# REPORTED GENERAL AND TASK-SENSITIVE 

READING STRATEGIES OF AMERICAN

## UNIVERSITY STUDENTS LEARNING SPANISH

## AS A FOREIGN LANGUAGE

By
JULIE G. WILLCUT

Bachelor of Arts
Oklahoma State University
Stillwater, Oklahoma 1989

Master of Arts
Oklahoma State University
Stillwater, Oklahoma 1993

Bachelor of Arts
Oklahoma State University
Stillwater, Oklahoma 2000

Submitted to the Faculty of the
Graduate College of the Oklahoma State University

In partial fulfillment of
the requirements for the Degree of
MASTER OF ARTS
May, 2002

# REPORTED GENERAL AND TASK- SENSITIVE READING STRATEGIES OF AMERICAN 

 UNIVERSITY STUDENTS LEARNING SPANISH
## AS A FOREIGN LANGUAGE

Thesis Approved:


## ACKNOWLEDGMENTS

The completion of a thesis is not a solo effort. It involves the effort of many individuals who graciously give their time, expertise, guidance, and support to bring the completed document to fruition. I share the accomplishment of this thesis with those who gave their valuable time and effort to help me complete this study.

This study could not have taken place without the support of my committee and cooperation of the professors and students of the Spanish Department who were kind enough to allow me to conduct my research with their classes. My deepest gratitude and respect goes to Dr. Ravi Sheorey, my thesis advisor, for his unwavering support, consistent guidance, and all the hours he spent helping me with, and navigating me through, the data of my study. Dr. Sheorey is the consummate professional, always going above and beyond the call of duty to assist me in completing this thesis. I appreciate all of your guidance and support more than words can express. I am also grateful and indebted to Dr. Carol Moder and Dr. Susan Garzon for their guidance and support in completing this study. Dr. Moder offered valuable and outstanding suggestions that enhanced this study significantly, and was wonderful in guiding me through the final writing process. Both are amazing scholars and terrific women. I consider myself incredibly fortunate to have had the opportunity to study with such talented professors and I feel honored to have such a professional and talented team guiding me through the process. I also extend my deepest gratitude to Dr. Chelo Gavin, Dr. John Deveney, Dr.

Christopher Wiemer, Dr. Cida Chase, and Dr. Lynne Echegaray of the Oklahoma State University Spanish department and their students for their assistance in conducting the survey for this study. I am grateful for the willingness of these professors to share the limited time that they have with their students by allowing me to conduct my survey in their classes and for their sincere interest in the study. Muchas gracias a todas!

My devoted friends have also been instrumental. My dear friend Lisa Eckels has been a constant source of support when I decided to go back to school to get my Spanish and ESL degrees and consistently has been there with words of encouragement. Thank you so much, my friend, for sticking with me through all these neurotic years. Yumi "Is that food?" Kamimura and Colleen Tije have been such welcome friends. They are my ESL sisters and teachers of Asian culture. It has been a joy to share the trials and tribulations of the program, the comps, and the data analysis. However, as much as I have enjoyed my Asian culture lessons, I'm still not going to eat anything raw! Dan and Rona Tracy were also a wonderful source of support as I juggled studies, work, and "home life." Dan so graciously put down my Pergo floor, giving me one less major home improvement project to work into my study schedule. Rona offered constant support with encouraging words, cards, and little goodies; as well as answering my data questions as I prepared for comps. Both offered their support and assistance even while adjusting to a wonderful new life with the birth of their first child, Cal Allen. Your friendship and support have enhanced my life more than I can express.

I owe eternal thanks to my CareerTech work mates who have become such dear personal friends. Val "ya know what!?" Terry, my El Vaquero sister, offered constant support and advice as I began designing my survey. Dr. Margaret "hoochie momma"

Ellibee, in addition to being a wonderful and supportive boss and friend, was kind enough to read chapters of this thesis and offered valuable suggestions on how I could make them better. Paula "mucho mug" Farris, my other El Vaquero sister, always asked about my progress, listened to my ideas as I worked through the organization of the study, and offered a "you can do it" on a daily basis; all while going through her own personal trials. Pam "Cozumal or Kosovo" Hargrove, my sister of zingers, also offered support and tons of giggles with our fun, colorful metaphor filled conversations. They were more cathartic than you can ever know. All of these incredible individuals have been so wonderful and supportive, always offering kind words of encouragement, talking me down from the tower during my comps prep meltdowns, and kept me laughing with their fabulous sense of humor. Their friendship has enrichened my life more than I can ever express and I am honored to have them as friends.

My deep love and appreciation goes to my beloved parents, Lloyd and Carole Willcut. You always believed in me and helped me, in your gentle guiding way, to find my potential. You nurtured, loved and supported me every step of the way. I am so incredibly blessed to have such loving parents, which has made me everything I am today. As such, this degree is as much your accomplishment as it is my own. I love you with all my heart.

## TABLE OF CONTENTS

Chapter ..... Page
I.. INTRODUCTION ..... 1
II. REVIEW OF LITERATURE ..... 8
Reading in a First and Second/Foreign Language ..... 8
Second/Foreign Language Reading Strategies ..... 18
American Foreign Language Readers ..... 30
Summary ..... 36
III. METHODOLOGY ..... 38
Overview ..... 38
Subjects ..... 38
Environment ..... 39
Instrument ..... 42
Procedure ..... 45
Research Questions ..... 46
Data Analysis ..... 47
IV. RESULTS AND DISCUSSION ..... 49
Reported General Reading Strategy Use ..... 49
Task-Sensitive Reading Strategy Use ..... 52
A Comparison of Reported and Task-Sensitive Reading Strategy Use ..... 56
Variables Impacting Strategy Use ..... 59
Years of Spanish Study ..... 59
Gender ..... 63
Summary of Findings and Discussion ..... 64
V. CONCLUSION ..... 70
Implications ..... 70
Recommendations for Further Study ..... 72
REFERENCES ..... 73
Chapter Page
APPENDIXES ..... 81
APPENDIX A - SORSI, PART I ..... 82
APPENDIX B - SORSI, PART II ..... 86
APPENDIX C - INFORMED CONSENT SCRIPT ..... 90
APPENDIX D - SPANISH READING PASSAGE ..... 92
APPENDIX E - OKLAHOMA STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD FOR HUMAN SUBJECTS RESEARCH FORM ..... 95

## LIST OF TABLES

Table Page

1. Distribution of Subjects by Background Variables ..... 40
2. Reported General Reading Strategy Use in Descending Order ..... 50
3. Task-Sensitive Reading Strategy Use in Descending Order ..... 54
4. Significant Strategy Correlations at the 0.05 Level ..... 58
5. Mean Differences in Strategy Use by Years of Spanish study ..... 60

## CHAPTER I

## INTRODUCTION

The importance of literacy to an individual cannot be overstated. When one speaks of literacy, the reference is usually to the first or native language. However, with political, economic and social globalization via improved technology such as satellite in addition to the newer technology of the Internet, literacy has become, for many, just as important in a second language as in the native one. Perhaps nowhere is this more true than in the United States. Citizens of the United States, as members of the traditionally monolingual society of the English world language and of a political and economic superpower, have long enjoyed the advantage of interacting with other cultures in English, placing the burden of interacting in the foreign language on citizens of other nationalities. However, the technological advancements over the past two decades, coupled with a perpetual rise in immigration, especially among Hispanic and Asian populations, have melted the geographic barriers between the United States and the rest of the world and have brought speakers of various languages together on a world social, political, and economic stage.

In light of this globalization, literacy issues have once again shifted into the forefront of educational issues, particularly in the United States. The headlines and political initiatives speak to this. One cannot turn on a talk radio station or an educational television station that does not sing the praises of Hooked on Phonics. Headlines in educational newspapers speak to the literacy crises of today's youth in issue after issue. Such headlines have been echoed in the nation's capital, with literacy being one of the
critical issues of educational reform. By 2005, all children in the United States will be tested on literacy skills in grades 3 through 8 to ensure that they will not be educationally left behind by not being able to comprehend the reading tasks necessary to complete their academic studies (No Child Left Behind Act (HR1), 2002).

In this current global climate, second or foreign language issues have also become more prevalent in the United States, not only with respect to addressing the limited English proficiency population, but also with respect to the recognition by many within business, industry and education of the importance of knowing another language to successfully participate in the world social, political and economic arenas. With American students enrolling in foreign language classes on the rise (National Center for Education Statistics, 2001) and the increasing movement among those in business and industry toward giving those knowing how to speak and read a foreign language a competitive edge in the job market, literacy has become an especially important issue among foreign language educators, especially at the secondary level. Instructors only getting an average of three hours per week of classroom time with their students call upon students to read a vast amount of material to supplement their classroom curriculum. If students are not good readers, they are most likely to be left behind in their academic endeavors. In this climate, the study into how foreign language learners read and, in particular, the strategies they employ to extract meaning and comprehension from foreign language texts, have taken on increased importance.

While individuals are considered proficient in a second or foreign language if they have the ability to speak fluently in the target language, they are not considered educated
if they are not literate in that language. Thus, literacy becomes just as an important issue in the second or foreign language as it is in the native language. Much of what one learns about the society, culture, and people of a country is through its printed media (i.e., books; newspapers; social, educational, economic, and political publications). Knowledge of foreign languages and familiarity with foreign cultures and their value systems (learned primarily through the target language print media) are key to securing the United States' ability to compete and cooperate much more effectively in the new global community. Because word meanings are not consistent across cultures, a tremendous amount of important information can be lost in the translation of foreign language documents. Leaders in many professions now realize this handicap and have come to value and recruit foreign language learners who are able to read and process information in original native language texts. Therefore, success as a foreign language reader depends in large measure on the awareness and successful implementation of reading strategies.

The act of reading requires the reader to draw upon a variety of strategies in order to understand the meaning of a text when there is a difficulty in comprehension. Thus, the efficient use of reading strategies is critical to understanding the meaning of a text. Reading strategies refer to the "mental operations involved when readers purposefully approach a text to make sense of what they read (Barnett, 1989). Readers employ a great number of strategies in order to comprehend meaning from a text. Such strategies include global and problem solving skills, such as connecting the meaning of a word to words already known; and skimming the title, headings, and captions of a text for
meaning. Readers also use support strategies, such as re-reading in order to better understand the text, using a dictionary to get at the meaning of unfamiliar words, and asking someone else for clarification.

Research into first language reading has increased our understanding of how proficient readers employ reading comprehension strategies. The proficient reader has better control over the comprehension monitoring process, is more aware of text inconsistencies, is able to respond to a wider range of inconsistences, and is able to focus on meaning-based cues to ascertain whether or not the meaning of a text has been understood (Block, 1992). Additionally, Block found that the proficient reader is able to make distinctions between important and less important information while reading and is able to use that information to make guesses about what will come next in the text. In sum, the proficient reader tends to rely on sentence-level cues, while the less proficient reader tends to rely on word-level cues (Grabe, 1991).

There are factors unique to foreign language reading that the reader must perpetually struggle to overcome. The elements which pose problems to readers of foreign languages are complex. Often the reader's knowledge of the foreign language is not at the level of a native speaker (Alderson, 1984). Moreover, the reader may not have enough cultural background knowledge of the language upon which to make accurate guesses about the message of a text. Finally, the memory span of the foreign language reader tends to be much shorter, at least in the beginning, than in the native language. This slows down the reading process and inhibits the readers ability to adequately process overall text information. (Yorio, 1971). To overcome these complex elements, foreign
language readers must draw upon the use of strategies to help them understand the meaning of the text.

Unlike the ESL learner, the foreign language student studying a target language in the United States does not learn the foreign language in the target language environment. This does not necessarily mean, however, that the motivation to learn to speak and read the target language is not as high for the American foreign language learner as for the ESL learner. The majority of university students studying a foreign language at the intermediate and advanced level in the United States are highly motivated to acquire proficiency in the target language and many expect to use that language to varying degrees in their careers. This expectation of using the target language in future career endeavors places an emphasis on becoming literate as well as proficient in the target language. Unlike ESL students, American foreign language learners are not readily exposed to literature, newspapers, magazines, and other reading material in the target language. Moreover, they are not in a position of having to read in the target language to carry out daily activities or complete all of their academic assignments. Given these differences, the question is raised as to whether American foreign language readers use the same types of reading strategies as ESL students and, perhaps even more importantly, if they do use similar reading strategies, do they vary in what types of strategies are used more or less often. Finally, given that the American foreign language learner and the English as a foreign language (EFL) learner acquire their target languages in similar environments, the question is raised as to whether these two groups share similar reading strategy use. While there have been studies investigating the reading strategy use of
native English speaking students studying a foreign language in the United States, to the best of my knowledge there are not any studies that investigate and compare the reported general and task-sensitive reading strategy use of American university students studying a foreign language in the United States. Moreover, to date, studies investigating reading strategy use by American foreign language readers have not addressed the influence of the English-speaking foreign language learning environment on years of study and target language reading proficiency. Finally, few studies investigating the reading strategy use of American foreign language learners have sought to see if there is a difference in reading strategy use between males and females. This study was designed fill this void.

The purpose of the present study was to examine the reported general and tasksensitive reading strategies of native English-speaking American university students studying Spanish as a foreign language. The survey method was used for collecting data. In order to ascertain the students' perceived use of general reading strategies, the subjects were asked to first respond to a survey about the types of strategies they use while reading texts in Spanish. This survey represented the students' reported general strategy use. A week later the subjects were asked to read a paragraph in Spanish, answer five multiple choice questions about the text, and respond to a survey about the types of strategies they used as they read the paragraph in Spanish. This survey represented the students' task-sensitive strategy use. The surveys were coded and analyzed to answer the following questions:

1. What kind of strategies do native English-speaking American university students studying Spanish as a foreign language report generally using
when reading in Spanish?
2. What kind of strategies do these students report using when given a reading task in Spanish?
3. Is there a relationship between reported general strategy use and tasksensitive strategy use?
4. What is the impact of certain variables (i.e., gender and years of Spanish study) on the use of these strategies by respondents in the sample?

This study begins with a review of the literature (Chapter II) that provides a theoretical foundation on the process of first and second/foreign language reading, followed by a discussion of studies on reading strategies employed by second and foreign language learners, and concludes by providing a rational for the present study. Chapter III describes the methodology of the study to examine the reported general and tasksensitive reading strategies of American university students studying Spanish as a foreign language. The findings of the study are presented in Chapter IV, followed by a discussion of the results. Chapter V closes the body of this study with a discussion of the practical implications of this research for second and foreign language teachers and learners, and with recommendations for further research.

## CHAPTER II

## REVIEW OF LITERATURE

This chapter provides a review of the research on reading strategies in first and second language acquisition. First, "Reading in the First and Second/Foreign Language" provides a brief review of studies on reading in a first language and reading in a second/foreign language. "Second/Foreign Language Reading Strategies" reviews the research on strategy use of second/foreign language readers and the transfer of reading strategies from the native language to a second or foreign language. Finally, "American Foreign Language Readers" discusses reading in a foreign language by American foreign language students. It is important to note that there are clear distinctions between the terms "foreign language" and "second language." Where a foreign language is not learned in the target language environment and is not required for carrying out daily activities in the target language (i.e., learning Spanish in the English-speaking United States), a second language is learned in the target language environment for the purpose of living in and carrying out daily activities in the target language environment (i.e., international students learning English in the United States).

Reading in the First and Second/Foreign Language
Reading, whether in a first or second/foreign language, is an interaction between the reader, the text, and the interaction between the reader and text (Rumelhart, 1977). Reading is a complex process by which a reader attempts to make sense of a text by drawing upon existing culturally determined background knowledge or schemata. In essence, a schema is a cognitive process that allows information to be organized in long-
term memory (Widdowson, 1983). Thus, as a reader interacts with a text, the mind is stimulated by key words, phrases, or contexts and the reader relates the incoming information to information already known. Researchers have defined two types of schemata. Content schema, the reader's background or world knowledge, provides the reader with a basis of comparison (e.g., Carrell \& Eisterhold, 1983). The second schema is a formal, or textual, schema which refers to the organizational structure of written language. This includes grammar structures, genre, various use of register, and vocabulary (Singhal, 1998). If, for example, the syntactic structure in a second/foreign language student's native language is significantly different from that of the target language, a greater degree of cognitive restructuring is required (Segalowitz, 1986). Grabe (1991) also notes that students begin reading in a second/foreign language with a different knowledge base than they had when starting to read in their native language in the sense that they already had a sufficient vocabulary base and knew thousands of words before they actually began reading in the native language. They also, notes Grabe, have some grammatical knowledge of their own language; whereas second/foreign language readers do not share these advantages. The role of a schema, therefore, is important in both first and second/foreign language reading. If a schema is hindered or lacking, the reader experiences a breakdown in reading comprehension.

As schemata are hierarchically organized from the most specific at the bottom to the most general at the top, the processing of information within a schema is accomplished either through a bottom-up processing or a top-down processing. Bottomup processing is said to be data-driven; whereas, top-down processing is said to be
conceptually-driven. Research has shown that in first and second/foreign language reading, the proficient reader employs the use of both top-down and bottom-up processing simultaneously throughout the reading process (Carrell \& Eisterhold, 1983; Rumelhart, 1980).

Much of what is known about second or foreign language reading has its roots in first or native language research studies. Perhaps one of the most pivotal studies providing the foundation upon which subsequent studies into first and second language reading have been built is that of Goodman (1967). In essence, Goodman stated that reading is a "psycholinguistic guessing game" by which the reader draws upon background knowledge (schemas) to reconstruct "a message which has been encoded by a writer as a graphic display." Goodman defines the process of reconstruction as one of sampling, predicting, testing, and confirming the text. Once the reader has reconstructed the text, the process of testing for accuracy begins. If the reconstruction agrees with the reader's background knowledge or schema, the reading process continues. If the reconstruction is inconsistent with the reader's background knowledge, comprehension breaks down and the reader must draw upon an array of reading strategies to assist in restoring comprehension. The proficient reader is able to quickly employ compensation strategies to address a breakdown in comprehension and, as such, will experience little difficulty in the reading process. The poor reader, in contrast, does not possess, or is not able to aptly employ, compensation strategies to overcome the breakdown in comprehension. Therefore, the poor reader will continuously draw on inaccurate schemas, which, in turn, leads to a perpetual cycle of wrong text predictions.

Coady (1979) was among the first to apply Goodman's psycholinguistic model of reading to second/foreign language reading. Coady supports the view that comprehension in second/foreign language reading consists of the successful interaction of high-level conceptual abilities, background knowledge, and process strategies. According to Coady, conceptual abilities play a critical role in second/foreign language reading; however, some adult language learners do not have the competence to learn from second/foreign language instruction. As schema theory has shown, background knowledge is also a critical element in successful second/foreign language reading. If the first and second/foreign language have similar cultural backgrounds, then there is more information upon which the second/foreign language reader can draw to make comparisons during the reconstruction process. Finally, process strategies play an important role in facilitating reading reconstruction. Coady defines them as "paths to comprehension which readers must travel but not necessarily in the same manner or to the same degree (p. 8)." In essence, they are the strategies readers use to make sense of a text when there is a breakdown in comprehension. The degree to which process strategies are used depend upon on such factors as text difficulty and reading purpose.

Research into the reading process conducted over the past two decades have provided considerable insight into the elements that make up a fluent reader. Information garnered from such studies have become important for foreign and second language teachers in assisting their students in becoming better readers. Research supports that the reading process of the fluent native language reader is similar across cultures (Alderson, 1984; Carrell, 1991; Cohen, 1996). Broadly defined, fluent reading is rapid, purposeful,
interactive, comprehending, flexible, and gradually developing (Grabe, 1991). The fluent reader is able to process information at a consistent rate by taking advantage of the redundant features of the language in reconstructing meaning from the text (Goodman, 1967). Additionally, the fluent reader reads with a specific purpose in mind, whether it be for entertainment or to acquire information for personal, academic, or professional knowledge. Finally, the fluent reader is able to maintain consistent comprehension by employing interactive and flexible reading skills, such as the ability to identify and respond to text inconsistencies; using more semantic than syntactic cues to evaluate whether they understand what they read, and employ the use of both top-down and bottom-up processing strategies (Block, 1992; Hudson, 1982; Carrell, 1984; Cziko, 1980; Golinkoff, 1975-1976; Paris \& Myers, 1981). The process of becoming a fluent reader, regardless of the language, is a gradual one acquired through consistent practice.

While research supports that the first and second/foreign language reading process is similar from language to language (Alderson, 1984; Carrell, 1991; Cohen, 1996), there are significant differences as well, particularly with respect to reading comprehension. Block (1992) notes that researchers have long debated just where the second/foreign language reader fits into the reading comprehension process. Research has provided several hypotheses to explain the differences between first and second/foreign language reading. There are researchers who claim that readers must first be proficient in the second/foreign language before they can possess strong second/foreign language reading skills (Clarke, 1980; Yorio, 1971; Cziko, 1978, 1980; Carrell, 1991). However, there are others who contend that it is a reader's proficiency in the first language that dictates
second/foreign language reading ability (Lee, 1986; Sarig, 1987; Coady, 1979).
Many research studies support that foreign language reading ability hinges on upon a reader's foreign language proficiency. Perhaps one of the most well-known studies to support this notion is that of Clarke (1980). In investigating the reading behaviors of adult Spanish-speaking readers reading in Spanish and English, results showed that the proficient native language reading strategies were "short-circuited" by the reader's low proficiency in the foreign language. In essence, the proficient top-down strategies used while reading in the first language shifted to bottom-up strategy processing while reading in the foreign language, thus short-circuiting the global processing strategies. This supports the conclusion of a prior study by Yorio (1971) that found that success in foreign language reading is directly related to the degree of proficiency in that language. Cziko $(1978,1980)$, in studies conducted in the United States comparing the French oral reading errors of English speaking students with errors of native French speaking students, found that both native French speaking students and students with advanced competence in French as a second language were able to draw upon both graphic and contextual information while reading in French. In contrast, those students with less competence in French were limited to relying primarily upon graphic (or bottom-up) strategies, thus confirming Clarke's contention that reading strategies are related to the reader's level of competence, or proficiency, in the foreign language. In essence, a reader cannot become a proficient foreign language reader until a "threshold" of competence in the second/foreign language is reached (Alderson, 1984).

In contrast, other research studies support that foreign language reading ability hinges on upon a reader's proficiency in the first language. Perhaps one of the leading researchers of this view is Lee (1986), who supports that proficient first language readers, as bi-oriented bottom-up and top-down strategy users, transfer those strategies to the foreign language. In a study of 320 native English speaking students studying Spanish at the advanced level in the United States, Lee tested the target and native language reading recall of the participants. The subjects were given the recall protocols written in the subjects' native language so that they would be able to express a more complete understanding of the Spanish language texts. The results found that the participants transferred their proficient native language reading strategies to the foreign language reading task. The following year Sarig (1987) used verbal reports to study the reading process of 10 Hebrew students studying English as a foreign language. The participants represented three levels of proficiency. The results found that the ability of the Hebrew students to transfer reading strategies was not dependent on foreign language proficiency but on first language reading ability. Hudson (1982), in a study investigating research studies into foreign language reading, also found that proficient first language readers transferred their skills to foreign language reading tasks. All support the argument made earlier by Coady (1979) that higher level first language processing skills are transferred to the foreign language regardless of proficiency.

With respect to second language reading, research into the reading process and strategies of bilingual readers of varying levels of second language proficiency have also lent support to the argument that native language reading proficiency is key to successful
second language reading. Jimenez, Garcia, and Pearson (1995) compared the reading processes of a proficient Latina bilingual reader of Spanish and English with those of a proficient monolingual reader of English and a less proficient bilingual reader of Spanish and English. The results found that the proficient Latina bilingual reader transferred her native language reading skills (Spanish) to the second language reading task (English). Moreover, she was aware that her knowledge of the first language facilitated her reading in the second. This supports conclusions of a study by O'Malley, Chamot, StewnerManzanares, Kupper \& Russo (1985), which found that Latino high school students learning English viewed their knowledge of Spanish as an asset for learning English. In a subsequent study of the metacognitive knowledge and strategies of bilingual Latina/o elementary school children who are successful English readers, Jimenez, Garcia, \& Pearson (1996) found that the majority of proficient readers indicated that Spanish and English reading were basically the same activity. They viewed learning to read in another language as a process of simply learning a new set of vocabulary. A study by Pritchard (1990) revealed that bilingual Latino high school students used the same reading strategies across languages. Thus, studies into the reading process of bilingual readers show that once bilingual readers become proficient readers in their first language, their awareness of the reading process is transferred to the second language.

In sum, then, it appears that with respect to foreign language reading, researchers continue to debate whether foreign language reading ability hinges on a readers first or foreign language proficiency; whereas, with respect to second language readers, studies focusing on the reading process and strategies of bilingual readers indicate that native
language proficiency is key to successful second language reading.

Although first and second/foreign language reading share some similarities, there remain factors unique to second/foreign language reading that present significant problems for the second/foreign language reader. Second/foreign language readers often do not have the level of knowledge in the target language that a native speaker would; they often lack adequate background knowledge in the target language; and, at least in the beginning, they have a much shorter memory span than in the native language (Yorio, 1971; Grabe, 1991). The degree to which a second/foreign language reader can recognize the grammatical structure of the target language depends, as in the native language, on the reader's overall language proficiency. Beginning second/foreign language learners, over time, will learn the grammatical structure of the target language; however, vocabulary acquisition is a more difficult process due to differences between the lexical and grammatical systems of the reader's first and second/foreign language (Yorio, 1971). Therefore, vocabulary acquisition and comprehension tends to be a long term obstacle with which the second/foreign language reader must struggle.

A reader's limited background knowledge of topics in the target language poses significant problems for the second/foreign language reader. Research has consistently shown that a second/foreign language reader who does not possess background knowledge can experience a lack of comprehension. Carrell (1987), in a content schemas study of Muslim Arabs and Catholic Hispanic ESL students, found that background knowledge affected the reader's comprehension. All the participants better comprehended reading passages that were similar to their native cultures. Steffensen and

Joag-Dev (1984) conducted a study with Indian students for whom English was a second language and American students for whom English was the first language. The students read a description of an American wedding and a description of an Indian wedding, both of which were written in English. Steffensen and Joag-Dev found that readers comprehended texts about their own cultures more accurately than the other, and that the second language reader's comprehension is often inhibited by a shorter memory span, particularly for the beginning reader. As in the first language, Steffensen and Joag-Dev discovered that second language reading cues are perpetually being tested to ensure that the choices are consistent with the context of the text. However, the second language reader must recall cues that are new or not yet known. Thus, the cues are forgotten more quickly. Since the reader must make associations with past cues in order to make accurate predictions about future ones, the reading process for the second language reader becomes slow and difficult.

While research into second/foreign language reading have clearly shown varying perspectives with respect to the role of second/foreign language proficiency and first language proficiency, it is likely that both play an important role in second/foreign language reading. Carrell's (1991) study lends support to this. In her study of the reading of native speakers of Spanish studying English and native speakers of English studying Spanish, all of different proficiency levels, the results indicate that while the proficiency level in the foreign language was more critical for learners at slightly lower proficiency levels (English students in first year, second semester; and second year, first semester Spanish courses), both first language reading ability and second language
proficiency had significant effects on the second/foreign language reading ability. Moreover, studies investigating factors unique to foreign language readers, such as limited background knowledge (or schemata), vocabulary, and variation in grammatical structures between languages, also indicate that a readers' ability to overcome these factors hinges upon both first and second language proficiency (Yorio, 1971; Grabe, 1991; Carrell, 1987; Steffensen and Joag-Dev, 1984). All of these factors pose problems in the comprehension processing of the second/foreign language reader. How these problems are overcome depends upon the reader's knowledge and use of strategies.

## Second/Foreign Language Reading Strategies

In recent years reading researchers have shifted their attention from the product of reading to an emphasis on determining the comprehension strategies that readers use in various reading contexts. The act of reading requires the reader to draw upon a variety of strategies in order to understand the meaning of a text when there is a breakdown in comprehension. Thus, a reader's knowledge and efficient use of reading strategies, whether explicit or implicit, is critical to understanding the meaning of a text. By investigating the second/foreign language reader's use of strategies one begins to, according to Block (1986), reveal the resources a reader draws upon to comprehend foreign language texts.

Strategies are techniques learners use in order to acquire and retain information (Oxford and Crookall, 1989). Reading strategies are processes that readers purposely choose in order to complete reading tasks (Cohen, 1986). Readers draw upon a number of strategies to help them comprehend meaning from a text. Such strategies include
global and problem solving strategies, such as using context to help better understand the text; guessing about content of the text; re-reading difficult text to aid in understanding; and guessing the meaning of unknown words or phrases. Readers also use support strategies, such as translating from the target language into the native language, reading aloud when text becomes more difficult, and using a dictionary to understand the meaning of unfamiliar words.

Reading is a cognitive process by which readers draw upon metacognitive knowledge and comprehension strategies to understand what they read (Flavell, 1979; Sheorey \& Mokhtari, 2001). Comprehension strategies refer to "how readers conceive a task, what textual cues they attend to, how they make sense of what they read, and what they do when they do not understand" (Block, 1986). Metacognitive awareness is "the knowledge of the readers' cognition relative to the reading process and the self-control mechanisms they use to monitor and enhance comprehension" (Sheorey \& Mokhtari, 2001, p. 432). For example, this awareness is influenced, as Sheorey and Mokhtari note, by such factors as previous experiences and instructional practices common in the learner's native culture. Research into first and second/foreign language reading indicates that proficient readers employ metacognitive awareness and use reading comprehension strategies better than less proficient readers, and that metacognitive awareness is influenced by factors such as second/foreign language proficiency and previous experience the reader brings to the reading task.

As in the case of the process of reading, researchers investigating the strategy use of second/foreign language readers are split into two groups with respect to the role of
second/foreign language proficiency in second/foreign language reading. The first group is represented by those that argue that the ability of a second/foreign language reader to transfer first language reading strategies is influenced by the reader's proficiency in the target language (Clarke, 1980; Cziko, 1980). They perceive language skills as developing in a linear fashion from lower word level skills to higher cognitive skills (Block, 1986). Those comprising the second group argue that proficient first language reading strategies are transferred to the second/foreign language reading process and operate along with the lower second/foreign language processing strategies (Coady, 1979; Hudson, 1982; Cummins, 1980). Studies in support of these two groups were addressed in the previous section and will not be revisited here.

In addition to research focusing on the role of target language proficiency and native language reading strategy transfer in second/foreign language reading, Block (1986) discovered that strategy use among second/foreign language learners is a stable phenomenon which is not tied to specific language features. Block's study used the think aloud technique to examine the comprehension strategies used by native and non-native English speaking college students enrolled in remedial reading classes. The non-native participants had been in the United States for similar amounts of time and were judged to be fairly fluent in English by their reading teachers. The findings showed consistent patterns of strategy use among the nonproficient native and non-native readers. The second language (non-native) readers brought with them their general knowledge of the language and their knowledge of the reading process and of approaches to tasks and then applied them to specific language features in the text. In essence, cognitive strategies
were applied throughout the reading process. This supports earlier conclusions of Hudson (1982) and Cummins (1980), whose studies found that various aspects of reading ability are readily transferred from the first to the second/foreign language.

Research has also found that the previous experience (i.e., background knowledge, orthographic influence of a reader's native language, and bilingual reading ability) that a second/foreign language reader brings to the reading process, as well as text type and reading strategy instruction, all play a significant role in the use of second/foreign language reading strategies (Barnett, 1988; Horiba, 1990; Hudson, 1982; Kletzien, 1991; Koda, 1988,1990; Block, 1986, 1992; Carrell, 1984; Garner, 1987; Olshavsky, 1976-1977). The effective use of reader schemata (background knowledge) has been the focus of extensive second/foreign language strategy research. Studies have shown that both activating the appropriate schemata (i.e., content, cultural, or rhetorical) and providing the necessary background information help second/foreign language readers better comprehend what they read (Barnett, 1988). Horiba's (1990) study of the comprehension processes of native and non-native readers of Japanese found that the proficient second language readers were able to successfully figure out the meaning of unfamiliar vocabulary and sentences by utilizing available contextual information. In essence, they utilized a familiar schema and activated relevant information in the schema to successfully deduce unfamiliar words and syntax. Hudson (1982), in a study of the effects of induced schemata in second language reading, relates reader schemata to language proficiency. In essence, Hudson found that schemata production is involved in short circuiting the proficient native language reading strategies of the second/foreign
language reader, that the effectiveness of externally induced schemata is greater at lower levels of proficiency than at higher levels, and that induced schemata can override language proficiency as a factor in comprehension.

The orthographic influence of a reader's native language can also influence the cognitive processing strategies in second/foreign language reading. In a study of the use of crossover native language reading strategies in second language reading, Koda (1990) investigated the orthographic influence of the first language on the cognitive processing involved in second language reading to ascertain if first language recoding strategies are transferred and used in second language reading. The participants were adult second language learners of English with contrasting first language orthographic backgrounds, namely Arabic, Japanese, Spanish, and English (for contrast). The subjects read two passages of approximately 350 words: one describing the characteristics of five imaginary fish, and the other describing the characteristics of five fictitious cocktails. Sanskrit symbols were used as names for the fish and cocktails, and the symbols were embedded in passages written in English. For the English control group, pronounceable English nonsense words were substituted for the Sanskrit symbols. Since the subjects had no knowledge of Sanskrit or its writing system, the Sanskrit symbols represented a phonologically inaccessible element. The subjects read the passages, and took a recall test after each reading. The findings indicated that the reading process of the phonographic readers (Arabic, Spanish, and English) was impaired when essential phonological information was inaccessible. However, this phonological inaccessibility did not affect the morphographic (Japanese) readers. From these findings, Koda
concluded that second language readers from differing first language orthographic backgrounds use their first language cognitive strategies in reading English as a second language, thus confirming cognitive strategy transfer during second language reading. This verified a previous study by Koda (1988) of 83 skilled readers from contrasting orthographic backgrounds. The findings also indicated that the subjects used cognitive skills and strategies developed in their native language when reading in the second language.

In recent years, studies investigating the reading processes of proficient bilingual readers have provided additional insight into the cognitive and metacognitive strategy processes in second language readers. Jimenez, Garcia, and Pearson (1995) used the techniques of think alouds, interviews, text retellings, a prior knowledge measure, and a questionnaire to compare the reading processes and strategies of a proficient Latina bilingual reader of Spanish and English with those of a marginally proficient Latina bilingual reader of Spanish and English and a proficient monolingual reader of English. With respect to vocabulary, the proficient bilingual reader found vocabulary to be both a bridge and a barrier and used morphological knowledge, especially cognate knowledge, to unlock the meaning of unfamiliar words when reading in English and Spanish. In contrast, the limited proficient bilingual reader of Spanish found vocabulary to be a barrier to comprehension but had no strategic tools to address the problem. With respect to the view of reading, both the proficient bilingual reader and the proficient monolingual reader considered the process of reading to be one of learning word meanings to enable comprehension. They consistently monitored their comprehension, invoking prior
knowledge to construct and monitor meaning. The limited proficient bilingual reader viewed the reading process as a task to complete in order to move on with other tasks. She was aware of the need to use her knowledge to monitor comprehension, but rarely demonstrated the tools or the desire to acquire comprehension. The proficient readers also demonstrated a multistrategic approach to reading, demonstrating the use of rereading, questioning, and visualizing as useful strategies. The limited proficient bilingual reader could identify comprehension problems, but could not adequately employ strategies to repair the comprehension breakdown. Finally, with respect to how the bilingual readers viewed the relationship between the two languages, the proficient bilingual reader was aware of the relationship between Spanish and English and exploited it to her benefit; whereas the limited proficient bilingual reader felt that bilingualism was confusing.

These findings of cognitive and metacognitive strategy processing are supported by prior studies investigating the strategy use of second/foreign language readers. Block's (1986) research into Chinese and Spanish speaking adults considered poor English learners found that they used some metacognitive strategies such as monitoring their comprehension and implementing repair strategies while reading English. Carrell (1989) discovered that what second language readers know about reading affects their reading behavior. In a comparative study of the bilingual reading (Spanish-English) of native language Spanish speakers and native language English speakers, Carrell found that only the better native language readers demonstrated cognitive flexibility in their second language reading. Pritchard (1990) found that bilingual Latino high school
students used similar reading strategies across languages. In a study of differences in the reported use of reading strategies of native and non-native English speakers when reading academic materials, Sheorey and Mokhtari (2001) found that both US and ESL proficient readers showed comparable degrees of higher reported usage for metacognitive and cognitive reading strategies than lower reading ability students. In sum, research reveals that good first and second/foreign language readers are more aware of the strategies they use than poor readers, are able to detect comprehension problems and employ strategies to correct comprehension breakdown, adjust strategy use to the purpose and the difficulty of the reading task, and are more careful comprehension monitors.

There is consensus among researchers that different text types require different reading strategies (Kletzien, 1991; Johnston, 1983; Olshavsky, 1976-1997; Afflerback and Johnson, 1984). In offering an explanation of factors that influence reading comprehension and its assessment, Johnston (1983) notes that assessing reading comprehension consists of an interpretation of a reader's performance on some reading task based on a given text within a given context. Therefore, Johnston argues, the reader's performance on the task will hinge on the characteristics of the text, nature of the task, context of the text, and the reader's prior knowledge and reading ability.

In a study of native language strategy use of good and poor comprehender reading expository text of differing levels, Kletzien (1991) found that subjects were somewhat sensitive to task demands in that they partially adapted their strategy use to the difficulty level of the passage. At the independent reading level (easy reading task), subjects reported using the greatest total number of strategies focusing primarily on visualizing
strategies and using prior knowledge. At the instructional level (intermediate reading task), subjects also used a large number of strategies such as focusing on vocabulary, making inferences, and relied heavily on organizational, text-based strategies such as recognizing passage and sentence structure. In essence, there was more of a focus on the use of organizational strategies at this level. At the frustration level (difficult reading task), all subjects (both good and poor readers) exhibited a behavior characteristic of poor readers. All concentrated on individual words or small units of words instead of on ideas or relations between sentences. Using vocabulary, making inferences, and invoking prior knowledge remained the most popular strategies used, but the organizational strategies most commonly used at the intermediate level were not as common at the difficult level. Kletzien offered the idea of "automatic processing" in reading to explain the diminishing role of background knowledge as text difficulty increases. Automatic processing is based on the theory that when a reader's cognitive capacity is directed to specific reading tasks, there is less capacity available to the reader to make associations with prior knowledge and process higher-level information. Thus, the reader has more cognitive capacity available to integrate and process information when reading easier texts. Afflerbach and Johnson (1984), noted similar findings with respect to the breakdown of organizational strategies while reading difficult texts. They point out that "extremely difficult texts may cause overloading of the subject's processing system and cause complete or nearcomplete breakdown of the comprehension process" (p. 314). Finally, Olshavsky (19761977) found that interest in text topic and writing style of the text also play an important role in reading strategy use. In a study designed to identify reader strategies and relate
their use to the factors of interest, proficiency, and writing style, Olshavsky focused on a $2 \times 2 \times 2$ design consisting of 2 types of reader interest (high and low), 2 types of reader proficiency (good and poor) and 2 types of writing styles (abstract and concrete). The study showed that readers applied the most strategies when they wanted to comprehend (were interested), when they could (were proficient readers), and when they needed to (are faced with abstract material). These strategies were problem identification strategies and problem solving strategies such as using context to define a word, re-reading, and using information about the passage to help them comprehend meaning. This supports the findings of studies on the overall learning strategy use by second/foreign language learners that show that problem solving strategies are used more often than global strategies by second/foreign language learners (Oxford, 1990). Therefore, it appears that easy and intermediate reading tasks invoke high strategy use, particularly with respect to visualizing strategies, prior knowledge, focus on vocabulary, making inferences, and organizational, text-based strategies such as recognizing passage and sentence structure. However, as texts become difficult, readers (both good and poor) use fewer strategies, primarily at the word level. Moreover, reader's tend to use more problem identification and problem solving strategies when they are interested in the text and when they are faced with abstract texts.

Researchers have also consistently discovered that efficient reading strategies are not acquired simply by reading, but that they should be learned through formal instruction (Block, 1986,1992; Pressley \& Afflerback, 1995; Carrell, 1989). Block (1992) points out the importance of strategy training to teach students that specific
strategies can be helpful in solving particular reading problems. She argues that the ability to attribute comprehension difficulty to a source rather than to lack of skill is an important part of effective reading. Carrell (1989), supports the need to train or guide second/foreign language readers on the importance of strategy use and how to adequately use those strategies to maximize their reading comprehension. She notes that often students in second/foreign language reading programs receive instruction in skills and strategies; however, they fail to adequately use them because they do not appreciate the purpose of using such strategies or understand where and when to use them. Thus, Carrell contends that adding instruction in "awareness or knowledge about a strategy's evaluation, rationale, and utility should greatly increase the positive outcomes of instruction" (p. 129). In a study using think-aloud protocols to assess the comprehension strategies of foreign language learners, Block (1986) found that the participating subjects expressed how the focus on their strategy use in the study taught them how to read better. Block notes that the task of thinking aloud focused the readers' attention on what they understood and what they needed to know. By stating aloud what they did understand, they became aware of what they did not understand and then drew upon strategic resources to solve their comprehension problems. Evidence does, therefore, lend support to, and underscores the importance of, the teaching of reading strategies to second/foreign language students to assist them in improving comprehension of target language texts.

With respect to gender, studies investigating a wide range of strategy use among second/foreign language learners have consistently shown that females tend to be stronger strategy users than are males (Sheorey, 1999; Oxford \& Green, 1993; Oxford \&

Crookall, 1989); however, strategy studies focusing specifically on reading strategy differences between males and females are limited (Sheorey and Mokhtari, 2001). In a study surveying the learning strategy use of 374 EFL/ESL learners at the University of Puerto Rico, Green and Oxford (1993) found that females used significantly more affective strategies than did males as a group. In a report focusing on research on language learning strategies, Oxford \& Crookall (1989) noted that a factor analytic study of 1,200 students learning French, Spanish, Italian, German and Russian at a major Midwestern university in the United States found that females used significantly more strategies than males overall. They further reported that a survey of learning strategies conducted at the United States Foreign Service Institute also revealed that females used a greater number and range of strategies than men. In a study examining language learning strategy use of 1261 college students in India, Sheorey (1999) found that female students reported significantly more frequent use of strategies than male students, adding more evidence for gender differences in learning strategy use.

With respect to gender differences and reading strategy use, Sheorey and Mokhtari's (2001) examination of differences in reported use of reading strategies of native and non-native English speakers revealed that among the US group, females reported a significantly higher frequency of strategy use; however, this gender effect was not found in the ESL sample. In looking at gender and strategy use, research supports that with respect to the use of overall language learning strategies, females tend to use language learning strategies more than males, regardless of whether they are US second/foreign language learners or ESL learners. With respect to gender and reading
strategy use, however, it is still too early to tell whether gender differences in strategy use exist and, if they do exist, whether they mirror those of language learning strategies. More studies need to be done before an accurate assessment can be made.

## American Foreign Language Readers

The majority of research into second language reading has primarily focused on the English as a second language (ESL) learner; however, there have been some studies that have sought to investigate the reading process of American foreign language learners. As in the case of research into the reading process of ESL learners, American foreign language reading studies have focused primarily on factors such as the role of background knowledge in foreign language reading, the role of target language proficiency in foreign language reading, and the role of first language reading ability and second language proficiency on foreign language reading ability.

Research focusing on the American foreign language reader indicates that background knowledge (i.e., content, cultural, or rhetorical schemata) plays a significant role in comprehending foreign language reading and the type of processing strategies used (i.e., top-down or bottom-up). Lee (1986) investigated the background knowledge and foreign language reading process of 32 American students studying Spanish as a foreign language. All of the participants were in the advanced level of their studies. Subjects were randomly assigned to one of four treatment conditions: context-transparent, context-opaque, no context-transparent, and no context-opaque. In each treatment condition, subjects were presented with two randomly-ordered passages, one familiar and one novel (strange) in that there was an absence within the reader of prior knowledge or
native English readers read in their first language, they used significantly more top-down strategies than in their foreign language reading. When they read in their foreign language, the subjects reported using significantly more bottom-up strategies than in their first language.

Scholars have also investigated the role of foreign language proficiency on the American foreign language reader. Cziko (1980) researched the reading errors of seventh-grade English speaking students with intermediate and advanced competence in French as a second language by comparing them to the errors of native French speaking students. The subjects read two French narratives. The researcher asked the subjects three questions in French about each text to motivate the students to read for comprehension. The findings revealed that the foreign language readers with less than advanced competence in the language were more reliant on graphic information and less sensitive to contextual information than those readers with advanced or native-speaker competence in French. These finding supported an earlier study by Cziko (1978) that investigated the use of syntactic, semantic and discourse constraints by readers of French as either a first or foreign language. The subjects read six French texts (two meaningful, two anomalous, and two random). The two anomalous texts were constructed by using the same words contained in the two meaningful texts to form groups of words (punctuated as sentences) which conformed to the syntactic constraints but which violated the semantic constraints of French. The two random texts were formed by putting these same words in random order (also punctuated as sentences) to create texts which violated both the syntactic and semantic constraints of French. The results found
that while the subjects were able to make use of the syntactic constraints in the anomalous texts, only the most proficient groups (native speakers and advanced French students) were able to take advantage of the semantic constraints present in the meaningful texts; showing that for beginning and intermediate readers of a foreign language, syntactic sensitivity to a foreign language develops prior to the sensitivity to the semantic system. This is seen clearly when looking at how the subjects employed the use of adjusting reading speed. They read fast while reading the meaningful task, slower for the anomalous, and slowest while reading the random task. With respect to discourse constraints, results found that only the native speakers of French and the advanced French students were aided by the additional discourse constraints, the intermediate group was not so aided. Cziko suggests that the foreign language reader must have a high level of competence in a language to use discourse constraints as a source of information in reading. Nevertheless, the conclusions of this study should be viewed with caution due to the fact that the study did not test normal reading processes.

Carrell (1991) combined in a single study the investigation of the effects on second/foreign language reading of: (1) reading ability in the first language and (2) level of language proficiency in the second/foreign language. The subjects included 45 native speakers of Spanish of varying proficiency in English studying at an American university, and 75 native speakers of English of varying proficiency in Spanish studying Spanish at an American university. Two reading passages in each of the two languages were prepared. Subjects read the two texts and answered multiple choice comprehension questions about the text. The results found that for the subjects with Spanish as their
native language and English as their second language, reading ability in the first language accounted for a greater proportion of the variance in second language reading ability than did proficiency in the second language. For the group with English as their native language and Spanish as their foreign language, proficiency in the foreign language accounted for a greater proportion of the variance in foreign language reading ability than did reading ability in the first language. Carrell attributes this to the fact that the English speakers are, overall, not as proficient in reading in Spanish as their foreign language as the Spanish speakers are in reading English as their second language. The reasons for this difference, Carrell notes, may be due to factors such as the differences between the environments of these two groups of learners (i.e., second language setting vs. foreign language setting), and the potential differences in the directionality of the learning (i.e., English to Spanish vs. Spanish to English).

Research focusing directly on foreign language reading strategy use is slight, particularly with respect to American foreign language learners. As Barnett (1988) notes, those conclusions that have been made about foreign language strategy use "have proceeded from studies which treat the question as incidental to that of how reading comprehension relates to general language proficiency" (p. 151). There are a few researchers who have focused specifically on the strategy use of native English speaking foreign language readers. Barnett (1988) sought to analyze the impact of effective foreign language strategies on reading comprehension of American students studying French as a foreign language. The results showed that comprehension increased with better use of the strategy of reading through context and that comprehension increased as
students perceive they use more effective strategies with or without an emphasis on the strategy of reading through context. In other words, students who effectively considered and remembered context as they read understood more of what they read then those students who employed these strategies less. Additionally, students who thought that they used those strategies considered most productive actually did read through context better and understood more than those who did not think they used such strategies.

In a study of strategy acquisition, Hosenfeld (1984) sought to discover whether unsuccessful foreign language readers can acquire the strategies of successful foreign language readers. In a case study of a native English speaker studying French as a foreign language, Hosenfeld discovered that the subject experienced difficulty in foreign language reading due to poor strategy use such as guessing the meaning of words without regard to context, failure to evaluate guesses, and consistent word-by-word translation. The subject was asked to compare her reading strategies to those of a successful reader and to list the differences between them. The subject then practiced the strategies of the successful reader with a new reading task. Results showed significant improvement. After instruction the subject translated in broad phrases, kept familiar phrases in the foreign language, remembered the meaning of sentences, guessed contextually the meaning of new words, and used information sources in decoding (i.e., cognates, illustrations, and world knowledge). Thus, this supports that native English speaking students who are poor foreign language readers can learn the reading strategies of successful foreign language readers. While studies such as these have provided insight into the acquisition and use of strategies of native English speaking foreign language
readers, there remains a need for additional research to confirm and build upon the results of existing studies.

## Summary

Reading is a complex process whereby the reader draws meaning by actively interacting with a text. Successful reading comprehension consists of a combination of conceptual abilities, background knowledge, and processing strategies. There are factors unique to second/foreign language reading that present significant problems for the second/foreign language reader. To overcome these factors, the second/foreign language reader must select and use strategies to successfully understand texts.

While research into the reading process (Grabe, 1991; Coady, 1979; Alderson, 1984; Carrell, 1991; Cohen, 1996; Clarke, 1980; Yorio, 1971; Sarig, 1987; Hudson, 1982; Steffensen \& Joag-Dev, 1984) and strategy use (Sheorey \& Mokhtari, 2001; Block, 1986, 1992; Barnett, 1988; Horiba, 1990; Kletzein, 1991; Koda, 1988, 1990; Carrell, 1984; Olshavsky, 1976-1977) of second/foreign language readers has primarily focused on the ESL/EFL learner, a few have focused on the reading process of native English speaking foreign language reader (Lee, 1986; Cziko, 1978, 1980; Davis and Bistodeau, 1993; Carrell, 1991; Macnamara, Feltin, Hew, and Klein, 1968). To date, studies indicate that for both the ESL and the native English speaking foreign language learner, successful reading depends upon factors such as background knowledge, target language proficiency, first language reading ability, text-type, and adequate strategy training.

However, studies into the types of strategies used by native English speaking foreign language learners are slight (Barnett, 1988; Hosenfeld, 1984). The lack of
research into the reading strategy use of native English speaking foreign language learners has possibly deprived foreign language teachers and learners of reading strategy information that can prove fundamental to successful foreign language reading. In knowing which strategies foreign language readers are aware of using and which ones they use while reading foreign language texts, teacher will be better equipped to build strategy awareness and use into the foreign language reading curriculum to maximize their students' reading comprehension in their respective target languages. This is particularly important for the foreign language learner who is learning the target language in an environment where exposure to the target language and culture is limited primarily to the classroom.

As the review of literature shows, there are only a handful of studies investigating the reading strategy use of American university foreign language learners. Consequently, there is limited research available on strategies that native English-speaking university foreign language learners use while reading in the target language. Moreover, there is limited research available on the gender differences in reading strategy use. This study was designed to build upon the results of these limited previous studies in an attempt to provide additional information on the types of reading strategies native English-speaking university foreign language readers use while reading in the target language. Finally, there are no studies on the reported general (perceived) vs. task-sensitive reading strategy use -- the topic of the present study. The following chapters address a study conducted at a U.S. university to assess the reported general and task-sensitive reading strategies of American university students studying Spanish as a foreign language.

## CHAPTER III

## METHODOLOGY

## Overview

This chapter describes the methodology used to assess the reported general and task-sensitive reading strategies of American university students studying Spanish as a foreign language. It identifies the participating subjects, instrumentation, procedures, questions, and data analysis involved in the study. The objective of the study was to explore the reported general and task-sensitive reading strategies used by American university students of Spanish as a foreign language to ascertain the types of reading strategies American students of Spanish report (perceive) they generally use when reading in Spanish and strategies they report using when performing a specific reading task in Spanish. Additionally, this study sought to discover if students reported employing their perceived use of reading strategies while they performed the reading task Spanish. Finally, this study also investigated the influence of variables such as gender and years of study in Spanish on strategy use.

## Subjects

The participants of this study were 94 native English-speaking American students who were studying Spanish as a foreign language at a large Midwestern university in the United States. The students were enrolled in one or more of the following five intermediate and advanced level classes: Intermediate Spanish IV, Hispanic Drama, Advanced Conversation, Hispanic Literature II, and Spanish Literature. The participants were enrolled in degree programs within the following six Colleges at the university:

Agricultural Sciences; Arts and Sciences; Business Administration; Engineering, Architecture and Technology; Education; and Human Environmental Sciences.

Table 1 breaks down the demographic information of the subjects. The demographic information collected from the background questionnaire shows that the age of the participants ranged from 18 to 43 , with a mean of 20.9 years. The number of years they had studied Spanish ranged from 2 to 10 years $(M=5.7 ; S D=1.9)$. The sample consisted of 20 males and 74 females. Of the 94 participants, 91 were native speakers of English, and 3 were native speakers of a language other than English ( $M=1.0$; $\mathrm{SD}=.17$ ). On a Likert scale of 1 to 6 , where 1 represents "below average" and 6 represents "excellent", 2 subjects self-reported their native language reading ability as poor, 9 subjects self-reported their native language reading ability as average, and 83 subjects self-reported their native language reading ability as excellent ( $M=5.3$; $\mathrm{SD}=.79$ ).

## Environment

The participants in this study were students studying a foreign language in an English speaking environment where exposure to the target language (Spanish) is primarily restricted to the classroom. The classes are taught in Spanish, with the students getting an average of 150 minutes ( 2 hours and 30 minutes) of classroom time per week per semester. There are some opportunities outside of the classroom for students to use

Table 1
Distribution of Subjects by Background Variables

$$
(\mathrm{N}=94)
$$

| Background Variables | Frequency | Percent |
| :--- | ---: | ---: |
| Age |  |  |
|  |  |  |
| 18 | 3 | 3.2 |
| 19 | 18 | 19.1 |
| 20 | 23 | 24.5 |
| 21 | 29 | 30.9 |
| 22 | 11 | 11.7 |
| 23 | 7 | 7.4 |
| 24 | 1 | 1.1 |
| 30 | 1 | 1.1 |
| 43 | 1 | 1.1 |
| Gender |  |  |
| Male | 20 |  |
| Female | 74 | 21.3 |
| Major |  | 78.7 |
|  |  |  |
| Agriculture | 1 | 1.1 |
| Arts \& Sciences | 51 | 54.3 |
| Business | 22 | 23.4 |
| Education | 8 | 8.5 |
| Engineering, Architecture \& Tech. | 8 | 8.5 |
| Human Environmental Sciences | 4 | 4.3 |
| Native Language |  |  |
| English |  |  |
| Other |  | 31 |

## Table 1 (Continued)

| Background Variables | Frequency | Percent |
| :--- | :---: | ---: |
| Years of Spanish Study |  |  |
|  |  |  |
| 2 | 6 | 6.4 |
| 3 | 8 | 8.5 |
| 4 | 12 | 12.8 |
| 5 | 20 | 21.3 |
| 6 | 11 | 11.7 |
| 7 | 18 | 19.1 |
| 8 | 13 | 13.8 |
| 9 | 4 | 4.3 |
| 10 | 2 | 2.1 |
| Native Language Reading Ability |  |  |
| (On a 1-6 scale, where 1 = poor and 6 = excellent) |  |  |
|  |  |  |
| 3 | 1 | 1.1 |
| 4 | 1 | 1.1 |
| 5 | 9 | 9.6 |
| 6 | 32 | 34.0 |

their Spanish by participating in the Spanish Club and by attending functions organized by the university Hispanic Student Association, where they have the opportunity to interact with native Spanish speakers. Exposure to Spanish television is limited, with the local cable provider offering only one or two programming stations in Spanish. Access to reading material in Spanish is primarily limited to classroom reading material. However, students have the ability to use the university library computers or personal computers where they can access newspapers and various other reading materials in Spanish from the Internet.

## Instrument

Prior to officially initiating the survey for this study, it was pilot tested over a period of two weeks during the Spring 2001 academic semester using a selected group of native English-speaking university students of Spanish as a foreign language ( $\mathrm{N}=47$ ) and non-native English speaking students studying English as a second language ( $\mathrm{N}=26$ ) at an English Language Institute (ELI). It was initially considered to conduct a study of strategy use between the native English-speaking university students of Spanish and nonnative English speaking students of English at an ELI. However, because one group was learning a foreign language (i.e., not in the target language environment) and the other group was learning a second language (i.e., in the target language environment), it was decided that a comparison of strategy use between these two groups would not be feasible. The result was a decision to focus on the reading strategy use of native Englishspeaking university students of Spanish as a foreign language, since there are fewer studies concerning this group than exist on ESL learners. Fourteen from the original group of 47 respondents from the native English-speaking university students of Spanish as a foreign language provided ideas, input, suggestions and direction to strengthen and clarify the survey instrument. These suggestions were incorporated into a revised survey designed and used for this study.

The data for this study were collected through the Survey of Reading Strategies Inventory (SORSI), Part I and II, which I developed specifically to gather information about the reported general reading strategies (SORSI, Part I) and task-sensitive reading strategies (SORSI, Part II) of native English-speaking American university students
studying Spanish as a foreign language. The instrument is based on information from literature on both first and second language reading strategies, foreign language reading texts; as well as Mokhtari and Sheorey's (2002) Survey of Reading Strategies (SORS). I first reviewed studies on first and second language reading strategies, making note of the various types of strategies used by the first and second language subjects studied. I then reviewed foreign language reading texts and made notes on the reading strategy tips provided for foreign language readers. I then matched these strategies with those identified from the studies conducted on first and second language reading strategies. Finally, I reviewed Mokhtari and Sheorey's (2002) Survey of Reading Strategies (SORS) and matched the previously identified strategies to those in the SORS. In essence, the final SORSI consisted of strategies identified consistently in all three sources. The internal consistency reliability coefficients (as determined by Cronbach's alpha) was . 73 for the SORSI, Part I, .79 for the SORSI, Part II, and .83 for the combined SORSI, Part I and II.

The SORSI, Part I (see Appendix A) consists of 30 items, each of which uses a five-point Likert scale ranging from 1 ("I never or almost never do this") to 5 ("I always or almost always do this"). Students are asked to read each statement and circle the number that best applies to them, indicating the frequency with which they employ the reading strategy implied in the statement. The higher the number, the more frequent the reported general use of the strategy concerned. A background questionnaire, which accompanied the SORSI, Part I, asked students to provide information about their age, gender, major area of study, number of years studying Spanish, and self-rated ability in
reading English.
The SORSI, Part II (See Appendix B) consists of three parts: an intermediate reading passage in Spanish, five multiple-choice questions about the content of the reading passage, and 30 items, each of which uses a 3-point Likert scale ranging from 1 ("I did not do this at all when I was reading the passage") to 3 ("I did this several times when I was reading the passage"). Because the SORSI, Part II required the subject to perform a specific reading task, the strategy ranking on the SORSI, Part II was ranked on a 1 to 3 Likert scale since in this case, in reading the passage, they either used the strategy, sometimes used the strategy, or did not use the strategy. Students were first asked to read the Spanish reading passage, followed by answering the five multiple choice questions over the passage. Students were then asked to read the 30 items on the SORSI, Part II survey and circle the number that best applies to them, indicating the frequency with which they used the reading strategy implied in the statement. As with the SORSI, Part I, the higher the number, the more frequent the task-sensitive use of the strategy concerned.

Both the SORSI, Part I and SORSI, Part II measure three broad categories of reading strategies. The description of each SORSI category (as defined by Mokhtari \& Sheorey, 2002, p. 436) and the number of items within each category are provided below:

1. Global Strategies (GLOB) are those intentional, carefully planned techniques by which learners monitor or manage their reading. Such strategies include skimming the text prior to reading, using illustrations/graphs to help understand the text, and reading with a specific
purpose in mind (13 items).
2. Problem Solving Strategies (PROB) are the actions and procedures readers use while working directly with the text. They are localized, focused techniques used when problems develop in understanding textual information (9 items).
3. Support Strategies (SUP) are support mechanisms intended to aid the reader in comprehending the text. Such strategies include using a dictionary, highlighting information within the text, and taking notes (8 items).

## Procedures

The SORSI was administered during the months of November and December, 2001 either at the beginning or end of the individual class periods with the help of the classroom instructors. The SORSI, Part I was administered first, followed a week later by the SORSI, Part II. The students were read a consent script (see Appendix C) that informed them of the purpose of the survey, that there were no right or wrong answers to the survey questions, that their participation was entirely voluntary, and that they would not be identified in any way. Prior to administering the survey, the participants were given an explanation of what is meant by the term "reading strategy" and were provided with a few examples of reading strategies. For the SORSI, Part I students were asked to provide their honest answers by circling the appropriate number designated to the right of each SORSI strategy statement. The participants were able to complete the SORSI, Part I in 8-10 minutes.

The following week, the participants were administered the SORSI, Part II. As with the SORSI, Part I, the SORSI, Part II was administered either at the beginning or end of the individual class periods with the help of the classroom instructors. The participants were first given a short reading passage (see Appendix D) in Spanish entitled "Revolución y Golpe de Estado." The passage, chosen from an Intermediate Spanish text used to provide cultural and historical information about Latin America, consisted of a heading and two paragraphs. The passage was chosen because it was rated to be at the intermediate level, making it readable for both the intermediate and advanced groups, and because it consisted of historical information not commonly read about in Spanish language courses. The entire passage consisted of approximately 300 words. After the participants read the Spanish passage, they were asked to answer five multiple choice questions about the content of the passage. The questions used accompanied the reading passage from the Intermediate Spanish text. Upon completing the five multiple choice questions, the participants were asked to complete the SORSI survey, Part II. As with the SORSI, Part I, the students were told that there were no right or wrong answers and asked to provide their honest answers by circling the appropriate number designated to the right of each SORSI strategy statement. The participants were able to complete all three steps of the SORSI, Part II in 25-30 minutes. After the data were collected, each completed survey $(\mathrm{N}=100)$ was examined to ensure that all were complete, and, after discarding the incomplete ones, the 94 usable questionnaires were coded for statistical analysis.

## Research Questions

This study was conducted to find answers to the following questions:

1. What kind of strategies do native English-speaking American university students studying Spanish as a foreign language report using when reading generally in Spanish?
2. What kind of strategies do native English-speaking American university students studying Spanish as a foreign language report using when performing a specific reading task in Spanish?
3. Is there a relationship between reported general strategy use and task-sensitive strategy use?
4. What impact do the variables of gender and years of Spanish study have on the use of reading strategies by respondents in the sample?

Data Analysis
The data for this study were analyzed by using the Statistical Package for the Social Sciences (SPSS, version 9.0). First, descriptive statistics such as frequencies were calculated to obtain the overall patterns of reported general and task-sensitive reading strategies of American students studying Spanish as a foreign language. This procedure provided information about the choice of strategies within the sample by ranking the reported general and task-sensitive strategies of the subjects in order of preference according to mean frequency. This provided answers to research questions one and two. Second, correlations between reported general and task-sensitive strategies were examined to find out the correspondence between reported general and task-sensitive strategies. Finally, the t-test was used to examine the impact of gender and years of Spanish study (divided into two groups: high $=7$ to 10 years of study, and low $=2$ to 5
years of study) on the subjects' reported general and task-sensitive reading strategy use.
These procedures provided answers to research questions three and four. The results of the above analysis are discussed in detail in the following chapter.

## CHAPTER IV

## RESULTS AND DISCUSSION

This chapter presents the results of the research study outlined in Chapter III with a summary and discussion. "Reported General Reading Strategy Use" summarizes and reports the results of the reported general strategy use of university students studying Spanish; "Task-Sensitive Reading Strategy Use" summarizes and reports the results of the analysis of the reported task-sensitive strategy use of university students studying Spanish; "A Comparison of Reported General and Task-Sensitive Reading Strategy Use" summarizes and reports the results of the correlation between reported general and tasksensitive strategy use of university students studying Spanish; "Variables Impacting Strategy Use" summarizes and reports the results of the impact of length of Spanish language study and gender on the reading strategy use of university students studying Spanish; and "Summary of Findings and Discussion" summarizes and discusses the findings in Sections 1 through 4.

## Reported General Reading Strategy Use

Table 2 shows the results obtained for the first question: What kind of strategies do native English-speaking American university students studying Spanish as a foreign language report generally using when reading in Spanish? The reported general reading strategy preferences of American students studying Spanish as a foreign language are arranged in descending order by their means (i.e., the most often used to least used strategies). On a scale of one to five, mean frequencies of 3.5 or above indicate that the strategy is used frequently; mean frequencies between 2.5 and 3.4 indicate that the

TABLE 2
REPORTED GENERAL READING STRATEGY USE (1 TO 5 LIKERT SCALE) IN DESCENDING ORDER

|  | $(\mathrm{N}=94)$ |  |  |
| :---: | :---: | :---: | :---: |
| STRATEGY CATEGORY | STRATEGY DESCRIPTION | MEAN | SD |
| PROB6 | I adjust my reading speed according to difficulty. | 4.28 | . 7707 |
| SUP5 | I use a dictionary to understand unfamiliar words. | 4.24 | . 9581 |
| PROB7 | When a text becomes difficult, I pay closer attention to what I am reading. | 4.20 | . 7976 |
| PROB9 | I look back and reread parts of a text to help me understand what I have read. | 4.06 | . 8271 |
| SUP8 | When reading, I think about information in both English and Spanish | 4.02 | 1.06 |
| PROB3 | I read Spanish slowly and carefully. | 3.97 | . 9272 |
| PROBI | I connect the meaning of a new word to words I already know. | 3.85 | . 8794 |
| PROB2 | I try to recall details about what I have read. | 3.80 | . 8331 |
| PROB4 | I think about what I know to help me understand what I read. | 3.71 | . 8753 |
| PROB8 | I try to picture information to help me remember what I read. | 3.64 | 1.133 |
| GLOB2 | Before I begin reading, I read the title and examine headings (if there are any) in the text. | 3.58 | 1.195 |
| SUP1 | When reading in Spanish, I translate information to English. | 3.53 | 1.104 |
| GLOB9 | I have a purpose in mind when I read. | 3.36 | 1.025 |
| GLOB12 | I try to guess what the content of the text is about when I read. | 3.24 | 1.074 |
| GLOB7 | If a word isn't important, I skip it. | 3.13 | 1.122 |
| GLOB10 | When reading, I decide what to read closely and what to ignore. | 3.10 | 1.072 |
| GLOBI | I first skim a Spanish passage (read over the passage quickly) then go back and read it carefully. | 3.06 | 1.171 |
| PROB5 | When a text becomes difficult, I read out loud to help me understand what I am reading. | 3.04 | 1.319 |
| GLOB13 | I check to see if my guesses about the text are right or wrong. | 3.02 | 1.173 |
| SUP4 | I underline or highlight important information as I read. | 2.92 | 1.229 |
| GLOB4 | I make predictions as I read to guess what will come next. | 2.91 | 1.206 |
| SUP2 | When reading in Spanish, I think about text information only in Spanish. | 2.75 | . 9581 |

TABLE 2 (Continued)

| STRATEGY CATEGORY | STRATEGY DESCRIPTION | MEAN | SD |
| :---: | :---: | :---: | :---: |
| SUP7 | I rephrase the content using different words. | 2.65 | 1.093 |
| GLOB5 | Before I begin reading, I preview the text and think about what it is going to talk about. | 2.61 | 1.017 |
| SUP3 | When reading in Spanish, I think about text information only in English. | 2.60 | 1.099 |
| SUP6 | I take notes while reading to help me understand what I read. | 2.45 | 1.054 |
| GLOB11 | I use illustrations/graphs, etc., to help me understand the text. | 2.41 | 1.386 |
| GLOB8 | I skip redundant paragraphs (ones that talk about the same things or contains unimportant details). | 2.18 | 1.036 |
| GLOB6 | I read the first paragraph and the conclusion to get an understanding of what the text is about. | 1.58 | . 8476 |
| GLOB3 | Before I begin reading, I read the first sentence of each paragraph. | 1.27 | . 7094 |
| OVERALL A | RAGE | 3.17 | . 35 |

strategy is used moderately; and mean frequencies between 1.0 to 2.4 indicate that the strategy is generally not used. With respect to reported general reading strategy use, 12 of the 30 strategies fell in the high usage group (mean of 2.5 or above), 13 strategies had means between 2.4 and 3.3, indicating medium usage of these strategies, and 5 strategies had means between 1.2 and 2.3, indicating low usage of these strategies. The overall average for reported general strategy use reflects how often readers as a group report using the strategies when reading Spanish texts. The three categories of each item are labeled global strategies (GLOB), problem solving strategies (PROB), and support strategies (SUP).

The overall average of 3.17 for the thirty items would indicate that the American
students studying Spanish as a foreign language typically perceive themselves as using a variety of strategies while reading Spanish texts. The top five strategies that this group of foreign language learners reported generally using most while reading in Spanish are:
(PROB6) "I adjust my reading speed according to difficulty" ( $\mathrm{M}=4.2$; $\mathrm{SD}=.7707$ );
(SUP5) "I use a dictionary to understand unfamiliar words" $(\mathrm{M}=4.2 ; \mathrm{SD}=.9581)$; (PROB7) "When a text becomes difficult, I pay closer attention to what I am reading" $(\mathrm{M}=4.2 ; \mathrm{SD}=.7976)$; $(\mathrm{PROB} 9)$ "I look back and re-read parts of a text to help me understand what I have read" $(\mathrm{M}=4.06 ; \mathrm{SD}=.8271)$; and (SUP8) "When reading, I think about information in both English and Spanish" $(M=4.02 ; \mathrm{SD}=1.06)$. Of the 12 strategies that fell in the high usage group (mean of 3.5 or above), most were problem solving strategies, followed by support strategies and global strategies. However, among the 13 strategies that fell in the medium use group, there was a shift to global strategies, followed by support strategies and problem solving strategies.

## Task-Sensitive Reading Strategy Use

Table 3 shows the results obtained for the second research question: What kind of strategies do native English-speaking American university students studying Spanish as a foreign language report using while performing a reading task in Spanish? Prior to calculating the descriptive statistics for the task-sensitive strategy use, those SORSI, Part II survey items that did not apply to the reading task were eliminated. There were a total of nine items that were not applicable to the reading passage: (GLOB9) "I had a purpose in mind when I read;" (GLOB2) "Before I began reading, I read the title and examined headings in the text;" (GLOB5) "Before I began reading, I previewed the text and thought
about what it was going to talk about;" (GLOB4) "I made predictions as I read to guess what would come next;" (GLOB8) "I skipped redundant paragraphs;" (GLOB11) "I used illustrations/graphs, etc., to help me understand the text;" (SUP6) "I took notes while reading to help me understand what I read;" (GLOB6) "I read the first paragraph and conclusion to get an understanding of what the text was about;" and (GLOB3) "Before I began reading, I read the first sentence of each paragraph." With respect to strategy (GLOB9), the subjects were told they would be answering a series of multiple-choice questions about the passage; therefore, they were reading with a purpose due to the overall design of the study. Strategies (GLOB2) and (GLOB11) were eliminated because the selected reading passage only possessed a title; there were no headings, illustrations, or graphs. Finally, due to the short length of the passage (two paragraphs consisting of an overall approximate total of 300 words), strategies (GLOB5), (GLOB4), (GLOB8), (SUP6), (GLOB6), and (GLOB3) were not strategies applicable to a short reading task. Therefore, there were a total of twenty-one applicable strategies used for calculation. The internal consistency reliability coefficients (as determined by Cronbach's alpha) was .73 for the 21 items.

The task-sensitive reading strategy preferences of American university students studying Spanish as a foreign language are arranged in descending order by their means (i.e., the most often used to least used strategies). On a scale of one to three, mean frequencies of 2.5 or above indicate that the strategy is used frequently; mean frequencies between 1.5 and 2.4 indicate that the strategy is used moderately; and mean frequencies between 1.0 and 1.4 indicate that the strategy is generally not used. With
respect to task-sensitive reading strategy use, 4 of the 21 strategies had means of 2.5 and above, indicating high usage, 14 of the 21 strategies had means between 1.5 and 2.4, indicating medium usage of these strategies, and the remaining 3 of the 21 strategies had means between 1.0 and 1.4 , indicating low usage of these strategies. The overall average for task-sensitive strategy use reflects how often readers as a group reported making use of strategies while they read a Spanish text. The three categories of each item are labeled global strategies (GLOB), problem solving strategies (PROB), and support strategies (SUP).

TABLE 3
TASK-SENSITIVE READING STRATEGY USE (1 TO 3 LIKERT SCALE) IN DESCENDING ORDER

$$
(\mathrm{N}=94)
$$

| STRATEGY | STRATEGY DESCRIPTION | MEAN | SD |
| :--- | :--- | :--- | :--- |
| CATEGORY |  |  |  |

$\left.\begin{array}{lllll}\text { PROB6 } & \begin{array}{l}\text { I adjusted my reading speed according to difficulty. } \\ \text { When a text became difficult, I paid closer attention }\end{array} & \mathbf{2 . 6 0} & \mathbf{. 5 5 3 0} \\ \text { PROB7 }\end{array} \quad \begin{array}{l}\text { to what I was reading. } \\ \text { I looked back and reread parts of the text to help me }\end{array}\right)$

TABLE 3 (Continued)


The overall average of 1.86 for the twenty-one items would indicate that the American university students studying Spanish as a foreign language reported using a variety of strategies while reading the Spanish text. The top five strategies that this group of foreign language learners reported using in this task are: (PROB6) "I adjusted my reading speed according to difficulty" $(\mathrm{M}=2.6 ; \mathrm{SD}=.5530)$; (PROB7) "When a text became difficult, I paid closer attention to what I was reading" ( $\mathrm{M}=2.6$; $\mathrm{SD}=.5906$ ); (PROB9) "I looked back and re-read parts of the text to help me understand what I had read" $(M=2.5 ; S D=.5757)$; ( PROB 2 ) "I tried to recall details about what I had read" $(\mathrm{M}=2.5 ; \mathrm{SD}=.6327)$; and $(\mathrm{PROB} 1)$ "I connected the meaning of a new word to words I already knew" $(M=2.4 ; \mathrm{SD}=.6446)$. Of the 4 strategies that fell in the high usage
group (mean of 2.5 or above), all were problem solving strategies. Among the 14 strategies that fell into the medium usage group, the subjects showed a preference for global and support strategies equally ( $\mathrm{N}=5$ ), followed by problem solving strategies ( $\mathrm{N}=4$ ).

A Comparison of Reported General and Task-Sensitive Reading Strategy Use
Table 4 shows the results obtained for the third research question: Is there $a$ relationship between reported general strategy use and task-sensitive strategy use of native English-speaking American university students studying Spanish as a foreign language? I sought the answer by computing the correlation coefficients between each reported general and corresponding task-sensitive strategy responses as well as between each of the categories of strategies. The significant strategy correlations at the 0.05 level are arranged in descending order by the size of the correlation of the coefficient (r). The overall correlation average for reported general and task-sensitive reading strategy use reflects how often readers as a group report the use of certain strategies in general and then report using these strategies when reading a Spanish text. The three categories of each item are labeled global (GLOB), problem solving (PROB), and support strategies (SUP).

The overall Pearson correlation of .532 between reported general and tasksensitive strategy use (mean of the 21 items of each scale) shows that while the correlation between the two scales is positive, it is somewhat low ( $\mathrm{r}=.532 ; \mathrm{p}<.05$ ). The fifteen correlated strategies at the 0.05 significance level are: (RSUP1 \& ASUP1) "When reading in Spanish, I translate information to English" ( $\mathrm{r}=.666$ ); (RSUP2 \& ASUP2)
"When reading in Spanish, I think about text information only in Spanish" ( $\mathrm{r}=.622$ ); (RSUP3 \& ASUP3) "When reading in Spanish, I think about text information only in English" $(\mathrm{r}=.564)$; (RPROB2 \& APROB2) "I try to recall details about what I have read" ( $r=.529$ ); (RGLOB7 \& AGLOB7) "If a word isn't important, I skip it" ( $r=.415$ ); (RPROB3 \& APROB3) "I read Spanish slowly and carefully" ( $\mathrm{r}=.401$ ); (RGLOB12 \& AGLOB12) "I try to guess what the content of the text is about when I read" ( $\mathrm{r}=.377$ ); (RSUP4 \& ASUP4) "I underline or highlight important information as I read" ( $\mathrm{r}=.353$ ); (RGLOB10 \& AGLOB10) "When reading, I decide what to read closely and what to ignore" ( $\mathrm{r}=.349$ ); (RSUP8 \& ASUP8) "When reading, I think about information in both English and Spanish" ( $\mathrm{r}=.302$ ); (RPROB5 \& APROB5) "When a text becomes difficult, I read out loud to help me understand what I am reading" ( $\mathrm{r}=.290$ ); (RGLOB13 \& AGLOB13) "I check to see if my guesses about the text are right or wrong" ( $\mathrm{r}=.287$ ); (RPROB1 \& APROB1) "I connect the meaning of a new word to words I already know" $(\mathrm{r}=.278)$; (RPROB8 \& APROB8) "I try to picture information to help me remember what I read" ( $\mathrm{r}=.258$ ); and (RGLOB1 \& AGLOB1) "I first skim a Spanish passage then go back and read it carefully" $(r=.254)$. Of the 15 strategies that correlated significantly at the 0.05 level, the three strategy types were represented in equal number: $[(\mathrm{N}=5)$ for global, support, and problem solving strategies].

TABLE 4
SIGNIFICANT STRATEGY CORRELATIONS AT THE 0.05 LEVEL IN DESCENDING ORDER

$$
(\mathrm{N}=94)
$$

| STRATEGY | STRATEGY DESCRIPTION |
| :--- | :--- |
| CATEGORY | PEARSON |
|  |  |
|  |  |
|  |  |


| RSUP1* | When reading in Spanish, I translate information to English. | . 666 |
| :---: | :---: | :---: |
| ASUP1* | When reading in Spanish, I translated information to English. |  |
| RSUP2 | When reading in Spanish, I think about text information only in Spanish. | . 622 |
| ASUP2 | When reading in Spanish, I thought about text information only in Spanish. |  |
| RSUP3 | When reading in Spanish, I think about text information only in English. | . 564 |
| ASUP3 | When reading in Spanish, I thought about text information only in English. |  |
| RPROB2 | I try to recall details about what I have read. | . 529 |
| APROB2 | I tried to recall details about what I had read. |  |
| RGLOB7 | If a word isn't important, I skip it. | . 415 |
| AGLOB7 | If a word wasn't important, I skipped it. |  |
| RPROB3 | I read Spanish slowly and carefully. | . 401 |
| APROB3 | I read Spanish slowly and carefully. |  |
| RGLOB12 | I try to guess what the content of the text is about when I read. | . 377 |
| AGLOB12 | I tried to guess what the content of the text was about when I read. |  |
| RSUP4 | 1 underline or highlight important information as I read. | . 353 |
| ASUP4 | I underlined or highlighted important information as 1 read. |  |
| RGLOB10 | When reading, I decide what to read closely and what to ignore. | . 349 |
| AGLOB10 | When reading, I decided what to read closely and what to ignore. |  |
| RSUP8 | When reading, I think about information in both English and Spanish. | . 302 |
| ASUP8 | When reading, I thought about information in both English and Spanish. |  |
| RPROB5 | When a text becomes difficult, I read out loud to help me understand what I am reading. | . 290 |
| APROB5 | When the text became difficult, I read out loud to help me understand what I was reading. |  |

TABLE 4 (Continued)

| STRATEGY <br> CATEGORY | STRATEGY DESCRIPTION | PEARSON <br> CORRELATION <br> $(\mathrm{r})$ |
| :--- | :--- | :---: |
| RGLOB13 <br> AGLOB13 | I check to see if my guesses about the text are right or wrong. <br> I checked to see if my guesses about the text were right or wrong. | .287 |
| RPROB1 | I connect the meaning of a new word to words I already know. <br> APROB1 | I connected the meaning of a new word to words I already knew. |
| RPROB8 | I try to picture information to help me remember what I read. <br> I tried to picture information to help me remember what I had read. | .278 |
| APROB8 |  |  |

OVERALL MEAN CORRELATION BETWEEN
REPORTED \& ACTUAL STRATEGY USE

* Where $\mathrm{R}=$ Reported General and $\mathrm{A}=$ Task-Sensitive

Variables Impacting Strategy Use
Impact of Years of Spanish Study on Reading Strategy Use
Due to the limited classroom time that the participating Spanish instructors had with their students, the instructors were not able to take the time necessary to assign a proficiency rating, or allow time to conduct a proficiency test, to ascertain a proficiency level in Spanish for each of the participating subjects in this study. Because the subjects in this study were learning Spanish in a native English-speaking environment, I hypothesized that the intermediate and advanced Spanish student participants were likely to have similar degrees of proficiency in Spanish, regardless of the number of years they had studied Spanish. To examine if the number of years of Spanish study had any impact

TABLE 4 (Continued)

| STRATEGY | STRATEGY DESCRIPTION | PEARSON |
| :--- | :--- | :--- |
| CATEGORY |  | CORRELATION |

(r)

| RGLOB13 | I check to see if my guesses about the text are right or wrong. | . 287 |
| :---: | :---: | :---: |
| AGLOB13 | I checked to see if my guesses about the text were right or wrong. |  |
| RPROB1 | I connect the meaning of a new word to words I already know. | . 278 |
| APROBI | I connected the meaning of a new word to words 1 already knew. |  |
| RPROB8 | I try to picture information to help me remember what I read. | . 258 |
| APROB8 | I tried to picture information to help me remember what I had read. |  |
| RGLOB1 | I first skim a Spanish passage then go back and read it carefully. | . 254 |
| AGLOB1 | I first skimmed the Spanish passage, then went back and read it carefully. |  |

OVERALL MEAN CORRELATION BETWEEN
REPORTED \& ACTUAL STRATEGY USE ..... 532

* Where $\mathrm{R}=$ Reported General and $\mathrm{A}=$ Task-Sensitive
Variables Impacting Strategy Use
Impact of Years of Spanish Study on Reading Strategy Use

Due to the limited classroom time that the participating Spanish instructors had with their students, the instructors were not able to take the time necessary to assign a proficiency rating, or allow time to conduct a proficiency test, to ascertain a proficiency level in Spanish for each of the participating subjects in this study. Because the subjects in this study were learning Spanish in a native English-speaking environment, I hypothesized that the intermediate and advanced Spanish student participants were likely to have similar degrees of proficiency in Spanish, regardless of the number of years they had studied Spanish. To examine if the number of years of Spanish study had any impact
on the use of reading strategies, I first divided the participants into two groups: the "high" group consisted of students who had studied Spanish between 7 to 10 years $(N=37)$, while the "low" group of participants had studied Spanish from 2 to 5 years ( $\mathrm{N}=46$ ). The t-test procedure was used to examine whether there were any significant differences in strategy usage (reported general or task-sensitive) between the high and low groups. Results indicated that there were no statistically significant differences between the two groups. The high vs. low years of Spanish study group statistics with respect to mean differences in strategy use for all 21 reported general and task-sensitive strategies are shown in Table 5.

## Table 5

High vs. Low Years of Spanish Study Group Statistics:
Mean Differences in Strategy Use for All Twenty-one
Reported General and Task-Sensitive Strategies

$$
(\mathrm{N}=83)
$$

| Category | Years of Spanish Study | Mean | SD |
| :--- | :--- | :--- | :---: |
| RSUP1 | High |  |  |
|  | Low | 3.35 | 1.1 |
| ASUP1 | High | 3.60 | 1.0 |
|  | Low | 2.21 | .67 |
|  |  | 2.36 | .74 |
| RSUP2 | High |  |  |
|  | Low | 2.72 | 1.1 |
| ASUP2 | High | 2.82 | .90 |
|  | Low | 2.00 | .66 |
|  |  | 2.10 | .70 |

Table 5 (Continued)

| Category | Years of Spanish Study | Mean | SD |
| :---: | :---: | :---: | :---: |
| RPROB1 | High | 3.91 | . 86 |
|  | Low | 3.73 | . 90 |
| APROB1 | High | 2.43 | . 64 |
|  | Low | 2.36 | . 64 |
| RPROB2 | High | 3.81 | . 73 |
|  | Low | 3.82 | . 92 |
| APROB2 | High | 2.51 | . 65 |
|  | Low | 2.54 | . 65 |
| RGLOB1 | High | 2.75 | 1.1 |
|  | Low | 3.17 | 1.2 |
| AGLOB1 | High | 1.67 | . 81 |
|  | Low | 1.65 | . 82 |
| RSUP3 | High | 2.56 | 1.1 |
|  | Low | 2.58 | 1.1 |
| ASUP3 | High | 1.56 | . 68 |
|  | Low | 1.82 | . 73 |
| RGLOB7 | High | 3.32 | 1.2 |
|  | Low | 3.04 | 1.0 |
| AGLOB7 | High | 2.35 | . 53 |
|  | Low | 2.17 | . 67 |
| RSUP4 | High | 2.97 | 1.2 |
|  | Low | 2.80 | 1.2 |
| ASUP4 | High | 1.32 | . 62 |
|  | Low | 1.23 | . 60 |
| RSUP5 | High | 4.08 | . 98 |
|  | Low | 4.30 | . 98 |
| ASUP5 | High | 1.21 | . 53 |
|  | Low | 1.30 | . 69 |

Table 5 (Continued)

| Category | Years of Spanish Study | Mean | SD |
| :---: | :---: | :---: | :---: |
| RPROB3 | High | 3.70 | 1.0 |
|  | Low | 4.06 | . 85 |
| APROB3 | High | 2.13 | . 63 |
|  | Low | 2.15 | . 69 |
| RPROB4 | High | 3.75 | . 86 |
|  | Low | 3.67 | . 87 |
| APROB4 | High | 2.32 | . 66 |
|  | Low | 2.50 | . 65 |
| RPROB5 | High | 3.40 | 1.3 |
|  | Low | 2.76 | 1.3 |
| APROB5 | High | 1.35 | . 67 |
|  | Low | 1.34 | . 67 |
| RPROB6 | High | 4.21 | . 88 |
|  | Low | 4.28 | . 68 |
| APROB6 | High | 2.51 | . 60 |
|  | Low | 2.69 | . 51 |
| RGLOB10 | High | 3.37 | 1.0 |
|  | Low | 2.80 | 1.0 |
| AGLOB10 | High | 2.32 | . 66 |
|  | Low | 2.10 | . 67 |
| RPROB7 | High | 4.05 | . 91 |
|  | Low | 4.32 | . 66 |
| APROB7 | High | 2.59 | . 55 |
|  | Low | 2.65 | . 60 |
| RPROB8 | High | 3.72 | 1.0 |
|  | Low | 3.56 | 1.1 |
| APROB8 | High | 2.02 | . 79 |
|  | Low | 2.04 | . 78 |

Table 5 (Continued)

| Category | Years of Spanish Study | Mean | SD |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| RSUP7 | High | 2.70 | .93 |
|  | Low | 2.56 | 1.2 |
| ASUP7 | High | 1.62 | .75 |
|  | Low | 1.50 | .75 |
| RGLOB12 | High |  |  |
|  | Low | 3.32 | 1.1 |
| AGLOB12 | High | 3.17 | 1.0 |
|  | Low | 2.00 | .74 |
|  |  | 2.08 | .72 |
| RPROB9 | High | 4.02 | .92 |
|  | Low | 4.06 | .77 |
| APROB9 | High | 2.54 | .60 |
|  | Low | 2.60 | .57 |
| RGLOB13 | High | 3.16 | 1.2 |
|  | Low | 2.91 | 1.1 |
| AGLOB13 | High | 1.64 | .78 |
|  | Low | 1.69 | .78 |
| RSUP8 | High | 4.10 | 1.1 |
|  | Low | 3.95 | 1.0 |
| ASUP8 | High | 2.45 | .69 |
|  | Low | 2.32 | .73 |

## * Where $\mathrm{R}=$ Reported General and $\mathrm{A}=$ Task-Sensitive <br> Impact of Gender on Reading Strategy Use

With respect to the impact of variables on reading strategy use, I sought to examine whether there were any significant differences in the choice of strategies according to subjects' gender (male vs. female). Information available from the background questionnaire indicated fairly similar background profiles (in terms of mean age, overall self-rated Spanish proficiency, undergraduate status, etc.) of the male and
female participants in the sample, although more females $(\mathrm{N}=74)$ than males $(\mathrm{N}=20)$ participated in the study. Because of the large variation in number between the two genders, twenty females subjects were randomly selected to compare with the twenty males for the $t$-test calculation. Once again, the t-test procedure, which was used to determine the years of Spanish study related differences, revealed that while the female means were slightly higher in a number of cases, there were no statistically significant differences between the overall mean use of strategies (reported general or task-sensitive) by male and female students.

## Summary of Findings and Discussion

The first question of this study sought to ascertain what types of reading strategies American university students of Spanish report or perceive they generally use when reading in Spanish. The results indicate that American university students of Spanish reported general reading strategy use, as measured by the SORSI, Part I, ranges from high (12 of the 30 reading strategies with $M=2.5$ or above) to medium ( 13 of the 30 reading strategies with $M=2.4$ to 3.3 ) level, with problem solving strategies being used more frequently than the other types of strategies.

A closer look at the ranking suggests inconsistent use of global strategies on the part of these foreign language readers as a group. Global strategies have been known to promote more fluent reading by providing the reader with more textual clues and priming the readers schemata prior to beginning the actual reading process by using strategies such as skimming the text prior to reading and using illustrations and graphs to help understand the text (Oxford, 1990). While the readers as a group reported a preference
for the use of global strategies among those used at the medium strategy use level, their limited use of global strategies among their high use strategy choices may, in part, explain why problem solving strategies are ranked among the students' top reading strategies. If the readers do not employ the use of global strategies to assist in acquiring textual clues and to prime the schemata prior to reading, they are more apt to experience problems in understanding textual information, thus drawing them to call upon problem solving strategies at the text level to compensate.

These American university foreign language learners of Spanish show a balanced knowledge of reading strategies with respect to their reported general strategy use, with an initial tendency to draw first on problem solving strategies to help them understand textual information. Of the combined 25 strategies that fell into the high and medium usage group, the subjects reported using problem solving and global strategies in equal number $(\mathrm{N}=9)$ followed by support strategies $(\mathrm{N}=7)$. This varies somewhat from the findings of Sheorey and Mokhtari (2001) on reported strategies of US native English speaking and nonnative English speaking ESL students, which revealed that both US native English speaking and nonnative English speaking ESL students attributed the order of importance to cognitive (problem solving), metacognitive (global) and support strategies when reading academic texts. The equal reported general use of problem solving and global reading strategies by the subjects in this study indicates that the readers strive to understand what they are reading in Spanish, are aware of a variety of reading strategies to help them in their reading comprehension, and take care to pay attention and take the time to be certain that they have a strong understanding of what
they read in Spanish.
The second research question of this study sought to ascertain the task-sensitive reading strategies use by American university students of Spanish when reading in Spanish. The results indicate that the task-sensitive strategy use of American university students of Spanish, as measured by the SORSI, Part II, ranges from high (4 of the 21 reading strategies with $M=2.5$ or above) to medium (14 of the 21 reading strategies with $M=1.5$ to 2.4 ) to low (3 of the 21 reading strategies with $M=1.0$ to 1.4 ) level.

A closer examination of the task-sensitive strategies ranking show that while these university student readers initially reported generally using strategies at a high level, they reported moderately using the strategies when performing the reading task in Spanish. The primary task-sensitive reading strategies use by the university foreign language readers when reading the passage were problem solving strategies. Of the combined 18 strategies that fell into the high and medium use group, the subjects used primarily problem solving strategies $(\mathrm{N}=8)$, followed by, in equal number, global strategies $(\mathrm{N}=5)$ and support strategies $(\mathrm{N}=5)$. This primary use of problem solving strategies supports the findings of Olshavsky (1976-1977), that found that subjects reading abstract material primarily used problem solving strategies such as re-reading parts of the text, using context to identify words and using information about the text to help them comprehend meaning. Thus, as in the case of the reported general strategy use, the data analysis of task-sensitive reading strategies indicates that while the Spanish foreign language readers relied primarily on problem solving strategies, they did use a balanced variety of global and support reading strategies when performing the reading
task in Spanish; however they did so moderately.
Thus, with respect to reported general and task-sensitive strategy use, the results reveal two major findings worthy of note. First, the primary strategies used by American university students of Spanish are problem solving strategies. Three of the top five reported general strategies and all of the top five task-sensitive strategies used by the subjects were problem solving strategies. With respect to task-sensitive reading strategy use, the fact that the top five strategies were all problem solving indicates that an active interaction with the text was occurring as the subjects tried to comprehend the foreign language reading passage. That the subjects were required to answer comprehension questions about the passage likely explains this active interaction with the text. Second, the American university students of Spanish tended to use, whether reported general or task-sensitive strategy use, primarily problem solving strategies, followed by global, and support strategies in relatively equal number when reading in Spanish. These findings are consistent with others investigating the overall learning strategy use of foreign language learners. As Oxford (1990) notes, while global strategies are essential for successful foreign language learning, research has indicated that global strategies are used inconsistently by foreign language learners; that problem solving strategies are used more often than global strategies by foreign language learners; and that university foreign language learners report using certain global strategies, such as using time well and being prepared, but fail to use other important global strategies, such as evaluating progress or seeking practice opportunities.

The third research question of this study sought to ascertain if there is a
relationship between reported general and task-sensitive strategy use. At the 0.05 , level the top five strategies that positively correlated between the reported general and actual strategies range from $\mathrm{r}=.66 ;(\mathrm{p}<.05)$ to $\mathrm{r}=.25 ;(\mathrm{p}<.05)$. These results indicate that the strategies which American university students studying Spanish as a foreign language report, or perceive, that they generally use and the strategies they used while performing the reading task in Spanish correspond somewhat, but the correspondence (or correlation) is not strong. An explanation for this may rest in the reading task used for this study. The subjects in this study read a brief (two paragraph, approximately 300 -word) intermediate passage in Spanish. Therefore, because the readers in this study were performing a brief reading task, there may have not been a need for the participants to frequently employ the strategies they reported that they generally use while reading the short passage. Another possible explanation for the low correlation may rest with the text topic used in the study. As Olshavsky (1976-1977) notes, reader's tend to use more strategies when they are interested in the text. It may be that the readers in this study did not find the topic of the reading passage interesting, and as a consequence, did not make the effort to employ the use of strategies they reported they generally use when reading in Spanish while performing the reading task. Finally, motivation may also be a factor in the low correlation between reported general and task-sensitive strategy use in this study. There were no incentives (i.e., grade) for the participants to approach the reading task in as a focused and attentive manner as they would have in a high-stakes situation.

The fourth research question of this study investigated the impact of the variables of gender and years of Spanish study on strategy use. The t-test procedure was used to
examine the impact of gender on strategy use revealed that there were no significant differences in the strategy use of male and females. This result was inconsistent with the findings of a number of studies which have shown that with respect to language learning strategies, females typically use strategies more frequently than males (Sheorey, 1999; Oxford \& Crookall, 1989; Green \& Oxford, 1993) and with Sheorey \& Mokhtari's (2001) reported reading strategy study. A possible reason for the inconsistent results of this study with respect to others may be due to the low number of subjects $(\mathrm{N}=20)$ in the sample. The interaction between reported general and task-sensitive strategy use and gender should be subjected to further research.

With respect to the impact of years of Spanish study on reading strategy use, the result of the $t$-test procedure revealed that there were no significant differences in the strategy use of the high group that had studied Spanish 7-10 years and the low group that had studied Spanish 2-5 years. This finding is somewhat predictable if the environment the foreign language learners acquired their target language training is taken into consideration. Since the majority of the subjects in this study likely learned Spanish solely in the United States, an increase in years of study would not necessarily translate to a higher level of proficiency in the target language over those having fewer years of study. This is due to the fact that the subjects' exposure to the target language takes place in the English speaking environment. The students' exposure to the target language is usually limited primarily to the classroom, perhaps short trips to target language speaking countries, and rare community events that would bring them into contact with native speakers of the target language.

## CHAPTER V

## CONCLUSION

This closing discusses implications of the research study reported in the previous chapters for foreign language teachers and learners, and suggests possible topics for further study.

## Implications

In light of the importance of reading strategies to successfully comprehending foreign language texts and given the limited target language exposure faced by foreign language learners, the results of this study have several implications. First, it is clear that foreign language teachers should be aware of the types of reading strategies their students use in order to be able to help students maximize the strategies they currently use and to make them aware of additional strategies that can help them better comprehend foreign language texts. Unfortunately, many foreign language instructors are unaware of the importance of reading strategies to foreign language reading or, perhaps more likely, they are not certain how to best integrate reading strategy training into their curriculum without significantly sacrificing the limited amount of class time they have with their students.

Reading strategies assessment and training can assist foreign language readers in improving comprehension of target language texts (Hosenfeld, 1988; Barnett, 1988). Instructors and students would benefit from taking advantage of existing instruments, such as Mohktari and Sheorey's Survey of Reading Strategies (SORS), (2002), which are designed to assess foreign language learners' reading strategies. As Mohktari and

Sheorey note, such instruments "can be helpful to students in increasing their awareness of reading strategies while reading, improving their understanding of the reading process, and gaining confidence in their own reading ability" (p. 6). Moreover, they note that "this information can also be helpful to teachers in helping students learn to become 'constructively responsive' and thoughtful readers" (p. 6). In essence, these instruments may serve as a bridge to the training of foreign language learners in reading strategies they are not acquainted with.

What this study has perhaps shown most clearly is that American university students of Spanish are aware of and do use a variety of reading strategies when reading in Spanish. However, the degree to which they report and use these strategies differ. Where the subjects reported generally using more strategies at the high and medium level of strategy use, they employed the strategies at the moderate level when they performed the reading task in Spanish. Moreover, the results show that the subjects are inconsistent in their use of global strategies, instead, drawing primarily on problem solving strategies when reading in the foreign language. Additionally, while the strategies that these students report that they generally use and what strategies they do use while reading in Spanish corresponds, the correspondence is not strong. This suggests that the students are not consistently employing the use of reading strategies they report (i.e., perceive) using when performing reading tasks in Spanish. This could be due to many factors such as text length, text topic, and text reading level (i.e., intermediate). Finally, the variables of years of study and gender do not seem to have an impact on the perceived general and task-sensitive strategies used by these students of Spanish. However, the sample
consisted of a low number from which to calculate results.

## Recommendations for Further Study

This study has some limitations which should be taken into consideration when interpreting the results and conducting follow-up research. First, the sample of this study was relatively small in number. Future studies would benefit from using a larger sample of subjects. Second, the subjects used in this study were surveyed on their reported general and task-sensitive reading strategy use when reading in the target language. It would also be worth investigating reported general and task-sensitive reading strategy use of the students when reading in their native language to ascertain if students use similar strategies when reading in their native and target languages. Third, it would be beneficial to ascertain the target language proficiency of the subjects prior to conducting the survey study in order to accurately draw conclusions about the role of the target language proficiency level in reading strategy use. Fourth, it would be beneficial to use various types of reading texts with respect to length, difficulty, and topic type. Fifth, it would also be worthwhile to survey those native English-speaking American university students of Spanish who have had study abroad experiences in the target language culture and compare the results with those who have not to investigate if there are differences in strategy use between the two groups. Finally, it would be useful to add a qualitative element to this study by randomly selecting a small number of survey participants to take part in a think-aloud technique to further uncover how readers attempt to understand foreign language texts and to assist students in becoming strategic readers.

## REFERENCES

Afflerbach, P. \& Johnson, P. (1984). Research methodology on the use of verbal reports in reading research. Journal of Reading Behavior, 16, 307-321.

Alderson, J. C. \& Urquhart, A. H.. (1984). Reading in a foreign language. New York: Longman.

Alderson, J. C. (1984). Reading in a foreign language: A reading problem or a language problem? In J. C. Alderson and A. H. Urquhart (Eds.), Reading in a Foreign Language (pp. 1-24). New York: Longman.

Anderson, N. J. (1991). Individual differences in strategy use in second language reading and testing. The Modern Language Journal, 75, 460-472.

Barnett, M. A. (1988). Reading through context: How real and perceived strategy use affects L2 comprehension. The Modern Language Journal, 72, 150-162.

Barnett, M. A. (1989). More than meets the eye. Foreign language reading: Theory and practice. Englewood Cliffs, NJ: Prentice Hall.

Berman, R. A. (1984). Syntactic components of the foreign language reading process. In J. C. Alderson and A. H. Urquhart (Eds.), Reading in a Foreign Language (pp. 139-156). New York: Longman.

Block, E. L. (1992). See How They Read: Comprehension Monitoring of L1 and L2 Readers. TESOL Quarterly, 26, 2.

Block, E. (1986). The comprehension strategies of second language readers. TESOL Quarterly, 20, 463-494.

Carrell, P. L. (1984). Schema theory and ESL reading: Classroom implications and applications. The Modern Language Journal, 68, 332-343.

Carrell, P. L. (1987). Content and formal schemata in ESL reading. TESOL Quarterly, 21, 461-481.

Carrell, P. L. (1988). Introduction: Interactive approaches to second language reading. In P. Carrell, J. Devine, \& E. Eskey (Eds.), Interactive Approaches to Second Language Reading (pp. 1-7). Cambridge University Press.

Carrell, P. L. (1989b). Metacognitive awareness and second language reading. Modern Language Journal, 73, 121-134.

Carrell, P. L. (1991). Second language reading: Reading ability or language proficiency? Applied Linguistics, 12, 159-179.

Carrell, P. L., \& Eisterhold, J. (1983). Schema theory and ESL reading pedagogy. TESOL Quarterly, 17, 553-573.

Clarke, M. A. (1980). The short circuit hypothesis of ESL reading -- or when language competence interferes with reading performance. The Modern Language Journal, 64, 203-209.

Clarke, M. A. (1979). Reading in Spanish and English: Evidence from adult ESL students. Language Learning, 29, 121-150.

Coady, J. (1979). A Psycholinguistic model of the ESL Reader. In R. Mackay, B. Barkman, \& R. R. Jordan (Eds.), Reading in a Second Language: Hypotheses, Organization, and Practice (pp. 5-12). Massachusetts: Newbury House Publishers.

Cohen, A. (1986). Mentalistic measures in reading strategies research: Some recent findings. English for Specific Purposes, $\underline{5}, 131-145$.

Cohen, A. D. (1996). Verbal reports as a source of insights into second language learner strategies. Applied Language Learning, 7, 5-24.

Cummins, J. (1980). The cross-lingual dimensions of language proficiency: Implications for bilingual education and the optimal age issue. TESOL Quarterly, 14, 175187.

Cziko, G. A. (1978). Differences in first- and second-language reading: The use of syntactic, semantic and discourse constraints. Canadian Modern Language Review, 34, 473-489.

Cziko, G. A. (1980). Language competence and reading strategies: A comparison of first- and second-language oral reading errors. Language Learning, 30, 101-116.

Davis, J. N. \& Bistodeau, L. (1993). How Do L1 and L2 Reading Differ? Evidence from Think Aloud Protocols. The Modern Language Journal, 77, 459-472.

Evans, E. E. (1988). "Advanced" ESL reading: language competence revisited. System, 16, 377-346.

Feng, X., \& Mokhtari, K. (1998). Reading Easy and Difficult Texts in English and Chinese: Strategy Use by Native Speakers of Chinese. CUHK English Language Teaching Unit, 19-40.

Flavell, J. (1979). Metacognition and cognitive monitoring: A new era of cognitivedevelopment inquiry. American Psychologist, 34, 906-911.

Garner, R. (1987). Metacognition and reading comprehension. Norwood, NJ: Ablex.

Garner, R. (1982). Verbal-report data on reading strategies. Journal of Reading. Behavior, 14, 159-167.

Golinkoff, R. M. (1975-1976). A comparison of reading comprehension processes in good and poor comprehenders. Reading Research Quarterly, 4, 623-659.

Goodman, K. S. (1967). Reading: A psycholinguistic guessing game. Journal of the Reading Specialist, $\underline{6}$, 126-135.

Grabe, W. (1991). Current developments in second language reading research. TESOL Quarterly, 25, 375-406.

Green, J.M., and Oxford, R.L. (1993). Learning strategies: Patterns of use by gender and proficiency. Paper presented at the April 1993 TESOL Convention, Atlanta, GA.

Hatch, E. (1974). Research on reading a second language. Journal of Reading Behavior, 6, 53-61.

Hauptman, P. C. (1979). A comparison of first and second language reading strategies among English-speaking university students. Interlanguage Studies Bulletin, 4, 173-201.

Horiba, Y. (1990). Narrative comprehension processes: A study of native and non-native readers of Japanese. The Modern Language Journal, 74, 188-202.

Hosenfeld, C. (1984). Case studies of ninth grade readers. In J. C. Alderson and A. H. Urquhart (Eds.), Reading in a Foreign Language (pp. 231-244). New York: Longman.

Hudson, T. (1982). The effects of induced schemata on the "short-circuit" in L2 reading: Non-decoding factors in L 2 reading performance. Language Learning, 32, 1-31. Jimenez, R. T., Garcia, G. E., Pearson, P. D. (1995). Three children, two languages, and strategic reading: Case studies in bilingual/monolingual reading. American Educational Research Journal, 32, 67-97.

Jimenez, R. T., Garcia, G. E., \& Pearson, P. D. (1996). The reading strategies of bilingual Latina/o students who are successful English readers: Opportunities and obstacles. Reading Research Quarterly, 31, 90-112.

Johnston, P.H. (1983). Reading comprehension assessment: A cognitive basis. Newark, DE: International Reading Association.

Kern, R. (1989). Second language reading strategy instruction: Its effects on comprehension and word inference ability. Modern Language Journal, 73, 135146.

Kletzien, S. B. (1991). Strategy use by good and poor comprehenders reading expository text of differing levels. Reading Research Quarterly, 25, 67-86.

Knight, S., Padron, Y., and Waxman, H. (1985). The cognitive reading strategies of ESL students. TESOL Quarterly, 19, 789-792.

Koda, K. (1990). The use of native language reading strategies in second language reading. Studies in Second Language Acquisition, 12, 393-410.

Koda, K. (1988). Cognitive process in second language reading: Transfer of L1 reading skills and strategies. Second Language Research, 4, 133-156.

Lee, J. F. (1986). Background Knowledge \& L2 reading. The Modern Language Journal, 70, 350-354.

Mackay, R., Barkman, B., \& Jordan, R. R. (1979). Reading in a second language: Hypotheses, organization, and practice. Massachusetts: Newbury House Publishers.

Macnamara, J., Feltin, M., Hew, M., and Klein, M. (1968). An analytic comparison of reading in two languages. Irish Journal of Education, 2, 41-53.

Mokhtari, K. And Sheorey, R. (2002). Measuring ESL students' reading strategies using the survey of reading strategies (SORS). Journal of Developmental Education, 25, 2-10.

National Center for Education Statistics. (2001). Trends in English and foreign language coursetaking. Indicator 33 .

O'Malley, J. M., Chamot, A. U. Stewner-Manzanares, G., Kupper, L., Russo, R. P. (1985). Learning strategies used by beginning and intermediate ESL students. Language Learning, 35, 21-46.

Olshavsky, J. E. (1976-1977). Reading as problem solving: An investigation of strategies. Reading Research Quarterly, 4, 654-674.

Oxford, R. (1993). La difference continue ... gender differences in second/foreign language learning styles and strategies. In J. Sutherland (Ed.), Exploring gender (pp. 140-147). Englewood Cliffs, NJ: Prentice Hall.

Oxford, R. (1990). Language learning strategies: What every teacher should know. Massachusetts: Heinle \& Heinle Publishers.

Oxford, R., \& Crookall, D. (1989). Research on language learning strategies: Methods, findings, and instructional issues. Modern Language Journal, 73, 404-419.

Oxford, R. \& Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. Modern Language Journal, 73, 291-300.

Paris, S. G., \& Myers. M. (1981). Comprehension monitoring, memory, and study strategies of good and poor readers. Journal of Reading Behavior, 13, 5-22.

Prichard, R. (1990). The effects of cultural schemata on reading processing strategies. Reading Research Quarterly, 25, 273-295.

Rumelhart, D. E. (1977). Toward an interactive model of reading. In S. Dornic (Ed.), Attention and performance VI (pp. 573-603). Hillsdale, NJ: Lawrence Erlbaum.

Rumelhart, D. E. (1980). Schemata: The building blocks of cognition. In R. J. Spiro, B.
C. Bruce, \& W. F. Brewer (Eds.), Theoretical issues in reading comprehension: Perspectives from cognitive psychology, linguistics, artificial intelligence and education (pp. 33-58). Hillsdale, NJ: Erlbaum.

Sarig, G. (1987). High-level reading tasks in the first and in the foreign language: Some comparative process data. In J. Devine, P. Carrell, \& D. Eskey (Eds.), Research in reading in English as a second language, (pp. 105-120). Washington, DC: TESOL.

Segalowitz, N. (1986). Skilled reading in the second language. In J. Vaid (Ed.), Language processing in bilinguals: Psycholinguistic and neuropsychological perspectives, (pp. 3-19). Hillsdale, NJ: Lawrence Erlbaum.

Sheorey, R. (1999). An examination of language learning strategy use in the setting of an indigenized variety of English. System, 27, 173-190.

Sheorey, R., and Mokhtari, K. (2001). Differences in the metacognitive awareness of reading strategies among native and non-native readers. System, 29, 431-449.

Singhal, M. (1998). A comparison of L1 and L2 reading: Cultural differences and schema. The Internet TESL Journal, 4(10), 1-8.

Smith, H. K. (1967). The responses of good and poor readers when asked to read for different purposes. Reading Research Quarterly, 3, 53-83.

Steffensen, M., \& Joag-Dev, C. (1984). cultural knowledge and reading. In J. C. Alderson \& M. H. Urquhart (Eds.), Reading in a foreign language (pp. 48-61). New York: Longman.

VanDuzer, C. (1999). Reading and the adult English language learner. (EDO-LE-9902). ERIC Digest: National Center for ESL Literacy Education.

Widdowson, H. G. (1983). Learning Purpose and Language Use. Oxford: Oxford University Press.

Yorio, C.A. (1971). Some sources of reading problems for foreign-language learners. Language Learning, 21, 107-115.

## APPENDIXES

## APPENDIX A

## SORSI, PART I

Please write the last four digits of your OSU ID\# $\qquad$ (This number will be used for data entry and analysis only)

## SURVEY OF READING STRATEGIES INVENTORY FOR STUDENTS OF SPANISH - PART I (SORSI)

The purpose of this study is to collect information about the various strategies you use when you read texts for information in Spanish.

The items below are strategies that some individuals use when reading in a second or foreign language. Each statement is followed by five numbers: $1,2,3,4$, and 5 , where each number means the following:
' 1 ' means that 'I never or almost never do this'.
' 2 ' means that ' $I$ do this only occasionally'.
' 3 ' means that 'I sometimes do this'. (About $50 \%$ of the time)
'4' means that 'I usually do this'.
' 5 ' means that 'I always or almost always do this'.
After reading each statement, please circle the number ( $1,2,3,4$, or 5 ) which applies to you. Remember that there are no wrong answers. Your honest and sincere responses will be greatly appreciated. All of the following items refer to your reading in Spanish.

| Category | Statement |  |  |  |  | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUP1 | 1. When reading in Spanish, I translate information to English. | 1 | 2 | 3 | 4 | 5 |
| SUP2 | 2. When reading in Spanish, I think about text information only in Spanish. | 1 | 2 | 3 | 4 | 5 |
| PROBI | 3. I connect the meaning of a new word to words I already know. | 1 | 2 | 3 | 4 | 5 |
| PROB2 | 4. I try to recall details about what I have read. | 1 | 2 | 3 | 4 | 5 |
| GLOBI | 5. I first skim a Spanish passage (read over the passage quickly) then go back and read it carefully. | 1 | 2 | 3 | 4 | 5 |
| GLOB2 | 6. Before I begin reading, I read the title and examine headings (if there are any) in the text. | 1 | 2 | 3 | 4 | 5 |
| GLOB3 | 7. Before I begin reading, I read the first sentence of each paragraph. | I | 2 | 3 | 4 | 5 |


| Category | Statement |  |  |  |  | Alw |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUP3 | 8. When reading in Spanish, I think about text information only in English. | 1 | 2 | 3 | 4 | 5 |
| GLOB4 | 9. I make predictions as I read to guess what will come next. | 1 | 2 | 3 | 4 | 5 |
| GLOB5 | 10. Before I begin reading, I preview the text and think about what it is going to talk about. | 1 | 2 | 3 | 4 | 5 |
| GLOB6 | 11. I read the first paragraph and the conclusion to get an understanding of what the text is about. | 1 | 2 | 3 | 4 | 5 |
| GLOB7 | 12. If a word isn't important, I skip it. | 1 | 2 | 3 | 4 | 5 |
| SUP4 | 13. I underline or highlight important information as I read. | 1 | 2 | 3 | 4 | 5 |
| GLOB8 | 14. I skip redundant paragraphs (ones that talk about the same things or contains unimportant details). | 1 | 2 | 3 | 4 | 5 |
| SUP5 | 15. I use a dictionary to understand unfamiliar words. | 1 | 2 | 3 | 4 | 5 |
| PROB3 | 16. I read Spanish slowly and carefully. | 1 | 2 | 3 | 4 | 5 |
| GLOB9 | 17. I have a purpose in mind when I read. | 1 | 2 | 3 | 4 | 5 |
| SUP6 | 18. I take notes while reading to help me understand what I read. | 1 | 2 | 3 | 4 | 5 |
| PROB4 | 19. I think about what I know to help me understand what I read. | 1 | 2 | 3 | 4 | 5 |
| PROB5 | 20. When a text becomes difficult, I read out loud to help me understand what I am reading. | 1 | 2 | 3 | 4 | 5 |
| PROB6 | 21. I adjust my reading speed according to difficulty. | 1 | 2 | 3 | 4 | 5 |
| GLOBI0 | 22. When reading, I decide what to read closely and what to ignore. | 1 | 2 | 3 | 4 | 5 |
| GLOB1] | 23. I use illustrations/graphs, etc., to help me understand the text. | 1 | 2 | 3 | 4 | 5 |


| Category | Statement | Never |  |  |  | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PROB7 | 24. When a text becomes difficult, I pay closer attention to what I am reading. | 1 | 2 | 3 | 4 | 5 |
| PROB 8 | 25. I try to picture information to help me remember what I read. | 1 | 2 | 3 | 4 | 5 |
| SUP7 | 26. I rephrase the content using different words. | 1 | 2 | 3 | 4 | 5 |
| GLOB12 | 27. I try to guess what the content of the text is about when I read. | 1 | 2 | 3 | 4 | 5 |
| PROB9 | 28. I look back and reread parts of a text to help me understand what I have read. | $1$ | 2 | 3 | 4 | 5 |
| GLOB13 | 29. I check to see if my guesses about the text are right or wrong. | 1 | 2 | 3 | 4 | 5 |
| SUP8 | 30. When reading, I think about information in both English and Spanish. | 1 | 2 | 3 | 4 | 5 |

Tell us something about yourself. Please do NOT write your name or identify yourself in any way.

1. Your age: $\qquad$
2. Gender (Please check $\checkmark$ one)
1) $\qquad$ Male
2) $\qquad$ Female
3. Your major: $\qquad$
4. Number of years you have studied Spanish: $\qquad$
5. Is your native language English? (Please check $\checkmark$ one): 1) $\qquad$ Yes
2) $\qquad$ No
6. How would you rate your reading ability in your NATIVE language (i.e., English) on a scale of 1 to 6 , where " 1 " = below average and " 6 " = excellent? (Please circle one):
$\begin{array}{llllll}1 & 2 & 3 & 4 & 5 & 6\end{array}$

Thank you for your cooperation in filling out this survey.

## APPENDIX B

 SORSI, PART IIPlease write the last four digits of your OSU ID\# (This number will be used for data entry and analysis only)

## SURVEY OF READING STRATEGIES INVENTORY FOR STUDENTS OF SPANISH - PART II (SORSI)

DIRECTIONS: Listed below are a number of strategies or techniques you may or may not have used when you were reading the passage a few minutes ago. Please read each statement given below and tell us whether you actually did what is indicated in the statement by circling the number ( 1,2 or 3 ) given on the right side of each statement, where each number means the following:
' 1 ' means that 'I did not do this at all when I was reading the passage'.
' 2 ' means that 'I did this occasionally'. (A couple of times)
' 3 ' means that 'I did this several times when I was reading the passage'.
Please note that there are no wrong answers. Your honest and sincere responses will be greatly appreciated.

| Category | Statement | Never |
| :--- | :--- | :--- |
| SUP1 | 1. When reading in Spanish, I translated <br> information to English. | 2 | Always


| Category | Statement <br> SUP3 | 8. When reading in Spanish, I thought <br> about text information only in English. | 1 | Always |
| :--- | :--- | :--- | :--- | :--- |
| GLOB4 | 9. I made predictions as I read to guess <br> what would come next. | 1 | 3 |  |


| Category | Statement <br> PROB7 | 24. When the text became difficult, I paid <br> closer attention to what I was reading. | 1 | 2 |
| :--- | :--- | :--- | :--- | :--- | Always

Tell us something about yourself. Piease do NOT write your name or identify yourself in any way.

1. Your age: $\qquad$
2. Gender (Please check $\checkmark$ one):
1) __ Male
2) $\qquad$ Female
3. Your major: $\qquad$
4. Number of years you have studied Spanish: $\qquad$
5. Is your native language English? (Please check $\checkmark$ one): 1) $\qquad$ Yes
2) $\qquad$ No
6. How would you rate your reading ability in your NATIVE language (i.e., English) on a scale of 1 to 6 , where " 1 " = below average and " 6 " = excellent? (Please circle one):
1
2
3
4
5
6

Thank you for your cooperation in filling out this survey.

## APPENDIX C

INFORMED CONSENT SCRIPT

## Oklahoma State University Institutional Review Board

## INFORMED CONSENT SCRIPT

To be read to the subjects by the Principal Investigator prior to administering the Survey of Reading Strategies
"You are being asked to participate in a research study being conducted at this university. The purpose of this study is to obtain information from students about how they read academic or school-related materials such as textbooks, library materials, etc. We are interested in finding out the types of reading strategies you use when you read these materials. Obtaining such information can help us gain a better understanding of how students such as yourselves can improve their reading skills for academic purposes.

Your participation involves completing a two-part survey instrument. The first part asks you to read several statements and rate yourself on each statement by circling the number on the survey that represents your answer choice. Please note that there are no "right" or "wrong" answers to these statements, and there is no time limit for completing this survey. However, we estimate that it will take you about 10-12 minutes to complete both parts of the survey. The second part asks you to provide background information such as age, gender, perception of your reading ability, ethnic background, whether you like to read, and what your reading strengths and challenges might be.

Please note that your participation in this study is completely voluntary. There are no penalties for refusing to participate in this study. No course privileges will be denied you should decline to participate or change your mind about participating.

Since your answers will be kept strictly confidential, feel free to respond to all statements honestly and completely. Please do not identify yourself by name. Do you have any questions? Are you ready to begin completing the survey?"

## ASSURANCES

My signature below indicates that (1) I read the Consent Form Script to the subjects, (2) explained its content and intent to them prior to conducting the study, (3) apprized them of the voluntary nature of their participating (they are aware that they were free to withdraw their consent and end participation in the study at any time without penalty after notifying the project directors and/or instructors), (4) assured them about our obligation to protect their identity and to maintain confidentiality of the information they provide, and directed them to the Office of Research and Compliance (attention Sharon Bacher, 744-5700) in the event they have any questions or need additional information about any aspect of this study. Completion of the survey instrument indicates consent of the subject to freely and willingly participate in the study.

## Principal Investigator or Class Instructor

## Date

## APPENDIX D

## SPANISH READING PASSAGE

Please write the last four digits of your OSU ID\# $\qquad$
(This number will be used for data entry and analysis only)

Please read the following passage and answer the five (5) multiple choice questions at the end.

## REVOLUCION Y "GOLPE DE ESTADO"

Durante nuestro siglo, en casi todos los países hispanoamericanos se han efectuado más cambios de gobierno por la fuerza que por via democrática. Estos cambios, sin embargo, raramente tienen las características de revoluciones verdaderas, sino que son simples golpes de estado. Estos se pueden definir como cambios que solo sustituyen un elemento por otro sin que se modifiquen los verdaderos poderes socioeconómicos. Algunos autores sugieren que en algunos países el golpe de estado ha asumido la misma función que tienen las elecciones parlamentarias en el sistema europeo. Es decir que cuando un presidente pierde el apoyo del congreso, sus rivales organizan un glope en vez de fijar elecciones. El procedimiento tiene una serie de reglas tradicionales y generalmente se lleva a cabo con gran eficacia. Claro que se elimina el elemento popular porque el cambio es de una fuerza militar a otra, de un grupo económico poderoso a otro grupo semejante o de un partido autocrático a otro de tendencias iguales. Lo esencial es que las verdaderas bases del poder no cambian, sino sólo los individuos que lo ejercen.

Las verdaderas revoluciones implican cambios mucho mas profundos en la distribución del poder. Ocurren de una clase social a otra, de los propietarios a los empleados, o de los oficiales a los soldados rasos del mismo ejército. Según la mayoría de los especialistas en política hispanoamericana, ha habido sólo tres revoluciones en el siglo XX: la de México de 1910, la boliviana de 1952 y la cubana de 1959. Esto significa que en los tres casos se efectuó una modificación radical en la organización de los elementos del poder. El movimiento sandinista en Nicaragua, si logra resistir las grandes presiones internacionales, probablemente será el cuarto caso de una revolución verdadera. Han existido otros movimientos que casi alcanzaron niveles de revolución, como la elección y caída de Allende en Chile y el movimiento peronista en la Argentina, pero la gran mayoría de los cambios han sido más bien golpes de estado.

## COMPREHENSION

Elija la respuesta que mejor complete las siguientes frases.
(Circle the correct response to complete the following phrases)

1. En Hispanoamérica se han efectuado más cambios de gobiernos por:
A. revoluciones
B. elecciones democráticas
C. golpes de estado
2. Una verdadera revolución ocurrió en:
A. Ecuador
B. México
C. Perú
3. El golpe de estado sólo cambia $\qquad$ en el poder.
A. Los individuos
B. Las bases
C. Las fuerzas militares
4. El caso de Allende casi llegó al nivel de:
A. glope de estado
B. movimiento
C. revolución
5. Las verdadaderas revoluciones implican un cambio en la distribución del:
A. ejército
B. poder
C. estado

Thank you for taking the time to complete this reading passage.
APPENDIX E
OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD FOR
HUMAN SUBJECTS RESEARCH FORM

# Oklahoma State University 

# Proposal Title: REPORTED AND ACTUAL READING STRATEGY USE OF AMERICAN STUDENTS 

LEARNING SPANISH AS A FOREIGN LANGUAGE

## Principal

Investigator(s):

Julie G. Willcut Ravi Sheorey
416 E. 29th
205 Morrill
Stillwater, OK 74074
Stillwater, OK 74078

Reviewed and
Processed as: Exempt
Approval Status Recommended by Reviewer(s): Approved

Dear PI :
Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact Sharon Bacher, the Executive Secretary to the IRB, in 203 Whitehurst (phone: 405-744-5700, sbacher@okstate.edu).


Carol Olson, Chair
Institutional Review Board

## VITA

Julie G. Willcut 2<br>Candidate for the Degree of<br>Master of Arts

Thesis: REPORTED GENERAL AND TASK-SENSITIVE READING STRATEGIES OF AMERICAN UNIVERSITY STUDENTS LEARNING SPANISH AS A FOREIGN LANGUAGE

Major Field: English
Biographical:
Personal Data: Born in Great Bend, Kansas, on June 28, 1965, the daughter of Lloyd and Carole Willcut.

Education: Graduated from Woodward High School, Woodward, Oklahoma in May 1985; received Bachelor of Arts degree in History from Oklahoma State University in December 1989; received Master of Arts degree in History from Oklahoma State University in July 1993; received Bachelor of Arts degree in Spanish from Oklahoma State University in May 2000; completed the requirements for the Master of Arts degree with a major in English at Oklahoma State University in May 2002.

Experience: Director of Midwest Curriculum Lending Library, Oklahoma Department of Career and Technology Education and U.S. Department of Education, January 1993 to December 1993, Occupational Licensing Testing Specialist, Oklahoma Department of Career and Technology Education and Oklahoma State Department of Health, January 1994 to June 2001; Research Specialist and Grant Writer, Oklahoma Department of Career and Technology Education, June 2001 to present; Spanish translator for Oklahoma Department of Career and Technology Education and Oklahoma Career Tech Centers, May 2000 - present.

Professional Memberships: Oklahoma Vocational Association, American Vocational Association; Sigma Delta Pi (Spanish Honor Society).

