A Reading Model Comparison in Intermediate Spanish Using the Interactive Reading with Instructor Support (I.R.I.S) Model

Ransom F. Gladwin IV
A READING MODEL COMPARISON IN INTERMEDIATE SPANISH USING THE
INTERACTIVE READING WITH INSTRUCTOR SUPPORT (I.R.I.S) MODEL

By
Ransom F. Gladwin, IV

A Dissertation submitted to the
Department of Modern Languages and Linguistics
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

Degree Awarded:
Summer Semester, 2005

Copyright 2005
Ransom Gladwin
All Rights Reserved
The members of the Committee approve the dissertation of Ransom Gladwin defended on

Brenda Cappuccio  
Professor Directing Dissertation

Elizabeth Platt  
Outside Committee Member

Juan Carlos Galeano  
Committee Member

Ernest Rehder  
Committee Member

Jonita Stepp-Greany  
Committee Member

The Office of Graduate Studies has verified and approved the above named committee members.
ACKNOWLEDGMENT

The first pilot study for this study began in winter 2003. Since that time, the I.R.I.S. model has been successfully used in my own classes, observed in other instructors’ classes, and presented to high-school and university level educators at conferences in the United States and Mexico. I am thankful for these opportunities to share my dissertation research, and I express my gratitude to the following for supporting me throughout the dissertation process.

I thank my committee members, whose support and appropriate criticism enabled me to believe confidently that I have researched, conducted, and reported a study that contributes to the body of research on collaborative learning, scaffolding, and interaction. Specifically, I thank Dr. Stepp-Greany, who has embodied the term mentor for me, and to whom I express my gratitude for the opportunities to present and publish in research areas important and enjoyable to me and the constructive criticism and consistent encouragement provided throughout the dissertation formation and writing process. Also, I thank Dr. Cappuccio, my advisor and a professor truly committed to graduate student learning and student success, who will be missed as Associate Chair for Graduate Studies. Additionally, I thank Dr. Platt, an expert in the field of sociocultural theory, whose classes and personal assistance have given my studies and research a lens to draw from and a true interdisciplinary focus.

I am grateful for those who assisted me with this study, notably Dr. Smart for running the statistics for this study and for answering the statistical questions that arose throughout and Dr. Lebow for lending expertise of the Hylighter program and interactive annotation. Also, I would like to thank María-José Maguire and Sherée Mitchell for participating in the study as instructors and providing valuable feedback and Lisette Montoto and Katrina Scroggin for their assistance as raters.
I thank my family (my parents and my brother, Ryan, and his wife, Natalia) for their prayers and constant encouragement through the highs and lows of this endeavor. I credit my parents, Skip and Rosalyn, with first (and always) supporting my love for language, travel, and social action abroad. Of course, to Céline, my wife and closest friend, thank you for your steadfast love and strength. God bless.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Tables</td>
<td>viii</td>
</tr>
<tr>
<td>Abstract</td>
<td>x</td>
</tr>
<tr>
<td><strong>CHAPTER I: INTRODUCTION</strong></td>
<td>1</td>
</tr>
<tr>
<td>Overview</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>3</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>5</td>
</tr>
<tr>
<td><strong>CHAPTER II: REVIEW OF THE LITERATURE</strong></td>
<td>7</td>
</tr>
<tr>
<td>Second Language Acquisition Theories</td>
<td>7</td>
</tr>
<tr>
<td>Input</td>
<td>7</td>
</tr>
<tr>
<td>Interaction</td>
<td>9</td>
</tr>
<tr>
<td>Task-based Instruction</td>
<td>9</td>
</tr>
<tr>
<td>Language-Promoting Assistance</td>
<td>10</td>
</tr>
<tr>
<td>Sociocultural Theory</td>
<td>10</td>
</tr>
<tr>
<td>Scaffolding</td>
<td>12</td>
</tr>
<tr>
<td>Interaction: Two Approaches</td>
<td>14</td>
</tr>
<tr>
<td>Reading and Second Language Acquisition</td>
<td>16</td>
</tr>
<tr>
<td>Authentic Texts</td>
<td>16</td>
</tr>
<tr>
<td>Bottom-up Processing</td>
<td>16</td>
</tr>
<tr>
<td>Top-down Processing</td>
<td>16</td>
</tr>
<tr>
<td>Reading as Interaction</td>
<td>17</td>
</tr>
<tr>
<td>Text Features</td>
<td>18</td>
</tr>
<tr>
<td>Strategy-focused Instruction</td>
<td>19</td>
</tr>
<tr>
<td>Motivation and Purpose</td>
<td>19</td>
</tr>
</tbody>
</table>
Instructor Frequency Checklists and Logs 75
Student Observation Surveys 78
Summary and Analysis 81
Summary of Results 84

CHAPTER V: SUMMARY OF DISCUSSION 86
Statement of the Problem and Study Purpose 86
Review of the Methodology 87
Discussion 87
Implications for the Classroom 93
Limitations 94
Recommendations for Further Research 95

APPENDICES 96
Appendix A: Demographic and Prior Knowledge Survey 96
Appendix B: I. R.I.S. Homework Sheets 98
Appendix C: T.R.I. Homework Sheets 110
Appendix D: Linguistic Support Sheet 125
Appendix E: Structured Log and Frequency Checklist 127
Appendix F: Student Observation Survey 130
Appendix G: Multiple Choice Identification Quizzes 135
Appendix H: Master Checklists 142
Appendix I: Human Subject Form 150

REFERENCES 152

BIOGRAPHICAL SKETCH 163
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Study Design: Quasi-Experimental Control Group Pretest-Posttest</td>
<td>28</td>
</tr>
<tr>
<td>4.1.1</td>
<td>Descriptive Statistics: (U.W.S.P.E.) Reading Comprehension Exams</td>
<td>44</td>
</tr>
<tr>
<td>4.1.2</td>
<td>Independent T-Test Results: (U.W.S.P.E.) Reading Comprehension Scores</td>
<td>45</td>
</tr>
<tr>
<td>4.1.3</td>
<td>Descriptive Statistics: Multiple-Choice Identification Quizzes</td>
<td>46</td>
</tr>
<tr>
<td>4.1.4</td>
<td>Independent T-Tests Results: Multiple-Choice Identification Quizzes</td>
<td>47</td>
</tr>
<tr>
<td>4.1.5</td>
<td>Average Means of Individual Classes on Multiple-Choice Identification Quizzes</td>
<td>48</td>
</tr>
<tr>
<td>4.2.1</td>
<td>Paired T-test Results: Multiple-Choice Identifications Quizzes/Recalls</td>
<td>51</td>
</tr>
<tr>
<td>4.3.1</td>
<td>Descriptive Statistics: Recalls</td>
<td>55</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Independent T-Test Results: Recalls</td>
<td>56</td>
</tr>
<tr>
<td>4.4.1</td>
<td>Frequency Checklists: Researcher Observations of Student-to-Student Scaffolding and Interaction</td>
<td>58</td>
</tr>
<tr>
<td>4.4.2</td>
<td>Codings from Researcher Logs: Student-to-Student Scaffolding and Interaction</td>
<td>60</td>
</tr>
<tr>
<td>4.4.3</td>
<td>Excerpts from Researcher Logs: Student-to-Student Scaffolding and Interaction</td>
<td>61</td>
</tr>
<tr>
<td>4.4.4</td>
<td>Frequency Checklists: Instructor Observations of Student-to-Student Scaffolding and Interaction</td>
<td>63</td>
</tr>
<tr>
<td>4.4.5</td>
<td>Excerpts from Instructor Logs: Student-to-Student Scaffolding and Interaction</td>
<td>64</td>
</tr>
</tbody>
</table>
4.4.6 Student Observation Surveys: Student Reporting of Student-to-Student Scaffolding and Interaction

4.4.7 Excerpts from Student Observation Surveys: Student-to-Student Scaffolding and Interaction

4.5.1 Frequency Checklists: Researcher Observations of Instructor-Led Scaffolding and Interaction

4.5.2 Codings from Researcher Logs: Instructor-Led Scaffolding and Interaction

4.5.3 Excerpts from Researcher Logs: Instructor-Led Scaffolding and Instruction

4.5.4 Frequency Checklists: Instructor Observations of Instructor-Led Scaffolding and Interaction

4.5.5 Excerpts from Instructor Logs: Instructor-Led Scaffolding and Interaction

4.5.6 Student Observation Surveys: Student Reporting of Instructor-Led Scaffolding and Language Promoting Assistance

4.5.7 Excerpts from Student Observation Surveys: Instructor-Led Scaffolding and Interaction
ABSTRACT

This study analyzed the effects of the interactive reading with instructor support (I.R.I.S.) model on reading comprehension as compared to a traditional (direct-teaching/lecture format) instructional model. The I.R.I.S. model combines reading strategies and social mediation together in the Spanish-as-a-second-language environment. In the I.R.I.S. model, elements of strategy-focused instruction, scaffolding, and language promoting assistance are operant. The researcher attempted to determine: 1) the effect of the I.R.I.S. homework sheet on reading comprehension, 2) the effect of the classroom intervention portion of the I.R.I.S. model on reading comprehension, 3) the effect of the total I.R.I.S. model on reading comprehension, 4) the types of student-to-student scaffolding that occur during the classroom portion of the I.R.I.S. model, and 5) the types of instructor-led scaffolding that occur during the classroom portion of the I.R.I.S. model.

There was no significant effect on reading comprehension for the I.R.I.S. homework sheet, the classroom portion of the I.R.I.S. model, or the total I.R.I.S. model. Thus, the I.R.I.S. model, a collaborative learning approach, presented no disadvantage in reading comprehension when compared to a traditional direct-teaching model. Furthermore, a slight trend in the data showed an increase in recall performance of the experimental group (the students participating in the I.R.I.S. model) when compared to the control group throughout the term.

Student-to-student scaffolding and instructor-led scaffolding were documented throughout the study with all three qualitative data sources identifying the frequency of specific scaffolding or language promoting assistance behaviors. Specifically, both instructors and students frequently employed “simplifying the task,” while they did not often “elicit more language”. Furthermore, three new behaviors emerged from the
qualitative data: “instructor presence,” “instructor as linguistic source,” and “use of linguistic support sheet.”
Stephen Krashen’s *The Input Hypothesis: Issues and Implications* (1985) has had a profound and lasting effect on second language acquisition research. Central to the input hypothesis is the belief that a second language learner must be exposed to input that is comprehensible. Through comprehensible input, a learner moves from his/her present language level (i) to the next natural language level (i + 1). This process occurs through the comprehension of input containing i + 1. According to Krashen, comprehensible input is essential to language acquisition. Moreover, Krashen (1993) argues that reading is an excellent source of comprehensible input.

Authentic texts, i.e. writings made by a specific language/cultural group for a member of that same group (Galloway, 1998), are currently accepted as a beneficial source of input for the foreign language curriculum (Nunan, 1999). Exactly how texts become comprehensible to students has been a focus of much research. Historically, reading research viewed reading as a bottom-up process whereby a reader constructs the text from the smallest units on up – from letters to words to sentences, etc. (Stanovich, 1990). However, reading researchers also note that successful readers utilize a top-down approach. In top-down processing, readers use their own intelligence and experiences to make predictions based on schemata, interpret assumptions, and draw inferences, while guessing and distinguishing main ideas, overall patterns, and general purpose of a text (Goodman, 1967; Duffy & Roehler, 1986). Today, many language theorists view reading as an interactive model in which readers use both bottom-up and top-down processing in individual ways (Carrell, Devine & Eskey, 1988).
A number of researchers have focused on the importance of characteristics of the written text in affecting reading comprehension; for example, writings possessing a clear “story” or organized format link to positive text recall (Oller, 1983; Oller, 1993; Lee & VanPatten, 2003; Riley, 1993). Also, text division, dividing longer pieces of reading into shorter sections, promotes better reading comprehension (Leow, 2001; MacLellan, 1997; Valette, 1998).

Strategy-focused instruction also plays a role in reading comprehension; for example, underlining the answer in the text increases both student learning and recall (Carrel, 1983; Carrell, Devine & Eskey, 1988). Additionally, the use of comprehension questions is one of the most frequently used devices to aid comprehension of a second language reading (Aebersold & Field, 2002).

Other student-based variables influence the learning process. Motivation is a key contributor to good reading comprehension and general language acquisition (Brown, Armstrong, & Thompson, 1998; Gardner, 1985). Establishing a purpose for reading has a positive influence on reader comprehension and recall (Knutson, 1997, Schraw & Denison, 1994). Another area of research with significance for the current study is language anxiety and the serious hindrance it represents to all language acquisition activities, including reading and task-based oral activities (Horwitz, 1991; Young, 1990).

The issue of social interaction in the second language acquisition process has also been explored extensively (Pica, Young, Doughty, 1987). For example, the interaction hypothesis (Long, 1983) proposes that interaction is not only necessary along with input in the acquisition process, but that the interaction itself is a major source of input and drives the acquisition process. Interaction and the negotiation of meaning increase the comprehensibility of input and lead to greater usefulness in language acquisition and development (Doughty & Pica, 1986; Porter, 1986).

The language utilized in interaction has been established to be important. Task-based instruction encourages the use of language with a purpose (Richards, Platt, & Weber, 1985). Utilizing the target language as a means to an end, during which there is a focus on communication and negotiation of meaning, is a central goal of task-based instruction (Lee, 1995).
Stemming from the works of Soviet psychologist Lev Vygotsky (1930/1987, 1934/1962), sociocultural theory extends the focus on interaction with its general view that the development of language is socially mediated and defined. Vygotsky believed that language was the critical tool utilized by humans for the mediation of mental activity. In his discussions of child development, Vygotsky defined an area between the learner’s current developmental level and potential higher learning levels. The learner passes through this area, the zone of proximal development, with adult or peer supervision and guidance.

Modern second language acquisition sociocultural theorists (Bodrova & Leong, 1996; Donato, 1994; Lantolf, 2000) propose that self-regulation, whereby one controls his/her autonomous functioning, is an important component of the learning process. However, the learner doesn’t have this ability autonomously; through a form of assistance called scaffolding (Wood, Bruner & Ross, 1976), the learner takes new knowledge and skills into his/her own consciousness. Language is the vehicle through which these skills or knowledge may develop. In scaffolding, a more skilled expert (such as a teacher, parent, or classmate) guides the individual through the zone of proximal development. As the learner experiences the environment, the expert prompts the individual through the steps of a problem. Various researchers have identified numerous types of scaffolding behaviors (Donato, 1994).

**Rationale for the Study**

Reading comprehension is at the heart of second language acquisition, yet it continues to be a problem area for foreign language students (Brantmeier, 2002; Tweissi, 1998), and traditional reading models do not seem to solve student problems relating to reading comprehension. Based on research findings concerning the role of comprehensible input, text and reader interaction, top-down processing, strategy-focused instruction, instructional support, task-based instruction, and social interaction theories, the interactive reading with instructor support (I.R.I.S.) model was developed to address student needs.
One previous study has been conducted on a socially-mediated interactive reading model in the first language environment (Lebow, Lick & Marks, 2003). This model used the Hylighter computer software program. Hylighter (patent pending/\url{www.hylighter.org}) is a computer software program that supports collaborative and interactive annotation as it allows multiple readers (and instructors) to highlight and annotate responses and then compare highlighting and annotation remarks. The study documented that students were engaged, negotiated meaning, and displayed increased retention rates as a result of the Hylighter process (Lebow, Licks & Marks, 2003).

The interactive reading with instructor support (I.R.I.S.) model investigated in the present study also combines elements of annotative reading and social mediation. This second language model draws its design from the Hylighter model (Lebow, Lick & Marks, 2003). However, the I.R.I.S. model differs from the Hylighter model in that the I.R.I.S. model specifically targets the second language classroom, does not use computers, simplifies the annotative responsibilities of the students, incorporates socially-mediated classroom activities into the model, and adds instructor and motivational support.

To date, no study has investigated the effects of a hybrid model that combines reading strategies and social mediation together in the second language environment. This study proposes to investigate the effectiveness of a model of reading instruction that includes instructor support and uses a socially-mediated approach in the second language environment.

Furthermore, Spanish as a second language researchers have advised the following research guidelines (Lafford & Salaberry, 2003). First, increase the size of samples of second language learners used in quantitative studies. Many quantitative Spanish second language acquisition studies have been based on one classroom or one group within a classroom. Larger sample sizes are needed to establish better validity of findings in the larger research community. This study addressed this issue by using a large sample size, four classes. Second, conduct more studies of a wider range of second language learners. Much Spanish second language acquisition research has investigated the beginning learner. More research needs to be conducted at all levels of second language acquisition to better posit a view of the stages of Spanish second language
acquisition. This study used adult learners and investigated intermediate-level language learning. Third, *complete both quantitative and qualitative analysis on Spanish second language data*. Most studies are either quantitative or qualitative, but a combined study with a dual analysis “deepens the processes at work that help to create the products under investigation” (p. 322). This study answered research questions one, two, and three using quantitative research and questions four and five using qualitative research. Fourth, *increase the length of the treatment period*. Many studies either focus on a one- or two-time treatment. In this study, three treatments were administered to all four classes. Fifth, *control for prior knowledge*. Controlling for subjects’ background knowledge in Spanish and/or any other second language(s) is critical in second language acquisition studies. All participants were screened to control for language background and prior knowledge of the phenomenon to be studied by filling out the demographic and prior knowledge survey (see Appendix A) with specific questions pertaining to both background language and topic familiarity.

**Purpose of the Study**

The purpose of this study was to determine the effects of the interactive reading with instructor support (I.R.I.S.) model on reading comprehension as compared to the traditional reading instruction (T.R.I.) model. The I.R.I.S. model draws from reading research, second language acquisition research concerning input and interaction, and sociocultural theory. This model is set within a context in which definitions from these theories (i.e. text division, strategy-focused instruction, scaffolding, language promoting assistance, etc.) may be operant. The I.R.I.S. model incorporates authentic texts, I.R.I.S. homework sheets, and accompanying interactive socially-mediated peer-group activities with instructor support. The traditional (T.R.I.) model draws from traditional teaching methods of literature that are generally described as instructor-centered (Carter & Long, 1991; Grasha, 1996; Wei, 1999). The T.R.I. model incorporates authentic texts, in-class reading, and lecture.

The authentic text in the I.R.I.S. model is reformatted into an I.R.I.S. homework sheet (see Appendix B) by dividing the text and embedding comprehension questions.
after each text division. Individual students read and mark the I.R.I.S. homework sheets and bring them to class. Question number two concerns classroom interaction. Using their individual I.R.I.S. homework sheets, students interact in small groups to develop group views and answer a group I.R.I.S. sheet, the exact equivalent of an I.R.I.S. homework sheet. Before the group decides on its answer, each group’s leader must orally ask each member for individual responses. The instructor insists on maintenance of the second language throughout the activity. Also, the instructor provides linguistic support, scaffolding, and language promoting assistance to promote conversation and student-mediated interaction. Lastly, the instructor reviews the I.R.I.S. homework sheet answers with the class, highlighting any responses that caused difficulty to the students.

As part of the T.R.I. model, students are assigned a T.R.I. homework sheet (see Appendix C), an authentic text followed by comprehension check questions. The instructor reviews homework answers in class. Next, the instructor has students read the text out loud and then the instructor lectures on the plot of the text. The instructor concludes by asking comprehension questions concerning the text.

Through a reading model comparison, the researcher attempted to answer the following five questions:

1. What is the effect of the I.R.I.S. homework sheet on reading comprehension as compared to the T.R.I. homework sheet?
2. What is the effect of the classroom portion of the I.R.I.S. model on reading comprehension as compared to the classroom portion of the T.R.I. model?
3. What is the effect of the total I.R.I.S. model on reading comprehension as compared to the total T. R. I. Model?
4. During the classroom portion of the I.R.I.S. model, what types of student-to-student scaffolding occur?
5. During the classroom portion of the I.R.I.S. model, what types of instructor-led scaffolding occur?
CHAPTER II

REVIEW OF THE LITERATURE

Second Language Acquisition Theories

Input

From the early 1940s to the mid 1960s, much second language acquisition research derived either from oral interviews or surveys from native speakers, or, more commonly, from books, magazines, newspapers, and other authentic materials from foreign countries (Lafford & Salaberry, 2003). From the mid 1960s to the early 1980s, the field of applied linguistics, led by the fields of cognitive psychology (Ausubel, 1968) and formal linguistics (Chomsky, 1965), began to revolve around empirical research, with data collection focusing on input from second language learners (Lafford, 2000). Snow (1994) notes that research on the nature of linguistic input predates even the research done on the early language development of children in the 1960s (Brown and Bellugi, 1964). Thus, input has been and continues to be a key area of research in second language acquisition. Among researchers there is a general consensus “that language input of some kind is essential for normal language learning” (Mitchell & Myles, 1998, p. 12).

Nevertheless, some researchers place more emphasis on the role of input than others. As a prime example, Krashen (1985) asserts that not only is input central to second language acquisition, but that “input is the [italics added] essential environmental ingredient” (p. 2). In the 1980s, several works by Krashen (1981, 1983, 1985) explained and clarified key concepts concerning the role of input in second language acquisition. Assertions made in The Input Hypothesis: Issues and Implications (1985) have greatly affected both second language research and classroom practices. Central to the input hypothesis is the belief that a second language learner must be exposed to input that is comprehensible. Two corollaries support this hypothesis. First, speaking is a direct result
of acquisition, not its cause. Second, if input is understood, and there is enough of it, the necessary grammar is automatically provided. These two concepts were revolutionary in that Krashen clearly stated his belief that speech, the desired outcome of most language learners, is not a product of direct instruction. Instead, Krashen proposed that oral communication is a result of understanding brought about by comprehensible input. The implication for the classroom is clear: the instructor needs to provide an environment in which students receive significant comprehensible input.

In the late 1970s and early 1980s, Krashen (1981) argued that input at the proper difficulty level (i + 1) (i.e. the initial state plus a little more) was all that was needed for second language acquisition. Nevertheless, Krashen remained open to other factors in the process. For example, Krashen and Terrel (1983) state, “while comprehensible input is necessary for acquisition, it is not sufficient” (p. 19). More recently (1993), Krashen has focused on the importance of reading as a source of comprehensible input.

The input hypothesis has prominent vocal critics (Long, 1985; McLaughlin, 1987; Rivers, 1994; Swain, 1985). McLaughlin points out that many of these researchers focus on two key complaints. First, Krashen’s theories are not supported by large amounts of empirical evidence; secondly, the theories are difficult to assess empirically. Other researchers (Rivers, 1994; Swain & Lapkin, 1995) have criticized input’s prominent role in Krashen’s theory of language acquisition and focused instead on the role of speech output and the learner’s attempts at second language production.

Nevertheless, Krashen’s past and present ideas remain influential in second language research, and Krashen has played an important role in the study of the input available to second language learners. The concept of input itself may be defined or envisioned differently (Gass & Selinker, 2001) and/or play a radically different role in acquisition (Dunn & Lantolf, 1998) depending on the researcher and the theoretical research lens. However, the importance of input in second language acquisition research continues; citing Larsen-Freeman & Long (1992) and Gass & Selinker (2001), Lafford & Salaberry (2003) note “if SLA researchers categorically agree on anything, it is the fact that input is a necessary ingredient in successful acquisition” (p. 291).
Interaction

While some researchers (Krashen, 1981; Rivers, 1994; Swain & Lapkin, 1995) focused on the roles of input and output, others researched the role of interaction in language acquisition. As part of his doctoral dissertation (1980), Long studied observations of speech between thirty-two pairs of speakers. Half were native speaker and native speaker (NS-NS) pairs and half were native speaker and non-native speaker (NS-NNS) pairs. All the pairs conducted face-to-face oral tasks such as game playing and informal speech. Long noticed key differences in conversation management and language functions within the NS-NNS pairs’ speech. Specifically, the NS-NNS pairs more often utilized clarification requests, comprehension checks, confirmation checks, and repetition. Drawing from these initial observations, Long (1983, 1985) forwarded the interaction hypothesis, which affirms these collaborative efforts as useful in language acquisition. As the speakers try to comprehend and negotiate meaning between them, they are in fact altering the L2 input: “they are collaborating to ensure that the learner is receiving i +1, in Krashen’s terms, rather than i + 3 or indeed i + 0” (Mitchell & Myles, 1998, p. 128). Often, this negotiation of meaning is a result of language trouble or a means to avoid conversation trouble. Pica, Holliday, Lewis & Morgenthaler (1989) describe negotiation of meaning as “exchanges between learners and their interlocutors as they attempt to resolve communication breakdown and work toward mutual comprehension” (p. 65). In response to critics challenging the defining of language interaction so purely in terms of negotiation of meaning (Braidi, 1995), Long (1996) re-defined the interaction hypothesis with more specific attention to the features of input, the linguistic environment, and the learner. However, negotiation of meaning is still central, although not exclusively so, to the interaction hypothesis.

Task-based Instruction

Task-based instruction draws on interactive research. Central to task-based instruction is the encouragement of negotiation of meaning and the use of the target language with a purpose (Lee, 1995). In task-based instruction, language use is purposeful as opposed to being used solely for drill work or manipulation exercises (Richards, Platt, & Weber, 1985). Negotiation of meaning within a task links to greater student use of confirmation and comprehension checks (Doughty & Pica, 1986) and is a
key activity promoted by task-based learning. In the second language classroom, Long & Porter (1986) noted improved quality of output, more positive affective environment, and increased motivation as a result of cooperative tasks. Lee (1995) has documented three specific task characteristics that promote student interaction and negotiation of meaning: a focus on 1) autonomous student-to-student interaction, 2) student use of language, and 3) a challenging concrete task with a specific outcome.

**Language-promoting assistance**

Another practical application of interaction theory addresses the important role the instructor plays in classroom interaction (Kinginger, 2001). There are several other key types of language-promoting assistance (often, but not solely utilized by an instructor) that link positively to greater interaction and language learning in the classroom (Scarcella & Oxford, 1992). These include caregiver talk, confirmation checks, and eliciting more language. First, an instructor may use caregiver talk to aid students in input comprehension. Caregiver talk consists of speaking carefully, clearly, and slowly. The “caregiver” rephrases and repeats central ideas and words as well as explains and expands key points or utterances. Caregiver talk or caregiver speech (Matthews, 1997) is also commonly referred to as child-directed speech. However, for this study, the term caregiver talk is used to identify talk directed at a student (Scarcella & Oxford, 1992). Confirmation checks refer to verifying information stated by asking questions such as, “Is that what you are saying?” Eliciting more language refers to the attempt to prompt more language production by asking questions such as, “What do you mean by that?” and/or inviting the student to expand on what he/she already said. Eliciting more language also includes restating the student’s answer and increasing the wait time for a response. Students, when engaged in student-to-student interaction, may also utilize the above three types of language promoting assistance.

**Sociocultural Theory**

More recently, other researchers have assigned an even more complex role to interaction. Sociocultural theory views language acquisition as socially mediated and defined, and for sociocultural researchers, language interaction itself forms both the acquisition and thought process. Sociocultural theory stems from child development research conducted in the 1920s and 1930s by Soviet psychologist Lev Vygotsky.
Vygotsky (1934/1962) “thought and language . . . are the key to the nature of human consciousness” (p. 28). Language mediates mental activity and guides humans in all thoughts and actions.

According to Vygotsky (1930/1980), to organize and control the self, including mental processes such as planning, problem solving, etc., humans utilize symbolic tools in much the same way that they use physical tools to organize and control their physical environment. Two significant processes for humans are the use of tools and the use of symbols. However, Vygotsky disdained the study of tools and symbols “thus far in psychology as isolated and independent of each other” (p. 12), because he believed that in language these processes were united. The critical symbolic tool utilized by humans for mediation of mental activity is language.

Vygotsky’s theories directly link to his observations of child development and learning. Vygotsky (1930/1980) noted that most individuals are self-regulated and function autonomously in several ordinary domains, but this isn’t true for the child or novice learner. The novice learner learns by task completion under the guidance of a more skilled individual. Through collaborative talk and a shared consciousness, the learner slowly develops or takes over new knowledge and skills into his/her own consciousness. The interaction between novice and expert in a problem-solving task is scaffolding (Wood, Bruner, & Ross, 1976), a well-documented and researched language acquisition phenomenon. Through scaffolding, an expert takes control of those portions of a task that are beyond the learner’s current level of competence, thus allowing the learner to focus on the elements within his/her range.

The expert and learner roles however are not as clearly defined as those of parent/child. In the classroom, an expert may be either an instructor or a fellow student. Current studies on scaffolding in the second language classroom typically note one individual providing scaffolding to a less proficient partner (Antón, Dicamilla & Lantolf, 2003).

In his discussions of child development, Vygotsky (1930/1980) defined the area between the learner’s current developmental and his/her potential higher learning levels as the zone of proximal development. In the zone of proximal development, the learner can’t complete the task independently, but the learner can receive expert guidance or
collaboration with more capable peers, i.e. scaffolding help (Wood, Bruner & Ross, 1976). Thus, the zone of proximal development is also a zone of potential development. The zone of proximal development “defines those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state” (Vygotsky, 1930/1980, p. 8).

Vygotsky’s concept of the zone of proximal development suggests that language learning occurs via assistance from an expert through meaningful, cooperative interaction. Applying Vygotsky’s concepts, second language acquisition researchers propose that cooperative, small-group work in the classroom positively affects second language acquisition (Antón, Dicamilla & Lantolf, 2003; Hall, 1995). For example, Donato & McCormick (1994) studied ten undergraduate students in a French conversation course as the students documented and reflected on their growth via portfolio assessment. The culture of the classroom, “an environment that mediated language learning in reflective and systematic ways” (p. 462), was cited as essential in fostering language learning and contributing to the successes of the students developing and using learning strategies. In general, sociocultural theory also places an importance on the classroom and the valued role educational classrooms can play in an individual’s cognitive growth.

**Scaffolding**

When you build a building, you build a scaffold with the size and shape of the building in mind. In the initial stages, the contractor provides more scaffolding than later, when the walls are established and the foundation is secure. If the scaffolding is removed too early, the building will also suffer. If the scaffolding is not removed, the contractor cannot build another building. In teaching, we provide more support at the beginning stages of the skill/concept formation. If we remove the support too early the child may have incomplete or incorrect understanding. If we leave the supports too long, the child will not be encouraged to move on to new learning. (Leong, Bodrova, Hensen & Henninger, 1999, p. 3)

The interaction between a learner and an expert in a problem-solving task was first defined as scaffolding in Wood, Bruner & Ross’s landmark 1976 study, *The Role of Tutoring in Problem Solving*. Wood, Bruner & Ross videotaped 594 events of a tutor
aiding 3-, 4-, and 5-year-olds in the task of pyramid construction using twenty-one interlocking blocks. The tutor allowed the child to do as much as he or she could alone and waited for the child’s success or failure at each level of the task before assisting in the next level of instruction. The results of the study identified “an interactive system of exchange in which the tutor operates with an implicit theory of the learner’s acts” (p. 99). This system said much about the function of the tutor as observed in the study and Wood, Bruner, & Ross outlined six specific functions of this “scaffolding” process.

These six functions are: 1. recruitment, 2. reduction in degrees of freedom, 3. direction maintenance, 4. marking critical features, 5. frustration control, and 6. demonstration. Recruitment entails the expert enlisting the learner’s interest in the task. For example, through appeals or questions, the expert forwards the requirements of the task and then encourages participation. Reduction in degrees of freedom involves reducing or simplifying the task, often by reducing the number of acts needed to complete the task. The learner can recognize whether he or she has achieved some of the task requirements and the expert may finish or “fill in the rest and let the learner perfect the component sub-routines” (Wood, Bruner, Ross, 1976, p. 98). Direct maintenance details the efforts of the expert to keep the learner from falling behind and losing interest, often by using encouragement and excitement. The expert tries to keep the learner motivated and in pursuit of the next step, because the learner often prefers to keep working at the current stage, “rather than moving on from this success at a simpler level to trying out a more complex task” (p. 98). An expert marks critical features and interprets discrepancies by pointing out and focusing on the relevant features of the task, while noting disagreement between what has been produced and the correct, assigned production task. Frustration control is key to task completion. An expert should provide a more pleasant and less stressful situation for the learner, but avoid unnecessary dependence on the expert. Demonstration or modeling is not simply performing; demonstration involves the expert presenting the idealized version, or an attempted solution, of the task in the hopes of imitation by the learner. The expert may complete the act or amplify the learner’s partial solution. Second language acquisition researchers now refer to these functions, as identified by Wood, Bruner, & Ross (1976), as behaviors of
scaffolded help, and they have been applied to foreign language learning tasks (Chism, 2003; Donato, 1994).

Students may also play the role of the expert or more proficient partner. During small-group work in the classroom, students provide much verbal assistance to other students via scaffolding (Donato, 1994; Brooks & Donato, 1994; Lapkin & Swain, 1998). Student-to-student scaffolding links to higher oral performance (Donato, 1994) and increased accuracy in written production (Aljaafreh & Lantolf, 1994).

**Interaction: Two Approaches**

As implied above, within the field of second language acquisition, there are two distinctive research approaches to interaction: 1) interactionist/linguistic and 2) sociocultural. Drawing on Long’s interaction hypothesis (1996), interactionists emphasize the role of conversational interaction and negotiation of meaning with much attention to interactional adjustments and modifications made by speakers that promote acquisition (Lightbown & Spada, 1993). In this view, interaction is largely a negotiation of linguistic form whereby “interaction is studied via analysis of modifications (phonological, morphosyntactic, discourse, and/or lexical) as they are made by two or more interlocutors in order to resolve a breakdown in communication, or to facilitate communication” (Lafford & Salaberry, 2003, p. 305).

While Krashen’s notion of input generally revolves around a passive learning experience whereby one listens for the next level of linguistic input, sociocultural views of input and interaction generally link to both scaffolding and the zone of proximal development and concern people actively working in the joint accomplishment of tasks (Thorne, 2000). Also, socioculturalists do not define set linguistic stages, because “for Vygotsky, the future is open, uncertain and depends on the material and interactional (i.e., cultural and historical circumstances in which the individual is situated)” (Dunn & Lantolf, 1998, p. 422). Socioculturalists note that interactive problem solving via scaffolding enables the learner to develop through the zone of proximal development (Vygotsky, 1930/1980). Sociocultural theorists view interaction from within a Vygotskian framework, highlighting the effect of social collaboration on both linguistic
and cognitive development. Sociocultural theorists note the influence of social context and collaboration on linguistic and cognitive development with the development of cognition as an outcome of social interaction (Dunn & Lantolf, 1998). Socioculturalists operate from within a general learning theory where all learning, including language learning, is “first social, then individual; first inter-mental, then intra-mental” (Mitchell & Myles, 1998, p. 162).

“Interaction is globally viewed as an important variable in successful second language acquisition” (Lafford & Salaberry, 2003, p. 304). Although interactionists and socioculturalists view interaction via different frameworks, both have contributed to the ongoing investigation into the nature of interaction.

Much research from varied theoretical frameworks within the field of second language acquisition links to interaction. Garcia & Asención (2001) drew from the “the growing body of research [that] links multiple threads of SLA theory, such as Krashen’s Input Hypothesis (1982), Swain’s Comprehensible Output Hypothesis (1985) and what has come to be known as Long’s Interaction Hypothesis (1981) with various sociocognitive theories such as sociocultural theory (Vygotsky, 1978) and skill acquisition theory (Dekeyser, 1998)” (p. 378). Their study showed significant positive effect for small group interaction on listening comprehension. Using an integrated view of interaction, the researchers attempted both to quantify the effect of the interaction and qualify the features of the interaction.

The present study uses a similar approach, linking multiple threads of second language theory in the investigation of a hybrid model of classroom instruction. This study also uses a hybrid research design to collect both quantitative and qualitative data. Lafford & Salaberry (2003) encourage such a hybrid research design in that the “strengths of both qualitative and quantitative frameworks may be combined in effective ways in order to answer classroom-specific questions related to interaction” (p. 309). The American Psychological Association, the American Educational Research Association, and the Education Department’s Institute of Education Sciences also strongly encourage such hybrid or mixed design studies (Viadero, 2005). In fact, the studies may not only produce strong findings, but perhaps they will help mend the great
separation found between qualitatively and quantitatively focused researchers in the field today (Viadero, 2005).

Reading and Second Language Acquisition

Authentic Texts

Authentic texts refer to communication made by those of a specific language or cultural group for members of that same group (Galloway, 1998). Authentic texts may be written or oral. These texts include audiotapes, magazine or newspaper articles, short stories, literature, videotapes, etc. Galloway (1998) proposes three specific reasons for the inclusion of authentic texts in the classroom. First, students are exposed to materials that serve a purpose. Second, they possess deep cultural content. Third, they reflect the cultural and societal values of the culture studied. Authentic reading texts are a recommended component of the foreign language curriculum today (Nunan, 1999).

Bottom-up Processing

Within the body of second language acquisition research, two significant models describe the ways a student processes texts to gain comprehension: bottom-up processing and top-down processing. Historically, second language reading focused on bottom-up (or alternately titled text-driven) processing. In a bottom-up processing approach, readers extract information, including the words, letters, and drawings, in a systematic and mechanical fashion from a text (Rivers, 1983). Some theorists hold that bottom-up theory best describes how people read and note that a reader constructs the text from the smallest units on up, that is, letters to symbols to words to sentences, etc., and that through repetition of this process, called decoding, the entire process becomes automatic (Eskey, 1988; Stanovich, 1990).

Top-down Processing

A top-down (or alternately titled reader-driven) processing approach is based on the theoretical proposition that successful readers utilize their own intelligence and experience to make predictions, interpret, and draw inferences. In top-down processing, the reader guesses and distinguishes main ideas, overall patterns, and general purpose of the text and focuses less on individual words, verb conjugations, or isolated grammar
points (Adair-Hauck, 1996; Adair-Hauck & Cumo-Johanssen, 1997). Central to top-down theory is the belief that readers bring their own individual assumptions, expectations, intelligence, questions, etc. to the text, and that the text addresses and confirms these expectations.

In top-down processing, an individual’s predictions are often based on schemata. Schema theorists propose that schemata, abstract mental structures, enable one to understand the world. For example, based on how one perceived or remembered an event or an occurrence, individuals possess schemata for arrangements of smells, the organization of a typical book, how to shop, etc. (Smith, 2004). According to schema theory, knowledge of relevant schemata is essential for reading comprehension. As an example, a student with no concept of the game of cricket will have difficulty with a story about cricket players or a game of cricket. Schema theorists note that students understand more of a text when they know the content schema and that the instructor plays an important role in helping students build schema via classification and categorization activities (Aebersold & Field, 2002).

Those that view top-down theory as the best description of the reading process differ from bottom-up advocates in that vocabulary is not central to the reading process in top-down theory (Goodman, 1967). In the top-down approach, a reader fits a text into his/her own individual knowledge and checks further when new information occurs. The approach leads to a successful rate of language acquisition (Adair-Hauck & Cumo-Johanssen, 1997). Specifically, beginning learners benefit from experience in top-down processing as they break from word-for-word decoding and are thus able to read more complicated texts, such as authentic texts (Shrum & Glisan, 2000). Guided by research findings, top-down or whole-language theme and task-based approaches have become popular and successful in the second language classroom.

Reading as Interaction

Today, most second language theorists view reading as an interactive process in which readers utilize both bottom-up and top-down processing in individual ways (Barnett, 1989; Carrell, Devine & Eskey, 1998). Reading as interaction characterizes the reader as retrieving relevant information from memories and general knowledge about a topic, while simultaneously considering text-based elements, such as letters, words,
formats, illustrations, etc. to aid in the complex process of determining both syntax and semantics. In summary, interactive reading “is a mental activity during which textual elements are taken in and acted on by linguistic processes mediated by the individual reader’s characteristics” (Lee & VanPatten, 2003). Also, sociocultural theory adds to the understanding of interactive reading by maintaining that the meaning of a text may be socially defined and that an ongoing process of meaning-making may occur after the initial reading of the text (Roebuck, 1998).

**Text Features**

Despite the popularity of the use of authentic texts in the second language classroom, these texts may have unfamiliar linguistic structures and vocabulary that can impede student reading comprehension (Pusack & Otto, 1996). However, learners can comprehend both vocabulary and language that they have not been formally taught (Lee, 1987). Also, a number of researchers have focused on key features of texts that facilitate reading comprehension. Texts that possess a clear “story,” in that they are structured episodically, will be easier to comprehend initially and easier to reproduce and recall later (Oller, 1983; Oller, 1993; Lee & VanPatten, 2003; Riley, 1993). For example, Riley (1993) studied one hundred and twenty university students studying French. The students, representing three language levels, were randomly assigned one of three stories to read in French and then recall in English. The stories differed only in story organization. The results showed high recall for the linear structure story organization commonly found in folk tales and fables. Texts that deviated from this ideal story grammar led to diminished reading comprehension (Riley, 1993). Many authentic texts, for example, newspaper articles, legends, parts of novels, and short stories, possess a strong story format and are excellent for class use (Barnes-Karol, 2000).

One of the most frequently noted text features positively contributing to better reading proficiency and reading comprehension is text organization (Ghaith & Harkouss, 2003; Knutson, 1997; Lee, 1987; Riley, 1993; Roller, 1990), with text division often cited as an excellent example of a text feature promoting text organization. Text division, defined as carving up longer pieces of reading into shorter sections, promotes better reading comprehension (Leow, 2001; MacLellan, 1997; Valette, 1998). Text division makes the text more approachable to all learners and helps learners construe meaning
from the individual divisions, while promoting guessing and anticipation of what comes next. Text division can play a clear role in better second language reading comprehension, especially at the intermediate level where text structure makes a major difference in text recall (Riley, 1993).

**Strategy-focused Instruction**

Strategy-focused instruction also plays a role in reading comprehension. Teaching reading strategies leads to better reading recall (Grabe, 1997). For example, underlining the answer in the text is a strategy that raises awareness of text structure (Lapp & Flood, 1992). Underlining also increases learning and recall (Carrell, 1983; Carrell, Devine & Eskey, 1988), as well as student retention and reading comprehension (Myers, 1984; Moffett and Wagner, 1983). Researchers theorize that underlining, as a broader part of general strategy training, makes students aware of the organizational formats and patterns that underlie all natural authentic texts. Students come to comprehend the coherence and logic of the reading material and will be able to distinguish main ideas from less important information (Grabe, 1997).

Aebersold & Field (2002) note that comprehension questions are one of the most frequently used strategy-focused instruction devices to help students review and understand a second language text. At the intermediate level, providing the majority of comprehension questions linking to knowledge and comprehension facilitates strong basic student comprehension of the text (p. 122). To aid activation of varied cognitive processes, some questions may be asked requiring analysis, synthesis, and evaluation - higher-order thinking skills (Bloom, 1956), but these higher-order questions are less text bound, more difficult, and at times very frustrating to students. Thus, when higher-order questions are used, providing for opportunities to review these questions in small group oral discussion often aids students (Aebersold & Field, 2002, p. 123).

**Motivation and Purpose**

Other variables also influence the second language reading process. Motivation has been defined as the most influential factor in both language acquisition and reading comprehension (Brown, Armstrong & Thompson, 1998; Gardner, 1985). Oxford & Nykos (1989) surveyed one thousand two hundred foreign language university students using the one hundred and twenty-one item Strategy Inventory for Language Learning
The S.I.L.L. assesses language-learning strategies used by respondents. The results showed that expressed motivation to learn a language was the most powerful influence on strategy choice. The more highly motivated the student, the more he or she used all types of language strategies (Oxford & Nyikos, 1989).

One specific source of motivation that has been linked to greater overall success in language learning is purpose for reading (Gardner, 1985; Oxford & Nyikos, 1989; Parry, 1992). The factor of purpose has been shown to facilitate reading comprehension, reader interest, and reading recall (Knutson, 1997; Schraw & Dennison, 1994). For a classroom text to have a purpose, the instructor must give the reader a particular goal or task relevant to the reader, ideally one that involves learning or entertainment. Reading with a purpose is especially important in the intermediate classroom, where purposeful tasks that provide communicative activities should link to enhanced student interest, participation, and recall (Knutson, 1997).

**Anxiety and Second Language Acquisition**

**Language Anxiety**

While the central questions of this study focus on reading comprehension and scaffolding, the model elicits the use of oral language through small group activities requiring individual oral communication. Language anxiety often affects students confronted with an oral classroom task, with some students reluctant to communicate regardless of context (Foss & Reitzal, 1991). Language anxiety manifests itself through a debilitating desire for speaking perfection, fear of performance errors, and strong feelings of self-consciousness (Friedman, 1980; Horwitz, 1986). Young (1990) administered a questionnaire to one hundred and thirty-five university students and one hundred and nine high school students, all in beginning-level Spanish, to identify items related to language anxiety and anxiety attached to specific class and instructor practices. Students cited speaking in class, along with spontaneous role-playing in front of the class, as the most anxiety-producing activities out of twenty classroom activities, ranging from writing a composition in class to presenting a dialog in front of the class.
Despite the abundance of research documenting the powerful deterrent language anxiety is to all forms of oral classroom communication and comprehension (Horwitz, 1991; Young, 1990), there are measures an instructor can take to lessen language anxiety. First, instead of speaking alone or on-the-spot, students should work in small groups with a relaxed atmosphere (Young, 1990). Second, an instructor should not overcorrect errors (Omaggio, 1986). Third, preparedness for the activity (having homework done, knowing what the activity will entail, etc.) reduces student anxiety (Young, 1990).

The Relationship between the I.R.I.S. Model and Research

The Interactive Reading with Instructor Support (I.R.I.S.) model draws from second language acquisition theory and research and, more specifically, second language reading research, interaction theory, and sociocultural theory. The model, uniquely designed to promote reading comprehension and to encourage scaffolding and interaction, has been used during two previous semesters in the intermediate-level second language classroom as a task-based cooperative learning activity incorporating both a homework and classroom component. The I.R.I.S. model represents an effort to promote reading comprehension through a socially-mediated task involving scaffolding, interaction, and negotiation of meaning in the classroom, while making authentic texts entertaining, interactive, and, ultimately, more comprehensible to intermediate second language students.

Recognizing that reading is an excellent source of input (Krashen, 1993), the I.R.I.S. model utilizes one reading text for both homework and a classroom activity. The model utilizes authentic texts so as to integrate culture into teaching and provide purpose (Galloway, 1998). The three authentic texts chosen for use in this study, Rigoberta Mechú: del apocalipsis a la gloria by José Elías, Tiempo libre by Guillermo Samperio, and Los perros mágicos de los volcanes by Manlio Argueta, are logically organized and possess a true story, characteristics recommended to enhance reading comprehension (Oller, 1993), and the readings represent texts accessible to intermediate level learners via top-down processing (Shrum & Glisan, 2000). The I.R.I.S. homework sheet comprises an authentic text divided using the principles of text division, which promote reading
proficiency and reading comprehension (MacLellan, 1997; Valette, 1998). Strategy-focused instruction to students receiving the I.R.I.S. homework sheet involves underlining to increase learning and recall (Carrell, 1998), reading comprehension (Myers, 1984; Moffett & Wagner, 1983) and organizational skills (Grabe, 1997). Another strategy-focused instruction is the use of comprehension questions, with the majority focused on knowledge and comprehension to build strong, basic comprehension of the text (Arbersold & Field, 2002), and at least one question per worksheet linking to higher-order thinking skills (Bloom, 1956) to activate varied cognitive processes.

The I.R.I.S. classroom activity consists of small group work, where each group produces a group worksheet. Drawing on sociocultural theory, students reach consensus about meaning through a socially-mediated process involving a task that requires them to develop a group I.R.I.S. worksheet focusing on the reading. Thus, students know that their I.R.I.S. homework sheet has a purpose beyond the homework grade. This purpose involves both learning and entertainment (i.e. the enjoyment of the socially-mediated task), two characteristics linking to enhanced student interest, participation, and recall (Knutson, 1997; Schraw & Dennison, 1994).

The interactive classroom portion of the I.R.I.S. model was designed to afford an opportunity for various forms of scaffolding (Wood, Bruner, & Ross, 1976), interaction, and language-promoting assistance (Scarcella & Oxford, 1992). The instructor plays a key role throughout the model by insisting on maintenance of Spanish and promoting conversation and interaction, while providing scaffolding, linguistic support, and language promoting assistance. To encourage student-to-student scaffolding, students must repeatedly negotiate meaning while developing one group response out of several individual responses. The nature of the purposeful task (Richards, Platt, & Weber, 1985) requires taking, and then defending, an opinion. To promote student interaction and negotiation of meaning (Lee, 1995), the task is designed to focus on autonomous student-to-student interaction, present a challenging and concrete task with a specific outcome, and encourage student use of language.

Every effort is made in the I.R.I.S. model to reduce the detrimental effects of language anxiety that may occur during student oral classroom conversation. As part of the I.R.I.S. workshops, instructors are specifically encouraged not to overcorrect errors.
(Omaggio, 1986). Students know ahead of time what the group activity entails and they come prepared to class with the individual I.R.I.S. homework sheets, two behaviors that have been linked to lower anxiety (Young, 1990).

The eight steps of the model (see chapter III), based around an intermediate-level authentic text, outline an instructor-designed homework assignment coupled with a 45-minute interactive small-group activity for the classroom. The original annotative and instructional model (A.I.M.) approach, upon which the current I.R.I.S. model is based, combined online annotative reading and social mediation via the use of the Hylighter (patent pending – www.hylighter.org) computer program. The A.I.M. approach drew from the earlier successes in the first language classroom using the Hylighter model (Lebow & Lick, 2001; Lebow, Lick & Marks, 2003) and was constructed under the guidance of Dr. David Lebow, the inventor of Hylighter.

This original approach was substantially altered as it developed into the I.R.I.S. model. Unlike the earlier A.I.M. approach, the I.R.I.S. model focuses on second language authentic texts, uses specially designed worksheets instead of a computer program, simplifies the annotative responsibilities of the students, incorporates socially-mediated small-group activities into the model, and adds instructional and motivational support. The I.R.I.S. model was officially pilot-tested in Spring 2003 in one university-level intermediate Spanish class and was subsequently used as part of the curriculum in another intermediate Spanish class in Fall 2003. Thus, the components of the I.R.I.S. model are supported by research and have been tested in the second language classroom.
CHAPTER III

METHOD AND PROCEDURE

Chapter III outlines the study research design by addressing the study’s teaching models, research questions, design, sample, and procedures. The dual purpose of this study was to determine the effectiveness of the Interactive Reading with Instructor Support (I.R.I.S.) model on second language reading comprehension as compared to the traditional reading instruction (T.R.I.) model and to explore and document language scaffolding and interaction within the I.R.I.S. model.

Teaching Models

Two teaching models were directly compared in this study, the Interactive Reading with Instructor Support (I.R.I.S.) model and the Traditional Reading Instruction (T.R.I.) model. Three authentic text readings, *Tiempo libre* by Guillermo Samperio, *Rigoberta Menchú: del apocalipsis a la gloria* by José Elías, and *Los perros mágicos de los volcanes* by Manlio Argueta, were used to construct the I.R.I.S. homework sheets.

Interactive Reading with Instructor Support (I.R.I.S.) Model

The I.R.I.S. model draws from second language reading research, interaction theory, and sociocultural theory. The following steps outline the I.R.I.S. model as it incorporates student reading of authentic texts and accompanying in-class interactive activities with strong instructor support.
1. To construct the I.R.I.S. homework sheets, the instructor divides the authentic texts into text divisions (see Appendix B).

2. To construct the I.R.I.S. homework sheets, the instructor embeds comprehension questions after each text division. For each homework sheet in this study, the majority of the questions require knowledge and comprehension of the text; however, at least one question in each sheet links to higher-order thinking skills (Bloom, 1956), and two questions require underlining the answer in the text.

3. Individual students answer and mark the I.R.I.S. homework sheets.

4. Students interact in small groups to develop group views and to answer an I.R.I.S. group sheet, an unmarked I.R.I.S. homework sheet that is identical to the individual sheet.

5. Before the group decides on each answer, the student group leader orally asks (in the second language) each member for individual answers.

6. The instructor insists on maintenance of the second language throughout the activity and provides a linguistic support sheet (see Appendix D) to students.

7. The instructor provides cues, prompts, linguistic support, and scaffolding to promote conversation and student-mediated interaction.

8. The instructor reviews a corrected I.R.I.S. homework sheet with the class, highlighting any questions and responses that caused difficulty to students.
Traditional Reading Instruction (T.R.I.) Model

The Traditional Reading Instruction (T.R.I.) model draws broadly from traditional literature teaching methods generally described as instructor-centered (Carter & Long, 1991; Wei, 1999). In traditional teaching models, the instructor provides and controls content, while the student is a more passive recipient of information (Grasha, 1996). The researcher formulated the following steps and codified them into a method for this study.

1. To construct the T.R.I. homework sheets (see Appendix C), the instructor adds comprehension questions to an authentic text. All questions are identical to the questions on the I.R.I.S. sheets.

2. Individual students answer and mark the T.R.I. homework sheets.

3. The instructor has students read the text out loud in class.

4. The instructor lectures on the plot of the text.

5. The instructor concludes with comprehension questions concerning the text.

6. The instructor reviews a corrected T.R.I. homework sheet with the class.

Research Questions

The study research questions are as follows:

1. What is the effect of the I.R.I.S. homework sheet on reading comprehension as compared to the T.R.I. homework sheet?
2. What is the effect of the classroom portion of the I.R.I.S. model on reading comprehension as compared to the classroom portion of the T.R.I. model?

3. What is the effect of the total I.R.I.S. model on reading comprehension, after classroom instruction, as compared to the total T. R. I. model?

4. During the classroom portion of the I.R.I.S. model, what types of student-to-student scaffolding and interaction occur?

5. During the classroom portion of the I.R.I.S. model, what types of instructor-led scaffolding and interaction occur?

**Design**

This study combined quantitative and qualitative research data. Research questions one, two, and three were answered using quantitative research data, while research questions four and five were answered using qualitative research data. For all quantitative questions, a single-variable design was employed. For question number one, the treatment variable, either the I.R.I.S. or T.R.I. homework sheet (see Appendix B and C), was manipulated, and the effects were observed on the dependent variable, the multiple-choice identification quizzes. For question number two, the treatment variable, the I.R.I.S. or T.R.I. classroom intervention, was manipulated, and the effects were observed on the dependent variable, the recalls. For question number three, the treatment variable (the total I.R.I.S. or T.R.I. model, i.e. both the homework and classroom intervention), was manipulated, and the effects were observed on the dependent variable, the recalls.

This study used intact groups, actual university classes, representing two control and two experimental groups. All four classes were 50-minute daytime classes that met four days per week, and all classes met in computer-enhanced classrooms in the same building. To guard against instructor bias, two instructors participated in the study. Each instructor taught one class pair, consisting of one control group and one experimental
group. This study used a sample size of 100 students. Descriptive and inferential statistics were used: means, medians, standard deviations, independent sample t-test analyses, and paired sample t-test analyses. The data for this study was analyzed using the S.P.S.S. statistical analysis program.

To clarify the procedures for each question within this quantitative/qualitative framework, Table 3.1 provides a visual graphic and synthesis of the research measures and treatments.

Table 3.1
*Study Design: Quasi-Experimental Control Group Pretest-Posttest*

| Subjects: Four intact groups (two experimental, two control) |
| Goals: To determine the effect of the Interactive Reading with Instructor Support (I.R.I.S.) model on reading comprehension as compared to the Traditional Reading Instruction (T.R.I.) model and to determine the kinds of student-to-student and instructor-led scaffolding and interaction observed while using the I.R.I.S. model. |

<table>
<thead>
<tr>
<th>Research Question One: What is the effect of the I.R.I.S. homework sheet on reading comprehension as compared to the T. R. I. homework sheet?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
</tr>
<tr>
<td>Treatment Variable</td>
</tr>
<tr>
<td>Posttest</td>
</tr>
<tr>
<td>Dependent Variable</td>
</tr>
</tbody>
</table>
Table 3.1–continued.

**Research Question Two:** What is the effect of the classroom portion of the I.R.I.S. model on reading comprehension as compared to the classroom portion of the T.R.I. model?

<table>
<thead>
<tr>
<th>Pretest</th>
<th>Multiple-choice identification quizzes (Independent sample t-test analyses were used to evaluate equivalency)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Variable</td>
<td>Classroom portion of I.R.I.S. model or classroom portion of T.R.I. model</td>
</tr>
<tr>
<td>Posttest</td>
<td>Recalls (To assess from the multiple-choice identification quizzes to the recalls, paired sample t-test analyses were used to compare within-group control and experimental scores)</td>
</tr>
<tr>
<td>Dependent Variable</td>
<td>Recalls after classroom interventions</td>
</tr>
</tbody>
</table>

**Research Question Three:** What is the effect of the total I.R.I.S. model on reading comprehension as compared to the T.R.I. model?

<table>
<thead>
<tr>
<th>Pretest</th>
<th>U.W.S.P. Exams – reading comprehension portion (Independent sample t-test analysis was used to evaluate equivalency)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Variable</td>
<td>I.R.I.S. homework sheets and classroom intervention or T.R.I. homework sheets and classroom intervention</td>
</tr>
<tr>
<td>Posttest</td>
<td>Recalls (Pretests were found to be equivalent; thus, independent sample t-test analyses were used to compare control and experimental groups.)</td>
</tr>
<tr>
<td>Dependent Variable</td>
<td>Recalls after classroom intervention</td>
</tr>
</tbody>
</table>

**Research Question Four:** While using the I.R.I.S. model, what kinds of student-to-student scaffolding and interaction are observed?

*Observed results via triangulation:*

- Researcher Logs and Frequency Checklists
- Instructor Logs and Frequency Checklists
- Student Observation Surveys
To establish a baseline for reading comprehension scores, all students took the reading comprehension section of the University of Wisconsin Spanish placement exam (U.W.S.P.E). The U.W.S.P.E. has been successfully used as a placement exam for first-through fifth-semester university Spanish at all of the University of Wisconsin System campuses. The official UW-Madison University website (www.wisc.edu) notes that the test has a reliability above .90.

This study was a pretest-posttest control-group design, a highly effective design that controls for all major threats to internal validity (Borg & Gall, 1983; Campbell & Stanley, 1989). Research questions one, two, and three used t-test analyses to assess the effect of the treatment variable by determining if there is a reliable difference between two means. For two groups with broadly normal distributions, the t-test is considered the most powerful test of mean equality, since no other test is more likely to detect actual differences between the two means (Balvar, 1997). Two types of t-tests, independent and paired, were used in this study. Both t-tests assess statistical differences in the means of two groups; however, an independent t-test is generally used for between subject groups and a paired t-test is generally used for within subject groups (Siegle, 2004). Independent t-test analyses were used in question one and three to directly assess whether the posttest means of the two groups were statistically different and to assess potential gain scores between the groups. Paired t-test analyses were used in question two to assess the differences in the pretest and the posttest means within the control and the experimental group. These results were then compared to assess potential gain scores between the groups.
Utilizing triangulation of data (Leedy, 1989) to answer research questions four and five, three data collection procedures were derived from three sources: structured logs and frequency checklists (See Appendix E) completed by the researcher, structured logs and frequency checklists completed by the instructors, and the student observation surveys (Appendix F) completed by the students. The qualitative data collection procedures focused on the observation of scaffolding (Wood, Bruner & Ross, 1976) and language promoting assistance (Scarcella & Oxford, 1992). Conclusions emerged as patterns were established by analyzing the three forms of data collected.

Sample

This study was completed at a large public graduate research institution with four third-semester Spanish classes. At this university all students who receive degrees in the College of Arts and Sciences and all other students who receive the B.A. degree must complete a classical or foreign language through the third semester. In Spanish this three-semester basic language sequence consists of SPN 1120, SPN 1121, and SPN 2220. All students in the four SPN 2200 classes involved in this study either successfully passed the two previous Spanish courses in the language sequence, at this or another public university or community college in the state, or were placed in the course via the official department placement test. This study was conducted in four SPN 2200 classes. Two instructors each taught one control group and one experimental group. Instructor A taught classes AC (control) and AE (experimental), with class AE consisting of 26 students and class AC of 25 students. Instructor B taught classes BC (control) and BE (experimental), with class BC consisting of 24 students and class BE of 25 students.

SPN 2200 emphasizes, in a culturally authentic context, the four communicative skills of listening, reading, speaking, and writing. The textbook for the course, Mundo 21 – Second Edition (Samaniego, Rojas, Ohara & Alarcon, 2001), is content-driven with daily lessons revolving around one-to-four page authentic text readings. Throughout the fifteen-week course, students complete four units of three lessons, each with a lesson containing both a historical text and an authentic text reading linking to a particular Spanish-speaking country. Three authentic text literature readings from unit three were
reformatted into I.R.I.S. and T.R.I. homework sheets and used in this study. The I.R.I.S. and T.R.I. sheets contained identical readings and comprehension questions. However, unlike the T.R.I. homework sheets, the readings and questions in the I.R.I.S. homework sheets were divided into text segments (Leow, 2001; MacLellan, 1997) and included at least one comprehension question phrased in the form of an underlining task (Grabe, 1997) (See Appendix B and C).

The demographic and prior knowledge survey (see Appendix A), addressing language background and topic familiarity, was administered to all students. Native Spanish speakers who grew up speaking Spanish in the home were to be eliminated from the study sample, as were any students with strong familiarity with the assigned readings. No native Spanish speakers who grew up speaking Spanish in the home and no students with strong familiarity to any of the assigned readings were reported.

To maximize validity, this study utilized a strict exclusion criterion for research questions number one, two, and three. The study required complete student attendance and participation over six days: each of the three interventions included one full class period for the study model and a partial class period the following day for the recall summary assessment. For the quantitative portion of the study, only students who on all study days attended classes, turned in completed homework, took the multiple-choice identification quizzes, and completed the recalls were included in the study. To insure observation of and results from authentic classroom experiences, no incentives were given to students to attend or participate in the study on any day in any class. The study sample size for research questions one, two, and three was 52, with sample sizes per class as follows: AC (16), AE (14), BC (11), BE (11). The gender breakdown in these classes was as follows: AC (10 female, 6 male), AE (11 female, 3 male), BC (6 female, 5 male), and BE (6 female, 5 male). For qualitative research questions number four and five, the study sample size was 50 students, consisting of students from classes AE (26 students) and BE (24 students) that completed a student observation survey (see Appendix F). All of these students participated in at least one complete I.R.I.S. model intervention.
Procedures

Question One
What is the effect of the I.R.I.S. homework sheet on reading comprehension as compared to the T.R.I. homework sheet?

To determine the effect of the I.R.I.S. homework sheet on reading comprehension, student recall after the use of the I.R.I.S. homework sheet was compared to student recall after the use of the T.R.I. homework sheet on three occasions. The I.R.I.S. homework sheets had been pilot-tested during two previous terms. These sheets were first used in an official pilot study in Spring 2003. Based on data from that study, including instructor and researcher journals, student interviews, recall summaries, and completed I.R.I.S. homework and group sheets, the I.R.I.S. sheets were redesigned to equate better with the completion time of traditional homework and one 50 minute class. The I.R.I.S. sheets were pilot-tested again throughout a second semester of SPN 2200 to assure equal completion times for both homework models used in this study.

All individuals in all classes received a ten-question multiple-choice identification quiz (see Appendix G) that they were given five minutes to complete at the beginning of each study-day class to assess individual reading comprehension from the previous night’s reading. All multiple-choice questions were constructed and evaluated by the researcher using the multiple-choice construction checklist from the chapter “Constructing Objective Test Items: Multiple-Choice Forms” from Measure and Assessment in Teaching (Linn & Gronlund, 1995). A curriculum expert checked the questions for objectivity and appropriateness, and a native Spanish-speaking graduate teaching assistant reviewed the questions for grammatical correctness. The undergraduate students of a SPN 2200 class also reviewed the questions and verified that they were appropriate for their level.

To establish a baseline reading comprehension for each class in order to rule out prior reading comprehension ability effect and to test for the effect of the I.R.I.S. worksheet, all students in the study completed the reading comprehension portion of the University of Wisconsin Spanish Placement Exam (U.W.S.P.E.). Using an independent sample t-test analysis, these scores were evaluated for equivalency between the control
and experimental groups. Based on this analysis, the groups were determined to be equivalent. After establishing that the pretests were equivalent, an independent sample t-test analysis compared the posttests of the experimental and control groups to determine differences in the group that completed the T.R.I. homework sheet versus the group that completed I.R.I.S. homework sheet.

**Question Two**

*What is the effect of the classroom portion of the I.R.I.S. model on reading recall as compared to the classroom portion of the T.R.I. model?*

To determine the effect on individual reading comprehension of the classroom portion of the I.R.I.S. model, the I.R.I.S. model was compared to the T.R.I. model during the same three class periods with the same four classes. As part of the T.R.I. model, control classes AC and BC participated in an instructor-led homework and story review. As part of the I.R.I.S. model, experimental classes AE and BE participated in interactive small group activities. All individuals in all classes received a ten-question multiple-choice identification quiz that they were given five minutes to complete at the beginning of each study-day class; thus, all classroom interaction portions of the study were designed for a 45 minute class period. The I.R.I.S. model was field-tested by the researcher during two previous terms, including a full-scale pilot study. The researcher conducted three one-hour workshops so that both instructors could learn and practice the teaching models and so that they could establish equal instructional times for both models.

At the beginning of class on the day immediately following the authentic reading lesson, all students wrote a ten-minute timed one-page plot recall of the story reviewed the day before. The recalls were written in English. The students’ first language was chosen for the recalls because students generally achieve higher on recall tasks in the first language as compared to the second language (Davis, Glass, & Coady 1998; Lee, 1986; Wolf, 1993).

The researcher and another expert in the field of reading independently divided the original readings into idea units. The idea units from the readings were compared and interrater reliability was established at 86.4%. Consensus was achieved on all contested units. The experts also individually divided the idea units into two sets of idea units: units...
encompassing main ideas were identified as main idea units, and units encompassing
supporting details were identified as detail idea units; consensus was achieved on all units
(Ghaith & Harkouss, 2003). Each reading was then formulated into a master checklist
identifying both sets of units (see Appendix H). During a one-hour rater training session,
two raters (graduate teaching assistants with matching academic and teaching
backgrounds) not associated with the study practiced using the master checklists of main
idea and detail idea units to score the recalls. To establish inter-rater reliability, fifteen
percent of the recalls, with five percent taken from each of the three readings, were
selected for reading and grading by both raters (Ghaith & Harkouss, 2003; Riley & Lee,
1996). An interrater reliability coefficient was established at 88% for these readings.
Once interrater reliability was established, each rater individually scored the remaining
recalls. Each recall received three percentage scores: 1) a total idea unit percentage score
based on the total number of idea units recorded out of the total number of idea units
possible; 2) a main idea unit percentage score based on the number of main idea units
recorded out of the number of main idea units possible; 3) a detail idea unit percentage
score based on the number of detail idea units recorded out of the number of detail idea
units possible. A loose criterion of recall was used whereby the idea unit was considered
correctly recalled if the most important semantic content of the idea unit was present
(Riley, 1993).

To assess from the multiple-choice identification quizzes to the recalls, paired
sample t-test analyses compared within group scores (pretest and posttest) of the
experimental and control groups. Afterward, gain scores between groups were assessed to
determine differences in the group that experienced the T.R.I. model versus the group
that experienced the I.R.I.S. model.

Question Three
What is the total effect of the total I.R.I.S. model on reading recall as compared to the
total T.R.I. model?

To determine the total effect of the I.R.I.S. model, the treatment variable, the
total I.R.I.S. or T.R.I. model (both the homework and the classroom intervention), was
manipulated and the effects were observed on the dependent variable, the recall
summaries. To establish a baseline reading comprehension for each class in order to rule
out prior reading comprehension ability effect and to test for the effect of the I.R.I.S. worksheet, all students in the study completed the reading comprehension portion of the University of Wisconsin Spanish Placement Exam (U.W.S.P.E.). Using an independent sample t-test analysis, these scores were evaluated for equivalency between the control and experimental groups. The independent t-test showed that equivalency existed between the groups on these t-tests. Thus, after establishing equivalent pretests, an independent sample t-test analysis was used to compare the posttests of the experimental and control groups to determine differences in the group that completed the T.R.I. homework sheet versus the group that completed the I.R.I.S. homework sheet.

**Question Four**

*During the classroom portion of the I.R.I.S. model, what kinds of student-to-student scaffolding and interaction occur?*

To determine the types of scaffolding strategies employed by students in the experimental classes, the researcher collected data in three ways: 1) structured logs and frequency checklists completed by the researcher, 2) structured logs and frequency checklists completed by the instructor, and 3) student observation surveys. The researcher and the instructors independently completed structured logs and frequency checklists (see Appendix E). Students from both experimental classes completed a student observation survey (see Appendix F) measuring their observation of the evidences of scaffolding and language-promoting assistance during the I.R.I.S. model. The language employed in the student observation surveys was phrased and detailed so as to be comprehensible to students. Before the students were asked to complete the student observation surveys, the researcher gave a fifteen-minute presentation on identifying both scaffolding and language-promoting assistance to both experimental classes.

Throughout the study, the researcher observed classes A2 and B2 using the I.R.I.S. model. The researcher and the instructors each used a log and checklist to note specific forms of student-to-student scaffolding and language promoting assistance during the classroom intervention portion of the I.R.I.S. model. The structured logs and frequency checklists were modified from observation sheets utilized by the researcher during the initial pilot study in Spring 2003. This modification into two instruments enabled the researcher to note more specifically the frequency of observed behaviors.
through the use of the checklist and then to highlight and describe specific observed behavior though the use of the log. The structured logs and frequency checklists were used in Fall 2003 by the researcher to practice observation and further to test ease of use. The instructors used the same frequency checklist and log format as the researcher. The logs provided support for the frequency of observed behaviors and detailed specific observed behavior. Also, the logs provided the potential to identify other behaviors that occur during the I.R.I.S. interaction. The same structured logs and checklists and student observation surveys were used to answer both research questions four and five, as the structured logs and checklists and the student observation surveys addressed both instructor-led and student-to-student scaffolding and language-promoting assistance.

Prior to the study, both instructors attended a one-hour workshop, led by the researcher, on identifying definable forms of scaffolding and language-promoting assistance. Both the researcher and an instructor completed a structured log and frequency checklist for each I.R.I.S. classroom intervention in the study. The logs and checklists used by the researcher and instructors contained coding prompts on each page to remind the observer of the definable forms of scaffolding and language-promoting assistance to be discussed: 1. recruiting interest in the task; 2. simplifying the task; 3. maintaining pursuit of the goal; 4. marking critical features; 5. controlling frustration; 6. demonstrating (Wood, Bruner & Ross, 1976); 7. activating background knowledge; 8. caregiver talk; 9. confirmation checks; and 10. eliciting more language (Scarcella & Oxford, 1992).

The codings one through six identify scaffolding (Wood, Bruner, & Ross, 1976) from a sociocultural perspective, and these codings were the only definable forms used during the 2003 pilot study. However, instructor journals from the pilot study identified other forms of interaction, identified in research literature as language promoting assistance (Scarcella & Oxford, 1992), present during the classroom portion of the I.R.I.S. model. Thus, the number of behaviors was expanded when the model was used again in the classroom in 2004. Currently each log and checklist contain ten definable forms of language interaction: six scaffolding behaviors (Wood, Bruner, Ross, 1976) drawn from sociocultural theory and four language-promoting assistance behaviors (Scarcella & Oxford, 1992) drawn from interactionist research.
The researcher and each instructor completed a log and checklist for each I.R.I.S. classroom intervention in the study. The researcher observed student-to-student interaction, recorded general notes, and identified student-to-student scaffolding and language-promoting assistance linking directly to the coding prompts. The instructors kept logs of their experiences during the classes and similarly recorded the behavior of students by filling out the checklists. On the frequency checklist accompanying the structured logs, the researcher and the instructors noted whether each of the ten behaviors, as student-to-student scaffolding and language promoting assistance, was not observed, observed a few times, or observed many times.

The researcher compiled the data from the frequency checklists (see Appendix E) and reported a mean score for each of the ten behaviors of scaffolding functions and language-promoting assistance, observed as student-to-student interaction, on the frequency lists. Responses on the frequency checklists were tabulated as follows: circling “I didn’t observe” received a 0, circling “I observed a few examples of this” received a 1, and circling “I observed many examples of this” received a 2. Thus, twelve scores were documented for each behavior: six scores from the researcher’s observations in both instructors’ three experimental classes; instructor A’s three scores from her observations in her own experimental classes; and instructor B’s three scores from her observations in her own three experimental classes. The researcher derived a mean score from these twelve scores to determine the reported frequency of the behavior. This process was repeated for all ten behaviors. For the logs, the researcher coded and analyzed the data, linked the data to the behaviors, and identified patterns that emerged.

To complete the triangulation of the data, students within the experimental classes answered an observation survey at the end of the study inquiring about specific socially-mediated learning strategies utilized during the study with questions linking specifically to the occurrence of the ten behaviors of scaffolded help (Wood, Bruner, & Ross, 1976) and language-promoting assistance (Scarcella & Oxford, 1992). The researcher compiled data from the student observation survey (see Appendix F) by reporting a mean score for each of the behaviors of scaffolding functions and language-promoting assistance. Student respondents documented their own interactions that they recalled in response to ten questions linking to the behaviors. The data was tabulated as follows: circling
“Never” received a 0, circling “Occasionally” received a 1, and circling “Frequently” received a 2. The researcher derived a mean score from the 50 scores reported (from the 50 observation surveys) to determine the reported frequency of the behavior. This process was repeated for all ten behaviors. For other data on the surveys, the researcher coded and analyzed the data, linked the data to the behaviors (as student-to-student interaction), and identified patterns that emerged.

**Question Five**

*During the classroom portion of the I.R.I.S. model, what kinds of instructor-led scaffolding and interaction occur?*

The researcher used the identical data collection instruments as described under research question four except that the focus of data collection in question five was instructor-led scaffolding. To determine the types of scaffolding and language-promoting assistance employed by instructors in the experimental classes, the researcher collected data in three ways: 1) structured log and frequency checklists completed by the researcher; 2) structured logs and checklists completed by the instructor; and 3) attitude and observation surveys. Both the researcher and the instructor completed a structured log and frequency checklist for each I.R.I.S. classroom intervention in the study. The researcher observed instructor-led interaction, recorded general notes, and identified instructor-led scaffolding linking directly to the coding prompts. The instructors kept logs of their experiences during the classes, recorded instructor (i.e. their own) behavior, and filled out the checklists. On the checklists accompanying the logs, the researcher and the instructors noted whether each of the ten behaviors, as instructor-led scaffolding and language promoting assistance, was not observed, observed a few times, or observed many times. The researcher recorded the data from the checklists and logs as identified under question four.

The researcher compiled the data from the frequency checklists (see Appendix E) and reported a mean score for each of the ten behaviors of scaffolding functions and language-promoting assistance, as instructor-led behaviors, on the frequency lists. Responses on the frequency checklists were tabulated as follows: circling “I (or the instructor) didn’t use this” received a 0, circling “I (or the instructor) used this a few times” received a 1, and “I or the instructor often used this” received a 2. Thus, the
researcher documented twelve scores for each behavior: six scores from the researcher’s observations in both instructors’ three experimental classes; instructor A’s three scores from her observations in her own experimental classes; instructor B’s three scores from her observations in her own experimental classes. The researcher derived a mean score from these twelve scores to determine the reported frequency of the behavior. This process was repeated for all ten behaviors. For the logs, the researcher coded and analyzed the data, linked the data to the behaviors (as instructor-led behaviors), and identified patterns that emerged.

To complete the triangulation of the data, students within the experimental classes answered an observation survey at the end of the study inquiring about specific socially-mediated learning strategies utilized during the study with questions linking specifically to the occurrence of the ten scaffolded help (Wood, Bruner, & Ross, 1976) and language-promoting assistance behaviors (Scarcella & Oxford, 1992). The researcher compiled data from the student observation survey (see Appendix F) by reporting a score for each of the scaffolding and language-promoting assistance behaviors. Student respondents documented observations of their instructors that they recalled in response to three questions linking to the behaviors. If the student mentioned a specific behavior, the researcher checked off the behavior as reported. The researcher reported a percentage score for all ten behaviors derived from the fifty student surveys. For other survey data, the researcher coded and analyzed the data, linked the data to the behaviors (as instructor-led scaffolding) and identified patterns that emerged.
CHAPTER IV

RESULTS AND ANALYSIS OF DATA

This study investigated the effects of a unique instructional model, the interactive reading with instructor support (I.R.I.S.) model, which combines reading strategies and social mediation in the second language environment. This chapter reports the findings of the effectiveness of the I.R.I.S. model in comparison to the traditional reading instruction (T.R.I.) model, a model drawing from traditional, instructor-centered literature teaching methods, on reading comprehension. Research questions one through three used quantitative data (scores from reading comprehension exams, multiple-choice identification quizzes, or recalls) in determining the effect of the treatment variable (either the I.R.I.S. or T.R.I. homework model, the I.R.I.S. or T.R.I. classroom model, or the complete I.R.I.S. or T.R.I. instructional model). Research questions four and five used primarily qualitative data (frequency checklists, logs, and observation surveys) in reporting language scaffolding and interaction identified within the I.R.I.S. model.

The research design for questions one, two, and three was quasi-experimental. Because random assignment is not practical or often feasible in a true educational setting, quasi-experimental designs are commonly utilized in classroom experiments (Trichim, 2004). This study utilized a nonequivalent pretest-posttest design, which is often used to assess the effectiveness of new curriculum (Campbell & Cook, 1979). When using a nonequivalent pretest-posttest design, the researcher should try to use groups that are broadly similar; the more similar the groups, the closer the design mimics an experiment. However, if groups differ at the onset (on the pretests), any differences that occur in concluding posttests are difficult to interpret (Trichim, 2004).

Research questions one, two, and three used t-test analyses to assess the effect of the treatment variable. A t-test analysis determines if there is a reliable difference
between two means. For two groups with broadly normal distributions, the t-test is considered the most powerful test of mean equality, since no other test is more likely to detect actual differences between the two means (Balvanz, 1997). Two types of t-tests, independent and paired, were used in this study. Both t-tests assess statistical differences in the means of two groups; however, an independent t-test is generally used for between subject groups and a paired t-test is generally used for within subject groups (Siegle, 2004). Independent t-test analyses were used in question one and three to assess directly whether the posttest means of the two groups were statistically different. Paired t-test analyses were used in question two to assess the differences in the pretest and the posttest means within the control and the experimental group. These results were then compared to assess potential gain scores between the groups. An analysis of variance and a regression procedure also assess mean differences, but for a two-group comparison, the t-test analysis should be used (Trichim, 2004). After the t-test analyses, analyses of variance and regressions were performed for each of the first three research questions to assess potential statistically significant results. No findings from the analyses of variance or the regressions resulted in any results of statistical significance; thus, only the t-test analyses are reported in this study.

**Research Question One**

*What is the effect of the I.R.I.S. homework sheet on reading comprehension as compared to the T.R.I. homework sheet?*

For research question one, reading comprehension exams, the reading comprehension portion of the University of Wisconsin Spanish placement (U.W.S.P.E.) exam, were the pretest data. The official UW-Madison University website ([www.wisc.edu](http://www.wisc.edu)) notes that this test has a reliability above .90. Before the study began, all students in both the experimental and control classes completed this reading comprehension exam. On the three study intervention days, students turned in their homework, consisting of either the I.R.I.S homework sheets for experimental classes (Appendix B) or the T.R.I. homework sheets (see Appendix C) for control classes. These homework sheets were the treatment variable for research question one. Multiple-choice
identification quizzes were the posttest data for research question one. During the first five minutes of class and after students turned in their homework, all students in the experimental and control classes completed these ten question multiple-choice identification quizzes. There were three separate multiple-choice identification quizzes (see Appendix G), with each quiz linked to one of the three assigned readings.

Table 4.1.1 shows descriptive statistics for the reading comprehension exam (U.W.S.P.E) scores. For research questions one through three data was used from 52 students, from the original sample of 100 students. The control group represented 27 students from classes AC and BC who completed the reading comprehension exam, attended all classes, turned in all completed I.R.I.S. homework, took all multiple-choice identification quizzes, and completed all the recall summaries included in the study. Similarly, the experimental group represented 25 students from classes AE and BE who completed the reading comprehension exam, attended all classes, turned in all completed T.R.I homework, took all multiple-choice identification quizzes, and completed all the recall summaries included in the study.

Table 4.1.1

Descriptive Statistics: (U.W.S.P.E) Reading Comprehension Exams

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Experimental</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>57.52</td>
<td>60.40</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>62.00</td>
<td>59.00</td>
</tr>
<tr>
<td><strong>Standard Deviation</strong></td>
<td>17.52</td>
<td>19.19</td>
</tr>
</tbody>
</table>
The descriptive statistics revealed initial groups scores that were broadly equivalent. The mean difference in the groups was 2.88 points, the median difference was 3 points, and the standard deviation difference was 1.67 points. To determine if there was a statistically significant difference between the means (by measuring the distance apart the means of the two groups are in standard error units), an independent t-test was conducted. Table 4.1.2 shows the results of this analysis.

### Table 4.1.2

*Independent T-Test Results: (U.W.S.P.E.) Reading Comprehension Exams*

<table>
<thead>
<tr>
<th>Mean Score</th>
<th>Mean Difference</th>
<th>T</th>
<th>df</th>
<th>Significance (two-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>57.52</td>
<td>2.88</td>
<td>50</td>
<td>.566</td>
</tr>
<tr>
<td>Experimental</td>
<td>60.40</td>
<td>.566</td>
<td>50</td>
<td>.574</td>
</tr>
</tbody>
</table>

* p = <.05

The independent t-test reported the following: mean difference, t score, degrees of freedom, and significance (or p). The result of the t-test comparing the initial pretest scores of the control and experimental group showed that there was no significant difference between the groups, t(50) = .566, p = .57. There was a mean difference in the groups of 2.88. However, this 2.88-point difference was not practically important in that it was within the margin of error for the pretest. The Item Analysis and Test Report prepared by Florida State University Assessment Services for this study asserts two margins of error concerning the reading comprehension percent scores: (+) or (-) five points at a confidence level of fifty percent and (+) or (-) nine points at a confidence level of eighty percent. As an example, for an individual percentage score of 60, there is an eighty percent chance that the individual has an actual ability between 51 and 69. With group mean averages of 57.52 and 60.40, the control and experimental group had extremely close performance on the pretests. In summary, the t-test established no significant difference between the groups and the small mean difference in the two
groups were not practically important according to the pretest’s margin of error. Accordingly, the groups were considered equivalent for the purpose of the study.

With equivalent pretests, the posttests (the multiple-choice identification quizzes) were directly compared to assess differences and determine the effect of the I.R.I.S. homework sheet on reading recall. Table 4.1.3 shows descriptive statistics for the multiple-choice identification quizzes. There were three separate multiple-choice quizzes for each control and experimental group.

Table 4.1.3

*Descriptive Statistics: Multiple-Choice Identification Quizzes*

<table>
<thead>
<tr>
<th></th>
<th>Control Group</th>
<th>Experimental Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>27</td>
<td>25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>Experimental</td>
<td>Control</td>
</tr>
<tr>
<td>Multiple-Choice Identification Quiz One</td>
<td>84.81</td>
<td>90.00</td>
<td>15.53</td>
</tr>
<tr>
<td>Multiple-Choice Identification Quiz Two</td>
<td>64.81</td>
<td>70.00</td>
<td>17.62</td>
</tr>
<tr>
<td>Multiple-Choice Identification Quiz Three</td>
<td>62.59</td>
<td>60.00</td>
<td>19.13</td>
</tr>
</tbody>
</table>

The descriptive statistics revealed scores that were similar between the two groups with mean differences in the groups of .79 points (for multiple-choice identification quiz one), .41 points (for multiple-choice identification quiz two), and 6.99 points (for multiple-choice identification quiz three). When comparing scores on the three multiple-choice identification quizzes, scores from both groups fell throughout the term.
For example, on the first quiz the mean average for the control groups was 84.81 and 85.60 for the experimental group, while on the second quiz the mean average was 64.40 for the control group and 64.81 for the experimental control group. However, this drop in scores does not necessarily link to any actual performance difference through time in that each multiple choice quiz was a unique ten-point assessment. The researcher suggests that perhaps the first quiz was an easier quiz than the other two and this may explain the better scores on the initial assessment. To determine if there was a statistically significant difference between all three sets of means, independent pair t-tests were conducted. Table 4.1.4 shows the results of these analyses.

Table 4.1.4
*Independent T-Tests Results: Multiple-Choice Identification Quizzes*

<table>
<thead>
<tr>
<th>Quiz Type</th>
<th>Group</th>
<th>Mean Score</th>
<th>Mean Difference</th>
<th>t</th>
<th>Df</th>
<th>Significance (two-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple-Choice Identification</td>
<td>Control</td>
<td>84.81</td>
<td>.79</td>
<td>.180</td>
<td>50</td>
<td>.858</td>
</tr>
<tr>
<td>Quiz One</td>
<td>Experimental</td>
<td>85.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple-Choice Identification</td>
<td>Control</td>
<td>64.81</td>
<td>.41</td>
<td>.087</td>
<td>50</td>
<td>.931</td>
</tr>
<tr>
<td>Quiz Two</td>
<td>Experimental</td>
<td>64.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple-Choice Identification</td>
<td>Control</td>
<td>62.59</td>
<td>6.99</td>
<td>1.41</td>
<td>50</td>
<td>.164</td>
</tr>
<tr>
<td>Quiz Three</td>
<td>Experimental</td>
<td>55.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p = <.05

Summary and Analysis

The results of the t-tests comparing the scores of the multiple-choice identification quizzes showed that on all three multiple-choice identification quizzes there was no significant difference between the control and experimental groups: multiple-choice identification quiz one, t(50) = .180, p = .85; multiple-choice identification quiz two, t(50) = .087, p = .93; multiple-choice identification quiz three, t(50) = 1.41, p = .16. However, there were mean differences in the groups which linked to a gain score of .79.
points for the experimental group for multiple choice identification quiz one, a gain score of .41 points for the control group for multiple choice identification quiz two, and a gain score of 6.99 points for the control group for multiple choice identification quiz three.

The experimental group performed worse on the third and final multiple-choice identification quiz (with an average mean of 55.60 compared to the control group’s average mean of 62.50). The data revealed that this lower performance completely linked to experimental class AE. Throughout the study, the means on the multiple-choice identification quiz scores for both experimental classes were close, with class AE outperforming class BE by 2.0 points on multiple-choice identification quiz one and by 6.2 points on multiple-choice identification quiz two. Uncharacteristically, class AE performed worse than class BE by 15.9 points (according to the class mean score) on multiple-choice identification quiz three. To illustrate this data discrepancy, table 4.1.5 shows the mean averages of the four individual classes on the three multiple-choice identification quizzes, with class AE’s third quiz mean score highlighted.

Table 4.1.5
Average Means Of Individual Classes On Multiple-Choice Identification Quizzes

<table>
<thead>
<tr>
<th></th>
<th>Multiple-Choice Identification Quiz One</th>
<th>Multiple-Choice Identification Quiz Two</th>
<th>Multiple-Choice Identification Quiz Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class AC (Control)</td>
<td>85.6</td>
<td>71.2</td>
<td>66.9</td>
</tr>
<tr>
<td>Class BC (Control)</td>
<td>83.6</td>
<td>55.5</td>
<td>56.4</td>
</tr>
<tr>
<td>Class AE (Experimental)</td>
<td>86.4</td>
<td>67.1</td>
<td>48.6</td>
</tr>
<tr>
<td>Class BE (Experimental)</td>
<td>84.5</td>
<td>60.9</td>
<td>64.5</td>
</tr>
</tbody>
</table>
In reviewing the journals and the testing calendar, the researcher noticed that once during the study the two groups did not receive the treatment on the same day. One instructor scheduled and took her masters comprehensive exams during the previously scheduled third intervention. Her class, BE, thus received the intervention one week after class AE. Class AE received the intervention following Spring Break. The researcher theorizes that class AE did not adequately or typically prepare their I.R.I.S. homework sheet because of its requirement to be turned in so soon after the holiday. In looking over the homework turned in for class AE for this day, the researcher also anecdotally noted that the homework sheets were completed (or else they would have been excluded from the study), but that they were not as comprehensive as both AE’s previous homeworks and the homeworks from class BE. This scheduling flaw in the study may have influenced the results and may explain the significant atypical underperformance of class AE on multiple-choice three. Thus, the gain score result (i.e. 6.99 points) of multiple-choice number three should not be overanalyzed.

The multiple-choice quizzes were used in this study to quickly (five minutes at the beginning of each study-day class) assess reading recall from the previous night’s reading in an actual classroom environment with limited class time (50 minutes). All multiple-choice questions were constructed and evaluated by the researcher using the multiple-choice construction checklist from the chapter “Constructing Objective Test Items: Multiple-Choice Forms” from Measure and Assessment in Teaching (Linn & Gronlund, 1995). A curriculum expert checked the questions for objectivity and appropriateness, and a native Spanish-speaking graduate teaching assistant reviewed the questions for grammatical correctness. The undergraduate students of a SPN 2200 class also reviewed the questions and verified that they were appropriate for their level. These ten-question quizzes were reported as percentage scores for the study. Thus, a zero- to ten-point difference on an individual quiz represented a less than one-question answer difference in score, and for this study, the researcher, in consultation with a curriculum expert and a statistician, established the gain scores recorded of .79 points, .41 points, and 6.99 points as not of practical importance.

In summary, class AE atypically underperformed on multiple-choice identification quiz number three, possibly due to a scheduling flaw in the study.
Nevertheless, the t-test established no significant difference between the groups on all three multiple-choice identification quizzes and the researcher reported no practical importance to the differences in the groups on all three multiple-choice identification quizzes. Accordingly, there was no effect of the I.R.I.S. homework sheet on reading recall as compared to the T.R.I. homework sheet.

**Research Question Two**

*What is the effect of the classroom portion of the I.R.I.S. model on reading comprehension as compared to the classroom portion of the T.R.I model?*

For research question two, the multiple-choice identification quizzes were the pretest and the recalls were the posttest. Table 4.1.3 shows descriptive statistics for the multiple-choice identification quizzes and table 4.3.1 shows descriptive statistics for the recalls. Each recall had a total idea unit score, a main idea unit score, and a detail idea unit score. T-tests, analyses of variance, and regressions were conducted to determine any significant differences between the control and experimental groups for the total idea unit score, the main idea unit score, and the detail idea unit score. There were no significant differences found; thus, total idea unit scores for the recalls were used to answer research question three.

Paired sample t-test analyses were conducted to assess any effect from the pretest (the multiple-choice identification quizzes) to the posttest (the recalls) within the control or experimental group. A paired t-test is used for within-subject comparisons to assess differences between two means by measuring how far apart in standard units the average difference score is from zero (Trichim, 2004). Table 4.2.1 shows the results of the paired sample t-test analyses.
Table 4.2.1

*Paired T-Test Results: Multiple-Choice Identification Quizzes/Recalls*

<table>
<thead>
<tr>
<th>Within-Group Pairs</th>
<th>Mean Scores</th>
<th>Mean Differences</th>
<th>Gain Score</th>
<th>t</th>
<th>df</th>
<th>Significance (two-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Control: Multiple-Choice Identification Quiz One / Recall One</td>
<td>84.81/35.22</td>
<td>49.59</td>
<td>2.29</td>
<td>16.44</td>
<td>26</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>2) Experimental: Multiple-Choice Identification Quiz One / Recall One</td>
<td>85.60/33.72</td>
<td>51.88</td>
<td>20.40</td>
<td>24</td>
<td>14.88</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>3) Control: Multiple-Choice Identification Quiz Two / Recall Two</td>
<td>64.81/21.77</td>
<td>43.04</td>
<td>14.88</td>
<td>26</td>
<td>15.53</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>4) Experimental: Multiple-Choice Identification Quiz Two / Recall Two</td>
<td>64.40/21.56</td>
<td>42.84</td>
<td>.20</td>
<td>24</td>
<td>15.28</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>5) Control: Multiple-Choice Identification Quiz Two / Recall Two</td>
<td>62.59/17.62</td>
<td>44.97</td>
<td>15.28</td>
<td>26</td>
<td>11.10</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>6) Experimental: Multiple-Choice Identification Quiz Two / Recall Two</td>
<td>55.60/19.36</td>
<td>36.24</td>
<td>8.73</td>
<td>24</td>
<td>11.00</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

*p = <.05*

**Summary and Analysis**

Table 4.2.1 reported within-group differences. The t-test analysis for pair one compared the control group’s multiple-choice identification quiz one scores and the control group’s recall one scores. With a mean difference of 49.59, there was a significant difference within the control group, t(26) = 16.44, p = <.001. The t-test analysis for pair two compared the experimental group’s multiple-choice identification
quiz one scores and the experimental group’s recall one scores. With a mean difference of 51.88, there was a significant difference within the experimental group, \( t(24) = 20.40, p = <.001 \). Significance shows how likely these results were due to chance. At a significance level of <.001, both pairing results (i.e. mean differences of 49.59 and 51.88) had almost a zero percent chance of being the result of chance. From the multiple-choice identification quiz one scores to the recall one scores, both the control (pair one) and experimental (pair two) group showed a significant drop in the performance mean. This result most likely linked to an easier multiple-choice assessment and a more difficult recall. The paired t-test analyses assessed within-group differences individually for the control and experimental groups. To assess gain scores, these mean differences were compared between the control and experimental groups. Comparing the mean differences of pair one (49.59) and pair two (51.88) showed a gain score of 2.29 points for the control group.

The t-test analysis for pair three compared the control group’s multiple-choice identification quiz two scores and the control group’s recall two scores. With a mean difference of 43.04, there was a significant difference within the control group, \( t(26) = 14.88, p = <.001 \). The t-test analysis for pair four compared the experimental group’s multiple-choice identification quiz two scores and the experimental group’s recall two scores. With a mean difference of 42.84, there was a significant difference within the experimental group, \( t(24) = 15.53, p = <.001 \). Significance shows how likely these results were due to chance. At a significance level of <.001, both pairing results (i.e. mean differences of 43.04 and 42.84) had almost a zero percent chance of being the result of chance. From the multiple-choice identification quiz two scores to the recall two scores, both the control (pair three) and experimental (pair four) group showed a significant drop in the performance mean. This result most likely linked to an easier multiple-choice assessment and a more difficult recall. The paired t-test analyses assessed within-group differences individually for the control and experimental groups. To assess gain scores, these mean differences were compared between the control and experimental groups. Comparing the mean differences of pair three (43.04) and pair four (42.84) showed a gain score of .2 points for the experimental group.
The t-test analysis for pair five compared the control group’s multiple-choice identification quiz three scores and the control group’s recall three scores. With a mean difference of 44.97, there was a significant difference within the control group, t(26) = 15.28, p = <.001. The t-test analysis for pair six compared the experimental group’s multiple-choice identification quiz three scores and the experimental group’s recall three scores. With a mean difference of 36.24, there was a significant difference within the experimental group, t(24) = 15.53, p = <.001. Significance shows how likely these results were due to chance. At a significance level of <.001, both pairing results (i.e. mean differences of 44.97 and 36.24) had almost a zero percent chance of being the result of chance. From the multiple-choice identification quiz three scores to the recall three scores, both the control (pair five) and experimental (pair six) group showed a significant drop in the performance mean. This result most likely linked to an easier multiple-choice assessment and a more difficult recall. The paired t-test analyses assessed within-group differences individually for the control and experimental groups. To assess gain scores, these mean differences were compared between the control and experimental groups. Comparing the mean differences of pair five (62.59) and pair six (55.60) showed a gain score of 8.73 points for the experimental group.

In summary, when assessing the classroom portion of the teaching models, the first gain score reported (2.29 points) reflected better performance of the control group. The second gain score (.2 points) and the third gain score (8.73 points) reflected better performance of the experimental group. However, the practical importance of these gain scores are difficult to determine because neither the pretest nor the posttest has an established reliability or margin of error. Referencing the ten-question multiple-choice test, the pretest, a zero to ten-point difference on an individual quiz represented a less than one-question answer difference in score. Referencing the recall, the posttest, the total idea unit score for the recalls ranged from 55 to 101 possible units. One percentage point difference on an individual quiz represents a difference of one idea unit or less; thus, for this study, the researcher, in consultation with a curriculum expert and statistician, established the gain scores recorded of 2.29, .2, and 8.73 as not of practical importance. Furthermore, the gain score of 8.73 linked to the potential scheduling flaw
with multiple-choice identification quiz three and class AE discussed in the analysis for question one.

There was a gain score trend on the recalls of increasingly better performance of the experimental group as compared to the control group throughout the term. However, this trend can’t be reported with confidence because of the data discrepancy and potential scheduling flaw linked to multiple-choice identification quiz three and class AE. The researcher will look to the results of question three, where the recalls are also compared and where there are equivalent pretests, to determine whether there is a finding that is similar.

**Research Question Three**

*What is the effect of the total I.R.I.S. model on reading recall as compared to the T.R.I. homework sheet?*

For research question three, the reading comprehension exam (U.W.S.P.E.) was the pretest data. A t-test analysis of the pretest established no significant difference between the control and experimental groups and the small mean difference in the two groups was insignificant according to the pretest’s margin of error (see table 4.1.4). Accordingly, the groups were considered equivalent for the purpose of the study. With equivalent pretests, posttests (the recalls) were directly compared to assess differences and determine the effect of the total I.R.I.S. model on reading recall.

The recalls for this study were given to all students at the beginning of class on the day immediately following the model intervention. All students wrote a ten-minute timed one-page plot recall of the story reviewed the day before. The total idea unit score for each recall was a percentage based on the total number of idea units recorded out of the total number of idea units possible: 55 possible units for recall one, 60 possible units for recall two, and 101 possible units for recall three (see Appendix H) (see Chapter 3 for a detailed explanation of the scoring of the recalls). As the term progressed, the recalls had more possible units (linking to longer, more complex readings); however, the students recall time allotment for the study remained the same. The researcher suggests
that this explains the lower recall scores as the term progressed (see table 4.3.1), but this does not necessarily link to lower performance through time.

Each recall had a total idea unit score, a main idea unit score, and a detail idea unit score. T-tests, analyses of variance, and regressions were conducted to determine any significant differences in these scores. There were no significant differences found; thus, total idea unit scores for the recalls were used to answer research question three. Table 4.3.1 shows descriptive statistics for the recalls. There were three separate recalls for each control and experimental group.

Table 4.3.1
Descriptive Statistics: Reading Recalls

<table>
<thead>
<tr>
<th></th>
<th>Recall One</th>
<th>Recall Two</th>
<th>Recall Three</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Experimental Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>35.22</td>
<td>21.77</td>
<td>17.62</td>
</tr>
<tr>
<td>Experimental</td>
<td>33.72</td>
<td>21.56</td>
<td>19.36</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>35</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td>Experimental</td>
<td>33</td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td><strong>Standard Deviation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>14.35</td>
<td>9.06</td>
<td>8.96</td>
</tr>
<tr>
<td>Experimental</td>
<td>10.39</td>
<td>6.53</td>
<td>5.71</td>
</tr>
</tbody>
</table>

When comparing the mean, median, and standard deviation, the descriptive statistics revealed scores with few differences between the two groups on each of the three recalls. There were mean differences in the groups: 1.50 points (for recall one), .22 points (for recall two), and 1.73 points (for recall three). To determine if there was a statistically significant difference between each of the three sets of means, independent sample t-test analyses were conducted. Table 4.3.2 shows the results of these analyses.
Table 4.3.2

*Independent T-Test Results: Recall Scores*

<table>
<thead>
<tr>
<th></th>
<th>Mean Score</th>
<th>Mean Difference</th>
<th>t</th>
<th>df</th>
<th>Significance (two-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recall One</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>35.22</td>
<td></td>
<td>1.5</td>
<td>.715</td>
<td>.478</td>
</tr>
<tr>
<td>Experimental</td>
<td>33.72</td>
<td></td>
<td>.715</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td><strong>Recall Two</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>21.77</td>
<td></td>
<td>.21</td>
<td>.099</td>
<td>.922</td>
</tr>
<tr>
<td>Experimental</td>
<td>21.56</td>
<td></td>
<td>.099</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td><strong>Recall Three</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>17.62</td>
<td></td>
<td>1.74</td>
<td>.823</td>
<td>.407</td>
</tr>
<tr>
<td>Experimental</td>
<td>19.36</td>
<td></td>
<td>.823</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

*p = <.05

Summary and Analysis

The independent t-test reported the following: mean difference, t score, degrees of freedom, and significance (p). The result of the t-test comparing the posttest scores of the control and experimental group showed that there was no significance difference between the groups on the recalls: recall one, t(50) = .715, p = .47; recall two, t(50) = .099, p = .92; recall three, t(50) = .823, p = .40. The t-test established no significant difference in the groups on all three recalls. The mean differences in the groups linked to a gain score of 1.5 points for the control group on recall one and a gain score of .21 for the control group on recall two. The mean differences in the groups linked to a gain score of 1.74 for the experimental group on recall three.

The total idea unit score for each recall was a percentage based on the total number of idea units recorded out of the total number of idea units possible: 55 possible units for recall one, 60 possible units for recall two, and 101 possible units for recall three (see Appendix H). One percentage point difference on an individual quiz represents a difference of one idea unit or less; thus, for this study, the researcher, in consultation with a curriculum expert and statistician, established the gain scores recorded of 1.5 points, .21 points, and 1.74 points are not of practical importance.
There was a slight trend noticed in the recall data. The gain scores recorded showed an increase in recall performance of the experimental group as compared to the control group throughout the term. Specifically, on the first recall the control group outperformed the experimental group by 1.5 points, on the second recall the control group and the experimental group were nearly equal with the control group outperforming the recall group by .2 points, and on the third and final recall the experimental group outperformed the control group by 1.74 points. This observation shouldn’t be overanalyzed, as the differences discussed are slight. However, this trend links to a similar trend seen in question two (but not reported as a finding because of difficulty reporting the result with confidence). This was an interesting trend that may indicate that the student groups within the experimental classes were learning how to optimize the I.R.I.S. model throughout the term.

In summary, the t-test established no significant difference between the groups on all three recalls and the researcher reported that no practical importance may be assigned to the differences in the groups on all three recalls. Accordingly, there was no effect of the total I.R.I.S. model on reading comprehension as compared to the total T.R.I. model; however, the researcher noticed a slight trend in the recall data showing an increase in reading comprehension performance of the experimental group as compared to the control group throughout the term.

**Research Question Four**

*During the classroom portion of the I.R.I.S. model, what kinds of student-to-student scaffolding and interaction occur?*

Data were recorded throughout three classroom intervention portions of the I.R.I.S. model in experimental classes AE and BE. For each classroom intervention, structured logs and frequency checklists completed by the researcher (Appendix E), structured logs and frequency checklists completed by the instructors, and student observation surveys (Appendix F) recorded evidences of student-to-student scaffolding and interaction during the I.R.I.S. model.
Researcher Frequency Checklists and Logs

The researcher observed both experimental classes on three separate occasions. While observing the classes, the researcher completed a frequency checklist to record the frequency of the ten definable forms of scaffolding and language-promoting assistance. The checklists listed each of these behaviors: 1. recruiting interest in the task; 2. simplifying the task; 3. maintaining pursuit of the goal; 4. marking critical features; 5. controlling frustration during problem-solving; 6. demonstrating (Wood, Bruner & Ross, 1976); 7. activating background knowledge; 8. caregiver talk, 9. confirmation checks; 10. eliciting more language (Scarcella & Oxford, 1992). Responses for each behavior on the checklists were recorded by assigning a 0 to the response “I didn’t observe this,” a 1 to the response “I observed a few examples of this,” and a 2 to the response “I observed many examples of this.” These were recorded on three separate occasions for each experimental class; thus, six scores for each behavior were recorded and then averaged to obtain a mean for each behavior. Table 4.4.1 shows the findings from the checklists ranked in descending order according to the mean score.

Table 4.4.1

*Frequency Checklists: Researcher Observations of Student-to-Student Scaffolding and Interaction*

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simplifying the task</td>
<td>.83</td>
</tr>
<tr>
<td>Maintaining pursuit of goal</td>
<td>.83</td>
</tr>
<tr>
<td>Marking critical features</td>
<td>.83</td>
</tr>
<tr>
<td>Demonstrating/modeling</td>
<td>.83</td>
</tr>
<tr>
<td>Controlling Frustration</td>
<td>.66</td>
</tr>
<tr>
<td>Recruiting interest</td>
<td>.50</td>
</tr>
<tr>
<td>Confirmation checks</td>
<td>.50</td>
</tr>
</tbody>
</table>
Table 4.4.1–continued.

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caregiver talk</td>
<td>.33</td>
</tr>
<tr>
<td>Activating background knowledge</td>
<td>.33</td>
</tr>
<tr>
<td>Eliciting more language</td>
<td>.16</td>
</tr>
</tbody>
</table>

From the researcher logs, “simplifying the task,” “maintaining pursuit of goal,” “marking critical features”, and “demonstrating/modeling,” all with mean scores of .83, were equally the most observed behaviors. “Caregiver talk” and “activating background knowledge,” with mean scores of .33, were less commonly observed. “Eliciting more language,” with a mean score of .16, was the least observed behavior.

While observing each in-class I.R.I.S. intervention, the researcher circulated throughout the room writing abbreviated notes concerning actions of the students in a log. The logs highlighted and described specific observed behavior noted on the frequency checklists. For the purposes of recording in the log, the researcher assigned each student group a number, which are referenced in the logs. The researcher recorded the name of the scaffolding or interaction observed, specific oral communication, or other actions from a student or several students. The researcher later coded any specific mention of a behavior or any discussion linking to one of the behaviors. Data not linking to the coded behaviors was also recorded to assess other findings that emerged from the data. The six researcher logs of the experimental classes contained 26 codings linking to the ten scaffolding and interaction behaviors. Table 4.4.2 lists these codings according to the behavior recorded and its frequency.
Table 4.4.2
Codings from Researcher Logs: Student-to-Student Scaffolding and Interaction

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Number of Times Recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintaining pursuit of goal</td>
<td>8</td>
</tr>
<tr>
<td>Controlling frustration</td>
<td>4</td>
</tr>
<tr>
<td>Activating background knowledge</td>
<td>4</td>
</tr>
<tr>
<td>Eliciting more language</td>
<td>3</td>
</tr>
<tr>
<td>Marking critical features</td>
<td>2</td>
</tr>
<tr>
<td>Caregiver talk</td>
<td>2</td>
</tr>
<tr>
<td>Simplifying the task</td>
<td>1</td>
</tr>
<tr>
<td>Demonstrating/modeling</td>
<td>1</td>
</tr>
<tr>
<td>Confirmation checks</td>
<td>1</td>
</tr>
</tbody>
</table>

“Maintaining pursuit of the goal” was the most identified behavior. Two examples of this are found below in table 4.4.3. “Controlling frustration” and “activating background knowledge” were both noted twice in the logs; one example of each is in table 4.4.3. One behavior, “recruiting interest,” was not identified in the logs.

All excerpts presented below are examples represented by exact quotations. These excerpts/quotations are taken directly from the logs and include all punctuation, abbreviations, spaces, etc., exactly as found in the researcher logs. An explanation, the source, and the coding the researcher linked to the excerpt are provided to clarify each excerpt, and a translation is provided in brackets if any of the excerpt was recorded in Spanish.
Table 4.4.3

Excerpts from Researcher Logs: Student-to-Student Scaffolding and Interaction

<table>
<thead>
<tr>
<th>Excerpt #1</th>
<th>Source</th>
<th>RAE3 (Researcher log of class AE during third intervention)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excerpt</td>
<td>“2 – Abby - qué está respuesta - oh, Abby, necesita terminar. ”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Translation: qué está respuesta (sic) = what is the question</td>
<td></td>
</tr>
<tr>
<td></td>
<td>necesita terminar = you need to finish</td>
<td></td>
</tr>
<tr>
<td>Coding</td>
<td>Maintaining pursuit of the goal</td>
<td></td>
</tr>
<tr>
<td>Explanation</td>
<td>The researcher is observing group number two. Abby is behind the rest of the group and still focused on the previous question. Abby asks which question they are on. The group leader brings Abby into the current group debate by telling her she needs to finish the question and continue with the rest of the group.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Excerpt #2</th>
<th>Source</th>
<th>RBE1 (Researcher log of class AE during first intervention)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excerpt</td>
<td>“1. Don Quijote de la Mancha question – S. back on task”</td>
<td></td>
</tr>
<tr>
<td>Coding</td>
<td>Maintaining pursuit of the goal</td>
<td></td>
</tr>
<tr>
<td>Explanation</td>
<td>The researcher is observing group number one. They are discussing “Don Quijote de la Mancha” among themselves and then ask Sherée, the instructor, a question concerning Don Quijote. This was a story read early in the term that has no relation to the current task. The instructor quickly answers the question and puts the group back on task and focused on the present reading activity.</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.4.3 – continued.

<table>
<thead>
<tr>
<th>Excerpt #3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source</strong></td>
<td>RBE3 (Researcher log of class BE during third intervention)</td>
</tr>
<tr>
<td><strong>Excerpt</strong></td>
<td>“5 - dónde - here - oh, sí, gracias”</td>
</tr>
<tr>
<td></td>
<td>Translation: dónde = where</td>
</tr>
<tr>
<td></td>
<td>sí, gracias = yes, thanks</td>
</tr>
<tr>
<td><strong>Coding</strong></td>
<td>Controlling frustration</td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>The researcher is observing group number five. One student is confused and asks with frustration where the group is. The group leader politely directs the student by stating “here” and showing where they are. The student understands and thanks the leader.</td>
</tr>
</tbody>
</table>

Instructor Frequency Checklists and Logs

After overseeing the I.R.I.S. interaction in their classes, the two instructors completed frequency checklists. As part of the study, each instructor used the I.R.I.S. model as a classroom intervention on three occasions, creating a total of six frequency checklists. The frequency checklist format and tabulation were identical for the instructors and the researcher. Table 4.4.4 shows the findings from the checklists in descending order according to the mean score.

Table 4.4.4

*Frequency Checklists: Instructor Observations of Student-to-Student Scaffolding and Interaction*

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmation checks</td>
<td>1.16</td>
</tr>
<tr>
<td>Simplifying the task</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Table 4.4.4–continued.

Maintaining pursuit of goal         .83
Marking critical features           .83
Activating background knowledge     .83
Recruiting interest                .66
Controlling frustration            .50
Demonstrating/modeling             .50
Eliciting more language             .50
Caregiver talk                     .16

“Confirmation checks,” with a mean score of 1.16, was the most frequently observed behavior. “Simplifying the task,” with a mean score of 1.00, was the second most frequently observed behavior. “Caregiver talk,” with a mean score of .16, was the least observed behavior.

While the researcher recorded data during the I.R.I.S. classroom intervention, the logistics of teaching necessitated that the instructors to complete their logs after each I.R.I.S. intervention. Generally, these recollections included brief notes and comments on how the intervention went. At times the instructors specifically remembered the students demonstrating a scaffolding or interaction behavior, and they noted the behavior name. At other times, the instructors described an interchange or interaction that was then coded as a behavior by the researcher.

The instructor logs provided less qualitative data than the researcher’s logs, possibly due to the fact that they completed their logs after the intervention. The instructors recorded three examples of “simplifying the task,” three examples of “maintaining pursuit of the goal,” two examples of “caregiver talk,” and two examples of
“confirmation checks.” One example of “simplifying the task” and one example of “maintaining pursuit of the goal” are found below in Table 4.4.5.

Table 4.4.5
Excerpts from Instructor Logs: Student-to-Student Scaffolding and interaction

<table>
<thead>
<tr>
<th>Excerpt #1</th>
<th>Excerpt #2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source</strong></td>
<td>IAE2 (Instructor log of class AE pertaining to second intervention)</td>
</tr>
<tr>
<td><strong>Excerpt</strong></td>
<td>“Group 2 in the back did more of simplifying of the task as they try to make connections and continue to go over the answers”</td>
</tr>
<tr>
<td><strong>Coding</strong></td>
<td>Simplifying the task</td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>The instructor is commenting on group two. The instructor identifies how the group simplified the task.</td>
</tr>
</tbody>
</table>

Student Observation Surveys

At the end of the term and after the study had been completed in the classes, all students in the experimental classes completed student observation surveys (see Appendix F). The surveys inquired about socially-mediated learning strategies utilized during the study with questions linking specifically to the occurrences of the ten scaffolding and interaction behaviors. During a 50-minute class period, the students first
listened to the researcher explain scaffolding and language-promoting assistance. To assist students, the questions on the survey linking to the behaviors (in the form of specific actions by the students) were asked in a manner comprehensible to a student learner. For example, these questions consisted of the following: I generated interest in the task; I simplified the task; I encouraged others; I corrected the oral mistakes of others; I alleviated frustration with the task; I demonstrated the correct version of the task; I spoke slowly and clearly to help others; I clarified by asking questions such as, “What do you mean?”; I made others think of any prior information linking to the question; I expanded the responses of others by asking questions such as, “Tell me more.” Students were then asked if any clarification was needed before using the rest of the period to complete the surveys. On the surveys, the students responded with “never,” “occasionally,” or “frequently,” and elaborated, if desired, with examples to the ten questions.

The data was tabulated as follows: circling “never” received a 0, circling “occasionally” received a 1, and circling “frequently” received a 2. The researcher derived a mean score for each question/behavior from the 50 scores reported (from the 50 observation surveys) to determine the frequency of the behavior. Table 4.4.6 shows the mean frequencies ranked in descending order. The table also lists the mean scores for each class.

<table>
<thead>
<tr>
<th></th>
<th>Final Mean Score</th>
<th>Mean Score: Class A / Class B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caregiver talk</td>
<td>1.48</td>
<td>1.26 1.70</td>
</tr>
<tr>
<td>Demonstrating/modeling</td>
<td>1.14</td>
<td>.92  1.37</td>
</tr>
<tr>
<td>Confirmation checks</td>
<td>1.12</td>
<td>.96  1.29</td>
</tr>
<tr>
<td>Recruiting interest</td>
<td>1.00</td>
<td>.92  1.08</td>
</tr>
<tr>
<td>Maintaining pursuit of goal</td>
<td>.98</td>
<td>.84  1.12</td>
</tr>
<tr>
<td>Simplifying the task</td>
<td>.94</td>
<td>.88  1.00</td>
</tr>
</tbody>
</table>
Table 4.4.6–continued.

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Class 1</th>
<th>Class 2</th>
<th>Class 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controlling frustration</td>
<td>.68</td>
<td>.53</td>
<td>.83</td>
</tr>
<tr>
<td>Marking critical features</td>
<td>.64</td>
<td>.50</td>
<td>.79</td>
</tr>
<tr>
<td>Activating background knowledge</td>
<td>.60</td>
<td>.57</td>
<td>.62</td>
</tr>
<tr>
<td>Eliciting more language</td>
<td>.46</td>
<td>.26</td>
<td>.66</td>
</tr>
</tbody>
</table>

There was strong agreement between the two classes in the rank ordering of the behaviors. Both classes ranked “caregiver talk” first and “eliciting more language” last. Both classes ranked “demonstrating/modeling,” “confirmation checks,” and recruiting interest from second to fourth. “Maintaining pursuit of the goal” and “simplifying the task” were ranked fifth or sixth and “controlling frustration,” “marking critical features,” “activating background knowledge” were ranked between seventh and ninth by both classes. “Caregiver talk,” “demonstrating/modeling,” and “confirmation checks” were the most frequently observed behaviors according to all the student surveys.

Table 4.4.7

Excerpts from Student Observation Surveys: Student-to-Student Scaffolding and Interaction

<table>
<thead>
<tr>
<th>Excerpt #1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Excerpt</td>
<td>“I slowed down my speech when my Spanish would get too fast”</td>
</tr>
<tr>
<td>Source</td>
<td>SSAE#16 (Student observation survey from class AE student #16)</td>
</tr>
<tr>
<td>Coding</td>
<td>Caregiver talk</td>
</tr>
<tr>
<td>Explanation</td>
<td>The student is responding to the question asking how the student encouraged others. Caregiver talk often involves slowing or altering speech to make it more comprehensible.</td>
</tr>
</tbody>
</table>
Table 4.4.7–continued.

<table>
<thead>
<tr>
<th>Excerpt #2</th>
<th>Source</th>
<th>SSAE#4 (Student observation survey from class AE student #4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excerpt</td>
<td>“I would collaborate w/ others + correct wrong answers. I would come in w/ my homework done – questions answered + paragraphs underlined.”</td>
<td></td>
</tr>
<tr>
<td>Coding</td>
<td>Demonstrating/modeling</td>
<td></td>
</tr>
<tr>
<td>Explanation</td>
<td>The student is responding to the question asking how the student demonstrated the correct version of the task. Modeling often involves presentation of an attempted solution to others.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Excerpt #3</th>
<th>Source</th>
<th>SSBE#11 (Student observation survey from class BE student #11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excerpt</td>
<td>“One guy had trouble explaining his answers, so I’d give an example and say did you mean this?”</td>
<td></td>
</tr>
<tr>
<td>Coding</td>
<td>Confirmation check</td>
<td></td>
</tr>
<tr>
<td>Explanation</td>
<td>The student is responding to the question asking if the student clarified questions from other students. The student identifies how and when confirmation checks were used.</td>
<td></td>
</tr>
</tbody>
</table>

Summary and Analysis

Structured logs and frequency checklists completed by the researcher, structured logs and frequency checklists completed by the instructors, and student observation surveys were used to identify student-to-student scaffolding and interaction that occurred during the classroom portions of the I.R.I.S. model. The frequency checklists linked to the already existing scaffolding and interaction behaviors. Thus, none of the qualitative data concerning student-to-student interaction identified any new behaviors.

The researcher compared three data sources [the frequency checklists of the researcher (table 4.4.1), the frequency checklists of the instructors (table 4.4.4), and the
student observation surveys (table 4.4.6]) to identify broadly any trends in observation among the researcher, instructors, and students. All three sources identified “simplifying the task” as more frequently observed (with a mean score of .83 from the researcher, a mean score of 1.00 from the instructors, and a mean score of .94 from the students). Similarly, all three sources identified “maintaining pursuit of the goal” as more frequently observed (with a mean score of .83 from the researcher, an identical mean score of .83 from the instructors, and a mean score of .98 from the students). All three sources identified “controlling frustration” as observed with moderate frequency (with a mean score of .66 from the researcher, a mean score of .50 from the instructors, and a mean score of .68 from the students; likewise, “recruiting interest” was observed with moderate frequency (with a mean score of .50 from the researcher, a mean score of .66 from the instructors, and a mean score or 1.00 from the students). Also, all three sources identified “eliciting more language” as less frequently observed (with a mean score of .16 from the researcher, a mean score of .50 from the instructors, and a mean score of .46 from the students).

There was considerable disagreement among the data sources concerning the frequency of student-to-student “caregiver talk.” “Caregiver talk” was less frequently observed by both the researcher (with a mean of .33) and the instructors (with a mean of .16, the least observed behavior), but it was the most frequently observed behavior according to the students (with a mean of 1.48). Looking over the specific responses on the student observation surveys concerning “caregiver talk” (question number three), the researcher theorizes that the students too broadly interpreted “caregiver talk” as merely providing any form of encouragement. Also, it appears that survey question number three asking whether “I encouraged others” was written too broadly. With limited time to understand the exact nature of “caregiver talk,” the students likely answered whether they gave encouragement, while the researcher and the instructors, with more knowledge of the exact and limited behavior of “caregiver talk,” observed and recorded a more narrowly defined behavior.

In summary, all data from the checklists, logs, and surveys corresponded to the previously identified student-to-student scaffolding and interaction behaviors. Thus, no new forms of scaffolding or language promoting assistance were identified. Comparing
the three data sources (structured logs and frequency checklists completed by the researcher, structured logs and frequency checklists completed by the instructors, and student observation surveys) showed several trends regarding the frequency of observation of student-to-student scaffolding and interaction by the researcher, the instructors, and the students. During the classroom portion of the I.R.I.S. model, “simplifying the task” and “maintaining pursuit of the goal” were more frequently observed; “controlling frustration” and “recruiting interest” were observed with moderate frequency, and “eliciting more language” was less frequently observed. There was wide disagreement concerning the frequency of student-to-student “caregiver talk” during the classroom portion of the I.R.I.S. model, with the researcher and the instructors observing it less frequently and the students reporting it the most frequently.

Research Question Five

_During the classroom portion of the I.R.I.S. model, what kinds of instructor-led scaffolding and interaction occur?_

**New Behaviors**

After coding the logs from the researcher, the logs from the instructors, and the student observation surveys for the previously identified ten instructor-led definable forms of scaffolding and language-promoting assistance, the researcher noted three new behaviors. Two behaviors, “instructor presence” and “instructor as linguistic reference source,” linked to instructor behaviors repeatedly noted in the logs, and one behavior, “use of linguistic support sheet,” linked to a continually referenced support. The behavior “instructor presence” derived from the observations of the mere presence of the instructor (without any mention of specific actions by the instructor) as having the effect of encouraging and promoting conversation and interaction. The behavior “instructor as linguistic reference source” derived from the observation of the use of the instructor by the students as a source for vocabulary and linguistic help, a human dictionary. Lastly, the behavior “use of linguistic support sheet” derived from the repeated mention of the use of the linguistic support sheet provided by the instructor to each group during the intervention. Although this linguistic support sheet is not an actual definition of behavior,
it turned out to be an important language-promoting tool for students. Students recorded use of the sheet in response to questions asking for ways the instructor encouraged oral conversation, oral comprehension, and on-task activity. The researcher also observed the usefulness of the sheet for promoting oral activity among the students.

**Researcher Frequency Checklists and Logs**

Instructor-led scaffolding and interaction during the I.R.I.S. model were recorded using identical methods as for student-to-student scaffolding and interaction: structured logs and frequency checklists completed by the researcher (see Appendix E), structured logs and frequency checklists completed by the instructors (see Appendix E), and student observation surveys (see Appendix F). The researcher and the instructors used the same frequency checklist format, with the researcher noting instructor-led behavior and the instructors noting self-identified behavior. Table 4.5.1 shows the findings from the researcher checklists, with behaviors ranked in descending order according to the mean score. Six researcher checklists, three from each class, were tabulated.

**Table 4.5.1**

*Frequency Checklists: Researcher Observations of Instructor-Led Scaffolding and Interaction*

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simplifying the task</td>
<td>1.16</td>
</tr>
<tr>
<td>Controlling frustration</td>
<td>1.16</td>
</tr>
<tr>
<td>Confirmation checks</td>
<td>.83</td>
</tr>
<tr>
<td>Recruiting interest</td>
<td>.66</td>
</tr>
<tr>
<td>Demonstrating/modeling</td>
<td>.66</td>
</tr>
<tr>
<td>Maintaining pursuit of goal</td>
<td>.50</td>
</tr>
<tr>
<td>Eliciting more language</td>
<td>.50</td>
</tr>
<tr>
<td>Marking critical features</td>
<td>.33</td>
</tr>
<tr>
<td>Caregiver talk</td>
<td>.33</td>
</tr>
<tr>
<td>Activating background knowledge</td>
<td>.33</td>
</tr>
</tbody>
</table>
“Simplifying the task” and “controlling frustration,” both with mean scores of 1.16, were equally the most frequently observed behaviors. The least observed behaviors were “marking critical features,” “caregiver talk,” and “activating background knowledge,” all with mean scores of .33.

The logs highlighted and described specific observed behavior noted on the frequency checklists. During each observation of the I.R.I.S. classroom intervention, the researcher wrote abbreviated notes concerning the actions of the instructor in a log. These were later coded so that any specific mention of a behavior was coded as such, as was any discussion linking to one of the behaviors. The six researcher logs contained sixteen codings linking to the ten behaviors of instructor-led scaffolding and interaction. Table 4.5.2 lists these codings according to the behavior’s recorded frequency.

Table 4.5.2
Codings from Researcher Logs: Instructor-Led Scaffolding and Interaction

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Number of Times Recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor as linguistic reference source</td>
<td>13</td>
</tr>
<tr>
<td>Instructor presence</td>
<td>4</td>
</tr>
<tr>
<td>Use of linguistic support sheet</td>
<td>3</td>
</tr>
<tr>
<td>Maintaining pursuit of goal</td>
<td>3</td>
</tr>
<tr>
<td>Controlling frustration</td>
<td>3</td>
</tr>
<tr>
<td>Recruiting interest</td>
<td>2</td>
</tr>
<tr>
<td>Simplifying the task</td>
<td>2</td>
</tr>
<tr>
<td>Caregiver talk</td>
<td>2</td>
</tr>
<tr>
<td>Confirmation checks</td>
<td>2</td>
</tr>
<tr>
<td>Demonstrating/modeling</td>
<td>1</td>
</tr>
<tr>
<td>Eliciting more language</td>
<td>1</td>
</tr>
</tbody>
</table>
“Instructor as linguistic reference source” was noted thirteen times in the researcher logs. It was the highest recorded behavior of the instructor-led behaviors in the researcher logs. The next highest recorded behavior, “instructor presence,” was recorded four times. “Use of linguistic support sheet,” “maintaining pursuit of the goal,” and “controlling frustration” were each identified three times. Two behaviors, “marking critical features” and “activating background knowledge,” were not identified in the logs. Table 4.5.3 shows six excerpts from the researcher logs. Two excerpts were coded as “instructor as linguistic reference source”; one was coded as “instructor presence”; one was coded as “use of linguistic support sheet”; one was coded as “maintaining pursuit of the goal”; one was coded as “controlling frustration.”

Table 4.5.3
Excerpts from Researcher Logs: Instructor-Led Scaffolding and Instruction

<table>
<thead>
<tr>
<th>Excerpt #1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
</tr>
<tr>
<td>Excerpt</td>
</tr>
<tr>
<td>Coding</td>
</tr>
<tr>
<td>Explanation</td>
</tr>
<tr>
<td>Excerpt #2</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Source</td>
</tr>
<tr>
<td>Excerpt</td>
</tr>
<tr>
<td>Coding</td>
</tr>
<tr>
<td>Explanation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Excerpt #3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>RAE1 (Researcher log of class AE during first intervention)</td>
</tr>
<tr>
<td>Excerpt</td>
<td>“Back group, into English, but MJ near + into Spanish”</td>
</tr>
<tr>
<td>Coding</td>
<td>Instructor presence</td>
</tr>
<tr>
<td>Explanation</td>
<td>The researcher is observing the group in the back of the room. The group began conversing in English until they noticed the instructor, MJ, coming near their group. They then switched into Spanish.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Excerpt #4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>RAE2 (Researcher log of class AE during third intervention)</td>
</tr>
<tr>
<td>Excerpt</td>
<td>“&lt; 4 of 5 groups using linguistic support words&gt;”</td>
</tr>
<tr>
<td>Coding</td>
<td>Use of Linguistic support sheet</td>
</tr>
<tr>
<td>Explanation</td>
<td>The researcher notes a general observation and brackets it in the log. Four of the five groups were using words in their oral conversation and interaction directly from the linguistic support sheet.</td>
</tr>
</tbody>
</table>
Table 4.5.3–continued.

<table>
<thead>
<tr>
<th>Excerpt #5</th>
<th>Source</th>
<th>RAE2 (Researcher log of class AE during third intervention)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excerpt</td>
<td>“I – and um – MJ – back to Spanish b/c all English off topic, American Idol”</td>
<td></td>
</tr>
<tr>
<td>Coding</td>
<td>Maintaining pursuit of the goal</td>
<td></td>
</tr>
<tr>
<td>Explanation</td>
<td>The researcher is observing group one. The researcher notes that one student said “and um” and that then the instructor, MJ, interrupted the group and refocused the group back on the task and to talking in Spanish. This was done because the group was conversing off-topic in English about the television show “American Idol”.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Excerpt #6</th>
<th>Source</th>
<th>RAE3 (Researcher log of class AE during third intervention)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excerpt</td>
<td>“5 – no sé  está bien  caregiver talk control frustration”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Translation: no sé = I don’t know</td>
<td></td>
</tr>
<tr>
<td></td>
<td>está bien = that’s ok</td>
<td></td>
</tr>
<tr>
<td>Coding</td>
<td>Controlling frustration</td>
<td></td>
</tr>
<tr>
<td>Explanation</td>
<td>The researcher is observing group five. The researcher notes that a member of the group stated “I don’t know.” Instructor A heard the loud comment and comfortably interrupted the group and told him “that’s fine.” The researcher notes the extended exchange in the log as caregiver talk and controlling frustration.</td>
<td></td>
</tr>
</tbody>
</table>

**Instructor Frequency Checklists and Logs**

Table 4.5.4 shows the findings from the checklists completed by the instructors in the I.R.I.S. classes. The behaviors are ranked in descending order according to the mean score for the behavior. Six checklists from the instructors were tabulated (three from each instructor).
Table 4.5.4

*Frequency Checklists: Instructor Observations of Instructor-Led Scaffolding and Interaction*

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caregiver talk</td>
<td>1.83</td>
</tr>
<tr>
<td>Demonstrating/modeling</td>
<td>1.66</td>
</tr>
<tr>
<td>Simplifying the task</td>
<td>1.50</td>
</tr>
<tr>
<td>Confirmation checks</td>
<td>1.50</td>
</tr>
<tr>
<td>Activating background knowledge</td>
<td>1.33</td>
</tr>
<tr>
<td>Recruiting interest</td>
<td>1.16</td>
</tr>
<tr>
<td>Controlling frustration</td>
<td>1.16</td>
</tr>
<tr>
<td>Eliciting more language</td>
<td>1.16</td>
</tr>
<tr>
<td>Maintaining pursuit of goal</td>
<td>.83</td>
</tr>
<tr>
<td>Marking critical features</td>
<td>.83</td>
</tr>
</tbody>
</table>

The instructors reported “caregiver talk,” with a mean score of 1.83, as the most frequently observed. The instructors reported “maintaining pursuit of the goal” and “marking critical features,” with mean scores of .83, the least observed.

After each I.R.I.S. intervention, the instructors completed a log based on their recollections of the class. Generally, the instructors took brief notes and commented on how the intervention went. At times the instructors specifically remembered the students demonstrating a scaffolding or interaction behavior, and they noted the behavior name. Other times, they described an interchange or interaction that was then coded as a behavior by the researcher.
The instructors’ logs provided less qualitative data than the researcher’s logs. The instructors recorded six examples of the “instructor as linguistic reference source,” four examples of “caregiver talk,” two examples of “recruiting interest,” and one example of “activating background knowledge.” One example of “instructor as linguistic reference source” and one example of “caregiver talk” are found below in Table 4.5.4.

Table 4.5.5

*Excerpt from Instructor Logs: Instructor-Led Scaffolding and Interaction*

<table>
<thead>
<tr>
<th>Excerpt #1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source</strong></td>
<td>IBE1 (Instructor log of class BE during first intervention)</td>
</tr>
<tr>
<td><strong>Excerpt</strong></td>
<td>“For the most part, everyone spoke in the L2. When I would stop and observe a particular group, every now and then they would ask how to say some [thing] in the L2. (I was asked about 3 times throughout the whole activity)”</td>
</tr>
<tr>
<td><strong>Coding</strong></td>
<td>Instructor as linguistic reference source</td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>The instructor generally records how the students used the instructor as a linguistic reference source.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Excerpt #2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source</strong></td>
<td>IAE1 (Instructor log of class AE during first intervention)</td>
</tr>
<tr>
<td><strong>Excerpt</strong></td>
<td>“Tiempo Libre [was] very difficult and lots of caregiver talk with repetition to help look for patterns like primero, segundo, etc.” Translation: primero = first; segundo = second</td>
</tr>
<tr>
<td><strong>Coding</strong></td>
<td>Caregiver Talk</td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>The instructor records that this specific reading was difficult for the class. The instructor records the use of caregiver talk and notes repetition, which is common in caregiver talk. The talk was used to aid the students in comprehension of the reading, which in this case consisted of a series of dreams (the first one, second one, etc.).</td>
</tr>
</tbody>
</table>
**Student Observation Surveys**

Students responded to three questions linking to instructor-led scaffolding on the student observation surveys. Students answered how the instructor facilitated oral conversation, how the instructor facilitated oral comprehension, and how the instructor kept the group on task during the activity by referencing one of the ten scaffolding and interaction behaviors and/or noting any ways this was done. The researcher later coded any discussion or direct reference linking to one of the behaviors from the answers to these three questions. The researcher recorded which of the behaviors were mentioned on each student observation survey (out of a total of 50 surveys) (see table 4.5.5).

Table 4.5.6

**Student Observation Surveys: Student Reporting of Instructor-Led Scaffolding and Language Promoting Assistance**

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Number of Surveys Mentioned In</th>
<th>Percent of Total Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintaining pursuit of the goal</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td>Instructor presence</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Caregiver talk</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Marking critical features</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>Controlling frustration</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>Simplifying the task</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Instructor as linguistic reference source</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Recruiting interest</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Demonstrating/modeling</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Eliciting more language</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Activating background knowledge</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Use of linguistic support sheet</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Confirmation checks</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>
The student observation surveys produced detailed comments and observations. Table 4.5.5 shows six excerpts from the student observation surveys. Two examples each link to “maintaining pursuit of the goal” and “instructor presence,” and one example each links to “marking critical features” and “caregiver talk.”

Table 4.5.7
*Excerpts from Student Observation Surveys: Instructor-Led Scaffolding and Interaction*

<table>
<thead>
<tr>
<th>Excerpt #1</th>
<th>Excerpt #2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source</strong></td>
<td>SSBE#23 (Student observation survey from class BE student #23)</td>
</tr>
<tr>
<td><strong>Excerpt</strong></td>
<td>“By making sure we spoke in Spanish, because you can’t chit chat in Spanish.”</td>
</tr>
<tr>
<td><strong>Coding</strong></td>
<td>Maintaining pursuit of the goal</td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>This question was in response to: Note any ways your instructor facilitated oral comprehension. The student identifies one way the instructor maintained pursuit of the goal.</td>
</tr>
</tbody>
</table>
### Excerpt #3
**Source**  SSBE5 (Student observation survey from class BE student #5)
**Excerpt**  “She would stand over our shoulders and watch us which forced us to be on-task”
**Coding**  Instructor presence
**Explanation**  This question was in response to: Note ways your instructor kept your group on-task during the activity. The student identifies how the instructor’s presence kept them on-task.

### Excerpt #4
**Source**  SSAE7 (Student observation survey from class BE student #5)
**Coding**  Instructor presence
**Excerpt**  “Just by listening, we talk more when someone is there”
**Explanation**  This question was in response to: Note ways your instructor facilitated oral conversation. The student identifies how the instructor’s presence encouraged oral communication.

### Excerpt #5
**Source**  SSAE#24 (Student observation survey from class AE student #24)
**Excerpt**  “By going around from group to group and correcting mistakes or regulating the conversation”
**Coding**  Marking critical features
**Explanation**  This question was in response to: Note any ways your instructor facilitated oral conversation. Marking critical features often involves oral correction.
Table 4.5.7–continued.

<table>
<thead>
<tr>
<th>Excerpt #6</th>
<th>Source</th>
<th>SSAE#10 (Student observation survey from class AE student #10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excerpt</td>
<td>“She encouraged each of us to try on and have a say. She is always enthusiastic.”</td>
<td></td>
</tr>
<tr>
<td>Coding</td>
<td>Caregiver talk</td>
<td></td>
</tr>
<tr>
<td>Explanation</td>
<td>This question was in response to: Note any ways your instructor facilitated oral conversation. The student identifies one way the instructor used caregiver talk. Caregiver talk often involves trying to make the most of the student’s efforts.</td>
<td></td>
</tr>
</tbody>
</table>

Summary and Analysis

Structured logs and frequency checklists completed by the researcher, structured logs and frequency checklists completed by the instructors, and student observation surveys were used to identify student-to-student scaffolding and interaction that occurred during the classroom portions of the I.R.I.S. model. The frequency checklists linked to already existing behaviors of scaffolding and interaction, and much of the data corresponded to these behaviors. However, to address continually referenced support in all three data sources, the researcher created three new behaviors for the study: “instructor presence,” “instructor as linguistic reference source,” and “use of linguistic support sheet.” These new behaviors were referenced often in the researcher logs, instructor logs, and student surveys.

To identify any trends in observation among the researcher, instructors, and students, the researcher compared three data sources: the frequency checklists of the researcher (table 4.5.1), the frequency checklists of the instructors (table 4.5.4), and the student observation surveys. All three sources identified “simplifying the task” as more frequently observed (with a mean score of 1.16 from the researcher, a mean score of 1.50 from the instructors, and 9 student surveys or 18% of the total reporting it). All three sources identified “recruiting interest” as observed with moderate frequency (with a mean
of .66 from the researcher, a mean score of 1.19 from the instructors, and 7 student surveys or 14% of the total reporting it). All three sources identified “eliciting more language” as less frequently observed (with a mean score of .50 from the researcher, a mean score of 1.16 from the instructors, and 6 student surveys or 12% of the total reporting it).

There was disparity in the rank ordering of the mean scores from the frequency checklists of the researcher and the instructors. Specifically, the researcher did not observe “caregiver talk,” with a mean score of .33, frequently, while it was the most observed behavior, with a mean score of 1.83, according to the instructors. The researcher reported much less observed “caregiver talk.” The explanation for this discrepancy may be that the researcher more narrowly defined the term according to its context in research literature, while the instructors (similar to the students in question four) perhaps defined “caregiver talk” more broadly by linking it to commonly occurring expressions of general caring.

The instructors recorded that they engaged in scaffolding and interaction more often than the researcher recorded that they did. One behavior, “controlling frustration,” had a mean of 1.16 on both tables; however, on all of the other behaviors the instructors had a higher mean average than the researchers. The researcher theorizes that the instructors overestimated their use of scaffolding and interaction, perhaps recording more what they felt a “good” instructor should have done than what actually took place. This occurrence is not uncommon. Teachers generally report more positive perceptions of teaching behavior when self-reporting than other observation measures would report (Marsh, 1984). In fact, teacher self-reports often do not correspond to actual practice and the data should not be over-extrapolated (Hook & Rosenshine, 1979; Saljo, 1997). Of the three most common measures of classroom teaching practice (classroom observation, teacher self-reporting, and student self-reporting), classroom observation, such as that done by the researcher (an expert witness) in this study, should be viewed as generally the most objective (Mayer, 1999; Lawrenz, Huffman, & Robey, 2003).

The time elapsed from the time of the event may have been a factor in the discrepancies. The researcher completed the frequency checklists during the classroom intervention, while the instructors completed the frequency checklists after the
intervention. The instructors turned in to the researcher their checklist and log by the weekend following the interaction. Thus, the researcher observations were observations made synchronously with the intervention, while the instructors recorded recollections of the event.

Lastly, the role in the classroom may have influenced the observations and explain differences between the instructors’ and the researcher’s observations. The instructors’ primary duty in their classes was to maintain the classroom environment and run the I.R.I.S. intervention (an all-encompassing and full-time role), while the researcher’s responsibility was to observe and record. These separate functions in the class, with the instructors having much less time and opportunity to observe the class interactions and behaviors due to distractions proceeding from their teaching role, might account for some of the discrepancy between the two sets of checklists. Thus, the idealized thinking of the instructors, the lack of detail of instructor self-reports, time, and the instructor’s role may have all contributed to the discrepancies.

In summary, the data showed that instructor-led scaffolding and interaction occurred regularly throughout the classroom portion of the I.R.I.S. model. The researcher created three new behaviors for the study (“instructor presence,” “instructor as linguistic reference source,” and “use of linguistic support sheet”) to address continually referenced support from all three data sources. Three data sources (frequency checklists completed by the researcher, frequency checklists completed by the instructors, and student observation surveys) were compared to identify any trends in observation of instructor-led scaffolding and interaction by the researcher, instructors, and the students. This comparison showed several findings. During the classroom portion of the I.R.I.S. model, “simplifying the task” was more frequently observed, “recruiting interest” was observed with moderate frequency, and “eliciting more language” was rarely observed. The researcher observed much less instructor “caregiver talk” than the instructors reported, and in general the instructors recorded that they engaged in scaffolding and interaction more often than the researcher observed that they did.
Summary of Results

The results presented in this chapter indicate the following:

Research question one: There was no effect of the I.R.I.S. homework sheet on reading comprehension as compared to the T.R.I. homework sheet.

Research question two: There was no effect of the classroom portion of the I.R.I.S. classroom model on reading comprehension as compared to the classroom portion of the T.R.I. classroom model.

Research question three: There was no effect of the total I.R.I.S. model on reading comprehension as compared to the total T.R.I. model. A slight trend in the recall data showed an increase in recall performance of the experimental group as compared to the control group throughout the term.

Research question four: During the classroom portion of the I.R.I.S. model, student-to-student “simplifying the task” and “maintaining pursuit of the goal” were frequently observed, student-to-student “controlling frustration” and “recruiting interest” were observed with moderate frequency, and student-to-student “eliciting more language” was less frequently observed. There was disagreement concerning the frequency of student-to-student “caregiver talk.”

Research question five: The researcher identified three new behaviors for the study (“instructor presence,” “instructor as linguistic reference source,” and “use of linguistic support sheet”) to address continually referenced support in the data. During the classroom portion of the I.R.I.S. model, instructor-led “simplifying the task” was observed quite frequently, instructor-led “recruiting interest” was observed moderately frequently, and instructor-led “eliciting more language” was rarely observed. There was disagreement concerning the frequency of instructor-led “caregiver talk.” Also, the instructors recorded that they engaged in scaffolding and interaction more often than the researcher observed that they did.
CHAPTER V

SUMMARY AND DISCUSSION

Introduction

Chapter five restates the study research problem, purpose, and methodology, discusses the study results, implications, and limitations, and forwards recommendations for additional research.

Statement of the Problem and Study Purpose

No study to date has investigated the effects of a model combining reading strategies and social mediation together in the second language environment. Drawing from multiple areas of second language research, the researcher developed the interactive reading with instructor support (I.R.I.S.) model. Through a reading model comparison of the I.R.I.S. model and the traditional reading instruction (T.R.I.) model, a model that draws from traditional literature teaching methods that are generally described as instructor-centered, the researcher addressed the following five questions:

1. What is the effect of the I.R.I.S. homework sheet on reading comprehension as compared to the T.R.I. homework sheet?
2. What is the effect of the classroom portion of the I.R.I.S. model on reading comprehension as compared to the classroom portion of the T.R.I. model?
3. What is the effect of the total I.R.I.S. model on reading comprehension as compared to the total T.R.I. model?
4. During the classroom portion of the I.R.I.S. model, what types of student-to-student scaffolding occur?
5. During the classroom portion of the I.R.I.S. model, what types of instructor-led scaffolding occur?
Review of the Methodology

This study used intact groups, actual university classes, representing two control and two experimental groups. Two instructors participated in this study with each teaching one control and one experimental class. This study used an original sample size of 100 students, with 51 students in the experimental classes and 49 in the control classes.

This study combined quantitative and qualitative research data. Research questions one, two, and three were answered using quantitative research data, while research questions four and five were answered using primarily qualitative research data. For question number one, the treatment variable (either the I.R.I.S. or T.R.I. homework sheet) was manipulated, and the effects were observed on the dependent variable (the multiple-choice identification quizzes). For question number two, the treatment variable (the I.R.I.S. or T.R.I. classroom intervention) was manipulated, and the effects were observed on the dependent variable (the recalls). For question number three, the treatment variable (the total I.R.I.S. or T.R.I. model) was manipulated, and the effects were observed on the dependent variable (the recalls). The data for this study were analyzed using the S.P.S.S. statistical analysis program. For research question numbers one and three, independent t-test analyses were performed and reported, and for research question number two, paired sample t-test analyses were performed and reported. For research questions four and five, data were collected using frequency checklists and logs from the researcher, frequency checklists and logs from the instructors, and student observation surveys.

Discussion

For research question one (What is the effect of the I.R.I.S. homework sheet on reading comprehension as compared to the T.R.I. homework sheet?), an independent group t-test analyses showed that there was no effect of the I.R.I.S. homework sheet. Also, there was no practical importance attached to the gain scores reported between the groups; however, the experimental group showed a slight advantage over the control
group on multiple choice identification quiz one, while the control group showed a slight advantage over the experimental group on multiple choice identification quiz two and three.

There were two central differences in the format of the I.R.I.S. and T.R.I. homework sheets. Unlike the T.R.I. homework sheets, the I.R.I.S. homework sheets divided the reading into segments (Leow, 2001; MacLellan, 1997) and two of the comprehension questions were phrased in the form of an underlining task (Grabe, 1997). The finding that there was no statistical effect of the I.R.I.S. homework sheet on reading comprehension is disappointing, as research recommends text division as a strategy-focused instruction to aid reading comprehension (Leow, 2001; MacLellan, 1997, Riley, 1993; Valette, 1998).

Anecdotally, the researcher notes that at least two students expressed the belief that they benefited from the text division. These students, who in general had difficulty with second language reading, specifically noted that the homework aided them and that they felt that they understood the entirety of the reading better when presented as the I.R.I.S. homework model. On the other hand, one student noted that the text division slowed down his/her reading. This student, who was an excellent second language reader, preferred to read the entire text before answering any questions. Interestingly, in the pilot study, two students who typically had reading difficulties in class also commented that they believed the text division of the I.R.I.S. sheet assisted them, and one strong reader voiced a negative reaction to the text division. The homework sheet used in the I.R.I.S. homework model may have benefited specific students, especially those with more difficulty reading in a second language, but this effect did not link to a total group effect. The researcher theorizes that the effect of text division may vary according to the ability of the individual student.

The results suggest that underlining tasks did not link to increased reading comprehension. These results also are perplexing in that much research recommends underlining as a strategy-focused instruction to aid learning and recall (Carrell, 1983; Carell, Devine & Eskey, 1988; Myers, 1984; Moffett and Wagner, 1983). However, students who participated in the I.R.I.S. model did comment on underlining as part of the I.R.I.S. classroom model. These students mentioned the task as something different and
enjoyable, and the researcher and the instructors anecdotally noted in discussions together that the underlining task (as part of the I.R.I.S. classroom activity), which required asking for markers, specifying where the answer was located, etc. provided for fun and much oral conversation within the groups. Although underlining as a part of the homework model did not appear to contribute to reading comprehension, the researcher proposes that underlining as a component of the total I.R.I.S. model contributed to a more enjoyable student experience and may have served as a springboard for oral production, a variable not measured in this study.

Students completed the I.R.I.S. homework sheet before class and then individually used their sheet as part of the I.R.I.S. group activity. One of the central purposes of the I.R.I.S. homework model was to allow students to come to class prepared and confident to participate in the I.R.I.S. classroom activity, i.e. to reduce anxiety (Young, 1990). From anecdotal verbal conversations with students and instructors, the researcher received much positive feedback on the students’ confidence level in the task and lack of anxiety when participating in the I.R.I.S. model. The written data, researcher and instructor logs, also supported this observation. One representative example from IAE3 (instructor log of class AE during third intervention) that specifically addressed the homework sheets noted:

They wanted to share their answers [from the I.R.I.S. homework sheets] . . . They knew what they were doing. They kept pretty much on task, talking in Spanish at all times without any signs of major frustration.

Thus, although the I.R.I.S. homework did not seem to contribute to higher reading comprehension, the qualitative data suggests that the I.R.I.S. homework sheet may have lessened student anxiety and contributed to general student confidence in the classroom task.

For research question two (What is the effect of the classroom portion of the I.R.I.S. model on reading comprehension as compared to the classroom portion of the T.R.I. model?), within-group paired t-test analyses and then between-group comparisons were used to assess gain scores between the control and experimental group. There was no effect of the classroom portion of the I.R.I.S. model on reading comprehension. Also,
comparing scores on the three multiple-choice identification quizzes with the three recalls, there was no practical importance attached to the gain scores between the groups.

The lack of statistically significant differences between the two groups is perplexing in that the components of the I.R.I.S. model were drawn from research that would predict improved reading comprehension. Several studies suggest that purposeful, engaged, and entertaining tasks lead to increased reading comprehension (Knutson, 1997; Schraw & Dennison, 1994). Nevertheless, according to the quantitative data, the I.R.I.S. classroom intervention did not seem to increase reading comprehension. However, the qualitative data (the researcher and instructor logs) reported that the students were actively engaged and seemed to enjoy the I.R.I.S. classroom model more than the T.R.I. classroom model. For example, one instructor noted in her log, IAE2 (instructor log of class AE during second intervention):

Group 4 was particularly very interested in this group task. Even my shy student was very interested and willing to talk. They were loud (in Spanish). They argued about the answers [and] constantly went back to the text to prove that their point was correct . . . if they were wrong [they] would tell you . . . but in a playful way . . . This group was very enthusiastic and wanted to continue working even after time was up for the assignment.

The instructor similarly noted in her log, IAE3 (instructor log of class AE during third intervention):

Group number five loves to be loud in Spanish, they yelled out “No estoy de acuerdo” . . . They love to argue in Spanish and see who can defend themselves better in Spanish. . . . They love to fight over who is going to be the leader, who is going to pick a color, etc.

Self-efficacy and motivation increase in a cooperative learning environment (Johnson & Johnson, 1995; Slavin, 1995). Johnson and Johnson (1994) also report that working to achieve a common goal results in greater productivity. Thus, the researcher suggests that the I.R.I.S. model may have led to higher student enjoyment, increased commitment to the task, and higher self-esteem in relation to the task, variables not assessed in this study.
For research question three (What is the effect of the total I.R.I.S. model on reading recall as compared to the total T.R.I. model?) independent group t-test analyses showed that there was no effect of the total I.R.I.S. model. Also, there was no practical importance attached to the gain scores between the groups.

While the I.R.I.S. model presented no advantage in reading comprehension, it presented no disadvantage in reading comprehension when compared to the T.R.I. model, a direct teaching approach. It may be concluded that through the I.R.I.S. model students may teach themselves and in reading comprehension can demonstrate equivalent performance.

These results were not predicted in anecdotal conversations with both instructors. In fact, both instructors during the study expressed to the researcher their feelings that through the traditional model they were dictating the entire plot to the students, and that most likely these students (those in the control group) would perform better on reading comprehension. In observing the traditional classes, the researcher also felt this ability of the instructor to “teach to the quiz” gave an advantage to the control group, as they seemed to cover more details in class and always completely finished discussing the story. In other words, the researcher and the two instructors originally believed that direct instruction resulted in more productive and efficient use of class time in terms of covering the material.

Many researchers report instructor concerns about not covering enough material and the time needed for cooperative activities (Cooper, Robinson & McKinney, 1994). However, Johnson & Johnson (1989) report that even though an instructor may be able to cover more content through a lecture format, the retention rate for material presented via cooperative learning is longer and the material is originally learned at a higher level of mastery than with more traditionally taught classes. The I.R.I.S. model may enhance long-term reading recall. Since this study only measured short-term recall, the effect of the I.R.I.S. on long-term recall is recommended for a future study. Moreover, the recall data did show a slight increase in recall performance of the experimental group as compared to the control group over time. Specifically, the control group outperformed the experimental group on the first recall. On the second recall, the control group
outperformed (but only slightly) the control group. However, on the third and final recall, the experimental group outperformed the control group.

Much research supports the finding that students introduced to a collaborative learning activity take time to acquire the skills needed to successfully work in such small-groups (Cooper, Prescott, Cook, Smith, Mueck & Cuseo, 1990). Many students have never worked together in a truly collaborative environment and may need to practice active listening, constructive criticism, and group management (Johnson & Johnson, 1994). Thus, the researcher suggests that this trend in improving performance by the experimental group may be the result of the acquisition of the skills utilized in collaborative activities throughout the term, as those in the experimental group better learned to work together and successfully participate in the I.R.I.S. model. It may be conjectured that the experimental group would have actually outperformed the traditional group once these skills were acquired. The researcher recommends that any future studies of the I.R.I.S. model contain group skills training prior to the study to neutralize any negative effect of the model that may be caused by unfamiliarity of group processes.

For research question four (During the classroom portion of the I.R.I.S. model, what types of student-to-student scaffolding occur?), “simplifying the task” and “maintaining pursuit of the goal” were frequently observed. “Controlling frustration” and “recruiting interest” were observed with moderate frequency. One of the least frequently observed behaviors was “eliciting more language.” Thus, it appears that the students understood how to prompt one another to simplify the task and to keep students on task. However, a presentation to students focusing on effective ways to elicit more language may be beneficial.

For research question five (During the classroom portion of the I.R.I.S. model, what types of instructor-led scaffolding occur?), the researcher identified three new behaviors for the study that emerged from the qualitative data. These three behaviors (“instructor presence,” “instructor as linguistic reference source,” and “use of linguistic support sheet”) are supported by research.

The behaviors “instructor presence” and “instructor as linguistic reference source” link to the importance of the role of the instructor in the foreign/second language classroom, which has been discussed by others (Gibbons, 2002; Savignon, 1991; Stepp-
Greany, 2002). For the collaborative classroom, research generally characterizes the instructor’s role as one of being a facilitator, committed to providing a positive classroom environment for language acquisition. Grasha (1996) noted that good facilitators move around in the background and that the instructor is a resource consultant. It appears that in this study the I.R.I.S. model provided opportunities for the instructor as facilitator and resource person and corroborated other studies that emphasize the importance of the instructor.

The behavior “use of linguistic support sheet” linked to the importance of the linguistic sheet for the students. Providing linguistic support through vocabulary sheets or other preview activities is a well-researched component of cooperative group activities (Lovitt, T, 1995; Shrum & Glisan, 2000). Based on qualitative data, this study corroborates the importance of support sheets for collaborative activities.

Also, all three sources of qualitative data identified the frequency of specific behaviors, as instructor-led scaffolding or interaction. “Simplifying the task” was frequently observed. “Recruiting interest” was observed with moderate frequency. One of the least frequently observed behaviors was “eliciting more language.” It appears that instructors, like students, know how to make the task more understandable, but that they do not know how to draw students out to produce more language, and may need professional development in this area. It also appears that they may need to be informed about activities or statements that serve as a "hook" to involve students.

**Implications for the Classroom**

Although a single study should not be used for broad recommendations or assertions, this study does provide suggestions for the practice of the I.R.I.S. model or other similarly constructed interactive reading and instructional models. Anecdotally, the researcher notes that several students, who in general had difficulty with second language reading, expressed the belief that they benefited from the text division. On the other hand, two students, who were excellent second language readers, noted that the text division slowed down their reading and that they preferred to read the entire text before answering any questions. One implication of the study for the classroom is that a variety of
strategies are needed to address the diverse reading styles and ability levels found in authentic second language classrooms.

A slight trend in the data showed an increase in recall performance of the experimental group as compared to the control group throughout the term. Thus, the researcher recommends that when using the I.R.I.S. model, or other similar collaborative model, the practitioner may need to allot more time for the model when first introduced and to allow for the gradual evolution of student mastery of the model. Also, group-processing skills need to be taught whereby students analyze how their groups are functioning to achieve their goals or tasks. In this way, the students and the instructor can discuss concerns or problems, celebrate positive outcomes, and, ultimately, more quickly establish successful collaborative groups.

This study suggests that the presence of the instructor and the role of the instructor as a linguistic reference are important instructional functions during the I.R.I.S. activity. The researcher recommends that the instructor facilitating in such a collaborative classroom environment circulate throughout the classroom, be a resource, and provide linguistic support. Also, this study suggests that the linguistic support sheet is an important component of the I.R.I.S. classroom. The researcher recommends the use of a linguistic support sheet as part of such an interactive group activity.

The qualitative data suggests that both instructors and students did not often elicit more language. As “eliciting more language” is important for oral production and language acquisition (Kaderavek & Justice, 2000), the researcher recommends that practitioners and participants in the I.R.I.S. or other similar collaborative model be trained in this form of scaffolding.

Limitations

This study was conducted in an authentic classroom environment using intact groups, actual university classes. Such studies are needed in Spanish as a second language classrooms (Lafford & Salaberry, 2003). However, any research involving non-randomized groups (such as actual university classes) has statistical limitations owing to the inability to control differences in the control and experimental groups (Leedy, 1993).
To address this limitation, the researcher used a nonequivalent pretest-posttest design, which is recommended for effectiveness studies in an authentic educational setting (Campbell & Cook, 1979). Within this design, independent sample t-test analyses were used (after an independent sample t-test determined equivalent pretests) in question one and three to directly assess whether the posttest means of the two groups were statistically different and to assess potential gain scores between the groups. Paired sample t-test analyses were used in question two to assess the differences in the pretest and the posttest means within the control and the experimental group.

The researcher, the instructors, and the students reported their observations of the I.R.I.S. classroom model. The instructors and the researchers used frequency checklists and logs, and the students used observation surveys. However, it is often difficult to draw comparisons across responding groups in that there may be difficulties with standardizing the meaning of the terms. Specifically, in this study, students may have misunderstood definitions of some of the terms.

The scheduling of homework assignments may have influenced the results. In reviewing the journals and the testing calendar, the researcher noticed that once during the study the two groups did not receive the treatment on the same day. One instructor scheduled and took her masters comprehensive exams during the previously scheduled third intervention. Her class, BE, thus received the intervention one week after class AE. Class AE received the intervention following Spring Break. The researcher theorizes that class AE did not adequately or typically prepare their I.R.I.S. homework sheet because of its requirement to be turned in so soon after the holiday. This scheduling flaw in the study may have influenced the results and may explain the atypical performance of class AE on multiple-choice three. This potential flaw was clearly described in the study analysis and no finding linking to this potential flaw was reported.

Recommendations for Further Research

In this study, short-term recall (assessment the day after the classroom intervention) was investigated and no effect was established for the I.R.I.S. model. Because Johnson and Johnson (1989) concluded that the retention rate for material
presented via cooperative learning is longer than with more traditionally taught classes, an investigation of the I.R.I.S. model focusing on long-term reading comprehension is recommended. Perhaps long-term reading comprehension assessment (i.e. recall assessment a week later, from the final exam, or six months later) would yield a different result.

In this study, the intervention was assessed three times. A slight data trend showed an increase in recall performance of the experimental group as compared to the control group throughout the term. Because Cooper (1990) concluded that students introduced to a collaborative learning activity take time to acquire the skills needed to successfully work in such small-groups, possibly more interventions or a longer treatment time (i.e. a complete term) would further support the improvement trend of the I.R.I.S. group or yield a different result. Further studies of the I.R.I.S. model should be conducted in which the treatment time is lengthened.

This study of a collaborative model did not assess motivation or self-esteem. Johnson & Johnson (1995) and Slavin (1995) concluded that key effects of collaborative instructional models are motivation and self-esteem. Assessing motivation and student self-esteem in the I.R.I.S. model may be informative to second language acquisition studies.

The data from the study indicate that the I.R.I.S. model is a teaching model that promotes scaffolding and interaction. Further studies may be done using this model. Other topics for future research implied by the I.R.I.S. model and previously investigated by others are discourse (Mantero, 2002), instructional style (Cook, 2001), and task engagement (Platt & Brooks, 2002).
APPENDIX A

DEMOGRAPHIC AND PRIOR KNOWLEDGE SURVEY
Demographic and Prior Knowledge Survey

1. Please check the appropriate responses:

________ I am female.

________ I am male.

________ English is my first language and the only language I speak fluently.

________ Spanish was my first language, but I did not speak it at home beyond preschool age.

________ Spanish was my first language and I speak it at home.

________ I grew up in a predominately Spanish-speaking area, but Spanish was not my first language.

________ I have traveled often or for an extended period of time (at least 2 months) to a Spanish-speaking country or area.

________ I have completed more than two years of Spanish in high-school.

________ I am fluent in another language besides English or Spanish.

2) Please respond with a response from 1-3 concerning your familiarity with the following story and/or person.

1 = I have never heard of this story or person.
2 = I am somewhat familiar with the story or person.
3 = I am very familiar with the story or person.

________ The story “Tiempo libre” by Guillermo Samperio

________ The person Rigoberta Menchú Tum

________ The story “Los perros magicós de los volcanes” by Manlio Argueta
APPENDIX B

I.R.I.S. HOMEWORK SHEETS
Tiempo libre por Guillermo Samperio

1. Todas las mañanas compro el periódico y todas las mañanas, al leerlo, me mancho [ensucio] los dedos con tinta [ink]. Nunca me ha importado ensuciármelos con tal de estar al día [informado] en las noticias. Pero esta mañana sentí un gran malestar [intranquilidad] apenas toqué el periódico. Creí que solamente se trataba de uno de mis acostumbrados mareos [dizziness]. Pagué el importe del diario regresé a mi casa.

1. Explica lo que ocurrió mientras el hombre estaba leyendo el periódico.

________________________________________________________________________
________________________________________________________________________

2. Mi esposa había salido de compras. Me acomodé en mi sillón favorito, encendí un cigarro y me puse a leer la primera página. Luego de enterarme de que un jet se había desplomado [caído del cielo], volví a sentirme mal, vi mis dedos y los encontré más tiznados [sucios] que de costumbre. Con un dolor de cabeza terrible, fui al baño, me lavé las manos con toda calma y, ya tranquilo, regresé al sillón. Cuando iba a tomar mi cigarro, descubrí que una mancha negra cubría mis dedos. De inmediato retorné al baño, me tallé con zacate [scrubber], piedra pómez [roca] y, finalmente, me lavé con blanqueador; pero el intento fue inútil, porque la mancha creció y me invadió hasta los codos [elbows].

2. ¿Por qué fue al baño?

________________________________________________________________________
________________________________________________________________________

2. ¿Y qué pasó después?

________________________________________________________________________
________________________________________________________________________
2. ¿Qué piensas que está pasando?

________________________________________________________________________

________________________________________________________________________

1-2. Describe al hombre físicamente y emocionalmente.

________________________________________________________________________

________________________________________________________________________

3. Subraya las reacciones específicas del médico y la mujer.

3. Ahora, más preocupado que molesto [de mal humor], llamé al doctor y me recomendó que lo mejor era que tomara unas vacaciones, o que durmiera. En el momento en que hablaba por teléfono, me di cuenta de [supe] que, en realidad, no se trataba de una mancha, sino de un número infinito de letras pequeñísimas, apeñuzcadas [agrupadas], como una inquieta [intranquila] multitud de hormigas [ants] negras. Después, llamé a las oficinas del periódico para elevar mi más rotunda protesta; me contestó una voz de mujer, que solamente me insultó y me trató de loco. Cuando colgué [I hung up], las letritas habían avanzado ya hasta mi cintura [waist]. Asustado [Con miedo], corrí hacia la puerta de entrada; pero, antes de poder abrirla, me flaquearon [se me doblaron] las piernas y caí estrepitosamente [con mucho ruido].

3. ¿El médico y la mujer creían al hombre?

________________________________________________________________________

________________________________________________________________________

4. Tirado [Extendido en el suelo] bocarriba descubrí que, además de la gran cantidad de letra hormiga que ahora ocupaban todo mi cuerpo, había una que otra fotografía. Así estuve durante varias horas hasta que escuché que abrían la puerta. Me costó trabajo hilar [conectar] la idea, pero al fin pensé que había llegado mi salvación. Entró mi esposa, me levantó del suelo, me cargó [llevó] bajo el brazo, se acomodó en mi sillón favorito, me hojeó despreocupadamente y se puso a leer.

4. ¿Qué pasó al hombre en el cuento?

________________________________________________________________________

________________________________________________________________________
4. ¿Qué ocurrió cuando llegó su esposa?

________________________________________________________________________

________________________________________________________________________

1-4. Escribe tu propia interpretación del título.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

1. Rigoberta Menchú, indígena maya-quiché, a los treinta y tres años, se convirtió en símbolo universal del sufrimiento de su pueblo al ser galardonada con el Premio Nóbel de la Paz. Su vida es una larga historia marcada por la muerte violenta de sus padres y un hermano, en crímenes atribuidos a las fuerzas de seguridad de su país.

2. **Reacciones al Premio Nóbel**
El premio, el segundo Nóbel concedido a un guatemalteco tras el de Literatura otorgado a Miguel Ángel Asturias en 1967, ha provocado en este país varias reacciones. Para los indígenas, es el reconocimiento a su lucha contra la segregación racial de la que son víctimas. Para los sectores más privilegiados significa sólo un acto de carácter político, destinado a desestabilizar el país. Al margen de esta polémica, es evidente que el premio les da a los guatemaltecos una gran oportunidad para alcanzar la concordia nacional, en momentos en que las conversaciones de paz entre el gobierno y la guerrilla parecen condenadas al fracaso.

2. ¿Cómo reaccionaron las indígenas guatemaltecas a la victoria de Menchú?

2. ¿Cómo reaccionó la clase alta en Guatemala a la victoria de Menchú?

2. ¿Por qué reaccionaron diferente los dos grupos?

100
3. Subraya los detalles que se refieren a una tradición (obligación) de los campesinos.

3. Niñez y juventud


4. ¿Dónde trabajó durante su adolescencia?

________________________________________________________________________

________________________________________________________________________

5. Este crimen, en el que se señala alguna complicidad de [conspiración con] las autoridades, hace que el padre de Rigoberta, Vicente Menchú, empiece realizar una enorme labor de organización entre sus vecinos [las personas del pueblo]. Esta actividad constituye la primera escuela de conciencia social para la hoy galardonada.

5. Explica en tus propias palabras de donde Rigoberta recibió sus primeras lecciones en conciencia social.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
6. **Muerte trágica de sus padres**

La tragedia estaba en el camino de Rigoberta. Vicente Menchú murió *carbonizado* [incinerado] en la Embajada de España en Guatemala durante el *sangriento* [bloody] asalto que la policía lanzó contra los que habían tomado el 31 de enero de 1980 esa *sede* [residencia] diplomática en protesta.

6. ¿Cómo murió el padre de Rigoberta?

________________________________________________________________________
________________________________________________________________________

7. Sólo unas semanas después, el 19 de abril, la madre de Rigoberta, Juana Tum, fue *secuestrada* [captured] y asesinada tras bárbaras torturas, por grupos paramilitares. Esto ocurrió como consecuencia de la “*caza de brujas*” [witch hunt] organizada por las fuerzas de seguridad ante el *auge de la sedición* [punto más activo de la rebelión].

7. ¿Cómo murió la madre de Rigoberta?

________________________________________________________________________
________________________________________________________________________

8. La suerte de Rigoberta estaba echada y la ahora galardonada con el Nóbel de la Paz escogió el camino del exilio y de la lucha cívica. Salíó en busca de las *reivindicaciones* [demandas, protestas] de los pueblos indígenas y mestizos pobres de Guatemala. A la vez, dos de sus hermanas eligieron la lucha armada y se incorporaron a uno de los grupos guerrilleros que operan en el país.

8. ¿Cómo reaccionó Rigoberta a sus circunstancias difíciles?

________________________________________________________________________
________________________________________________________________________

8. ¿Cómo reaccionaron las hermanas de Rigoberta a sus circunstancias difíciles?

________________________________________________________________________
________________________________________________________________________
9. **El triunfo de Rigoberta**

Al conocerse la concesión de Nóbel, las campanas de todos los templos del altiplano indígena de Guatemala y de las iglesias de barrios populares de la capital, anunciaron con júbilo el triunfo de Rigoberta Menchú. Es un triunfo que la población indígena (unos 5,6 de los nueve millones de habitantes del país) reconoce como propio.


9 y 10. ¿Cómo reaccionó el pueblo indígena al oír de la concesión del Nóbel?

________________________________________________________________________
________________________________________________________________________

11. Rigoberta dedicará parte del premio a crear una fundación que llevará el nombre de su padre, Vicente Menchú, y que luchará por la vigencia [la aplicación de leyes] de la justicia social y los derechos humanos en Guatemala.

El País, octubre de 1992 (Madrid, España)

11. ¿Qué hará Rigoberta con el dinero?

________________________________________________________________________
________________________________________________________________________

1-11. Rigoberta Menchú seleccionó la cita más abajo como introducción a su autobiografía, Me llamo Rigobeta Menchú y así me nació la conciencia. ¿Por qué crees que seleccionó este trozo?

________________________________________________________________________
________________________________________________________________________

“Siempre hemos vivido aquí: es justo que continuemos viviendo donde nos place [gusta] y donde queremos morir. Sólo aquí podemos resucitar; en otras parte jamás volveríamos a encontrarnos completos y nuestro dolor sería eterno.” (Popol Vuh)

Los perros mágicos de los volcanes
por Manlio Argueta

1. En los volcanes de El Salvador habitan perros mágicos que se llaman cadejos. Se parecen a los lobos aunque no son lobos. Y tienen el donaire [elegancia] de venados [deer] aunque no son venados. Se alimentan de las semillas [seeds] que caen de las campánulas [morning glories], esas lindas flores que cubren los volcanes y parecen campanitas.

1. Identifica dos características físicas de los cadejos:
________________________________________________________________________
________________________________________________________________________

2. La gente que vive en las faldas de los volcanes quiere mucho a los cadejos. Dice que los cadejos son los tataranietos [great-great-grandchildren] de los volcanes y que siempre han protegido a la gente del peligro y la desgracia. Cuando la gente de los volcanes viaja de un pueblo a otro, siempre hay un cadejo que las acompaña. Si un cipote [niño] está por pisar una culebra [serpiente] o caerse en un agujero [hole], el cadejo se convierte en un soplo [gust] de viento que lo desvía [diverts] del mal paso.

3. Si un anciano se cansa de tanto trabajar bajo el sol ardiente, un cadejo lo transporta a la sombra de un árbol cercano. Por todo esto, la gente de los volcanes dice que, si no fuera por la ayuda de los cadejos, no hubiera podido sobrevivir hasta hoy en día. Pero lamentablemente, no todos han querido siempre a los cadejos. ¡Qué va! A don Tonio y a sus trece hermanos, que eran los dueños de la tierra de los volcanes, no les gustaban los cadejos para nada.

-- ¡Los cadejos hechizan [bewitch] a la gente y la hacen perezosa! --dijo un día don Tonio a sus hermanos.
1-3. ¿Por qué se llaman los animales los perros “mágicos”?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

4. Y los trece hermanos de don Tonio contestaron: --Sí, es cierto. La gente ya no quiere trabajar duro para nosotros. Quieren comer cuando tienen hambre. Quieren beber cuando tienen sed. Quieren descansar bajo la sombra de un árbol cuando arde [quema] el sol. ¡Y todo eso por los cadejos!

3-4. Explica quiénes eran don Tonio y sus trece hermanos y que creían ellos.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

5. Entonces, don Tonio y sus hermanos llamaron a los soldados de plomo [lead] y los mandaron para los volcanes a cazar [to hunt] cadejos. Los soldados se pusieron en camino con sus tiendas de campaña [tiendas... tents], sus cantimploras [canteens] y sus armas centellantes [brillantes] y se dijeron: --Vamos a ser los soldados de plomo más bellos y más respetados del mundo. Vestiremos uniformes con charreteras [adornos (en el hombro)] de plata, iremos a fiestas de cumpleaños y todo el mundo obedecerá nuestras órdenes.

5. ¿Qué hicieron los soldados de plomo?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

6. Subraya las descripciones específicas de los dos volcanes.

6. Los soldados de plomo marcharon hacia el volcán Tecapa, que es mujer y viste un ropaje espléndido de agua y un sombrero de nubes. Y marcharon hacia Chaparrastique, un volcán hermoso que lleva siempre su sombrero blanco de humo [smoke] caliente.
7. --Cazaremos a los cadejos mientras duermen – dijeron los soldados de plomo --. Así podremos tomarlos desprevenidos [off guard] sin correr ningún riesgo [peligro].

Pero no sabían que los cadejos visten un traje de luz de día y de aire, con lo cual [con... with which] se hacen transparentes. Los soldados de plomo buscaban y buscaban a los cadejos, pero no encontraban a ninguno. Los soldados se pusieron furibundos [furiosos]. Comenzaron a pisotear [caminar en] las campánulas y a aplastar [to crush] a sus semillitas. –Ahora, los cadejos no tendrán qué comer – dijeron.

8. Los cadejos nunca habían corrido tanto peligro. Así es que buscaron la ayuda de Tecapa y Chaparrastique. Toda la noche los cadejos hablaron con los volcanes hasta que comentó Tecapa: --Dicen ustedes que son soldados de plomo. ¿El corazón y el cerebro [brain] son de plomo también?

--¡Sí! --respondieron los cadejos--. ¡Hasta sus pies están hechos de plomo!

--Entonces, ¡ya esta! [ya... it's settled!] --dijo Tecapa.

9. Y Tecapa le dijo a Chaparrastique: --Mira, como yo tengo vestido de agua y vos tenés [vos... tú tienes] sombrero de fumarolas [humo], simplemente comenzás a abanicare [comenzás... begin to fan yourself] con el sombrero por todo tu cuerpo hasta que se caliente la tierra y entonces yo comienzo a sacudirme [agitarme] mi vestido de agua.

-- Y Tecapa se lo sacudió.

--Y eso, ¿qué daño les puede hacer? -- preguntaron los cadejos.

-- Bueno – dijo Tecapa --, probemos y ya veremos [probemos... let’s just wait and see].

10. Al día siguiente, cuando los soldados de plomo venían subiendo los volcanes, comenzó el Chaparrístique a quitarse el sombrero de fumarolas y a soplar sobre todo su cuerpo, hasta que ni él mismo aguantaba [toleraba] el calor. Al principio, los soldados sentían sólo una picazón [itching], pero al ratito los pies se les comenzaron a derretir [liquidar, disolver]. Entonces, Tecapa se sacudió el vestido y empezó a remojarles [to soak them]. Y los cuerpos de los soldados chirriaban [sizzled], como cuando se le echa agua a una plancha [iron] caliente.

11. Los soldados de plomo se sentían muy mal y se sentaron a llorar sobre las piedras. Pero éstas estaban tan calientes que les derretían el trasero [les... they melted their bottoms]. Fue así que los soldados de plomo se dieron cuenta que no era posible derrotar [to defeat] a los cadejos, ni pisotear a las campánulas, y, en fin, ni subir a los volcanes a hacer el mal. Y sabiendo que tenían la debilidad [fragilidad] de estar hechos de plomo, lo mejor era cambiar de oficio [profesión] y dedicarse a cosas más dignas [honradas].
7-11. ¿Qué pasó a los soldados de plomo cuando Chaparrastique se quitó el sombrero de humo? ¿Por qué?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

12. Desde entonces hay paz en los volcanes de El Salvador. Don Tonio y sus hermanos huyeron [se fueron] a otras tierras, mientras que los cadejos y la gente de los volcanes celebraron una gran fiesta que se convirtió en una inmensa fiesta nacional.

12. ¿Por qué se celebra una fiesta nacional?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

1-12. Explica la importancia y el simbolismo en esta lectura del siguiente:

A. semillas de las campánulas

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

B. el uso de vos entre Tecapa y Chaparrastique

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

C. el uso de los soldados de plomo

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

APPENDIX C

T.R.I. HOMEWORK SHEETS
Tiempo libre de Guillermo Samperio

Todas las mañanas compro el periódico y todas las mañanas, al leerlo, me mancho [ensucio] los dedos con tinta [ink]. Nunca me ha importado ensuciármelos con tal de estar al día [informado] en las noticias. Pero esta mañana sentí un gran malestar [intranquilidad] apenas toqué el periódico. Creí que solamente se trataba de uno de mis acostumbrados mareos [dizziness]. Pagué el importe del diario y regresé a mi casa. Mi esposa había salido de compras. Me acomodé en mi sillón favorito, encendí un cigarro y me puse a leer la primera página. Luego de enterarme de que un jet se había desplomado [caído del cielo], volví a sentirme mal, vi mis dedos y los encontré más tiznados [sucios] que de costumbre. Con un dolor de cabeza terrible, fui al baño, me lavé las manos con toda calma y, ya tranquilo, regresé al sillón. Cuando iba a tomar mi cigarro, descubrí que una mancha negra cubría mis dedos. De inmediato retorné al baño, me tallé con zacate [scrubber], piedra pómez [roca] y, finalmente, me lavé con blanqueador; pero el intento fue inútil, porque la mancha creció y me invadió hasta los codos [elbows]. Ahora, más preocupado que molesto [de mal humor], llamé al doctor y me recomendó que lo mejor era que tomara unas vacaciones, o que durmiera. En el
momento en que hablaba por teléfono, me di cuenta de [supe] que, en realidad, no se trataba de una mancha, sino de un número infinito de letras pequeñísimas, apeñuzcadas [agrupadas], como una inquieta [intranquila] multitud de hormigas [ants] negras.

Después, llamé a las oficinas del periódico para elevar mi más rotunda protesta; me contestó una voz de mujer, que solamente me insultó y me trató de loco. Cuando colgué [I hung up], las letritas habían avanzado ya hasta mi cintura [waist]. Asustado [Con miedo], corrí hacia la puerta de entrada; pero, antes de poder abrirla, me flaquearon [se me doblaron] las piernas y caí estrepitosamente [con mucho ruido].

Tirado [Extendido en el suelo] bocarriba descubrí que, además de la gran cantidad de letrashormiga que ahora ocupaban todo mi cuerpo, había una que otra fotografía. Así estuve durante varias horas hasta que escuché que abrían la puerta. Me costó trabajo hilar [conectar] la idea, pero al fin pensé que había llegado mi salvación. Entró mi esposa, me levantó del suelo, me cargó [llevó] bajo el brazo, se acomodó en mi sillón favorito, me hojeó despreocupadamente y se puso a leer.
1. ¿Explica lo que ocurrió mientras el hombre estaba leyendo el periódico?

________________________________________________________________________
________________________________________________________________________

2. ¿Por qué fue el hombre al baño?

________________________________________________________________________
________________________________________________________________________

3. ¿Y qué pasó después?

________________________________________________________________________
________________________________________________________________________

4. ¿Qué piensas que está pasando?

________________________________________________________________________
________________________________________________________________________

5. Describe al hombre físicamente y emocionalmente.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

6. Identifica las reacciones específicas del médico y la mujer.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
7. ¿El médico y la mujer le creían al hombre?

________________________________________________________________________
________________________________________________________________________

________________________________________________________________________

8. Identifica las acciones específicas de la esposa.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

9. ¿Qué le pasó al hombre en el cuento?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

10. Escribe tu propia interpretación del título.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Rigoberta Menchú: Del apocalipsis a la gloria
por José Elías

Rigoberta Menchú, indígena maya-quiché, a los treinta y tres años, se convirtió en símbolo universal del sufrimiento de su pueblo al ser galardonada [premiada] con el Premio Nóbel de la Paz. Su vida es una larga historia marcada por la muerte violenta de sus padres y un hermano, en crímenes atribuidos a las fuerzas de seguridad de su país.

El premio, el segundo Nóbel concedido a un guatemalteco tras el de Literatura otorgado a Miguel Ángel Asturias en 1967, ha provocado en este país varias reacciones. Para los indígenas, es el reconocimiento a su lucha [batalla] contra la segregación racial de la que son víctimas. Para los sectores más privilegiados significa sólo un acto de carácter político, destinado a desestabilizar el país.

Al margen de esta polémica [controversia], es evidente que el premio les da a los guatemaltecos una gran oportunidad para alcanzar la concordia [conseguir la unión] nacional, en momentos en que las conversaciones de paz entre el gobierno y la guerrilla parecen condenadas al fracaso [destinadas a salir mal].


Posteriormente, durante su adolescencia, viajó hacia la Ciudad de Guatemala para realizar [hacer] las tareas del servicio doméstico. En esto fue fiel a [siguió] una tradición que parece formar parte del ciclo vital de las mujeres de zonas rurales del país. Pero el destino tenía un camino trazado [planeado] para Rigoberta Menchú. Hija de un campesino con una innata conciencia social, fue testigo [witness], en su niñez, del asesinato de un hermano suyo de dieciséis años. Él fue víctima de terratenientes [ricos...
con propiedad] que querían despojar [quitar, robar] a los indígenas de sus terrenos, según se relata en su biografía oficial.

Este crimen, en el que se señala alguna complicidad de [conspiración con] las autoridades, hace que el padre de Rigoberta, Vicente Menchú, empiece realizar una enorme labor de organización entre sus vecinos [las personas del pueblo]. Esta actividad constituye la primera escuela de conciencia social para la hoy galardonada.


Sólo unas semanas después, el 19 de abril, la madre de Rigoberta, Juana Tum, fue secuestrada [captured] y asesinada tras bárbaras torturas, por grupos paramilitares. Esto ocurrió como consecuencia de la “caza de brujas” [witch hunt] organizada por las fuerzas de seguridad ante el auge de la sedición [punto más activo de la rebelión].

La suerte de Rigoberta estaba echada y la ahora galardonada con el Nóbel de la Paz escogió el camino del exilio y de la lucha cívica. Salió en busca de las reivindicaciones [demandas, protestas] de los pueblos indígenas y mestizos pobres de Guatemala. A la vez, dos de sus hermanas eligieron la lucha armada y se incorporaron a uno de los grupos guerrilleros que operan en el país.

Al conocerse la concesión de Nóbel, las campanas de todos los templos del altiplano indígena de Guatemala y de las iglesias de barrios populares de la capital, anunciaron con júbilo el triunfo de Rigoberta Menchú. Es un triunfo que la población indígena (unos 5,6 de los nueve millones de habitantes del país) reconoce como propio.


Rigoberta dedicará parte del premio a crear una fundación que llevará el nombre de su padre, Vicente Menchú, y que luchará por la vigencia [la aplicación de leyes] de la justicia social y los derechos humanos en Guatemala.

El País, octubre de 1992 (Madrid, España)
Answer all questions completely by answering in **Spanish using your own words!**

1. **¿Cómo reaccionaron las indígenas guatemaltecas a la victoria de Menchú?**

   ____________________________________________________________

   ____________________________________________________________

2. **¿Cómo reaccionó la clase alta en Guatemala a la victoria de Menchú?**

   ____________________________________________________________

   ____________________________________________________________

3. **¿Por qué reaccionaron diferente los dos grupos?**

   ____________________________________________________________

   ____________________________________________________________

4. **Identifica dos tradiciones (una de los niños y la otra de las adolescentes) de los campesinos.**

   ____________________________________________________________

   ____________________________________________________________

   ____________________________________________________________

5. **Explica de dónde Rigoberta recibió sus primeras lecciones en conciencia social.**

   ____________________________________________________________

   ____________________________________________________________

6. **¿Cómo murió el padre de Rigoberta?**

   ____________________________________________________________

   ____________________________________________________________

7. **¿Cómo murió la madre de Rigoberta?**

   ____________________________________________________________

   ____________________________________________________________
8. ¿Cómo reaccionó Rigoberta a sus circunstancias difíciles?
________________________________________________________________________
________________________________________________________________________

9. ¿Cómo reaccionó las hermanas de Rigoberta a sus circunstancias difíciles?
________________________________________________________________________
________________________________________________________________________

10. ¿Cómo reaccionó el pueblo indígena al oír de la concesión del Nóbel?
________________________________________________________________________
________________________________________________________________________

11. ¿Qué hará Rigoberta con el dinero?
________________________________________________________________________
________________________________________________________________________

12. Rigoberta Menchú seleccionó la cita más abajo como introducción a su autobiografía, Me llamo Rigoberta Menchú y así me nació la conciencia. ¿Por qué crees que seleccionó este trozo?
________________________________________________________________________
________________________________________________________________________

“Siempre hemos vivido aquí: es justo que continuemos viviendo donde nos place [gusta] y donde queremos morir. Sólo aquí podemos resucitar; en otras parte jamás volveríamos a encontrarnos completos y nuestro dolor sería eterno.” (Popol Vuh)

En los volcanes de El Salvador habitan perros mágicos que se llaman cadejos. Se parecen a los lobos aunque no son lobos. Y tienen el donaire [elegancia] de venados [deer] aunque no son venados. Se alimentan de las semillas [seeds] que caen de las campánulas [morning glories], esas lindas flores que cubren los volcanes y parecen campanitas.

La gente que vive en las faldas de los volcanes quiere mucho a los cadejos. Dice que los cadejos son los tataranietos [great-great-grandchildren] de los volcanes y que siempre han protegido a la gente del peligro y la desgracia. Cuando la gente de los volcanes viaja de un pueblo a otro, siempre hay un cadejo que las acompaña. Si un cipote [niño] está por pisar una culebra [serpiente] o caerse en un agujero [hole], el cadejo se convierte en un soplo [gust] de viento que lo divierte [diverts] del mal paso.

Si un anciano se cansa de tanto trabajar bajo el sol ardiente, un cadejo lo transporta a la sombra de un árbol cercano. Por todo esto, la gente de los volcanes dice que, si no fuera por la ayuda de los cadejos, no hubiera podido sobrevivir hasta hoy en día. Pero lamentablemente, no todos han querido siempre a los cadejos. ¡Qué va! A don Tonio y a sus trece hermanos, que eran los dueños de la tierra de los volcanes, no les gustaban loscadejos para nada.

-- ¡Los cadejos hechizan [bewitch] a la gente y la hacen perezosa! --dijo un día don Tonio a sus hermanos
Y los trece hermanos de don Tonio contestaron: --Sí, es cierto. La gente ya no quiere trabajar duro para nosotros. Quieren comer cuando tienen hambre. Quieren beber cuando tienen sed. Quieren descansar bajo la sombra de un árbol cuando arde [quema] el sol. ¡Y todo eso por los cadejos!

Entonces, don Tonio y sus hermanos llamaron a los soldados de plomo [lead] y los mandaron para los volcanes a cazar [to hunt] cadejos. Los soldados se pusieron en camino con sus tiendas de campaña [tiendas... tents], sus cantimploras [canteens] y sus armas centellantes [brillantes] y se dijeron: --Vamos a ser los soldados de plomo más bellos y más respetados del mundo. Vestiremos uniformes con charreteras [adornos (en el hombro)] de plata, iremos a fiestas de cumpleaños y todo el mundo obedecerá nuestras órdenes.

Los soldados de plomo marcharon hacia el volcán Tecapa, que es mujer y viste un ropaje espléndido de agua y un sombrero de nubes. Y marcharon hacia Chaparrastique, un volcán hermoso que lleva siempre su sombrero blanco de humo [smoke] caliente.

--Cazaremos a los cadejos mientras duermen – dijeron los soldados de plomo --. Así podremos tomarlos desprevenidos [off guard] sin correr ningún riesgo [peligro].

Pero no sabían que los cadejos visten un traje de luz de día y de aire, con lo cual [con... with which] se hacen transparentes. Los soldados de plomo buscaban y buscaban a los cadejos, pero no encontraban a ninguno. Los soldados se pusieron furibundos [furiosos]. Comenzaron a pisotear [caminar en] las campánulas y a aplastar [to crush] a sus semillitas. --Ahora, los cadejos no tendrán qué comer -- dijeron.

Los cadejos nunca habían corrido tanto peligro. Así es que buscaron la ayuda de Tecapa y Chaparrastique. Toda la noche los cadejos hablaron con los volcanes hasta que comentó Tecapa: --Dicen ustedes que son soldados de plomo. ¿El corazón y el cerebro [brain] son de plomo también?

--¡Sí! --respondieron los cadejos--. ¡Hasta sus pies están hechos de plomo!

--Entonces, ¡ya esta! [ya... it’s settled!] --dijo Tecapa.

Y Tecapa le dijo a Chaparrastique: --Mira, como yo tengo vestido de agua y vos tenés [vos... tú tienes] sombrero de fumarolas [humo], simplemente comenzás a abanicare [comenzás... begin to fan yourself] con el sombrero por todo tu cuerpo hasta que se caliente la tierra y entonces yo comienzo a sacudirme [agitarme] mi vestido de agua.
-- Y Tecapa se lo sacudió.
--Y eso, ¿qué daño les puede hacer? -- preguntaron los cadejos.
-- Bueno – dijo Tecapa --, probemos y ya veremos [probemos... let’s just wait and see].

Al día siguiente, cuando los soldados de plomo venían subiendo los volcanes, comenzó el Chaparristique a quitarse el sombrero de fumarolas y a soplar sobre todo su cuerpo, hasta que ni él mismo aguantaba [toleraba] el calor. Al principio, los soldados sentían sólo una picazón [itching], pero al ratito los pies se les comenzaron a derretir [liquidar, disolver]. Entonces, Tecapa se sacudió el vestido y empezó a remojarles [to soak them]. Y los cuerpos de los soldados chirriaban [sizzled], como cuando se le echa agua a una plancha [iron] caliente.

Los soldados de plomo se sentían muy mal y se sentaron a llorar sobre las piedras. Pero éstas estaban tan calientes que les derretían el trasero [les... they melted their bottoms]. Fue así que los soldados de plomo se dieron cuenta que no era posible derrotar [to defeat] a los cadejos, ni pisotear a las campánulas, y, en fin, ni subir a los volcanes a hacer el mal. Y sabiendo que tenían la debilidad [fragilidad] de estar hechos de plomo, lo mejor era cambiar de oficio [profesión] y dedicarse a cosas más dignas [honradas].

Desde entonces hay paz en los volcanes de El Salvador. Don Tonio y sus hermanos huyeron [se fueron] a otras tierras, mientras que los cadejos y la gente de los volcanes celebraron una gran fiesta que se convirtió en una inmensa fiesta nacional.
• Fill in all blanks completely by answering in Spanish using your own words!

1. Identifica dos características físicas de los cadejos:

________________________________________________________________________

________________________________________________________________________

2. ¿Por qué los animales se llaman los perros “mágicos”?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

3. Explica quiénes eran don Tonio y sus trece hermanos y qué creían ellos.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

4. ¿Qué hicieron los soldados de plomo?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
5. Describa los dos volcanes.
________________________________________________________________________
________________________________________________________________________

6. Identifica las acciones de los soldados de plomo.
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

7. ¿Qué pasó a los soldados de plomo cuando Chaparrastique se quitó el sombrero de humo? ¿Por qué?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

8. ¿Por qué se celebra una fiesta nacional?
________________________________________________________________________
________________________________________________________________________
9. Explica la importancia y el simbolismo en esta lectura de lo siguiente:
(You may need to research your answer.)

A. las semillas de las campánulas

________________________________________________________________________
________________________________________________________________________

B. el uso de vos entre Tecapa y Chaparrastique

________________________________________________________________________
________________________________________________________________________

C. el uso de los soldados de plomo

________________________________________________________________________
________________________________________________________________________

APPENDIX D

LINGUISTIC SUPPORT SHEET
Linguistic Support Sheet

1) Tener razón – to be correct

   Tienes razón.
   No tienes razón.

2) Estar de acuerdo – to agree

   Estoy de acuerdo.
   No estoy de acuerdo

3) Subrayar – to underline

   Subraya aquí.
   No subrayes aquí.

Respuesta – answer

Opinión – opinión

Manera – way

Opción – option

Error – mistake

Cambio – change

Turno – turn
APPENDIX E

STRUCTURED LOG AND FREQUENCY CHECKLIST
*Recruit
  *Simplify
  *Maintain
  *Mark Features
  *Caregiver Talk

*Control Frustration
  *Confirmation Checks
  *Elicit More Language
  *Activate Background Knowledge

Structured Log

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

126
**Frequency Checklist**

*Note (circle) how often you witnessed the following scaffolding functions and language promoting assistance operating in student-to-student interaction during the I.R.I.S. classroom intervention. Also, note (circle) how often you as the instructor provided the following during the interaction.*

1 = I didn’t observe this  
A = I didn’t use this  

2 = I observed a few examples of this  
B = I used this a few times  

3 = I observed many examples of this  
C = I often used this  

### Scaffolding functions:

1. Recruiting interest:  
   1  2  3  A  B  C  

2. Simplifying the task:  
   1  2  3  A  B  C  

3. Maintaining pursuit of goal:  
   1  2  3  A  B  C  

4. Marking critical features:  
   1  2  3  A  B  C  

5. Controlling frustration:  
   1  2  3  A  B  C  

6. Demonstrating/modeling:  
   1  2  3  A  B  C  

### Language Promoting Assistance:

A. Caregiver talk:  
   1  2  3  A  B  C  

B. Confirmation checks:  
   1  2  3  A  B  C  

C. Activating background knowledge:  
   1  2  3  A  B  C  

D. Eliciting more language:  
   1  2  3  A  B  C
APPENDIX F

STUDENT OBSERVATION SURVEY
Student Observation Survey

Before responding to each question, think carefully about the interactions that occurred during the task (the I.R.I.S. group work).

Answer each question completely by providing any examples of the action that you remember!

1. *I generated interest in the task.*
   
   A. Never   B. Occasionally   C. Frequently  

   Example(s):

   

   

   

2. *I simplified the task.*
   
   A. Never   B. Occasionally   C. Frequently  

   Example(s):

   

   

3. *I encouraged others.*
   
   A. Never   B. Occasionally   C. Frequently  

   Example(s):

   

   

   

   

129
4. I corrected the oral mistakes of others.
   A. Never       B. Occasionally       C. Frequently
   
   Example(s):
   
   
   

5. I alleviated frustration with the task.
   A. Never       B. Occasionally       C. Frequently
   
   Example(s):
   
   
   

6. I demonstrated the correct version of the task.
   A. Never       B. Occasionally       C. Frequently
   
   Example(s):
   
   
   

7. I spoke slowly and clearly to help others.
   A. Never       B. Occasionally       C. Frequently
   
   Example(s):
   
   
   

130
8. I clarified by asking questions such as, “What do you mean?,” etc.
   A. Never    B. Occasionally    C. Frequently

Example(s):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

9. I made others think of any prior information linking to the questions.
   A. Never    B. Occasionally    C. Frequently

Example(s):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

10. I expanded the responses of others by making statements such as, “Tell me more,” etc.
    A. Never    B. Occasionally    C. Frequently

Example(s):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

11a. Note any other ways you facilitated oral conversation during the task.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

11b. Note any other ways you facilitated oral comprehension during the task.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

131
12a. Note any ways your instructor facilitated oral conversation.

List any of the ten activities from before (use the questions #s to refer to the activity) that you observed.

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

12b. Note any ways your instructor facilitated oral comprehension.

List any of the ten activities from before (use the questions #s to refer to the activity) that you observed.

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

12c. Note any ways your instructor kept your group on-task during the activity.

List any of the ten activities from before (use the questions #s to refer to the activity) that you observed.

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
APPENDIX G

MULTIPLE-CHOICE IDENTIFICATION QUIZZES
Multiple-Choice Identification Quiz
Tiempo Libre de Guillermo Samperio

Fill in the blanks with correct responses.

1. ¿Con qué frecuencia compraba el periódico el narrador? __________
   A. todos los fines de semana
   B. todos los domingos
   C. todas las mañanas
   D. solamente cuando él tenía tiempo libre

2. ¿Qué estaba haciendo la esposa del hombre? __________
   A. haciendo la compra
   B. leyendo un libro
   C. trabajando en el estudio
   D. cocinando el desayuno

3. ¿Cuáles fueron las primeras noticias que leyó el hombre? __________
   A. sobre un accidente fatal de automóvil
   B. sobre las elecciones locales
   C. sobre el éxito extraordinario del equipo boxeo nacional
   D. sobre la caída de un jet

4. ¿Qué ocurrió mientras el hombre estaba leyendo el periódico? __________
   A. sintió un gran malestar
   B. comió rápidamente su desayuno
   C. charló con su esposa
   D. oyó tres explosiones inesperadas

5. Después de ir al baño, ¿qué descubrió el hombre? __________
   A. una mancha negra cubriendo sus dedos
   B. una quemadura grave en la mano
   C. un gran agujero en su sillón
   D. el resto de su desayuno

134
6. ¿Cómo reaccionó el médico a la llamada telefónica del hombre? __________
   A. le recomendó que visitara su oficina inmediatamente
   B. le recomendó que tomará unas vacaciones
   C. llamó a una ambulancia
   D. trató de calmar al hombre

7. ¿Cómo reaccionó la mujer a la llamada del hombre? __________
   A. trató de calmar al hombre
   B. llamó a una ambulancia
   C. le recomendó un psiquiatra
   D. le insultó y le trató de loco

8. “Una inquieta multitud de hormigas negras” se refiere a: __________
   A. las alucinaciones extrañas del hombre
   B. las letras pequeñísimas que cubren las manos del hombre
   C. los insectos que cubren y que comen el desayuno
   D. los pensamientos irracionales del hombre acerca de su situación

9. ¿Qué le pasó al hombre cuando corrió hacia la puerta? __________
   A. se le doblaron las piernas y se cayó
   B. por fin se escapó de su casa encantada
   C. se murió inmediatamente
   D. descubrió que no existía la puerta

10. ¿Al final del cuento, cómo reaccionó la esposa? __________
    A. gritó, lloró y se desmayó
    B. comió el resto del desayuno
    C. se refugió en el armario
    D. se sentó y se puso a leer
Multiple-Choice Identification Quiz
Rigoberta Menchú: del apocalipsis a la gloria
de José Elías

Fill in the blanks with the correct responses.

1. Cuando Rigoberta Menchú ganó el Premio Nóbel, los indígenas de Guatemala reaccionaron con ____________ .
   A. deprecio hacia una mujer tan inculta
   B. esperanza de una campaña política de Menchú para alcaldesa
   C. felicidad por el reconocimiento de su lucha contra la segregación
   D. miedo de la posibilidad de anarquía social en el país

2. Este guatemalteco recibió el primer Nóbel en 1967:
   A. Camilo José Cela
   B. Juan Ramón Jiménez
   C. Miguel Ángel Asturias
   D. Pablo Neruda

3. La niñez de Rigoberta Menchú era ____________ .
   A. difícil – porque tenía que trabajar en las fincas
   B. optimista – porque iba a escuela para lograr una vida mejor para su familia
   C. solitaria – porque vivía afuera de su familia en el sur del país
   D. violenta – porque murieron los dos padres de ella

4. El hermano de Rigoberta Menchú fue ____________ .
   A. asesinado por los terratenientes
   B. incinerado por la policía
   C. rescatado por los guerrilleros
   D. secuestrado por grupos paramilitares
5. El padre de Rigoberta Menchú realizó una enorme labor de organización entre __________.

A. fincas  
B. guerrilleros  
C. mujeres  
D. vecinos

6. El padre de Rigoberta Menchú murió cuando fue __________.

A. ahogado en un accidente  
B. ahorcado por una muchedumbre  
C. matado por los terratenientes  
D. quemado vivo por la policía

7. ¿Después de la muerte de su madre, cómo reaccionaron las hermanas de Rigoberta?

__________

A. apoyaron la candidatura política de Rigoberta  
B. crearon una fundación para las víctimas de la guerra civil  
C. se incorporaron a uno de los grupos guerrilleros  
D. salieron a protestar a favor de los pobres

8. La población indígena representa __________ de la población de Guatemala.

A. casi el total  
B. una mayoría  
C. aproximadamente la mitad  
D. una minoría

9. Garlardonada con el Nóbel de la Paz, Rigoberta Menchú __________.

A. escogió el exilio  
B. les invitó a sus hermanas a vivir con ella  
C. se matriculó en la universidad  
D. fundó una escuela

10. Rigoberta Menchú le dio el nombre de __________ a su fundación.

A. Las Hermanas de Justicia  
B. La Resistencia Indígena y Popular  
C. Juana Tum  
D. Vicente Menchú
Multiple-Choice Identification Quiz
Los perros mágicos de los volcanes
de Manlio Argueta

Fill in the blanks with the correct responses.

1. La gente que vive en los volcanes trata a los cadejos como __________.
   A. amigos íntimos
   B. animales salvajes
   C. dioses omnipotentes
   D. enemigos de su tierra natal

2. Los cadejos se alimentan de __________.
   A. culebras
   B. frutas
   C. semillas
   D. venados

3. Cuando un niño está en peligro, un cadejo __________.
   A. se convierte en un soplo de viento
   B. hechiza al niño con su magia
   C. huele las flores que cubren los volcanes
   D. informa a don Tonio

4. Cuando un anciano se cansa de tanto trabajo, un cadejo __________.
   A. construye un traje de aire y lluvia
   B. crea un riachuelo de agua dulce
   C. refuerza su resistencia
   D. lo transporta a la sombra de un árbol

5. Don Tonio y sus hermanos creían que los cadejos hacían a la gente de los volcanes __________.
   A. estúpida
   B. hambrienta
   C. loca
   D. perezosa
6. Los soldados de plomo eran ___________.
   A. altos y delgados
   B. bellos y respetados
   C. desorganizados y sucios
   D. emocionantes y felices

7. Siguiendo las órdenes de don Tonio, los soldados de plomo ___________.
   A. charlaron con Tecapa y Chaparrastique
   B. comieron las frutas de los cadejos
   C. destruyeron las campánulas
   D. mataron a un cadejo

8. ¿Qué hizo Chaparrastique para ayudar a los cadejos? ___________
   A. se quitó el sombrero de humo
   B. trajo el impermeable de flores
   C. se convirtió en cadejo
   D. creó un terremoto tremendo

9. ¿Qué hicieron los soldados de plomo en respuesta a las acciones de Chaparrastique y Tecapa?
   A. se quitaron sus uniformes de plata
   B. derrotaron a los cadejos
   C. huyeron a otras tierras
   D. se sentaron a llorar

10. La gente tuvo una gran fiesta para __________.
    A. adorar a los perros mágicos
    B. agradecer a los soldados de plomo
    C. celebrar la paz en los volcanes
    D. dedicar la montaña a don Tonio
Master Checklist: Idea Units

Tiempo Libre

Circle the number if the recall essay contains the idea unit.

1. Every morning the man always buys a paper.
2. The man always reads the paper.
3. The man always stains his hands while reading the paper.
4. The stains never bother him, as long as he reads the news.
5. This morning he feels discomfort/uneasiness when he touches the paper.
6. He thinks this was typical.
7. He pays for the paper.
8. He returns home.
9. His wife already left to go shopping.
10. He sits down to read in his favorite chair.
11. He lights a cigar.
12. He starts to read the first page.
13. He reads about a jet crash.
14. He feels bad again.
15. He notices dirtiness on fingers.
16. He has a headache.
17. He goes to the restroom.
18. He washes his hands.
19. He returns to the chair.
20. He goes to get his cigar.
21. He discovers a black stain covering his hand.
22. He returns to the restroom.
23. He scrubs the spot.
24. He uses several items - scrubber, rock, soap.
25. The scrubbing didn’t work.
26. The stain grows.
27. It spreads to his elbows.
28. He gets worried.
29. He calls the doctor.
30. The doctor recommends taking a vacation or sleep.
31. He realizes that the stain resembles many letters.
32. The letters resemble ants.
33. He calls the newspaper to protest.
34. A woman answers.
35. She mocks and insults him as if he were crazy.
36. He hangs up.
37. The letters now cover him to his waist.
38. He gets afraid.
39. He ran to the door.
40. He doesn’t open the door.
41. His knees buckle.
42. He loudly falls.
43. He falls down on the floor.
44. He lies on the ground.
45. His mouth is open.
46. The letters are now photographs on his body.
47. He lies confused on the floor.
48. He lies for several hours.
49. He thinks someone has arrived to save him.
50. His wife returns and enters.
51. She lifts him up.
52. She puts him under her arm.
53. She sits in the chair.
54. She leafs through him.
55. She begins to read the paper.

Total Score:  
Main Idea Score:  
Detail Score:
Rigoberta Menchú

Circle the number if the recall essay contains the idea unit.

1. Rigoberta Menchú was maya-quiché.
2. She was twenty-three.
3. She became a universal symbol of the suffering of the Guatemalan people.
4. This happened when she won the Nobel Peace Prize.
5. Her life is a long history marked by the violent death of her parents and brother.
6. The state security forces caused these deaths.
7. Another Guatemalan, Miguel Ángel Asturias, won the Nobel Prize in Literature.
8. He won the prize in 1967.
9. This was the first Nobel Prize won by a Guatemalan.
10. Menchu’s prize provoked various reactions.
11. The indigenous groups considered it an acknowledgement of their battle against racial segregation.
12. The privileged classes considered it a political act destined to destabilize the country.
13. On the margin of the polemic, it is evident that the prize gives Guatemalans an opportunity to reach national unity.
14. This comes at a time when conversations of peace between the government and guerrillas seem destined to fail.
15. Rigoberta was born on June 9, 1959.
16. She was born in the town of Chimel.
17. She was born in the province of Uspantán.
18. This is in Quiché in North Guatemala.
19. She began to work at age 5.
20. She began to work in the fields with her parents.
21. She harvested cotton and coffee from large farms.
22. These farms were in southern Guatemala.
23. All peasant children worked.
24. She earned 20 quetzal cents or fifteen pesetas.
25. Later, as an adolescent, she moved.
26. She went to Guatemala City.
27. She became a maid/servant.
28. This was part of the tradition of rural women.
29. But, destiny had a way planned for Rigoberta Menchú.
30. She was the daughter of a peasant with an innate social conscience.
31. As a child she saw her 16-year brother assassinated.
32. He was a victim of the wealthy that want to rob the poor of their lands.
33. This information is from her official biography.
34. The authorities were involved in the crime.
35. Her father, Vicente Menchú, thus founded a labor organization.
36. This organization drew from among neighbors.
37. This activity was Rigoberta’s first school of social conscience.
38. Tragedy was part of Rigoberta’s journey.
39. Vicente was burnt to death.
40. This occurred in the Spanish embassy in Guatemala.
41. This occurred on January 31, 1980.
42. This happened during a bloody assault by the police against those involved in the strike.
43. Just months before, tragedy had also struck.
44. Rigoberta’s mother, Juana Tum, was captured.
45. She was also tortured.
46. She was killed.
47. This occurred on April 19.
48. Guerrillas did this.
49. This occurred as a consequence of a witch-hunt by security forces against active part of the rebellion.
50. After, she chose exile and civic battle.
51. She left to protest and lobby for the poor indigenous and mestizos of Guatemala.
52. At the same time, her sisters made a choice.
53. They chose to arm themselves and join guerrilla groups in the country.
54. Upon receiving the Nobel Prize, the bells of the rural indigenous temples and the churches of the capital all rang to announce the triumph of Rigoberta Menchú.
55. The indigenous represent 5.6 of the 9 million inhabitants of Latin America.
56. They recognize Rigoberta’s triumph as their own.
57. Supporters prepared a massive celebration in Guatemala City.
58. Rigoberta will dedicate part of the money to creating a foundation.
59. The foundation will be named after her father, Vicente.
60. It will fight for legal social justice and human rights in Guatemala.

Total Score: _________ / 60 = _________%
Main Idea Score: _________ / 24 = _________%
Detail Score: _________ / 36 = _________%
Los Perros Mágicos

Circle the number if the recall essay contains the idea unit.

1. There are volcanoes in El Salvador.
2. Magic dogs live in these volcanoes.
3. The dogs are called cadejos.
4. They look like wolves.
5. They are not wolves.
6. They are elegant like deer.
7. They aren’t deer.
8. They eat seeds.
9. The seeds are from morning glories.
10. The morning glory flowers cover the mountain.
11. The flowers look like lots of little bells.
12. The native people live in the foothills of the volcanoes.
13. The people love the cadejos.
14. They say that the cadejos are the great-great-grandchildren of the volcanoes.
15. They say that the cadejos have always protected the people from danger and disgrace.
16. They say that a cadejo always accompanies them from village to village.
17. They say that a cadejo helps when a snake threatens a child.
18. They say that a cadejo helps when a child falls in a hole.
19. They say that a cadejo helps by becoming a gust of wind.
20. A cadejo helps an old man rest from too much hot sun by bringing the shade.
21. The people say that they would not have survived without the help of the cadejos.
22. Don Tonio and his 13 brothers are owners of the lands.
23. They don’t like the cadejos.
24. Don Tonio talks to his brothers.
25. He says that the cadejos bewitch the people.
26. He says that they make them lazy.
27. The brothers all agree.
28. They say that the people don’t want to work for them.
29. Instead they want to eat when they are hungry.
30. And, they want to drink when they are thirsty.
31. Also, they want to rest under a tree when there is hot sun.
32. The cadejos cause all of this.
33. Don Tonio and his brothers call for the lead soldiers.
34. They order them to hunt the cadejos.
35. The soldiers begin to march with their supplies - tents, canteens, and weapons.
36. They say that they will be the most beautiful and respected lead soldiers in the world.
37. They will dress in silver epaulettes.
38. They will go to birthday parties.
39. Everyone will obey them.
40. They march toward the volcano Tecapa.
41. Tecapa is female.
42. She wears robes of water.
43. She wears a hat of clouds.
44. They march toward Chaparrastique.
45. The volcano is a handsome man.
46. He always wears a white hat of hot smoke.
47. They decide to hunt the cadejos while they sleep.
48. Thus, they will catch them off-guard.
49. They will not endanger themselves.
50. They didn’t know that the cadejos wear a suit of light and air.
51. This suit makes them invisible.
52. The soldiers looked and looked for the cadejos.
53. They couldn’t find them.
54. The soldiers got very angry.
55. They walked in the flowers.
56. They crushed their seeds.
57. Thus, the cadejos couldn’t eat.
58. The cadejos never run from danger.
59. They ask Tecapa and Chaparristique for help.
60. They talk all night to the volcanoes.
61. Tecapa has an idea.
62. She asks again if they are lead soldiers.
63. She asks if their heart and brain are also lead.
64. The cadejos answer affirmatively.
65. They say that they are lead all the way to their feet.
66. Tecapa says that it is settled.
67. Tecapa talks to Chaparristique.
68. She says that she has a suit of water.
69. She says that he has a hat of smoke.
70. Thus, he needs to fan himself with the hat.
71. The earth will heat up.
72. She will begin to shake her suit of water.
73. Tecapa begins to shake.
74. The cadejos ask what hurt this will cause.
75. Tecapa answers to wait and see.
76. The next day the soldiers are climbing the volcanoes.
77. Chaparristique removes his hat of smoke.
78. He blows with his body.
79. He can’t even take the heat.
80. The soldiers feel itching.
81. Then, their feet start to melt.
82. Tecapa removes her outfit.
83. She soaks them.
84. The soldiers sizzle.
85. It sounds like when water hits a hot iron.
86. The soldiers feel bad.
87. They sit down.
88. They cry on the rocks.
89. They melt their bottoms.
90. The soldiers realize that they can’t beat the cadejos.
91. Neither can they trample all the morning glory flowers.
92. Nor can they climb the volcanoes.
93. They can’t do evil.
94. They know that their weakness is being made of lead.
95. They decide to change their profession.
96. They dedicate themselves to good causes.
97. Ever since there has been peace in the volcanoes.
98. Don Tonio and his brothers flee.
99. They flee to other lands.
100. The people and the cadejos celebrate.
101. The celebration becomes a national party.

Total Score: _____ / 101 = _____%
Main Idea Score: _____ / 40 = _____%
Detail Score: _____ / 61 = _____%
APPENDIX I

HUMAN SUBJECT FORM
Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2763
(850) 644-8673 · FAX (850) 644-4392

APPROVAL MEMORANDUM

Date: 2/19/2004

To:
Ransom Gladwin
MC 1523

Dept.: MODERN LANGUAGES AND LINGUISTICS

From: John Tomkowiak, Chair

Re: Use of Human Subjects in Research
    Reading Model Comparison in Intermediate Spanish using the Interactive Reading with
    Instructor Support

The forms that you submitted to this office in regard to the use of human subjects in the proposal
referenced above have been reviewed by the Secretary, the Chair, and two members of the Human
Subjects Committee. Your project is determined to be Exempt per 45 CFR § 46.101(b) 2 and has been
approved by an accelerated review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to
weigh the risk to the human participants and the aspects of the proposal related to potential
risk and benefit. This approval does not replace any departmental or other approvals, which
may be required.

If the project has not been completed by 2/18/2005 you must request renewed approval for
continuation of the project.

You are advised that any change in protocol in this project must be approved by resubmission of the
project to the Committee for approval. Also, the principal investigator must promptly report, in writing,
any unexpected problems causing risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is
reminded that he/she is responsible for being informed concerning research projects involving human
subjects in the department, and should review protocols of such investigations as often as needed to
insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Protection from Research Risks. The
Assurance Number is IRB00000446.

Cc: Dr. Jonita Stepp-Greany
HSC No. 2004.107
REFERENCES


BIOGRAPHICAL SKETCH

Ransom F. Gladwin, IV, was born and raised in Jupiter, Florida, and graduated from the Benjamin School in Palm Beach Gardens, Florida. He received a Bachelor of Arts degree in History and a Master of Arts degree in Education from Furman University in Greenville, South Carolina, and he holds professional teaching certification in History and Spanish from the state of South Carolina. Ransom was a WorldTeach volunteer in the country of Ecuador, where he served as an English as a Foreign Language (EFL) instructor at ESPOL University (Escuela Superior Politécnica del Litoral) and an assistant social worker with Junto con los niños (JUCONI) in the city of Guayaquil. Later, he worked as an English as a Second Language (ESL) instructor, instructor trainer, and curriculum and assessment specialist at Indian River Community College in Stuart and Port St. Lucie, Florida, and as a Spanish instructor and learning specialist at Palm Beach Community College in Palm Beach Gardens, Florida.

Currently, Ransom is completing his Doctorate of Philosophy degree in Spanish with a concentration in Second Language Acquisition from Florida State University in Tallahassee, Florida. While at Florida State, he was the Ada Belle Winthrop-King fellow, a graduate teaching assistant, and assistant to the program coordinator. Ransom married Céline Hardan, a native of Byblos, Lebanon. Ransom recently co-presented, with Jonita Stepp-Greany, a workshop on second-language reading at the annual meeting of the American Association of Teachers of Spanish and Portuguese in Acapulco, Mexico and published a sociolinguistic study conducted among the Guatemalans of South Florida in the Florida Foreign Language Journal.