowledge and recalled "En las fronteras de San Antonio hay muchos ilegales que pasan de Mexico. (Near the border of San Antonio there are many illegal aliens who come from Mexico.)" for the text that actually stated as "To be sure, the barrio remains a hispanic place apart, swollen by a steady stream of illegal aliens from Mexico." Subject #12 recalled "Hay un barrio para los Hispanos ilegales de
Mexico. (There is a barrio for Hispanics and illegal aliens from Mexico)." Another instance, where syntax seemed to have presented problems, is reflected in the recall of Subject #12, who wrote "Tortilla aparece un poco antes que el pan. (Tortilla appears little before the bread.)" for the text that stated "...the tortilla disappears long before the bread."

Effects of prior knowledge and intratextual perceptions were more prominent in the recall protocols of the ninth graders across all levels of proficiency than in the recall protocols of the seventh or eighth graders. For example, Subjects #9, #14 and #24 recalled "Un Arcobispo dice que los Mexicanos usan mas salsa que los Americanos. (Archbishop says that Mexicans use more salsa than Americans.)" for the text that actually stated "...Archbishop Flores notes, 'Anglos seem to use more hot sauce on their scrambled eggs than we do'." This interpretation reveals that these subjects' prior knowledge (that Americans do not use hot sauce in their food) forced them to ignore the relationship between the words such as, "we" and "he notes" in the above sentence (we refers to Hispanics), and they misinterpreted the relationship among the words "Anglos," "than," and "we." Moreover, what is stated in the text did not match with the subjects' prior knowledge, this mismatch between the subjects' prior
knowledge and textual information directed them to misinterpret the meaning of the pronouns.

Another subject (#23) also influenced by his prior knowledge about Hispanic and American culture, in an effort to reconcile his prior knowledge with his intratextual perception, writes "...los Americanos tambien comen chile aunque en menos cantidad. (...Americans also eat chiles though in less quantity)." It is amazing that the ninth graders perceived the text from diverse perspectives; and as a result of these diverse perspectives, they reconstructed the text in a variety of ways. One of the students, for instance, perceived the text as a criticism of Hispanics; while another student viewed the text as a description of the influence of Hispanics on Americans. Yet another student interpreted the text as a description of the mixture of the two cultures.

Discussion

The quantitative data on the reading comprehension test indicated three distinct levels of proficiency at different levels of instruction. The subjects' placement in different levels of proficiency at different levels of instruction was validated by their scores on the reading comprehension test. Results of the qualitative analysis of the recall protocol data provided important information
about subjects' abilities to handle authentic text in English.

Regardless of their levels of instruction and proficiency, the subjects' recall and comprehension processes were influenced by the components outlined in the constructivist model of L2 comprehension. Bernhardt (1985, 1986), and Bernhardt and Berkemeyer (1988) reported that in the case of L2 learners of German, a lack of vocabulary did not interfere with subjects' process of comprehension as much as a lack of knowledge about the relationship of words to each other (syntax). Results of the present study support the findings reported by Bernhardt and Berkemeyer (1988). In the present study, in addition to word recognition features, grapheme/phoneme similarities, intratextual perceptions, and prior knowledge posed difficulties for students in the comprehension of the text across all levels of instruction as well as levels of proficiency.

In addition, subjects' feelings about the text also affected their recalls. Recall of the sentences, such as "25% of the doctors in San Antonio are Hispanics" for instance, by most of the subjects, may be because of the pride Mexican feel about Hispanic professionals in the United States of America. On the other hand, failure to recall the part of the text related to illegal Mexicans in San Antonio on the part of majority of the subjects, may be
due to the fact that most Mexicans do not feel very good about illegal Mexicans in the United States.

Qualitative Analyses of the Relationship between the Grammaticality Judgment Test and the Reading Comprehension Test

The results of the quantitative analyses (Pearson Product Moment Correlation Analyses) indicated a low correlation between the subjects' means on the grammaticality judgment test and the reading comprehension test at different levels of instruction and proficiency (Tables 13 and 14). Moreover, when all the data were collapsed, an overall low correlation between the subjects' scores on the grammaticality judgment test and the reading comprehension test was reported (Table 15). These results suggest that L2 learners' ability to make judgments about the grammaticality of sentences does not make a significant difference in their reading comprehension abilities.

In order to get further insights into the relationship between ESL learners' ability to make judgments about the grammaticality of sentences and their reading comprehension, the data were analyzed qualitatively. The purpose of these analyses was to investigate: to what extent the subjects' performance on the five grammatical form-classes was reflected in their direct reconstructions of the text, the recall protocols. In this section a
report on the qualitative analyses of the relationship between the ability to make grammaticality judgments and the reading comprehension of the seventh, eighth, and ninth graders will be presented.

Data syntheses for the qualitative analysis for grades seven, eight, and nine are displayed in Tables L-1, L-2, L-3, L-4, L-5, L-6, L-7, L-8 and L-9 (Appendix L). Because it is difficult to display all portions of the data generated by the qualitative analyses, these tables are representative, not exhaustive. The tables excerpt data from all instructional levels across all three levels of proficiency. Displaying the data in this manner permits analyses of the relationship between the ability to make grammaticality judgments and reading comprehension within levels of instruction and across levels of proficiency. It helps to examine questions such as whether subjects in a particular level of proficiency demonstrate their ability to use different grammatical form-classes in their direct reconstructions of the text.

Grade Seven

The quantitative results reported in Table 2, indicated that the seventh graders across all levels of proficiency scored highest on accurately identifying sentences with errors in the past tense. The qualitative data on the relationship between the ability to make grammaticality
judgments and reading comprehension show that across all three levels of proficiency, most of the seventh graders, who scored higher on accurately identifying the grammaticality of the sentences in the past tense, did not use past tense in their recall protocols (See Tables L-1, L-2 and L-3 in Appendix L).

The seventh grade subjects at the beginning and intermediate levels of proficiency, for instance, who accurately identified up to seven sentences belonging to the past tense form-class, did not use past tense in their direct reconstruction of the text (Subject #5, Beginning Proficiency Level, Table L-1; and Subject #2, Intermediate Proficiency Level, Table L-2). In contrast, another subject with beginning proficiency level, (Subject #6, see Table L-1) who correctly identified only three sentences in the past tense grammatical form-class, however, did use past tense in his/her reconstruction of the text, thus demonstrating his/her ability to use past tense for communicative purpose.

The seventh graders at the advanced level of proficiency who correctly identified between four and seven sentences with errors in the past tense form-class on the grammaticality judgment test, demonstrated their ability to use past tense by reconstructing the text in past tense (Table L-3). Thus, they demonstrated their ability to use past tense for communicative purposes.
The seventh graders across all three levels of proficiency, who accurately identified between three and six sentences in the present tense form-class, used present tense in their recall protocols. These results indicate that these subjects possessed not only the ability to make judgments about the grammaticality of sentences in the present tense but also demonstrated an ability to use the present tense in their reconstructions of the text (See Tables L-1, L-2, and L-3 in Appendix L).

The results of the quantitative data (Table 2) indicated that the present perfect tense was one of the grammatical form-classes that presented problems for seventh grade subjects. The qualitative data in Tables L-1, L-2, and L-3 indicate that seventh graders at the beginning level of proficiency, regardless of their higher or lower scores on the present perfect grammatical form-class, did not use present perfect in the reconstruction of the text; whereas only one subject at the intermediate levels of proficiency (Subject #6, Table L-2) did use present perfect tense in the reconstruction of the text.

The advanced level subjects, on the other hand, who scored comparatively higher on the present perfect form-class than those at the beginning and intermediate levels, did not use present perfect tense for their reconstruction in the text either. Among the advanced level subjects, who scored lower on identifying the grammaticality of the sentences in
the present perfect tense, very few used present tense in their reconstructions of the text. Subject #12 at the advanced proficiency level, for instance, who accurately identified only three sentences pertaining to the present perfect tense form-class, did use present perfect tense in his recall protocol (Table L-3 in Appendix L).

The descriptive statistics and qualitative analyses of interview data suggest that identifying the grammaticality of the sentences with errors in the passive voice was difficult for the seventh grade subjects at all three levels of proficiency. Qualitative analyses of the relationships between the ability to make grammaticality judgments and reading comprehension also revealed that most of the seventh grade subjects across all three levels of proficiency did not use passive voice in their recall protocols.

Although some of the subjects at the beginning and intermediate levels seem to have understood the meaning conveyed in the sentences structured in the passive voice, they did not use the passive voice in the reconstruction of the text (Subjects #16 and 26, Beginning Proficiency Level; Subject #29, Intermediate Proficiency Level). They simply converted the passive voice into active voice in the reconstruction of the meaning. Subject #16 at the beginning level of proficiency (Table L-1), for instance, reconstructed the text that originally read, "The white-
flour tortilla was invented in San Antonio, as were Fritos, a Tex-Mex snack," as "La tortilla de harina se invento en San Antonio. Los fritos se inventaron tambien en San Antonio. (The wheat flour tortilla invented (itself) in San Antonio. Fritos also invented (itself) in San Antonio)."

In contrast, few subjects at the advanced proficiency level, who captured the message conveyed in the sentences constructed in the passive voice, did use the passive voice correctly in their reconstructions of the text. Subject #11 (Table L-3) reconstructed the text that originally read, "...chile con carne was invented in San Antonio." as "Algunas personas dicen que el carne con chile fue inventado en San Antonio."

The examples, such as those quoted above, suggest that the subjects at the beginning and intermediate proficiency levels had some understanding of the sentences that used structures in the passive voice, but failed to use passive voice correctly in their reconstructions of the text. This example supports the finding of the qualitative analyses of the interview data. The findings of the qualitative analyses of the interview data suggest that seventh graders at the beginning and intermediate levels of proficiency had some ability to recognize the ungrammaticality of sentences with errors in the passive voice, but did not have the ability to explain what part of the sentences was incorrect.
or how to make an ungrammatical passive voice sentence grammatical.

The quantitative results of the grammaticality judgment test (Table 2) demonstrate that the seventh graders across all three levels of proficiency scored lowest on identifying the grammaticality of sentences with errors in subject-verb agreement. The qualitative analyses of the relationship between the ability to make grammaticality judgments and reading comprehension, indicate that most of the seventh graders at all levels of proficiency, did use sentences with correct subject-verb agreement in their reconstructions. For instance, subjects at beginning proficiency level, constructing the sentences such as, "Los Hispanos comen con mucha salsa y huevo." (Subject #6) and "En el verano los Anglo y Hispanos juegan football juntos." (Subject #16) demonstrated their ability to use sentences with correct subject-verb agreement in the reconstruction of the text. These results suggest that the seventh graders' inability to accurately identify grammaticality of the sentences with errors in subject-verb agreement did not interfere with their ability to use that had correct subject-verb agreement.

**Grade Eight**

According to the quantitative results reported in Table 3, the eighth graders across all levels of proficiency
scored highest on accurately identifying sentences with errors in the past tense. The qualitative analyses of the data on the relationship between the ability to make grammaticality judgments and reading comprehension show that most of the eighth graders, who scored higher on accurately identifying the grammaticality of sentences in the past tense, did not use past tense in their recall protocols (See Tables L-4, L-5, L-6 in Appendix L).

The eighth grade subjects at the beginning level of proficiency, for instance, Subjects #3, #7, and #13, who accurately identified five, three, and six sentences with errors in the past tense respectively, did use past tense in their direct reconstruction of the text (See Table L-4). This suggests that regardless of their ability to make judgments about the grammaticality of sentences in the past tense, these subjects had the ability to use the past tense for communicative purposes.

Among the eighth graders at the intermediate level of proficiency, on the other hand, only one subject (Subject #21), who correctly identified six sentences with errors in the past tense, used past tense in his reconstruction of the text. Other subjects (Subject #6 and Subject #20), who identified four sentences correctly did not use past tense in their reconstructions of the text. The eighth graders at the intermediate level of proficiency, regardless of their comparatively higher scores on the past
tense form-class, did not use past tense in their recall protocols (See Table L-5).

With the exception of one subject (Subject #10), the advanced level subjects, who also scored higher on correctly identifying sentences with errors in the past tense, did not use the past tense in their reconstructions of the text (See Table L-6). These findings suggest that in the case of eighth graders across all three levels of proficiency, an ability to identify more sentences with errors in the past tense form-class does not ensure the subjects' ability to use that knowledge in the real communication.

The analyses of the data in Tables L-4, L-5, and L-6 indicate that across all three levels of proficiency the eighth graders used the present tense in their reconstructions of the text, thus, demonstrating their ability to use the present tense in a real communication situation. It is interesting to note here that, on the one hand these subjects, who identified a higher number of sentences with errors in the past tense, did not use the past tense in their reconstructions of the text. The same subjects, who also identified a higher number of sentences with errors in the present tense, on the other hand, used the present tense more consistently in their reconstructions of the text.
The data displayed in Tables L-4 and L-5 demonstrate that the eighth grade subjects at the beginning and the intermediate levels of proficiency scored comparatively lower on identifying correctly grammaticality of the sentences in present perfect tense. These subjects, however, did not use the present perfect tense in their recall protocols. In contrast, the subjects at the advanced level of proficiency, by scoring comparatively higher than subjects at the beginning and intermediate levels of proficiency, demonstrated their ability to make accurate judgments about the grammaticality of sentences in the present perfect tense (See Table L-6). With the exception of two subjects (Subject #1, and #15), these advanced proficiency level subjects, by not using the present tense in their reconstructions of the text, demonstrated an inability to use the present perfect tense for real communicative purposes.

The descriptive statistics and qualitative analyses of the interview data indicate that identifying the grammaticality of sentences with errors in the passive voice was difficult for eighth grade subjects at the beginning level of proficiency. Qualitative analyses of the relationship between the ability to make grammaticality judgments and reading comprehension also revealed that the eighth graders at the beginning level of proficiency, regardless of their scores on the passive voice grammatical
form class, did not use passive voice in their direct reconstructions of the text.

At the intermediate and advanced levels of proficiency, a majority of the eighth grade subjects did not use passive voice in their reconstructions of the text. Only one subject at the intermediate level of proficiency (Subject #6), and two subjects at the advanced level of proficiency (Subject #4 and #11) successfully used the passive voice in their reconstructions of the text (see Tables L-5 and L-6). These results suggest that few subjects at the intermediate and advanced levels of proficiency have developed the ability to comprehend and correctly use the passive voice structures.

Earlier, qualitative analyses of the interview data indicated that many eighth graders had problems in making judgments about the grammaticality of sentences with subject-verb agreement. Qualitative analyses of the relationships between the ability to make grammaticality judgments and reading comprehension for eighth graders indicate that, regardless of their scores on identifying the grammaticality of sentences with errors in subject-verb agreement, most subjects had the ability to use sentences with subject-verb agreement. This ability can be clearly observed throughout the eighth graders' reconstructed texts. These results suggest that the eighth graders' inability to identify accurately the
grammaticality of sentences with errors in subject-verb agreement did not have any negative influence on their ability to use sentences with subject-verb agreement.

Grade Nine

According to the quantitative results reported in Table 3, the ninth graders, with the exception of those at the beginning level of proficiency, scored comparatively higher on accurately identifying sentences with errors in the past tense. The qualitative analyses of the data on the relationships between the ability to make grammaticality judgments and reading comprehension (Table L-7, in Appendix L) show that at the beginning level of proficiency, most of the ninth graders, who scored higher on accurately identifying the grammaticality of sentences in the past tense, did use past tense in their recall protocols. Subject #7, Subject #9, and Subject #10, for instance, who correctly identified five, four, and seven sentences with errors in the past tense form-class respectively, did use past tense in their reconstructions of the text.

The ninth graders at the intermediate level of proficiency demonstrated an ability to use the past tense in their reconstructions of the text. The data displayed in Table L-8 (Appendix L), for instance, show that Subjects #2, #3 and #13 (Intermediate Proficiency Level), who accurately identified a higher number of sentences with
errors in the past tense, used the past tense in the reconstruction of their recall protocols. It is interesting to note that these ninth graders demonstrated an ability to use not only the simple past tense, but also other forms of past tense also.

Most of the ninth graders at the advanced proficiency level, who generally scored higher on identifying sentences with errors in the past tense, also used the past tense in their recall protocols (See Table L-9 in Appendix L). Like the subjects at the intermediate level of proficiency, these advanced proficiency level subjects also, by using different types of the past tense in their reconstructions of recall protocols, demonstrated their ability to use different types of the past tense for communicative purpose.

The analyses of the data in Tables L-7, L-8, and L-9 indicate that with the exception of those at the intermediate proficiency level, the ninth graders accurately identified a higher number of sentences with errors in the present tense. Regardless of the number of sentences accurately identified by them, the ninth grade subjects across all three levels of proficiency successfully used present tense in their reconstructions of the text. Subjects #6 and #7 (Beginning Proficiency Level), who correctly identified four and five sentences with errors in the present tense respectively, used the present tense in the reconstruction of their recall
protocols (See Table L-7). Similarly, the subjects at the Intermediate Proficiency Level, identified a lower number of the sentences with errors in the present tense; nevertheless, they did use the present tense in their reconstructions of the text. Subject #2, #3, and #13, for instance, who identified accurately the grammaticality of three, two, and two sentences with errors in the present respectively, successfully used the present tense in their recall protocols (Table L-8). The subjects at the advanced proficiency level, including those who accurately identified both a high number and those who identified a low number of sentences with errors in the present tense, used the present tense in their recall protocols. Similarly, subjects #7 and #10 who correctly identified three and six sentences, with errors in the present tense respectively, used the present tense in their recall protocols (See Table L-9). Hence, by demonstrating an ability to use the present tense in their reconstructions of the text, the ninth graders at all three proficiency levels demonstrated an ability to use the present tense in a real communicative situation.

The ninth graders at the beginning level of proficiency, in spite of accurately identifying sentences with errors in the present perfect tense, did not use the present perfect tense in their recall protocols (for example, Subject #9, Table L-7). The results reported in
Table L-8 indicate that a majority of the subjects at the intermediate level of proficiency did not use the present prefect tense in their reconstructions of the text, although they accurately identified sentences with errors in the present perfect tense. Similarly, the advanced proficiency level subjects, although demonstrated their ability to make judgments about grammaticality of the sentences in the present perfect tense, did not used the present perfect tense in their recall protocols (Table L-9).

The results of qualitative analyses reveal that the ninth graders at the beginning level of proficiency, regardless of their performance on identifying sentences with errors in the passive voice, did not use the passive voice structures in their reconstructions of the text. They used active voice structures instead. Subject #6, for instance, wrote, "La carne con chile es invento de San Antonio. (Chile con carne is an invention of San Antonio);" and Subject #7 wrote, "...el carne con chile ellos inventaron en San Antonio. (They invented chile con carne in San Antonio)." (See Table L-7).

The ninth graders at the intermediate and advanced proficiency levels performed better on the passive voice task than the subjects at the beginning level of proficiency. These subjects regardless of the number of sentences with errors in the passive voice that they
accurately identified, did not use the passive voice in their reconstructions of the text (See Tables L-8 and L-9). Like the subjects at the beginning proficiency level, the advanced proficiency level subjects used active voice structures in their reconstructions of the text (Subject #10, Table L-9).

The results of the qualitative analyses indicate that subject-verb agreement did not pose any problems for the ninth graders across all three levels of proficiency. Most of the ninth grade subjects at the beginning proficiency level could accurately identify a higher number of sentences with errors in the subject-verb agreement; and they used sentences with appropriate subject-verb agreement in their recall protocols. Although many ninth graders at the intermediate proficiency level experienced difficulties identifying accurately the sentences with subject-verb agreement, they appropriately used subject-verb agreement in their reconstruction of the text. At the advanced proficiency level, the ninth graders, who accurately identified a higher number of sentences with errors in the subject-verb agreement, used sentences that had correct subject-verb agreement in their recall protocols.

Discussion

The results of the qualitative analyses of the data on the grammaticality judgement test and the reading
comprehension test support the statistical findings, suggesting there is a very low correlation between these two variables. In addition, the qualitative analyses provide information about the nature of the relationship between the ability to make grammaticality judgments and reading comprehension; and these findings provide an explanation for the question as to why there is a low relationship between these two variables. The results of the qualitative analyses suggest that ESL learners' ability to make judgments about the grammaticality of isolated sentences does not influence positively or negatively their reading comprehension ability.

The patterns of relationship as revealed by the qualitative analyses support the quantitative findings that indicated a poor relationship between the ability to make grammaticality judgments and reading comprehension at the three levels of instruction and proficiency. A careful review of the qualitative analyses of the data reveals identical patterns in the relationship between the ability to make grammaticality judgments and reading comprehension at different instructional and proficiency levels. At the beginning proficiency level, for instance, most of the seventh graders, who had the ability to make correct judgments about the grammaticality of sentences in the past tense, did not use the past tense in their reconstructions of text. Within the same group, however, subjects with a
comparatively low grammatical awareness demonstrated their ability to use the past tense appropriately for communicative purposes.

The eighth graders, regardless of their ability to make grammatical judgments about sentences with errors in the present perfect tense, failed to use the present tense in their recall protocols. The results of the qualitative analyses indicate that ninth graders are distinct from seventh and eighth graders. This distinction lies in the fact that the ninth graders demonstrated an ability to manipulate their grammatical knowledge, such as the use of different types of the past tense, in their recall protocols.

Similarly, another pattern observed among the majority of subjects, with the exception of advanced level ninth grade subjects, was the subjects' inability to use passive sentences in their reconstructions of text. On the other hand, the subjects across all three levels of proficiency and levels of instruction, regardless of their ability to accurately identify the sentences with errors in the present tense, were able to use the present tense in their recall protocols. These patterns strongly suggest a low correlation between the subjects' explicit knowledge of the structures of language and the ability to use that knowledge for real communication. Furthermore, these findings suggest that any differences observed in the
subjects' performance on these two variables are because of other factors, such as the subjects' cognitive maturity level or language proficiency. In sum, the findings of the qualitative analyses of the relationship between the ability to make grammaticality judgments and reading comprehension support the quantitative findings: a low correlation between the ability to make grammaticality judgments and reading comprehension.
CHAPTER V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Overview of the Study

The objective of this study was to investigate the relationship between metalinguistic awareness and reading comprehension of ESL learners and to explain the differences in metalinguistic awareness and reading comprehension of ESL learners at different levels of proficiency and instruction. The present study used knowledge from linguistic theory, cognitive psychology, and L1 and L2 reading and metalinguistic awareness studies to assess reading behaviors and metalinguistic awareness of ESL learners.

The study investigated the relationship between metalinguistic awareness and reading comprehension at different levels of proficiency and instruction as they relate to ESL learning. The study also investigated the differences in metalinguistic awareness and reading comprehension abilities of the Spanish speaking ESL learners. The subjects of the study, two hundred and forty seven junior high school students at three different levels of instruction and three levels of proficiency, wrote
recall protocols in Spanish after they read a passage in English. They also responded in writing to a 40 item grammaticality judgment test by identifying sentences as grammatical or ungrammatical.

After they had completed the written tasks, the subjects participated in individual interview sessions during which they responded to three questions about the sentences they had identified as ungrammatical on the grammaticality judgment test. The subjects' recall protocols and responses on the grammaticality judgment test were scored with the scoring instruments described in Chapter Three.

The data were subjected to quantitative and qualitative analyses. The quantitative analyses included a two-way analysis of variance and Pearson Product Moment Correlations. Three qualitative analyses were done on the data. These analyses included the qualitative analyses of the recall protocol data, interview data, and the data on the relationship between the ability to make judgments about the grammaticality of sentences and the direct reconstruction of the texts through recall. The objective of the first two qualitative analyses, namely, the qualitative analyses of the recall protocols and interview data was to study subjects' ability to make judgments about the grammaticality of sentences and reading comprehension. The purpose of the third qualitative analysis (the analyses
of the qualitative relationship between the ability to make judgments about the grammaticality of sentences and reading comprehension) was to investigate the question as to what extent the subjects' performance on the five grammatical form-classes was reflected in their direct reconstructions of the text through recall. In other words, the objective of the third qualitative analysis was to investigate whether the subjects' performance on the five grammatical form-classes of the grammatical judgment test was reflected in their reconstructions of the recall protocols.

**Summary of Findings and Conclusions**

A review of the findings reveals significant differences among the groups' mean scores on the grammaticality judgment test and the recall protocols. Many of the differences proved to be significant at the .0001 level. A summary of the findings with respect to the three research questions investigated follows.

**Question 1:** Is there any difference in the metalinguistic awareness of nonnative speakers of English who are at different proficiency levels in different academic levels, as measured by scores on a grammaticality judgment test?
The results of the two-way analysis of variance done on the data pertaining to the grammaticality judgment test and the reading comprehension test indicated significant differences among the mean scores of the groups. Furthermore, the results revealed that the differences among the mean scores on the grammaticality judgment test were because of significant main effects for instruction and proficiency. The interaction between the levels of instruction and levels of proficiency, however, was not found to be significant.

The results of Tukey's post hoc tests of significant differences revealed that the subjects' scores on the grammaticality judgment test increased in accordance with the level of proficiency and instruction. The differences among the subjects' mean scores on the grammaticality judgment test at the beginning, intermediate, and advanced levels of proficiency were found to be highly significant. The differences between the seventh and eighth grade subjects' scores on the grammaticality judgment test were found to be significant. The differences in the eighth and ninth grade subjects' scores on these tests, however, were not found to be significant. In other words, the higher the levels of proficiency (language knowledge) and cognitive maturity of the subjects, the higher were their scores on the grammaticality judgment test.
In sum, the quantitative findings of the study suggest that the metalinguistic abilities are affected by the learners' proficiency in the language and cognitive maturity. The quantitative findings of the grammaticality judgment test as reported in the present study are parallel to those reported by Bialystok (1979), Gass (1983), Sorrace (1985), Singh, d'Anglegan, and Carroll (1982).

An investigation of the interview data revealed important information about the metalinguistic awareness of the subjects. The data revealed that across all three levels of instruction and proficiency the subjects not only accurately identified ungrammatical sentences as ungrammatical, but also identified several grammatical sentences as ungrammatical.

The results of this study suggest that data on grammaticality judgments are useful in explaining how and why ESL learners perform as they do. Furthermore, the results of present study suggest that by taking into account ESL learners' abilities to identify the ungrammaticality of sentences and their (learners') explanations for identifying a particular sentence as ungrammatical, researchers and foreign language teachers may gain meaningful insights into the learners' overall language proficiency, knowledge about structure of language, and processes of interlanguage development.
The results of the qualitative analyses of the interview data provided important information about the development of subjects' interlanguage rules. An investigation of individual interviews and the subjects' explanations to the question why they judged a particular sentence as ungrammatical revealed that grammatical sentences that were identified by the subjects as ungrammatical reflected their interlanguage rules which were not in agreement with the English grammar. Consequently, the grammatical sentences that were not in agreement with the subjects' interlanguage rules were identified as ungrammatical. Thus, grammatical sentences judged as ungrammatical reflected the internal consistency of subjects' interlanguage. Similarly, the sentences that were accurately identified by the subjects as grammatical or ungrammatical reflected external consistency with the English Grammar in terms of what is produced and what is expected to be produced according to the English grammar.

Question 2: Is there any difference in the reading comprehension of nonnative speakers of English who are at different proficiency levels in different academic levels, as measured by scores on recall protocols?

The results of the two-way analysis of variance done on the data pertaining to the reading comprehension test
indicated that there were significant differences in the subjects' scores on the reading comprehension. Furthermore, the results of two-way analysis of variance revealed that differences in subjects' scores on the reading comprehension test were because of instruction and proficiency effects. The interaction between the levels of instruction and levels of proficiency, however, was not found to be significant.

The results of Tukey's post hoc tests of significant differences revealed that the subjects' scores on the reading comprehension test increased in accordance with the level of proficiency and instruction. In other words, the higher the levels of proficiency and instruction the higher were the subjects' scores on the reading comprehension test. The differences between the seventh and eighth grade subjects' scores on the reading comprehension test were found to be significant; whereas the differences in the eighth and ninth grade subjects' scores on the reading comprehension test were not found to be significant. The quantitative findings of this study, while suggesting L2 learners' reading comprehension abilities are affected by their L2 proficiency levels, support the results reported by Bernhardt (1988), Bernhardt and Berkemeyer (1988), and Carrell (1983, 1984) among others.

In addition to providing important information about subjects' abilities to comprehend authentic text in
English, results of the qualitative analyses of the recall protocol data suggest that the subjects' comprehension and recalls were affected by different facets of the L2 comprehension process across all three levels of instruction and proficiency. Furthermore, the results of the present study suggest that the subjects' implicit knowledge of the structure of language (syntax), that is reflected in the form of ability to interpret the relationship of words to each other, as well as grapheme/phoneme decoding, and word recognition are important factors for reading comprehension.

Question 3: Is there any relationship between the metalinguistic awareness and reading comprehension of nonnative speakers of English who are at different proficiency levels in different academic levels, as measured by scores on a grammatical judgment test and recall protocols?

The results of the Pearson Product Moment Correlation analyses revealed a low correlation between the subjects' scores on the grammaticality judgment test and the reading comprehension test at different levels of instruction. The correlation between the scores on the grammaticality judgment test and the reading comprehension test was not found to be significant at the levels of proficiency. A
low correlation \( (r = .35 \, P < .0001) \) was reported between these variables when all the data were collapsed. In sum, results of the Pearson Product Moment Correlation analyses revealed a low correlation between the subjects' scores on the reading comprehension test and the grammaticality judgment test.

The results of the qualitative analyses of the recall protocols and individual interview data provided additional information regarding the relationship between metalinguistic awareness and reading comprehension. The subjects' poor performance on the grammatical-form classes, such as present perfect tense, subject-verb agreement, and passive voice is reflected in the comprehension problems posed by the subjects' inability to interpret the relationship between words.

Metalinguistic abilities and reading comprehension share several characteristics. Both metalinguistic abilities and reading comprehension skills are considered to be an important outcome of literacy learning. Moreover, both metalinguistic tasks and reading comprehension require a great deal of cognitive control and analyzed knowledge (Bialystok and Ryan, 1985). Consequently, a reciprocal relationship between metalinguistic awareness and reading comprehension is generally assumed. The quantitative findings of the present study, contrary to the general
belief, did not reveal a strong correlation between metalinguistic awareness and reading comprehension.

Furthermore, the findings of the first two qualitative analyses pertaining to the interview data and recall protocols provided information about the nature of the relationship between the ability to make grammaticality judgments and reading comprehension of ESL learners at different levels of instruction and proficiency. The findings of the third qualitative analysis pertaining to the qualitative relationship between the subjects' ability to make judgments about the grammaticality of sentences and reading comprehension indicated that the subjects' high scores on a particular grammatical form-class did not ensure their ability to use that knowledge in their reconstruction of the texts. In addition, findings of the qualitative analyses of the relationship between the subjects' ability to make grammaticality judgments and reading comprehension unraveled several contradictory and conflicting patterns related to the subjects' performance on the five grammatical form-classes and direct reconstruction of text.

Surprisingly, these contradictory patterns were observed among the seventh, eighth, and ninth graders across all three levels of proficiency. For instance, on the one hand, the qualitative analyses revealed that some of the subjects, regardless of their higher or lower score
on making judgments about the grammaticality of sentences in a grammatical form-class, demonstrated their ability to use that particular grammatical form-class for communicative purposes, such as reconstructions of text. A majority of subjects, on the other hand, despite their higher scores on making judgments about the grammaticality of sentences in several grammatical form-classes, did not use those structures in the reconstruction of the recall protocols. These conflicting patterns in the subjects' performance on the grammatical form-classes and their reconstructions of text, therefore, suggest a poor and confusing relationship between the ability to make judgments about the grammaticality of sentences and reading comprehension.

In sum, the results of the qualitative analyses not only strongly supported the results of the quantitative analyses suggesting a low correlation, but also provided an explanation for the question as to why there is a poor relationship between these variables. In other words, the results of present study did not provide any evidence that metalinguistic awareness fosters reading comprehension or comprehension follows metalinguistic awareness. The qualitative findings of the study, in addition to reflecting and supporting the quantitative findings, provided a richer perspective on the development of metalinguistic abilities, reading comprehension, and the
relationship between metalinguistic awareness and reading comprehension among ESL learners. The quantitative and qualitative findings of the relationship between metalinguistic awareness and reading comprehension appear to be internally consistent in that they reflect parallel results indicating no relationship between the ability to make grammaticality judgments and reading comprehension.

The findings of the qualitative analyses of the relationship between the ability to make judgments about the grammaticality of sentences and reading comprehension indicating no relationship between these variables may appear to contradict the findings of the first qualitative analyses of the recall protocol data that suggested knowledge of syntax influence recall protocols. In fact, the results of these two qualitative analyses strongly support the findings such as those reported by Barnett (1986) that suggest French students' recall increased according to both vocabulary and syntactic proficiency, and that "knowledge of syntax and vocabulary interact to allow a reader to understand a text" (p. 347); and those reported by Bernhardt and Berkemeyer (1988) that for students of German as a foreign language lack of syntactic knowledge posed comprehension problem; and those indicated by the qualitative analyses of the recall protocols in this study suggesting subjects' poor knowledge of syntax affected their recall protocols). The results reported in the above
stated research (Barnett, 1986; and Bernhardt and Berkemeyer (1988) study suggests that L2 learners' ability to interpret the relationship between words (syntactic feature recognition) affects reading comprehension. Bernhardt and Berkemeyer (1988), and Barnett (1986) study suggest ability to interpret the relationship between words is important. Therefore, ability to interpret the relationship between words is crucial for reading comprehension.

The results of the two qualitative analyses (the qualitative analyses of the recall protocols, and the qualitative analyses of the relationship between ability to make grammaticality judgments and reading comprehension) provide strong evidence in support of the view that states the ability to state grammatical rules (explicit knowledge of syntax) and ability to interpret the relationship between words or syntactic feature recognition (that requires implicit knowledge of syntax) are two distinct aspects of grammatical competence. In a subtle way, the results of the qualitative analyses of recall protocols in the present study, while supporting the results of the above stated research, suggest that the syntactic feature recognition that requires an implicit knowledge of grammar is important for reading comprehension. The results of the second qualitative analysis relating to the relationship between the ability to make grammaticality judgment and
reading comprehension, while suggesting no relationship between these two variables, support the view that states explicit knowledge of the structure of language is not important for reading comprehension.

Implications for Pedagogy

This study is important because it brings to light information regarding the relationship between metalinguistic awareness and the reading comprehension abilities of ESL learners. The findings of this study shed light on the extent to which L2 learners at the junior high school level are capable of making judgments about the grammaticality of sentences in English.

The interview data on grammaticality judgments provide insights into the ESL learners' learning processes and development of interlanguage, also known as learner language. The subjects' explanations as to why they identified a particular sentence as ungrammatical, though considered idiosyncratic, for instance, reflect their interlanguage. Although the subjects' explanations for the ungrammaticality of particular sentences did not agree with the rules of English Grammar, from the learners' point of view, they were based on some kind of logic. Foreign language teachers' awareness of why their students make particular performance errors and learners' explanations for their errors will help teachers in instruction.
The findings of this study bring into question present teaching practices and instruments being used to evaluate student performance. The results of this study indicate that paper-pencil tests alone do not provide complete information regarding students' learning behaviors and their achievement. L2 learners, for example, may accurately identify ungrammatical sentences on a written exam. Consequently, their performance on the written exam may lead the teacher to believe that learning has occurred, and the teaching objectives have been achieved; but in reality the L2 learners may have a different explanation for their responses. In other words, the use of interviews as a part of the evaluation process may provide ESL teachers with important information and feedback regarding the areas in which the students need more help.

In this study the use of students' written recall protocols has proven to be an effective and efficient measure for evaluating students' reading comprehension in a foreign language. It provided information about not only what students were able to comprehend and recall, but also why they failed to comprehend the intended meaning of the author. Bernhardt (1983) recommends the use of immediate recall protocols as a means for evaluating reading comprehension in a foreign language. There is no doubt that the interview process and recall protocols are more
time-consuming methods of evaluation than traditional paper-pencil tests, but they are worth the time investment.

This study is important because it begins to unravel the differences that exist in metalinguistic awareness and reading comprehension abilities among students at different levels of instruction and proficiency. This study is the first one to provide information about the relationship between students' metalinguistic awareness and reading comprehension (the product of the reading process) in a second language. Because development of reading comprehension skills is an important aspect of literacy learning, there exists a general assumption about the relationship between metalinguistic awareness and reading comprehension. The correlation between the scores on the grammaticality judgment test and reading comprehension test are not strong enough to be used for making any strong predictions about learners' performance or success on these variables.

The results of the qualitative analyses did reveal important information about the grammatical-form classes on which subjects scored lowest and factors that posed problems for students when comprehending a passage. The results of the study, therefore, suggest that ESL teachers need to develop more effective and efficient ways to provide opportunities for the development of grammatical
competence (one of the components of communicative competence).

The results did not provide any evidence that metalinguistic awareness fosters comprehension or that comprehension follows metalinguistic awareness. Succinctly, the results of the study, while suggesting no relationship between the explicit knowledge of the rules of structure of language and reading comprehension, imply may be "rules" (explicit knowledge of the syntax rules) are not critical for reading, but may be they are for other skills. Therefore, one pedagogical implication of the results of this study, is that foreign language teachers ought to reconsider, when the objective of teaching and learning to develop communicative competence skills, whether it is worthwhile spending a large amount of instruction time teaching and practicing explicit grammar rules in the L2 classroom. These suggestions imply that ESL teachers need to take time to discover how they can help their students become more literate in a foreign language.

Recommendations for Further Research

Metalinguistic awareness and reading comprehension are special types of skills that one acquires with literacy learning even in one's native language. These skills are also important for developing communication skills in a second language. This study discussed the relationship
between metalinguistic awareness and reading comprehension of L2 subjects quantitatively as well as qualitatively. Quantitative results are invaluable in that they reveal patterns among the subjects and point out the areas that need to be explored qualitatively.

In the present study qualitative data on the relationship between metalinguistic awareness and reading comprehension in ESL learners provided greater insight into the nature of these variables and their relationships to each other. Qualitative research, in addition to validating the information provided by quantitative analyses, furnishes researchers and educators with further information that is impossible to acquire through quantitative analyses alone. Because the results of the present study suggested that the relationship between these two variables, as they relate to quantitative as well as qualitative data, is not highly correlated, further research to explain the relationship between metalinguistic awareness and reading comprehension is required.

The present study is the first study of its kind that has investigated the quantitative as well as qualitative relationship between metalinguistic awareness and reading comprehension in ESL students. Because results of the present study do not support the theoretically claimed relationship between metalinguistic awareness and reading comprehension, further research is needed on this topic.
In this study ESL learners' ability to make judgments about the grammaticality of sentences, one of several aspects of metalinguistic awareness, and its relationship to ESL learners' reading comprehension was investigated. In order to gain better insights about the relationship between specific aspects of metalinguistic awareness and reading comprehension, further research involving metalinguistic awareness and its relationship between reading comprehension are very much in order. Furthermore, studies involving other aspects of metalinguistic awareness, such as phonological awareness, word-form awareness, and pragmatic awareness and their relationship with reading comprehension are recommended.

This study has focused on junior high school students. In the light of the growing emphasis on teaching content areas in English at all levels of academic studies, further studies particularly involving younger students (at the elementary school level) and high school students are particularly necessary. This study used only one text for recall protocols and one grammatical judgment test for groups at different instruction and proficiency levels. Use of a variety of texts for writing recall protocols and a variety of grammaticality judgment tests for groups at diverse levels of instruction and proficiency is recommended for future research.
In conclusion, research on the relationship between metalinguistic awareness and reading comprehension is in its beginning stages. The possibilities for empirical research in this area are limitless. In order to arrive at a clearer understanding and to make any kind of generalization regarding the relationship between metalinguistic awareness and reading comprehension as they relate to ESL learning, replications of the present research are recommended.

Limitations of the Study

This study was limited to the investigation of grammaticality judgments, which is one of several aspects of metalinguistic awareness, and its relationship to students' reading comprehension in English as a Second Language. Because it was not possible for the researcher to select a random sample of subjects, intact classes (stratified random sample) were used for this study. The use of intact classes may have affected the results of this study in that the sample selected might not be a true representative of the population it represents.

Because prior to the administration of the tests, the subjects were informed that their responses on these tests were going to be used for research purposes, their awareness of participation in a research study and something novel happening in their English class might have
affected their performance on the tests. Because the subjects knew that their performance on these tests was not going to be a part of their grades, there is a possibility that the subjects might not have taken the test very seriously.

Furthermore, subjects selected for this study may have had different ideas about how to write a recall or they may not have had experience in writing recall protocols. This may have affected the results of this study. As Johnston (1983) states, difficulties may arise in terms of misinterpreting the level of detail to include in the recall protocol and the degrees to which the protocols should maintain the surface structure of the original passage. Bower (1978) also points out that a decision about the perspective from which to present the recall may differ across individuals. As it is reflected in their performances, subjects had different ideas about how to write recall protocols. Their varied interpretations of how to write recall protocols and diverse performances on the reading comprehension test might have affected the results of this study.

Using one text for writing recall protocols and one grammatical judgment test for all the groups is another limitation of this study. The use of one text for writing recall protocols and one grammatical judgment test for subjects at different levels of instruction and proficiency
might have affected the results of this study. The use of a variety of texts for writing recall protocols and a variety of grammatical judgment tests are recommended for future research investigating relationship between metalinguistic awareness and reading comprehension.

Another limitation of this study stems from the fact that interview sessions were conducted over several weeks and required students to be absent from their classes. This procedure may have contributed to students' awareness of the interview session. Thus, the subjects' awareness about the nature of the interview may have affected their performance on the interview tasks. In addition, in order to be available for interviews many subjects had to miss their lunch-breaks; this might have affected their performances on the interview tasks. Despite the limitations that will occur in any empirical research, the information reported in the present study is undoubtedly valuable.
What a lot of visitors fail to notice, says Mike Greenberg, a native of the city and cultural critic for the San Antonio Express News, "is how deeply mixed this society is." In the summer time, for example, Anglos and Hispanics play football together, stage and attend concerts and dances in the city's parks, and mix unself-consciously in the city's leafy downtown plazas. To judge by the society pages, intermarriage is unexceptional if not yet commonplace. To be sure, the barrio remains a Hispanic place apart, swollen by a steady stream of illegal aliens from Mexico. And like many major cities, San Antonio has bedroom communities of wealthy Anglos. But most of the city's school districts are integrated and, after generations of efforts, a Hispanic middle class of prosperous businessmen, lawyers and physicians (25 percent of the city's doctors are Hispanic) is making its presence felt. Along the city's romantic Paseo del Rio, or River walk, there are watering holes like the Calico Cat and the Kangaroo Court where Hispanic and Anglo artists, intellectuals and journalists gather.
One of the basic bonds between Anglos and Hispanics is their shared passion for Mexican-American food. At his table, Archbishop Flores finds that the tortillas disappear long before the bread, and at breakfast, he notes, "Anglos seem to use more hot sauce on their scrambled eggs than we do." Local historians insist that chili con carne is a San Antonio invention. The white-flour tortilla was invented in San Antonio, as were Fritos, a Tex-Mex snack. During Fiesta, revelers can purchase from street vendors a Taco-Polaco, a Polish sausage which is wrapped in a Mexican tortilla.

APPENDIX B

GRAMMATICAL JUDGMENT TEST

01 Robert often writes letters to his friends.
02 I am sure that they had arrived by now.
03 I met her in the Zocalo yesterday.
04 The guest of honor, along with his wife and two sons, were seated in the front row.
05 It has been raining all day.
06 Every time when they have some extra money they spent it.
07 How many letters have you gotten so far this month?
08 He lived in New York for thirty years and then decides to return to France.
09 Is your English class teach by a women?
10 Of those who graduated with Betty and Juan, Ellen is the only one who found a job.
11 In Columbus's days people believed that the Earth is round.
12 The results of the second experiment is even better than the first one.
13 Every Sunday Carlos visits his grandparents.
14 The trash was threw all over the field by motorists.
The population of this city has doubled during the last ten years.

Jane asked the teacher for her grades on the mid-term exams.

When two people meet for the first time, they are shaking hands.

Spanish is spoken in many South American countries.

She lived in the United States since 1968.

A library full of current magazines, provides interest to students.

When Carl is away from home for a week, he starts to get homesick.

The pictures were sketches by the painter in fifteen minutes.

Maria says that the Earth revolves around the Sun.

Have you ever visit Canada?

Last year it rained frequently in this area.

Because the shipment of supplies for our experiments were delayed, we had to reschedule our work.

They hanged the criminal by the neck until he was dead.

Do not look into the closet in the hall, his birthday present is hidden there.

There has been very little rain this summer.

There was ten people in the line when he arrived.

Did Maria and Betty want to go for dinner now?
32 All the documents were handed over to the lawyer.
33 My younger brother began to study English when he is in the elementary school.
34 We have went to the beach several times, but we have never enjoyed the trip.
35 Although medicine tastes bad, it seems to have helped my condition.
36 What did you ate for lunch today?
37 One of the children play by himself.
38 The house was broken into by thieves.
39 Up until now, I have never meet his wife.
40 Neither my friend nor my relative has been selected to serve on that committee.
APPENDIX C
INTERVIEW QUESTIONS

-- You have identified sentence number ( ) as ungrammatical, can you tell me what part of this sentence is ungrammatical?

-- Can you tell me the English grammar rule which is not followed in this sentence?

-- Can you make it a grammatical sentence?
APPENDIX D

INSTRUCTIONS FOR TEACHERS FOR ADMINISTRATION OF TESTS

-- Before administering the test, please announce the following to your students in your English class:

- You are going to participate in a research study which is being conducted to investigate the ability of Spanish-speaking students in making judgments about the grammaticality and ungrammaticality of sentences written in English.
- Today you will take a grammaticality test in English.
- Your performance on this test will not affect your grades.
- Answer the test to the best of your ability.
- If you like, you will be informed of the results of the study.
- Your cooperation and participation in this study is appreciated.

-- Make sure the students do not help each other, copy, or consult each other while they take the test.

-- After they have answered the test, collect the
test booklets. At the end of the class hour, please return them to the researcher.

-- Inform the researcher of any unusual incidents that might occur during the test.
APPENDIX E

INSTRUCCIONES PARA LOS ESTUDIANTES
PARA ESCRIBIR RECALL PROTOCOL

-- Lea el siguiente texto tantas veces que Ud. desee durante el tiempo designado.
-- Después que Ud. haya terminado de leerlo, ponga el texto en el sobre del examén.
-- Tome la hoja blanca del sobre del examén y escriba en Español tanto como Ud. pueda recordar sobre el texto.
-- Una véc que ud. empiece a escribir, no le estará permitido consultar el texto.lectura.
-- Cuando termine de escribir ponga la hoja en el sobre del examén y deselo a su profesor.

DIRECTIONS FOR WRITING RECALL PROTOCOL

-- Read the following text as many times as you wish during the designated time.
-- After you have finished reading put the text in the test packet.
-- Take the blank sheet from the test packet and write in Spanish as much as you can remember about the text.
-- Once you start writing you will not be allowed to consult the passage.
-- When you finish writing put the sheet in the test packet and give it to your teacher.
APPENDIX F

INSTRUCCIONES PARA LOS ESTUDIANTES

PARA EXAMEN DE JUICIO GRAMATICAL

-- Lea los siguientes frases e identifique si son o no gramaticales.

-- Marque su respuesta para cada frase en el espacio apropiado, designado en la hoja del examén.

-- Para una frase gramatical, rellene el círculo debajo de la columna número uno, y para una frase no gramatical, rellene el círculo debajo de la columna número dos.

INSTRUCTIONS FOR THE STUDENTS

FOR THE WRITING GRAMMATICAL JUDGMENT TEST

-- Read the following sentences and identify whether or not they are grammatical.

-- Mark your answer for each sentence in the appropriate space provided on the test sheet.

-- For a grammatical sentence, fill in the circle under column number 1, and for an ungrammatical sentence, fill in the circle under column number 2.
APPENDIX G

SCORING GUIDE ENGLISH VERSION

List of propositions in the reading text:

<table>
<thead>
<tr>
<th>value</th>
<th>Propositions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>What a lot of visitors</td>
</tr>
<tr>
<td>1</td>
<td>fail to notice,</td>
</tr>
<tr>
<td>1</td>
<td>says mike Greenberg,</td>
</tr>
<tr>
<td>2</td>
<td>a native of the city</td>
</tr>
<tr>
<td>2</td>
<td>and cultural critic</td>
</tr>
<tr>
<td>2</td>
<td>for the San Antonio Express News,</td>
</tr>
<tr>
<td>4</td>
<td>is how deeply mixed this society is.</td>
</tr>
<tr>
<td>1</td>
<td>In summer time,</td>
</tr>
<tr>
<td>1</td>
<td>for example,</td>
</tr>
<tr>
<td>4</td>
<td>Anglos and Hispanics</td>
</tr>
<tr>
<td>3</td>
<td>play football together,</td>
</tr>
<tr>
<td>3</td>
<td>stage and attend concerts</td>
</tr>
<tr>
<td>3</td>
<td>and dance</td>
</tr>
<tr>
<td>2</td>
<td>in the city's parks,</td>
</tr>
<tr>
<td>4</td>
<td>and mix unself-consciously</td>
</tr>
<tr>
<td>1</td>
<td>in the city's leafy downtown plazas.</td>
</tr>
<tr>
<td>2</td>
<td>To judge by the society pages</td>
</tr>
<tr>
<td>4</td>
<td>intermarriage is unexceptional</td>
</tr>
<tr>
<td>3</td>
<td>if not yet commonplace.</td>
</tr>
</tbody>
</table>
To be sure,
the barrio remains a Hispanic place apart,
swollen by a steady stream
of illegal aliens from Mexico.
And like other major cities
San Antonio has bedroom communities
of wealthy Anglos.
But most of the city's school districts
are integrated and,
after generations of efforts,
a Hispanic middle class
of prosperous businessmen,
lawyers and
physicians
(25 percent of the city's doctors are Hispanic)
is making its presence felt.
Along the city's
romantic Paseo del Rio,
or River Walk,
there are watering holes
like the Calico Cat
and the Kangaroo Court
where Hispanic and Anglo artists
intellectuals,
and journalists gather.
One of the basic bonds
between Anglos and Hispanics is their shared passion for Mexican-American food. At his table, Archbishop Flores finds that the tortillas disappear long before the bread, and at breakfast, he notes, "Anglos seems to use more hot sauce on their scrambled eggs than we do."

Local historians insist that chili con carne is a San Antonio invention. The white flour tortilla was invented in San Antonio, as were Fritos, a Tex-Mex snack. During the Fiesta, revelers can purchase from street vendors Taco-Polaco, a Polish sausage.
which is wrapped

in a Mexican tortilla.
De lo que muchos visitantes no se dan cuenta dice Mike Greenberg, un nativo de la ciudad y crítico cultural del San Antonio Express News, "es cuan profundamente mezclada esta esta ciudad". En verano por ejemplo, los Anglos y los Hispanos juegan al fútbol juntos, presentan y asisten a conciertos, bailan en los parques de la ciudad, se mezclan inconscientemente (sin darse cuenta) en las frondosas plazas del centro. A juzgar por las páginas de sociedad los matrimonios mixtos no son excepcionales si no más bien una cosa común. Efectivamente, el barrio sigue siendo un sitio hispano aparte, repleto de un constante río de extranjeros ilegales de Mexico. Y como todas las grandes ciudades, San Antonio tiene comunidades de los Anglos ricos. Pero la mayoría de los distritos escolares de la ciudad están entregadas en el centro, y después de las generaciones de los esfuerzos la clase media hispana de prósperos hombres de los negocios, abogados y médicos (el 25 % de los médicos de la ciudad son hispanos) están haciendo que su presencia se sienta. A lo largo (de la ciudad) del romántico Paseo del Rio, o River Walk hay "Cantinas" como el "Calico Cat" y
el "Kangaroo Court" donde los artistas, intelectuales, periodistas hispanos, y Anglos se reúnen.

Uno de los lazos básicos entre Anglos y Hispanos es su pasión común para la comida mexicano-americana. En su mesa el arcobispado Flores ve (como) las tortillas desaparecen mucho más antes que el pan, y en el desayuno firma, "parece que los Anglos usan más salsa picante en sus huevos revueltos que nosotros." Historiadores locales, insisten en que el chile con carne es un invento de San Antonio. Las tortillas de harina fueron inventadas en San Antonio como los Fritos, un aparato Tex-Mexicano. Durante la Fiesta, reveladores pueden comprar del vendedor (ambulante) un taco polaco, (que es) una salchicha Polaca revuelta en una tortilla mexicana.
APPENDIX I

SCORING GUIDE: SPANISH VERSION

<table>
<thead>
<tr>
<th>Value</th>
<th>Propositions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>De lo que muchos visitantes</td>
</tr>
<tr>
<td>1</td>
<td>no se dan cuenta</td>
</tr>
<tr>
<td>1</td>
<td>dice Mike Greenberg</td>
</tr>
<tr>
<td>2</td>
<td>un nativo de la ciudad</td>
</tr>
<tr>
<td>2</td>
<td>y crítico cultural</td>
</tr>
<tr>
<td>2</td>
<td>del San Antonio Express News</td>
</tr>
<tr>
<td>4</td>
<td>&quot;es cuan profundamente mezclada esta' esta ciudad&quot;.</td>
</tr>
<tr>
<td>1</td>
<td>En verano</td>
</tr>
<tr>
<td>1</td>
<td>por ejemplo,</td>
</tr>
<tr>
<td>4</td>
<td>los Anglos y los Hispanos</td>
</tr>
<tr>
<td>3</td>
<td>juegan al fútbol juntos,</td>
</tr>
<tr>
<td>3</td>
<td>presentan y asisten a conciertos,</td>
</tr>
<tr>
<td>3</td>
<td>bailan</td>
</tr>
<tr>
<td>2</td>
<td>en los parques de la ciudad</td>
</tr>
<tr>
<td>4</td>
<td>se mezclan inconcientemente (sin darse cuenta)</td>
</tr>
<tr>
<td>1</td>
<td>en las frondosas plazas del centro.</td>
</tr>
<tr>
<td>2</td>
<td>A juzgar por las páginas de sociedad</td>
</tr>
<tr>
<td>4</td>
<td>los matrimonios mixtos no son excepcionales</td>
</tr>
<tr>
<td>3</td>
<td>si no más bien una cosa común.</td>
</tr>
</tbody>
</table>

207
Efectivamente,
el barrio sigue siendo un sitio hispano aparte,
repleto de un constante río
de extranjeros ilegales de México.
Y como todas las grandes ciudades,
San Antonio tiene comunidades
de los Anglos ricos.
Pero la mayoría de los distritos escolares de la
ciudad
están entregadas en el centro, y
después de las generaciones de los esfuerzos
la clase media hispana
de prósperos hombres de los negocios,
abogados y
médicos
(el 25% de los médicos de la ciudad son hispanos)
están haciendo que su presencia se sienta.
A lo largo (de la ciudad)
de romántico Paseo del Río, O’
River Walk
hay "Cantinas"
como el Calico Cat
y el Kangaroo Court
donde los artistas,
intelectuales,
periodistas hispanos, y Anglos se reúnen.
Uno de los lazos básicos
entre Anglos y Hispanos
es su pasión común
para la comida mexicano-americana.

En su mesa
el arzobispo Flores
ve (como)
las tortillas desaparecen
mucho más antes que el pan,
y en el desayuno
afirma
"parece que los Anglos usan
más salsa picante
en sus huevos revueltos
que nosotros."

Historiadores locales,
insisten en que el chile con carne
es un invento de San Antonio.
Las tortillas de harina
fueron inventadas en San Antonio
como los fritos,
un aperitivo Tex-Mexicano.
Durante la fiesta,
reveladores pueden comprar
del vendedor (ambulante)
un taco polaco (que es)
una salchicha polaca
revuelta en una tortilla mexicana.
APPENDIX J

SAMPLE UNEDITED INTERVIEWS

Question asked for interviews:
1. You have identified sentence ( ) as ungrammatical, can you identify ungrammatical part in this sentence?
2. Can you tell me why do you think this part is ungrammatical?
3. Can you make it a grammatical sentence?

Grade Seven
Level of Proficiency: Beginning
Subject #1
Sentence 3
1. I think the verb "meet" is ungrammatical.
2. It is in the present tense, It should be in the past tense.
3. I met her in Zocalo yesterday.

Sentence 5
1. "has been."
2. It is in the present, it has to be in the past tense.
3. It was raining all day yesterday.
Sentence 7
1. I think it is "so far".
2. Because I think..., no I don't know why. Sentence 10
1. I think it is "only one".
2. No, I don't know.

Sentence 13
1. I think it is "visit".
2. It has to be in the past tense.
3. Every Sunday Carlos visited his grandparents.

Sentence 19
1. I think it is correct.

Sentence 22
1. I think it is correct.

Sentence 25
1. I think it is correct.

Sentence 26
1. It is correct.

Sentence 28
1. It is correct.

Sentence 32
1. I think it is "handed."
2. It has to be in present tense.

Sentence 37
1. I think it is correct.
Subject #2

Sentence 3
1. "meet."
2. Because it has to be in the past tense, because he using the word yesterday.
3. I met her in Zocalo yesterday.

Sentence 4
1. I don't understand this sentence.

Sentence 5
1. "raining all day."
2. It has to be in the past tense.

Sentence 7
1. "gotten."
2. I think it has to be another time.
3. How many letters have you get.....

Sentence 11.
1. "in columbus's days."
2. Because .......

Sentence 14.
1. "threw."
2. Because it has to be in the past participle.
3. thrown.

Sentence 18
1. "spoken."
2. Because they speak already.
3. I think it should be "Spanish is speak in many South...."

**Sentence 21**

1. I do not understand this sentence.

**Sentence 23**

1. "revolved."
2. Because I think the verb is "revolve."
3. Maria says that Earth go around the Sun.

**Sentence 26**

1. I do not understand this sentence.

**Sentence 28.**

1. "hid" it cannot be there.
2. I think the sentences can be "Do not look in the hall closet your present is there?"

**Sentence 30**

1. I do not understand.

**Sentence 32**

1. I think this sentence is grammatical.

**Sentence 37**

1. I think this sentence is correct.

**Sentence 38**

1. "broke."
2. I don't know, it does not sound right.

**Sentence 39**

1. I think it is correct.

**Sentence 40**
Subject #5

Sentence 1.
1. I think "often" is not correct.

Sentence 3
1. I think it is ungrammatical.
2. Because he go to Zocalo yesterday and he is telling.
3. I don't know.

Sentence 5
1. I don't know what part is ungrammatical.

Sentence 8
1. I think "decides" is ungrammatical
2. Because he decided in the past.
3. "decided."

Sentence 11
1. I think the "believe" is not grammatical
2. In columbus days people may believe....

Sentence 14
1. The sentence is not ungrammatical

Sentence 17
1. I think it is "meet".
2. When two persons meet they shake hands.

Sentence 18
1. I think is "spoken" is ungrammatical here.

Sentence 23
1. I think "revolved" is not grammatical.
2. Because, the earth goes around the Sun.
3. The Earth goes around the Sun.

Sentence 25
1. "frequently" is ungrammatical.

Sentence 28
1. I think "hall" is ungrammatical.

Sentence 36
1. I think "ate."
2. What did you eat for lunch today?
3. Because "did" is past tense and the verb is also in the past tense.

Sentence 39
1. "meet"
2. because the wife....
3. up until now I have never met....

Subject #8
Sentence 2
1. "arrived"
2. I am sure they have arrived by now.

Sentence 4.
1. "seated."

Sentence 11
1. "believed."
2. I don't know.
Sentence 13
1. "visit."
2. Because...
3. Every Sunday Carlos visits his grandparents.

Sentence 15
1. I don't know.

Sentence 21
1. "start."
2. because....

Sentence 22
1. I don't know.

Sentence 33
1. "began."
2. Because I think it should be in past participle.
3. "begun."

Sentence 35
1. "seems."
2. ....

Sentence 36
1. "ate"
2. It has to be "eat."
3. What did you eat for lunch today?

Sentence 37
1. no, I don't know.

Sentence 38
1. no
Sentence 39
1. no

Subject #9
Sentence 2.
1. "they"
2. because ....
3. I don't know.
Sentence 4
1. I don't know.
Sentence 7
1. I don't know
Sentence 8
1. "decides"
2. Because "lived" is in the past and "decides" is in present.
3. "decided"
Sentence 11
1. apostrophe in Columbus's is wrong.
Sentence 13.
1. I don't know.
sentence 14
1. I don't know.
Sentence 16
1. I don't know.
Sentence 19
1. "since"
2. She lived in the United States in 1968.

Sentence 21
1. I don't know.

Sentence 22
1. I think the word "sketch" is wrong.
2. The pictures were sketched by the painter in fifteen minutes.

Sentence 23
1. "revolved."
2. Because Maria says now in the present.
3. Maria says that the Earth goes around the sun.

Sentence 25
1. I don't know.

Sentence 27
1. I think "dead" is wrong word, because "dead" is in present.
3. It should be "died."

Sentence 31
1. I do not know.

Sentence 32
1. "over"

Sentence 35
1. I don't know.

Sentence 38
1. "the house"
2. Because como puede a romper la casa los ladrones.

Sentence 39
1. I don't know.
2. no, I don't know.

GRADE 8

Level of Proficiency: Beginning

Subject #3

Sentence 2
1. "had"
2. Because it is in past.
3. "has"

sentence 4.
1. "were seated."
2. were
3. "is seat......"

Sentence 6
1. "spent."
2. .......
3. "spend."

Sentence 7
1. "gotten."
2. Because sentence is in present and it is past participle.
3. "got."

Sentence 9
1. "teach"
2. Because it is in past tense.
3. It should be "teached."

Sentence 10
1. "graduated"
2. Because the sentence is in present.
3. "graduate"

Sentence 11
1. "believed"
2. Because it is in past.
3. "believe."

sentence #14
1. "was"
2. Because was...
3. "were."

Sentence #17
1. "are shaking" is in incorrect.
2. Because...
3. "are shake."

Sentence #18
1. "spoken"
2. Because the verb is in past.
3. "spoke"

Sentence #22
1. "were" is incorrect.
2. "was"

Sentence #24
1. no
2. .......
3. I think it is correct.

Sentence 26
1. "were"
2. because it is in past.
3. "was"

Sentence #27
1. "hanged"
2. Because it is the past tense and the sentence is in present.

Sentence #28
1. This sentence is correct.

Sentence #32
1. "were"
2. .......

Sentence #33
1. It is correct.

Sentence 36
1. "ate"
2. because it is in past.
3. "eat"

Sentence #39
1. It is correct.

Subject #7
Sentence #2
1. I think it is grammatical.

Sentence #3
1. "meet"
2. Because it is in present tense.
3. "met"

Sentence #4
1. "seated"
2. It is past tense and sentence ....
3. "were seat" is correct form.

Sentence #7
1. "gotten"
2. Because gotten is in past and the sentence is in present.
3. got

Sentence #8
1. I don't know.
3. I don't know.

Sentence #9
1. "your"
2. because.....

Sentence #10
1. "those"
2. it is pronoun
3. ............

Sentence 13
1. "his"
2. .......
3. "her"

**Sentence 16**
1. "mid-term"
2. No I don't know.
3. Plural

**Sentence 17**
1. No I don't know.

**Sentence 20**
1. "full"
2.

**Sentence 22**
1. "were"

**Sentence 24**
1. "ever"
2. Because it doesn't have to be there in this sentence.
3. Have you visited Canada?

**Sentence 26**
1. no.

**Sentence 28**
1. "hid"
2. Because "hid" should not be there.
3. "there"

**Sentence 29**
1. "has"
2. I don't know.

Sentence 32
1. "handed"
2. because ....

Sentence 37
1. No, I don't know.

Sentence 38
1. No, I don't know.

Subject #8

Sentence 2
1. "had arrived" is in correct.
2. Because the verb is not in correct tense.
3. "have arrived."

Sentence 4
1. "were seated" is not grammatical.
2. Because the sentence is in present tense.
3. "is seat" is correct.

Sentence 5
1. "has been raining"
2. Because raining
3. It have been raining all day

Sentence 7
1. "so far"
2. because....
3. How many letters have you gotten this month?
Sentence 10
1. "of those"

Sentence 14
1. "threw"
2. The verb is not right.
3. "thrown"

Sentence 15
1. "has doubled"
2. It is in .......
3. have doubled.

Sentence 17
1. "are shaking" is ungrammatical.
2. because shake...
3. "...shake hands."

Sentence 21
1. "starts"
3. "start"

Sentence 28
1. "hid"
3. "is there"

Sentence 29
1. "has been"
3. "have been"

Sentence 34
1. "have went"
3. We went to the beach several times but we never enjoyed it.

Level of Proficiency: Intermediate

Subject #4

Sentence 2
1. It is correct.

Sentence 4
1. "were seated"
2. because,...no I don't know.

Sentence 7
1. "have you gotten" is incorrect.
2. It should be "have you got."

Sentence 9
1. "teach"

Sentence 13
1. "visit"
2. Because the subject is in third person singular.
3. "visits"

Sentence #14
1. "threw"
2. because it is in past tense.
3. "thrown" is correct.

Sentence #17
1. "are shaking" is in correct here.
2. It does not sound good.
3. "shake"

Sentence #23
1. "says"
2. Because the sentence is in past.
3. "said" is correct.

Sentence #28
1. "hid"
2. I don't know.
3. "is hiding" sound better.

Sentence #33
1. "is"
2. It should read "was" in place of "is."

Sentence #35
1. I think it is correct.

Sentence #38
1. "broke"
2. I don't know.
3. "broken"

Grade Nine
Level of Proficiency: Beginning

Subject #7

Sentence 2
1. It is grammatical.

Sentence #7
1. "have you gotten"
2. It should be "How many letters have you got so far this month?"

Sentence 11
1. "is"
2. In Columbus's day people believed the Earth was round.

Sentence 17
1. "are shaking"
2. I just feel that it is incorrect.
3. "they shake hands" is better.

Sentence 26
1. I don't know but it is ungrammatical.

Sentence 28
1. I don't know.

Sentence 31
1. "want"
2. Maria and Betty want to go to dinner now.

Sentence 33
1. "is"
2. It has to be in past tense.
3. He "was" in the elementary school.

Sentence 38
1. I think it is grammatical.

Subject #9
Sentence 3
1. "meet"
2. Because meet is in present tense here.
3. "met"

Sentence 6
1. "have"
2. Because "have" in present tense.
3. "had"

Sentence 7
1. "have"
2. because...
3. "got"

Sentence 10
1. "graduated"
2. I don't know.
3. "graduation"

Sentence 11
1. "believed"
2. I don't know.
3. I can't.

Sentence 13
1. "visit"
2. present tense
3. ..... 

Sentence 15
1. I don't know.

Sentence 17
1. "meet"
2. Because it is in present tense.
3. ....

Sentence 24
1. It is correct.

Sentence 26
1. "supplies"
2. It has to be in past tense.
3. "supplied"

Sentence 27
1. I don't know.

Sentence 30
1. "already"
2. I don't know.
3. It should be without "already."

Sentence 32
1. "handed"
2. I don't know.
3. "hand"

Sentence 34
1. I don't know.

Sentence 37
1. I think it is correct.

Sentence 38
1. "broke"
2. I don't know why, but it does not sound good.
3. "broken"
Subject #10

Sentence 3
1. "meet".
2. I think because meet has to be in past tense here it is in present.
3. "met"

Sentence 6
1. "spent"
2. Because it is past tense, it should be present.
3. It should be "spend."

Sentence 8
1. "lived"
2. I don't know.
3. He lived "decided."

Sentence 10
1. "graduated"
2. It is in past tense.
3. "graduate"

Sentence 11
1. "believed"
2. "they believe."
3. "believe"

Sentence 12
1. "even"
2. It should be without even.

Sentence 14
1. "threw"
2. Because it is in past tense.
3. I don't know.

Sentence 18
1. "spoken"
2. because it is in past tense.
3. I don't know.

Sentence 21
1. "away"
2. because...., no I don't know.

Sentence 23
1. "revolved"
2. Because it is in past tense.
3. It should be "revolves."

Sentence 26
1. "experiments"
2. It should be without "s."

Sentence 28
1. "is"
2. I think so.

Sentence
1. "arrived"
2. I don't know.

Sentence 32
1. "handed"
2. I should be "hand."
Sentence 36
1. "did"
2. I don't know.
3. "does"

Sentence 39
1. "until"
2. Because I think...., I don't know.
3. "up now"

Level of Proficiency: Intermediate

Subject #2

Sentence 1
1. "often"
2. Because you can just say "Robert writes...."

Sentence 2
1. by now.
2. It should be without by the word "now."

Sentence 5
1. It is correct.

Sentence 7
1. gotten
2. I don't know it does not sound right.
3. get

Sentence 9
1. teach
2. teached
Sentence 14
1. threw
2. I don't know.

Sentence 17
1. "are shaking hands."
2. Ther are not shaking hands now.
3. "shake hands."

Sentence 22
1. I don't know.

Sentence 23
1. This sentences is correct, I was wrong.

Sentence 29
1. ...... 
2. I don't know.
3. It has been little raining this year.

Sentence 33
1. is
2. It should be "was" because he had started study.

Sentence 35
1. seems
2. I don't know the rule.
3. may

Sentence 36
1. It is correct.

Sentence 40
1. It is correct.
Subject #3

Sentence 2
1. had arrived.
2. I think "had" is the past tense. It is talking about the present.
3. have arrived by now.

Sentence 3
1. in
2. Because you're not in zocalo you are at the Zocalo.
3. at

Sentence 4
1. No, I don't know.

Sentence 7
1. gotten
2. We are talking about past.
3. got

Sentence 9
1. teach
2. Asking about if we have a woman teacher.
3. taught

Sentence 10
1. of those
2. I don't know.
3. the ones

Sentence 11
1. "is"
2. Because I think they are talking about Columbus's days of past.
3. was

Sentence 14
1. threw
2. I don't think it is right way of saying.
3. no

Sentence 17
1. "are"
2. I don't think we say "are shaking hands."
3. They shake hand.

Sentence 19
1. I think in this sentence "has" is missing.
2. it means ..., I don't know how to say that.
3. has lived.

Sentence 21
1. It is a correct sentence.

Sentence 22
1. "sketches"
2. I don't know.
3. sketched.

Sentence 26
1. delayed

Sentence 28
1. hid
2. Because it is talking ..., I don't know how to say.
3. I think it should be "hidden."

**Sentence 29**
1. No, I don't know.

**Sentence 30**
1. Here verb form "is" is wrong.
2. because it is talking about them.
3. "were."

**Sentence 33**
1. I think here in this part in stead of "is" it should be "was."
2. Because here talking about since when his younger brother is studying English.
3. "was."

**Sentence 34**
1. "have went."
2. It does not sound good.
3. gone

**Sentence 35**
1. here "but" is missing.

**Sentence 40**
1. has.
2. In stead of "has" it should be "have" because it sounds better.
3. "have been."
Level of Proficiency: Advanced

Subject #15

Sentence 7
1. I think "so far."
2. Because we can say...
3. "gotten."

Sentence 8
1. "decides."
2. Here you are talking in past and then you can not say in present here.
3. "decided."

Sentence 10
1. I may have mistaken, this sentence is right.

Sentence 11
1. "is."
2. We are talking in past and then verb is changed to present tense.
3. The correct way will be "earth was round."

Sentence 13
1. "visit."
2. Because we know that in third person singular we have to add "s" in verb.
3. "visits."

Sentence 17
1. The verb here is in correct, "shaking hands."
2. when two...
3. Correct sentence will be "...shake hand."

Sentence 19
1. It is correct. I must have mistaken.

Sentence 22
1. "were".
2. The verb should be in present.
3. Here verb should be in present tense "...is sketched by painter."

Sentence 23
1. "revolved."
2. I don't know.
3 "...goes around".

Sentence 26
1. It is grammatical one.

Sentence 27
1. "until"
2. Because I don't think we can say like this.
3. I don't find the word.

Sentence 29
1. "very little."
2. "...not much rain."

Sentence 36
1. verb form "ate."
2. We have to say "eat."

Sentence 37
1. It is grammatical one.
Sentence 38
1. "broke"
2. This is not how you say.
3. "...robbed by thieves."
APPENDIX K
SAMPLE (UNEDITED) RECALL PROTOCOLS

Grade Seven
Level of Proficiency: Beginning

Subject #2
Mike un critico cultural de San antonio dijo que una de las convenciones son que en el verno los hispanos y los anglos juegan juntos football otros bailan en parques de las ciudades. Se cree que en San Antonio fue donde se hicieron primeros las tortillas y que las tortillas desaperecen antes que el pan, tambien el chiles con carne se fue de ahi. El rio de paseo es romantico. Los fritos tambien fue en San Antonio gracias un senor.

Subject #5
Es hacerca de un retorno de San Antonio venian en el Express news. Su nombre era Mike Gembeer. Ellos venian contando hacerca de la tradiciones que habia. Contaban que habia culturas hipsana tambien fueron a un rio que era romantico, tambien habia ....
Subject #7

Se trata de que Mike Greenberg periodista del San Antonio Express News hizo un reportaje acerca de cómo los hispanos les gusta la comida americana mexicana, también a donde les gusta visitar y saber. En este vimos que en San Antonio esta hecha la tortilla de harina, también que se invento la carne con chile, que los hispanos comen con mucha salsa y mucho huevo.

Subject #16

Se trata de que en Estados Unidos en la parte de Texas hay mucho hispanos que se van a vivir aya. En Estados Unidos no hay costumbres como las que hay en México o en otra parte como America del Sur. Aquí por ejemplo en México se costumbra de comer tortillas, vestirse muy distinto a la gente de aya, porque aya se tiene otra costumbre no comen tortilla se visten a la forma de aya, tienen otra educación de adecuando a las de aquí. Por eso es que a muchos americanos les gusta Mexico y a los Mexicanos les gusta irse a Estados Unidos.

Level of Proficiency: Advanced

Student #17

"Lo que muchos visitantes no se dieron cuenta menciono Mike Greenberg para el periodo del San antonio News es que
mientras unas personas juegan futbol juntos otros lo hacen separados. En un lugar apartado de San Antonio hay un lugar donde hay comida mexicana. El 25% de los doctores son hispanos. El taco polacos es un sitio donde se venden tacos Arabes. Hay un rio donde se pasean los hispanos y los anglos y al lado se pueden caminar.

Subject #11

Mike Geeenerg es un reporterro que busca datos importantes acerca de la convivencia de los hispanos con los ingleses, dice que en San Antonio hay muchisimos emigrados de Mexico pero dice que en muchos casos los hispanos se mezclan con los americanos como por ejemplo en las escuelas y los profesionales el 25% de los doctores en San Antonio son hispanos. En los lugares concurridos como el teatro los conciertos o un partido de football hispanos y americanos conviven juntos.

Una de las cosas que mas los une es la comida Nota que en la mesa si se ponen tortillas y pan lo primero que se acaba son las tortillas y los americanos son los que le ponen mas salsa a sus huevos. Hay quien dice que la tortilla con huevo fue inventado en San Antonio. Pero lo que si es mas seguro es que las tortillas de harina son invento originario de San Antonio.

Hay personas que se hacen un taco polaco, es decir que un taco de tortilla y una salsa polaca. Así que ahora ya
es más común la convivencia entre hispanos y americanos aunque todavía existen lugares solo para unos o para otros.

Grade Eight
Level of Proficiency: Beginning
Subject #3

Esta es una noticia de San Antonio Express new que decía que en el verano juegan futbol americano y bailan en San Antonio los hispanos es un gran porcentaje de dotores que hay en San Antonio hay lugares románticos como pueden ser The River y otro lugar. Se dice que desaparecieron por un momento las tortillas, el pan y otras cosa. También se dice que inventaron la tortilla blanca y también el chile con carne. Durante las fiestas comían los tacos polacos. En San Antonio les gusta mucho la comida mexicana y la americana.

Subject #8

Muchos visitantes cayeron en la noticia dijo Mike Greenberg, nativo de la ciudad crítico de San Antonio Noticias Expresadas. En tiempo de verano los Anglos y Hispanos juegan fútbol juntos y van a ver bailables en los parkes. También que en Estados Unidos hay muchos hispanos y anglos ilegales que vienen de Mexico, los mexicanos y las gentes que viven alla van a ver bailables a los parkes y van a las plazas comunes que hay alla.
Muchos hispanos y Anglos que eran ilegales ya están nacionalizados y son útiles a su población trabajando. La mayoría de los hispanos y Anglos tienen de doctores. En Estados Unidos hay muchas lugares en donde van todos los anglos y hispanos a divertirse como parques, plazas, tiendas etc. La mayoría de ellos trabajan y otros no.

Subject #16

Se trata de que en Estados Unidos en la parte de Texas hay mucho hispanos que se van a vivir aya. En Estados Unidos no hay costumbres como las que hay en México o en otra parte como América del Sur. Aquí por ejemplo en México se costumbra de comer tortillas, vestirse muy distinto a la gente de aya, porque aya se tiene otra costumbre no comen tortilla se visten a la forma de aya, tienen otra educación de adecuado a las de aquí. Por eso es que a muchos americanos les gusta México y a los Mexicanos les gusta irse a Estados Unidos.

Level of Proficiency: Intermediate

Subject #9

En el verano los hispanos juegan fútbol y de un Sr. Hispano Greenberg que era reportero de un periódico y escribía sobre los hispanos en E.U.A. y en algunas comunidades había hispanos. En casi todas las escuelas la mayoría son hispanos. El 25% de doctores son hispanos.
Después va diferentes ciudades donde habla sobre la comida mexicana. En los huevos les ponen chile y se usa más de lo que usamos nosotros. Se decía que la tortilla de harina inventados en Boston y que el chile era algo también huevo e inventado en E.U.A. Después hay un puesto de tacos El Taco Polaco en el cual se servían un tipo de salsa enrollada en tortilla mexicana.

**Subject #10**

Que cantidad de visitantes están en la noticia dijo un Sr. Greenberg un nativo de San Antonio y crítico de cultura de un periódico de San Antonio. Muchos mexicanos vivían en San Antonio. En verano mucho Hispanos y Anglos conviven juntos juegan fútbol van a conciertos etc.... Como todos las ciudades grandes tienen comunidades de anglos, pero casi en todas las escuelas su mayoría son hispanos. La clase media de hispanos son hombre de trabajo (25% de los doctores son de S.A. son hispanos). Cruza la ciudad el paseo del río o el caminata del río donde hay hoyos de agua como el calico cat o el kangaroo court donde muchos Anglos y Hispanos trataban (las artistas). Una cosa que es igual entre los hispanos y Anglos es su pasión por la comida mexicana. El arcobispo Flores dijo que la tortilla había desaparecido y que usaban pan. Algunos ellos ponen más salsa que nosotros. Algunos ellos inventaron el chile con carne. Ellos inventaron la tortillas de harinas y nachos.
**Subject #19**

Lo que muchos de los visitantes emplezan a notar como por ejemplo un critico culturalista nota que los mexicanos se estan mezclando cada vez mas con los ....como por ejemplo el 25% de los doctores de San Antonio son Hispanos. San Antonio es una ciudad de muchos ilegales. On week end the hispanos play futbol with the americans. En los fin de semanas el hispanos juegan football con los americanos y que muchos convivien su comida. El chile con carne fue inventada en San Antonio y la tortilla de harina en.... En los desayunos el mexicano come salsa y el americano no. Los fritos de tortillas fueron .....por los mexicanos. El tambien dice que en mexico el taco polaco se puede comprar en la calle envuelto en tortilla.

**Level of Proficiency: Advanced**

**Subject #1**

"Que gran numero de visitantes que acuden la ciudad e dan cuenta de la gran mezcla y convivencia que hay entre los hispanos y los americanos", expresa un nativo de San Antonio y critico de todo lo relacionado con la cultura para el periodico local San Antonio Express News. En el verano es comun ver a mexicanos y a estado unidenses jugar futbol americano y ver los asistir juntos a todos los eventos culturales que llevan acabo en la ciudad. Que en cualquier lado como en Kangaroo Court podemos ver que tanto
como políticos, poetas, se reúnen todo a expresar ideas. Y que es visto como una cosa natural ver matrimonios entre hispanos y norte americanos. De gente que imigran muchas logran llevar una mejor vida algunos se les ve que ya son grande financieros, abogados etc. La ciudad de San Antonio admira mucho la cocina mexicana ha creado platillos como las tortillas de harina y un snack llamdo Frito de Texas y Mexico. Estos platillos se pueden degustar en varios lugares como Taco Polaco etc.

Subject #4

Lo visitantes de San Antonio no notan un detalle que la sociedad esta profundamente mezclada. Por ejemplo, en el verano, los hispanos y no hispanos juegan futbol juntos, o van a bailes y las plazas mezcladas.

Hay barrios de ilegales de Mexico. Algunos "no hispanos " ricos viven en colonias donde no hay hispanos. Afortunadamente después de varias generaciones de mucho esfuerzo, algunos hispanos como jueces, fisicos y doctores estan haciendo notar su precencia. Tambien lo que habitantes de San Antonio tienen en comun es su gusto por la comida mexicana-americana. En algunas comidas dice el Sr. Flores, las totillas se terminan antes que el pan. Y en los desayunos, los anglos le popnen mas chile a sus huevos revueltos que los hispanos.
Aunque historiadores locales, afirman que el chile con carne es una invencion de San Antonio al igual que las tortillas de harina. Tambien los fritos, botana mexicana son hecha en San Antonio.

Subject #10

Muchas turistas de San Antonio se dan cuenta de la mezcla de clase dice Mike Greenberg nativo de la ciudad y critico cultural del "San Antonio News". Se puede ver este aspecto en las bodas que son mixtas, nada excepcional es mas casi comun. Aunque los barrios siguen siendo hispanos cuidados por los inmigrantes mexicanos. Como en cualquier grand ciudad San Antoino tiene muy buenos departamentos para los anglos. Los hispanos han logrados atravez del tiempo y con trabajo salir adelante y llegar a ser abogados, fisicos, (25% del los medicos de San Antonio son hispanos). Tambien asisteron juntos a los conciertos y bailes asi como juegan juntos al football. Les gusta ir a bailar a las plazas del centro de San Antonio. Los hispanos y anglos artistas, negociantes, intelectuales se juntan en los paseos, que hay hoyos de agua como Kangaroo Court, etc.

Pero donde mas concuerdan es en la comida, ya que les gusta la comida Mexicanamericana y como dice el arcbispo Flores, " A la hora de desayunar ya se han acabado
tortillas mientras ahí sigue el pan ". Los anglos comen más salsa picante en sus huevos estrellados que nosotros.

También es cierto que se dice que las tortillas de harina y las fajitas se inventaron en en San Antonio. Y si vienes en las fiestas no será difícil que te den un Taco Polaco. Salsa polaca envuelta en una tortilla mexicana.

Grade Nine
Level of Proficiency: Beginning
Subject #7

Muchos de los visitantes fallan a las noticias dice Mike Greenberg reportero del periódico de San Antonio profunamente el dijo que unos de los hispanos y anglos eran muy fuerte, ejemplo jugaban football juntos, bailaban y ven los conciertos de bailes, y reúnen en el centro de la ciudad. En las fronteras de San Antonio hay muchos ilegales que pasan de México a San Antonio. También hay mucho profesionistas y en los escuelas hay muchos hijos de señores de negocios, psicologos. Doctores el 25% hispanicos, muchos historiadores dicen que la carne con chile es invento de San Antonio. La tortilla con salsa Polaca es de San Antonio, taco Polaco también dicen que es de San Antonio.
Subject #15

Muchos visitores fallan a la noticia dijo Mike Greenberg un nativo de la ciudad y critico de la cultura, en el periodico de San Antonio, y el se profundizo en cruzas de hispanicos y anglos, juntos jugaban football e van a los conciertos y bailaban en los parques de la ciudad. Tambien se van al centro de la ciudad. En la frontera de Texas hay muchos ilegales y hay casas en cuales los ilegales llegan. Tambien un 25% de hispanicos de la clase media que son doctores, sicologos etc. Tambien describio que a los hispanicos le gustaba mucho la comida de EUA con la mexicana y usaban la tortilla, siempre ponian mas adereso a sus huevos revueltos, y usaban tortillas, y se cree que el chile con carne fue inventado en Texas, y tortilla en Mexico, y comian mucho el taco polaco con la tortilla y una ensalada polaca.

Subject #17

Mucho visitantes y tambien gentes de ahí critican la cultura, dice Mike Greenberg, que en vacaciones los hispanos se la pasan jugando futbol y que van a los conciertos a ver a los artistas en los parques. Dicen que hay barrios para las personas ilegales que se encuentran alla. Tambien dicen que hay un lugar romantico el Paseo del rio. Hay historiadores que dicen que la tortilla es de San Antonio al igual que el chile con carne. Dicen que los frijoles
fritos son una botanas de Mexico-Texas. También dicen que las tortillas cambiaron por pan. Toman de desayuno huevos revueltos con salsa.

Level of Proficiency: Intermediate

Subject #2

Este texto trata de la relación que hay entre los ingleses y Latinos. También habla de los personas que imigran en los estados unidos. Dice que un periódico llamado New York Times habla de todas las relaciones que hay entre ellos por ejemplo: Dice que los Ingleses y los Latinos se llevan bien y que han hecho una especie de investigaciones y dice que en un desayuno lo que se termina más rápidamente son las tortillas y que el pan tarda más tiempo en terminarse, también dice que la tortilla de harina blanca la inventaron en San Antonio al igual que los totopos. Dicen también que la carne con chile comensaron a comer las personas de San Antonio. Dices que en las fiestas hacen tacos con salsa polaca que así la comen. Al principio dice que el 25% de doctores son Latinos.

Subject #19

Bueno, la lectura se trataba de la relación de Ingleses y Mexicanos en San Antonio. Dice que el 25% de los doctorados alla son hispanos y que también los Mexicanos tienen un lugar solo para ellos para vivir (emigrados),
también en San Antonio dice que se inventó el chile con carne de lo cual pienzo que están en un gran error, porque se inventó en México, a igual dice que las tortillas de harina, de eso no estoy segura, pero no creo. Hay una relación también muy buena entre los Ingleses y Mexicanos, eso saber lo es agradable. Ya que siempre es bueno tener amigos buenos no?

Level of Proficiency: Advanced

Subject #11

En este pararfo Mike Greenberg un crítico del periódico de San Antonio nos habla de que los turistas se fijan más en la revoltura de culturas como en este caso en San Francisco: Los Anglos con los hispanos Por ejemplo en el verano juegan beisbol y actuan y cantan juntos, en su matrimonio también hay revolturas y como es supuesto, los colegio están integrados con alguna asociación y por eso hay muchos hispanos que se vuelvan gran doctores, abogados etc. En la parte romántica en el rio se reúnen los grandes artistas, anglos y hispanos. Una coas que los une es que a ambos grupos les encanta la comida Americana-Mexicana y ellos dicen que inventaron la carne con chile, fritos y las tortillas blancas. En sus día de fiesta cisinan una especiede taco con salsa.
Subject #16

Lo que muchos visitantes no notan, dice Mike Greenberg, es cuan mezclada esta la sociedad en San Antonio. Y esta mezcla es tanto en la poblacion como en la cultura. Por ejemplo, en el verano los mexicanos y Americanos juegan juntos al football. Asisten ambos a conciertos y bailes, y muchas veces se casan entre ellos. En San Antonio como en todas las grandes ciudades se forman comunidades hispanas que generalmente estan formadas por mexicanos ilegales, a las cual las llaman barrios. Muchos de los ilegales son doctores y fisicos que en este tiempo ya hacen sentir su presencia, pues son el 25% de todos los doctores y fisicos. En las escuelas tambien se puede notar la mezcla, pues algunos mexicanos de clase media (negociantes) han entegrado a colegio americanos ninos mexicanos. La mezcla tambien se nota en la comida, pues los americanos ya tambien comen picante segun Flores, ya se acostumbran en el desayuno la tortilla. Algunos mexicanos y americanos se reuuen en el paseo del rio o en las plazas. Es comun encontrar los tacos polacos, que estan hechas con la carne al estilo polaco pero dentro de una tortilla mexicana.
APPENDIX L

SAMPLE DATA USED FOR EXAMINING THE QUALITATIVE RELATIONSHIP BETWEEN THE ABILITY TO MAKE GRAMMATICALITY JUDGMENT AND READING COMPREHENSION
Analyses of the Qualitative Relationship between the scores on the Grammaticality Judgment test and the Reading Comprehension Test

**Table L-1**
Grade Seven: Beginning Level of Proficiency Level

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Scores on Grammatical Form-classes</th>
<th>Scores on Reading Comprehension Test</th>
<th>Direct Selected Text Reconstruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>#5</td>
<td>Past Tense 7</td>
<td>27</td>
<td>Mike Greenberg habla de la forma de como estan mezcladas culturas diferentes.</td>
</tr>
<tr>
<td></td>
<td>Present Tense 4</td>
<td></td>
<td>Los Anglos y Hispanos juegan futbol juntos.</td>
</tr>
<tr>
<td></td>
<td>Present Perfect 4</td>
<td></td>
<td>1. Mike Greenberg hizo un reportaje acerca de como los Hispanos les gusta la comida Mexicana.... se invento la carne con chile.</td>
</tr>
<tr>
<td></td>
<td>Passive Voice 3</td>
<td></td>
<td>2.</td>
</tr>
<tr>
<td></td>
<td>Subject-verb 5</td>
<td></td>
<td>3.</td>
</tr>
<tr>
<td>#6</td>
<td>Past Tense 3</td>
<td>25</td>
<td>4. ...en San Antonio esta hecha la tortilla de harina.</td>
</tr>
<tr>
<td></td>
<td>Present Tense 7</td>
<td></td>
<td>5. Los Hispanos comen con mucha salsa y mucho huevo.</td>
</tr>
<tr>
<td></td>
<td>present Perfect 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>passive voice 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>subject-verb 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>Tense</td>
<td>Count</td>
<td>Text</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------</td>
<td>-------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>#16</td>
<td>Past Tense</td>
<td>5</td>
<td>La tortilla de harina se inventó en San Antonio. Los fritos se inventaron en también en San Antonio. En el verano los Anglos y Hispanos juegan football juntos.</td>
</tr>
<tr>
<td></td>
<td>Present Tense</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Present Perfect</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passive Voice</td>
<td>6</td>
<td>El Taco Polaco es una salchicha que está envuelta en tortilla Mexicana.</td>
</tr>
<tr>
<td></td>
<td>Subject-verb</td>
<td>3</td>
<td>En la ciudad el Paseo del Río tiene dos hoyos, uno es el Calico Cat y el otro es el Kangaroo Court.</td>
</tr>
<tr>
<td>#23</td>
<td>Past Tense</td>
<td>6</td>
<td>La tortilla apareció en San Antonio antes que el apareciera el pan.</td>
</tr>
<tr>
<td></td>
<td>Present Tense</td>
<td>6</td>
<td>Mike Greenberg nos dice que los Anglos y Hispanos ya hacen muchas cosas juntas como como jugar football, ir a conciertos, reunirse en los plazas.</td>
</tr>
<tr>
<td></td>
<td>Present Perfect</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passive Voice</td>
<td>7</td>
<td>En los barrios de los hispanos hay muchos Mexicanos refugiados y en los distritos de la ciudad ya están mezclados Anglos y Hispanos.</td>
</tr>
<tr>
<td></td>
<td>Subject-verb</td>
<td>2</td>
<td>Otra de las cosas más comunes entre ellos es la comida Mexicana-Americana.</td>
</tr>
<tr>
<td>#26</td>
<td>Past Tense</td>
<td>5</td>
<td>Mike que era nativo de San Antonio hablaba sobre las diferentes razas de personas que hay en San Antonio.</td>
</tr>
<tr>
<td></td>
<td>Present Tense</td>
<td>5</td>
<td>Dice que juegan football en los veranos, se reúnen en la plaza de centro, van juntos a bailes.</td>
</tr>
<tr>
<td></td>
<td>Present Perfect</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passive Voice</td>
<td>6</td>
<td>El menciona que al unirse los Anglos, Hispanos en el parque parece al barrio Mexicano que está formado por Hispanos ilegales.</td>
</tr>
<tr>
<td></td>
<td>Subject-verb</td>
<td>4</td>
<td>Dice que los norteamericanos especialmente de Texas inventaron la tortilla de harina.</td>
</tr>
<tr>
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<td>Subject-verb 4</td>
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</tr>
</tbody>
</table>

Los Americanos son que ponen mas salsa a sus huevos. Las tortillas de harina son invento de originrio de San Antonio.

Dícen que la tortilla con huevo fue inventado en San Antonio.

Así es que ahora ya es común la convivencia entre Hispanos y Americanos aunque todavía existen lugares solo para unos o para otros...

...de los 25 % de los doctores son hispanos.

Los Hispanos y los Nortamericanos conviven haciéndolos diversos actividades... Los nortamericanos se acaban mas rapido la tortilla que el pan.

Ya se han inventado nuevos platillos con la tortilla.

La comunidad está mezclada...

Hay muchos lugares en San Antonio donde se puede ir a comer comida típica de Mexico.

...en el verano los Anglos y los Hispanos juegan futbol juntos, van al teatro y bailar a las plazas del pueblo.

...25 % de los doctores en esa ciudad son Hispanos.

...los Mexicanos le ponemos mas salsa a sus huevos fritos y a varias cosas.
Ellos dicen que inventaron la carne con chile, fritos y las tortillas blancas.

En la parte romántica en el río se reúnen los grandes artistas, Anglos y Hispanos.

Mike Greenberg decía que San Antonio era una ciudad llena de Hispanos, Anglos, y algunos Mexicanos ilegales.

...que los Anglos y Hispanos tienen común que a los les gusta la comida Mexicana-Americana.

Mike Greenberg decía que San Antonio era una ciudad llena de Hispanos, Anglos y Mexicanos ilegales.

Los Hispanos y Anglos tienen en común que a los dos les gusta la comida Mexicana-Americana.

En San Antonio 25% de los doctores eran Hispanos.

Mike Greenberg trabaja en un periódico y dice...

 Dice que la tortilla de harina blanca y los fritos se inventaron en San Antonio.

En el verano los Hispanos y los Anglos juegan futbol.
Table L-3
Grade Seven: Advanced Proficiency Level

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Scores on Grammatical Form-classes</th>
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<th>Direct Selected Text Reconstruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>#3</td>
<td>Fast Tense 6</td>
<td>43</td>
<td>Mike Greenberg hablo de la forma de como estan mezcladas culturas diferentes la Inglesa y Hispana.</td>
</tr>
<tr>
<td></td>
<td>Present Tense 4</td>
<td></td>
<td>Dos personas, una Inglesa y una Hispana conviven juntos juegan futbol juntos.</td>
</tr>
<tr>
<td></td>
<td>Present Perfect 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passive Voice 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subject-verb 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#11</td>
<td>Past Tense 4</td>
<td>62</td>
<td>Taco Polago tambien inventaron en San Antonio.</td>
</tr>
<tr>
<td></td>
<td>Present Tense 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Present Perfect 7</td>
<td></td>
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<tr>
<td></td>
<td>Passive Voice 4</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Subject-verb 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#12</td>
<td>Past Tense 5</td>
<td>36</td>
<td>Algunas personas dicen que el carne con chile fue inventado en San Antonio.</td>
</tr>
<tr>
<td></td>
<td>Present Tense 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Present Perfect 3</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>Passive Voice 2</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Subject-verb 5</td>
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</tbody>
</table>

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### Table L-4

**Grade Eight: Beginning Level of Proficiency**

<table>
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<th>Scores on Reading Comprehension Test</th>
<th>Direct Selected Text Reconstruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>#3</td>
<td>Past Tense 5</td>
<td>52</td>
<td>Se dice que inventaron tortilla blanca y también el chile con carne. En el verano juegan futbol americano y bailan los Anglos y Hispanos juntos.</td>
</tr>
<tr>
<td></td>
<td>Present Tense 5</td>
<td></td>
<td>Sr. Florete dice que desaparecieron las por un momento las tortillas y otras cosas.</td>
</tr>
<tr>
<td></td>
<td>Present Perfect 4</td>
<td></td>
<td>Mike Greenberg hizo un reportaje acerca de como los Hispanos les gusta la comida Mexicana....</td>
</tr>
<tr>
<td></td>
<td>Passive Voice 4</td>
<td></td>
<td>...se invento la carne con chile.</td>
</tr>
<tr>
<td></td>
<td>Subject-verb 4</td>
<td></td>
<td>...en San Antonio esta hecha la tortilla de harina.</td>
</tr>
<tr>
<td>#7</td>
<td>Past Tense 3</td>
<td>35</td>
<td>Los Hispanos comen con mucha salsa y mucho huevo.</td>
</tr>
<tr>
<td></td>
<td>Present Tense 5</td>
<td></td>
<td>Cuando los visitantes saben la noticia? dijo Mike.</td>
</tr>
<tr>
<td></td>
<td>Present Perfect 3</td>
<td></td>
<td>En la ciudad hay muchos parkes en donde bailan.</td>
</tr>
<tr>
<td></td>
<td>Passive Voice 6</td>
<td></td>
<td>...los Anglo and Hispanic juegan futbol juntos.</td>
</tr>
<tr>
<td></td>
<td>Subject-verb 2</td>
<td></td>
<td>...el chile con carne fue inventado por San Francisco y las tortillas de harina tambien.</td>
</tr>
<tr>
<td>#13</td>
<td>Past Tense 6</td>
<td>37</td>
<td>Hay personas que dicen....</td>
</tr>
<tr>
<td></td>
<td>Present Tense 3</td>
<td></td>
<td>...ellos comen mucha tortilla durante el día.</td>
</tr>
<tr>
<td></td>
<td>Present Perfect 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passive Voice 4</td>
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### Table L-5
Grade Eight: Intermediate Level of Proficiency

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<th>Scores on Reading Comprehension Test</th>
<th>Direct Selected Text Reconstruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>#6</td>
<td>Past Tense 4 31</td>
<td>Un Sr. hispano Greenberg que era un reportero de un periodico escribía sobre los hispanos en E.U.A.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Present Tense 5</td>
<td>En casi todas escuelas la mayoría son hispanos.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Present Perfect 4</td>
<td>El 25% de los doctores son hispanos.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passive Voice 6</td>
<td>Mike Greenberg es un muchacho que observa la cultura de los hispanos y los anglos.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subject-verb 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#20</td>
<td>Past Tense 4 61</td>
<td>En el texto anterior se menciona que el 25% de los doctores en ese lugar son hispanos.</td>
<td></td>
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<tr>
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<td>Present Tense 4</td>
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<td>Subject-verb 6</td>
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</tr>
<tr>
<td>#21</td>
<td>Past Tense 6 6</td>
<td>Mike Greenberg dice que los anglos y hispanos en el verano juegan football juntos.</td>
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<tr>
<td></td>
<td>Present Tense 3</td>
<td>Comen chile con carne y tortilla que fue inventado en San Antonio.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Present Perfect 4</td>
<td>La tortilla se acaba antes que el pan.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passive Voice 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subject-verb 3</td>
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<tr>
<td>#1</td>
<td>Past Tense 7</td>
<td>83</td>
<td>&quot;En el verano es común ver a Mexicanos y a Estadounidenses jugar fútbol americano y ver les asistir juntos a todos los eventos culturales que se llevan acabo en la ciudad.&quot;</td>
</tr>
<tr>
<td></td>
<td>Present Tense 7</td>
<td></td>
<td>...ha creado platillos como las tortillas de harina y un snack llamado frito de Texas and Mexico. (recalls passive voice sentences as present perfect tense.)</td>
</tr>
<tr>
<td></td>
<td>Present Perfect 6</td>
<td></td>
<td>De gente que inmigra muchas logran llevar una mejor vida, a algunos se les ve que ya son grandes financieros, abogados etc.</td>
</tr>
<tr>
<td></td>
<td>Passive Voice 4</td>
<td></td>
<td>Los visitantes no notan un detalle, que la sociedad esta profundamente mezclada. Por ejemplo en el verano, los Hispanos y no Hispanos juegan fútbol juntos o van a bailes ....</td>
</tr>
<tr>
<td></td>
<td>Subject-verb 5</td>
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<td>Las tortillas de harina y los fritos son hechos en en San Antonio.</td>
</tr>
<tr>
<td>#4</td>
<td>Past Tense 8</td>
<td>112</td>
<td>...algunos Hispanos como jueces, físicos, y doctores estan haciendo notar su presenecia. las tortillas se terminan antes que el pan.</td>
</tr>
<tr>
<td></td>
<td>Present Tense 7</td>
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<td>...asistieron juntos a los conciertos y bailes. ....a las hora de desayunar, ya se han acabados las tortillas....</td>
</tr>
<tr>
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<td>Present Perfect 8</td>
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<td>Present Tense</td>
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</tr>
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<td>Present Perfect</td>
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<td>41</td>
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Table L-8
Grade Nine: Intermediate Level of Proficiency

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</tr>
</thead>
<tbody>
<tr>
<td>#2</td>
<td>Past Tense 5</td>
<td>51</td>
<td>Habla de las personas que imigran en los Estados Unidos.</td>
</tr>
<tr>
<td></td>
<td>Present Tense 3</td>
<td></td>
<td>...que la tortilla de harina blanca la inventaron en San Antonio.</td>
</tr>
<tr>
<td></td>
<td>Present Perfect 2</td>
<td></td>
<td>...que en desayuno lo que se termina más rápido son las tortillas.</td>
</tr>
<tr>
<td></td>
<td>Passive Voice 5</td>
<td></td>
<td>1. La historia trato de que todas las cosas mixtas que existen en Estados Unidos.</td>
</tr>
<tr>
<td></td>
<td>Subject-verb 2</td>
<td></td>
<td>2. Dice que conviven los Anglos y los Mexicanos, que van a conciertos y danzan en las parkes de la ciudad.</td>
</tr>
<tr>
<td>#3</td>
<td>Past Tense 7</td>
<td>79</td>
<td>3. Mike decía que muchos braceros ilegales han pasado a la frontera y han empezado negocios en San Antonio.</td>
</tr>
<tr>
<td></td>
<td>Present Tense 2</td>
<td></td>
<td>4. ... que de San Antonio inventaron la tortilla de harina, los nachos, snacks etc.</td>
</tr>
<tr>
<td></td>
<td>Present Perfect 5</td>
<td></td>
<td>5. ... que los anglos inventaron un taco llamado Taco Polaco ponen salsa polaca en una tortilla mexicana.</td>
</tr>
<tr>
<td></td>
<td>Passive Voice 7</td>
<td></td>
<td>Se juntaban a comer cosas típicas de comer Mexicana y Americana.</td>
</tr>
<tr>
<td></td>
<td>Subject-verb 3</td>
<td></td>
<td>Se trata de que en San Antonio en el verano se unen los Hispanos y los Anglos a jugar futbol.</td>
</tr>
<tr>
<td>#4</td>
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<td>12</td>
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### Table L-9

**Grade Nine: Advanced Level of Proficiency**

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<th>Scores on Grammatical Form-classes</th>
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</tr>
</thead>
<tbody>
<tr>
<td>#7</td>
<td>Past Tense 7</td>
<td>81</td>
<td>Los Anglos dicen que las <em>tortillas desaparecieron</em> antes que el pan.</td>
</tr>
<tr>
<td></td>
<td>Present Tense 3</td>
<td></td>
<td>Los Anglos y los Hispiones ocupan un mismo lugar y juntos juegan. <strong>van a conciertos, danzan</strong> en los parques de la ciudad.</td>
</tr>
<tr>
<td></td>
<td>Present Perfect 4</td>
<td></td>
<td><strong>... que muchas personas han caído</strong> en las noticias.</td>
</tr>
<tr>
<td></td>
<td>Passive Voice 5</td>
<td></td>
<td><strong>Esto fue lo que dijo</strong> un crítico de la cultura.</td>
</tr>
<tr>
<td></td>
<td>Subject-verb 6</td>
<td></td>
<td><strong>Los mexicanos</strong> <strong>comparten</strong> una pasión por la comida Mexicana-Estadounidenses.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Es sencillo ver cómo las culturas están mezcladas.</strong></td>
</tr>
<tr>
<td>#9</td>
<td>Past Tense 4</td>
<td>61</td>
<td><strong>Los Anglos y Espanoles</strong> <strong>comparten</strong> una pasión por la comida Mexicana-Estadounidenses.</td>
</tr>
<tr>
<td></td>
<td>Present Tense 6</td>
<td></td>
<td><strong>Los</strong> <strong>mexicanos</strong> <strong>son</strong> más chile a la comida que los estadounidenses.</td>
</tr>
<tr>
<td></td>
<td>Present Perfect 7</td>
<td></td>
<td>En San Antonio se invento la tortilla de harina.</td>
</tr>
<tr>
<td>#10</td>
<td>Past Tense 8</td>
<td>98</td>
<td><strong>Los Anglos y Hispanos</strong> <strong>tienen</strong> algo en común como quién dice en que les gusta la comida Mexicana y Americana.</td>
</tr>
<tr>
<td></td>
<td>Present Tense 6</td>
<td></td>
<td><strong>Mike Greenberg</strong> dice que los Anglos y Hispanos que residen en San Antonio....</td>
</tr>
<tr>
<td></td>
<td>Present Perfect 3</td>
<td></td>
<td><strong>La gente de San Antonio hace</strong> una mezcla entre comida Mexicana y Americana.</td>
</tr>
<tr>
<td></td>
<td>Passive Voice 3</td>
<td></td>
<td><strong>... en el verano los anglos con hispanos juegan beisball y actuan y cantan juntos.</strong></td>
</tr>
<tr>
<td>#11</td>
<td>Past Tense 5</td>
<td>105</td>
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<tr>
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<tr>
<td></td>
<td>Present Perfect 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Passive Voice 5</td>
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<td></td>
<td>Subject-verb 3</td>
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