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**The effects of cultural background on reading comprehension of
ESL learners**

Khalil, Adnan M., Ph.D.
The University of Arizona, 1989

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**THE EFFECTS OF CULTURAL BACKGROUND ON
READING COMPREHENSION OF ESL LEARNERS**

by

Adnan Khalil

A Dissertation Submitted to the Faculty of the
DIVISION OF LANGUAGE, READING AND CULTURE
In Partial Fulfillment of the Requirements
For the Degree of
DOCTOR OF PHILOSOPHY
WITH A MAJOR IN READING
In the Graduate College
THE UNIVERSITY OF ARIZONA

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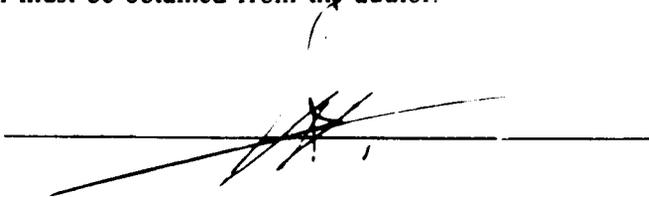
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To My Father

Mohiddin Khalil

ACKNOWLEDGMENT

The author would like to express thanks for the help and confidence provided by Drs. Judy Mitchell, Wilbur Ames, Patricia Anders, Roseann Gonzalez and Frank Pialorsi.

A special thanks to the reading experts: Dr. Judy Mitchell, Dr. John Bradley and Dr. (to be) Deborah Tidwell.

My sincere thanks to Dr. (to be) Michael J. Wagner, who helped immensely with the design of the study and the analysis of data.

Thanks to my family for their support and patience.

Special thanks to all of my friends who are too many to mention here.

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ABSTRACT

This study investigates the effects of cultural background on reading comprehension of ESL learners. Theoretically, this study emanates from schema theory. That is, the readers' comprehension is believed to be affected by background knowledge.

Forty-eight ESL students, sorted into three groups (beginning, intermediate and advanced), were randomly assigned to the treatment, which was the reading of a familiar and unfamiliar, high difficulty and/or low difficulty passages.

Procedures included a survey, a pre-test, passages and a post-test. The survey was used to select the two topics for the passages. The pre-test consisted of questions based on both passages. The passages were one familiar and one unfamiliar, and each type was written on two difficulty levels. The post-test was the same test given to the students as a pre-test.

The dependent variable was the 20-item multiple choice test based on two passages, "The Weekend" and "Groundhog Day". Two question types were included: 1) literal, and 2) inferential.

The data were analyzed using several analyses of variance, t-tests and, for post hoc testing of significance, the Scheffé was utilized.

Results indicate that the reading level has an effect on the ESL students' comprehension when reading a culturally different passage. However, passage type (familiar-unfamiliar) and passage difficulty (high difficulty-low difficulty) did not have effects on ESL readers' comprehension.

CHAPTER 1

INTRODUCTION

The purpose of this chapter is to present the following: 1) background of the study, 2) statement of the problem, 3) significance of the study, 4) definition of terms, and 5) limitations of the study.

Background of the Study

In the English as a Second Language (ESL) field, language teaching is consistently focused on the pronunciation, vocabulary, and syntax of the language. But teaching of a second language should also include some cultural aspects that the students need to know to ease the learning of the language (Bedford, 1981; Carrell, 1983; Johnson, 1981). Language and culture are not truly separate entities. The idea behind teaching a language along with its culture is to help the students acquire a closer understanding of both.

It is not enough to say that language students need to learn about the culture of a new language. Language teachers must try to include cultural topics in their classrooms in a systematic way.

Everyone in the foreign language teaching profession has heard the argument that studying a foreign language has the benefit of giving the student an appreciation for a new and different culture. The advancement of this justification for language study does not necessarily mean that the proponents have included culture in the content of their curriculum in a systematic or specific manner (Bedford, 1981, p. 584).

In addition to linguistic ability, background knowledge and awareness of the new culture are factors that can affect the reading of the ESL students (Johnson, 1981; Carrell, 1983). For example, when ESL students have difficulties with the complexity of the foreign

language, their comprehension of texts can suffer. And, if this language complexity is joined with the lack of background knowledge and/or inappropriate schemata, the students' comprehension suffer even more. There is definitely a need for cultural background in order to understand a foreign text.

Johnson explains this point clearly when stating that

The effects of the language complexity and the culturally determined background of a text on reading comprehension have always been recognized as elements of concern in the selection of reading materials for foreign language learners and in the evaluation of their reading comprehension.

Research in reading comprehension of texts of a foreign cultural background has shown that discourse has a meaning of its own which determines the relative meaningfulness of groups of sentences which comprise it (1981, p. 169).

English as a second language (ESL) readers can have problems when relying solely on the content of a text without having, activating, and using prior knowledge. Besides the deficits in linguistic, text structure, culture, and background knowledge from which ESL students might suffer, there are indeed some other individual factors affecting the reading of such students.

Readers must not only know how to process text, but they also must have some background knowledge about the topic. However, reading the text does not necessarily mean that the reader would understand everything written in that text. "A text is never fully explicit" (Anderson, Reynolds, Schallert, and Goetz, 1977, p. 370). Therefore, the text should add to things that the reader already knows something about and the reader should not expect the text to tell everything about a particular subject. The reader has to contribute something to the material in order to interpret it in a logical and reasonable way.

Poor readers, frequently struggling with the text as they read, may have learned to use primarily text-based processing strategies in reading. Consequently, their comprehension of written text may be poor because they fail to make adequate use of prior knowledge as they read.

While it would be possible for a person to focus primarily on textual information and not prior knowledge while reading, comprehension inevitably would suffer (Taylor, 1979, pp. 375-378).

When dealing with ESL students, it seems that the linguistic factor can be minimal when compared with the background knowledge factor. "Comprehension of words, sentences, and discourse could not be simply a matter of applying linguistic knowledge. Every act of comprehension involves one's knowledge of the world as well" (Anderson et al., 1977, p. 369).

Johnson also said that the ESL students may ". . . depend more on background knowledge of the topic than on linguistic analysis of the text for comprehension and reconstruction of a passage because of their incomplete knowledge of the language" (1982, p. 504).

A student might memorize the dictionary, and learn the grammatical rules of a foreign language, but still might be poor in comprehending a text written in that foreign language. On the other hand, another student might not possess a wide knowledge of vocabulary, or know a great deal of grammar of a foreign language, but might comprehend better than the former student because he had a vast knowledge of the foreign culture.

Therefore, it seems that students need to develop appropriate schemata about the language as well as its culture because they may need that most when reading an English text. Reading can be difficult with the lack of appropriate schemata, especially when the material consists of cultural aspects. If the students are given the proper cultural schemata for the target language, perhaps they will experience less difficulty handling both the text

and the culture shock of the language. "The interpretation people give to messages is influenced by their background. People's personal history, knowledge, and belief influence the interpretations that they will give to prose passages" (Anderson et al., 1977, p. 376). Background information is paramount in processing a text, and vital when that text is not in the first language of the reader. Lack of knowledge about the new culture could possibly cause misunderstanding and misinterpretation of foreign texts (Anderson et al., 1977; Rumelhart, 1980; Rumelhart and Ortony, 1977).

According to a newsletter of the Educational Equity Northwest (1985), "Most written discourse is culture-specific, not only in content but in structure; that readers do have difficulty comprehending discourse that presupposes prior knowledge of another culture; and that we can facilitate reading comprehension by teaching the culture represented in the discourse, and teaching students the structure of the text" (p. 2).

Cultural differences can make reading comprehension more difficult for ESL students. These students not only face difficulties such as linguistics, grammar, vocabulary and other factors, but also the difficulty of dealing with a new culture. The cultural factor can be the most difficult factor in learning a second language, particularly if the student's culture and the culture of the new language differ greatly. Exposure to the culture of the language will acquaint the student with the special relationship of that culture to its language.

The terms 'knowledge' and 'world knowledge' used by Anderson et al. (1977) should not be interpreted as knowledge gained through instruction only; they can also mean knowledge gained through experience. This knowledge could also mean knowledge about other cultures and how it can facilitate learning and reading. "Many problems in reading comprehension are traceable to deficits in knowledge rather than deficits in linguistic skill.

From the perspective of schema theory, the principal determinant of the knowledge a person can acquire from reading is the knowledge she/he already possesses" (Anderson et al., 1977, p. 378).

It could be argued that English reading materials, especially those intended for ESL students, should include topics bearing typical English cultural aspects. Perhaps comprehension would be facilitated if the ESL teacher introduced materials that include elements of the foreign culture to the students and explained them. Some of the many reasons behind introducing such cultural aspects are: to facilitate reading comprehension, to give background knowledge, to reduce cultural shock, to acquaint students with the foreign culture, to strengthen awareness of native culture by comparing and contrasting cultures, to encourage communication with people of the foreign culture, and to provide better understanding of and relating to people of other cultures. Bedford reminds the reader that the profession "has not always been consistent in including culture in language courses, even when cultural considerations were used as a justification for the course." Further, Bedford comments that the inclusion of culture is not always made clear to readers. "When culture is included in the program, either by the materials or by the teacher, it is not always stated clearly why the cultural element is being included" (1981, p. 584).

In general, ESL students do not have the opportunity to learn about the culture of the new language. ESL texts usually do not include cultural aspects of American English. Perhaps authors of such texts for ESL students do not want to risk teaching two things at the same time. These authors might not be concerned with teaching the culture, and probably concentrate on the teaching of English. Therefore, when foreign students come to the United States, many may encounter a culture shock, because even though they speak the language, they might not know how to apply it to the cultural setting.

Statement of the Problem

It appears that ESL students are not adequately aware of some cultural aspects of the new language which might contribute to misunderstanding of texts or people encountered while studying or conversing with native speakers of that new language. Further, claimed familiarity with the foreign culture by ESL students does not necessarily reflect acquisition of the appropriate schemata and cultural background needed to comprehend texts based on that foreign culture.

Through testing of the subjects, and analysis procedures, the following questions will be addressed:

1. Does reading ability affect the reading comprehension of ESL beginning readers, intermediate readers, and advanced readers when reading culturally different passages with familiar or unfamiliar topics?
2. Does reading a culturally familiar topic and a culturally unfamiliar topic affect reading comprehension of ESL readers?
3. Does reading difficulty of a high readability passage and a low readability passage affect the reading comprehension of ESL readers when reading a culturally different passage?

Significance of the Study

This study is significant for two reasons. First, the study will extend the schema theory literature to include the reading comprehension of ESL students. Second, the study is significant because of its implications for the teaching of ESL students.

This study is based on schema theory which claims that background knowledge and appropriate schemata are basic to reading comprehension of a text. Story comprehension

and recall depend upon the right schema. Results of schema theory studies have shown that background knowledge influences reading comprehension (Anderson et al., 1977; Bransford and Johnson, 1973; Carrell, 1983; Christopherson et al., 1981; Johnson, 1981, 1982; Kintsch and Greene, 1978; Pichert and Anderson, 1976, Steffensen et al., 1979).

This study will investigate the relationship between familiar and unfamiliar topics and reading comprehension of ESL students when reading about cultural background knowledge. Results of this study should lead to implications for the teaching of ESL students concerning the teaching of culture along with the teaching of the foreign language.

Kintsch and Greene (1978) stated that, "If readers use the story schema to help them in comprehending the story or in reconstructing it, it follows that stories that are constructed according to a familiar schema should be easier to process than stories built according to an unfamiliar schema. The point that is important here is that story schemata are culture specific" (p. 1-2).

Simply stated, it is important to develop schemata by providing the necessary cultural background knowledge of the foreign language in order to improve the comprehension of the ESL reader. In support of this point of view, Christopherson, Schultz and Waern (1981) suggest two sources of input for the reader, one which is the current text and the other is prior knowledge.

The findings to date suggest that some students who have problems understanding and recalling text may not have deficiencies in their listening and reading skills; their difficulties in comprehension and recall may be attributable to the unavailability of relevant prior knowledge, either because the information is not known or because its relevance is not perceived (Christopherson et al., 1981, p. 577).

Rumelhart and Ortony (1977) and Anderson et al., (1977) would support the idea that the knowledge of the world (schemata) is very important to the reader. Steffensen, Joag-Dev, and Anderson (1979) give additional support.

When a person reads a story, the schemata embodying his background knowledge provide the framework for understanding the setting, the mood, the characters, and the chain of events. It stands to reason that readers who bring to bear different schemata will give various interpretations to a story. In particular, an individual who reads a story that presupposes the schemata of a foreign culture will comprehend it quite differently from a native, and probably will make what a native would classify as mistakes (Steffensen et al., 1979, p. 11).

The need for instruction in the culture of the second language can be greater for the students of English as a foreign language (EFL). These students learn English in their country of origin, and they lack exposure to the foreign culture. The concern here is to include materials bearing cultural aspects both in the ESL program centers and in the EFL materials currently being used in teaching English in other countries. This use of culturally specific materials may bridge the cultural gap and may make learning and understanding of the foreign language much easier for the language students.

Likewise, inclusion of cultural materials into the ESL curriculum might be helpful to the students learning the English language, especially those pursuing higher education in the United States in the fields of foreign languages, history, religion, law or cultures.

It appears that there may be a need for culturally based material for the ESL/EFL students to teach cultural aspects along with the linguistic aspects. This study is designed to shed some light on the need for such materials, the teaching of culture, and the provision of background knowledge to facilitate the learning of English as a second language.

Ultimately, this study may add impetus for text writers to include cultural aspects in their development of ESL materials. In addition, publishers might consider ESL material which includes cultural aspects of the English language more useful in teaching English, and more usable by ESL centers.

Definition of Terms

Schema. (plural, schemata) - "A schema can be thought of as a knowledge structure, or framework, which interrelates all of one's knowledge about a given topic; prior knowledge, organized in schemata, in turn influences the form and content of new knowledge." (Richgels, 1981)

Culture. "A culture is the body of customs found in a society, and anyone who acts according to these customs is a participant in the culture." (Slotkin, 1950, p. 58, in Kroeber and Kluckhohn, 1952)

Background or Prior Knowledge. Knowledge already possessed by the reader or listener.

Comprehension. The meaningful interpretation of written discourse.

ESL. (English as a Second Language). English taught and learned in an English speaking country.

EFL. (English as a Foreign Language). English taught and learned in the native country in which English is not the main or dominant language.

American English. Standard English spoken in the U.S.A.

Familiar Passage. A passage written on a topic about which the ESL students claim familiarity.

Unfamiliar Passage A passage written on a topic about which the ESL students claim unfamiliarity.

CESL. Center for English as a Second Language, University of Arizona.

Limitations of the Study

1. The study is limited to ESL students in one location; therefore the results may not be generalizable to all ESL students.
2. Specific outcomes of the study might not be generalized to a particular culture since the subjects belong to several ethnic groups.
3. This study includes ESL students who were relatively new to the American culture. Therefore, results may not be generalizable to other ESL students who have been in the U.S.A. for a long period of time.
4. The passages selected for the study are based on the survey of participants. Other passages for this study that deal with topics on either holidays, events, occasions or something similar but related to the American culture might yield different results. Therefore, results may not be generalizable to other culturally related passages.
5. Passages for this study were selected based on students' claims of topic familiarity or unfamiliarity. Students' claims may or may not accurately reflect their topic background knowledge.

CHAPTER 2

REVIEW OF THE LITERATURE

In this chapter, schema theory and background knowledge, linguistic background, text structure, and cultural background will be introduced. These topics appear to be important for discussion because they are all related to the contents of this study. Each topic will be introduced in a general form, its relevance to reading will be explained, and its relation to ESL reading and culture will be discussed. A summary is provided at the end of this chapter.

Schema and Background Knowledge

Schema is such a complex notion that nobody could claim extensive knowledge about it. Scholars tried and still will try to come up with some intelligent definitions and explanations to what schema is and what schema does (Anderson et al., 1977; Rumelhart and Ortony, 1977; Rumelhart, 1980).

As the review of the literature reveals, the term schema has been used as long ago as 1781 by Kant and 1932 by Bartlett. Kant claimed that schema is the outcome of new information that has meaning and can be related to old information stored in the background of an individual (Kant, 1982).

Zangewill, in his article *Remembering Revisited*, gave an explanation to the definition of schema given by Bartlett.

Bartlett defined the schema as an active organization of past reactions, or of past experiences, which must always be supposed to be operating in any well-adapted organic response. Such schemata were thought to be ordered on a chronological basis and so constituted as to endow every fresh response, whether perceptual or motor, with appropriate skill or facility (1972, p. 127).

Current definitions of schema have also been proposed by Anderson et al. (1977) and Rumelhart (1980). Anderson et al. defined schemata as knowledge structures. These structures are what the reader brings to the text. Knowledge of structures "... 'slot', or 'place holder' for each constituent element in the knowledge structure" (Anderson et al., 1977, p. 369).

Further, Rumelhart defines schema as "... a theory about how knowledge is represented and about how that representation facilitates the use of the knowledge in particular ways. A schema, then, is a data structure for representing the generic concepts stored in memory" (Rumelhart, 1980, p. 34).

In talking about schema and comprehension, Rumelhart (1980) stated, "Perhaps the central function of schemata is in the construction of an interpretation of an event, object or situation that is in the process of comprehension" (p. 37).

Considerable research efforts have been devoted to the relationship of schema and comprehension. For example, Anderson et al. tested physical education students and music students on recalls of two passages. The first passage could be given either a prison break or a wrestling interpretation. The second passage could be given either an evening of card playing or a rehearsal session of a woodwind ensemble. The researchers found out that background or high-level schemata provide the interpretive framework for comprehending discourse. The subjects gave each passage one distinct interpretation or another. This suggests that schemata can cause a reader to interpret messages in a certain way, without considering other alternative interpretations (Anderson et al., 1977).

Schema is some kind of knowledge structure that leads us to know new knowledge when we activate it by using our memory to infer that new knowledge "... schema can help us make inferences about unobserved aspects of a situation" (Rumelhart, 1980, p. 36).

Therefore, schema theory refers to a very complex set of procedures that take place in the brain and depend upon a great deal of stored information or background knowledge that supports the learning of additional knowledge.

Schema cannot be measured, but the product of schema might be measured. In other words, there is no specific test for schema, although students' use of schemata may be investigated through the use of background knowledge while reading. The product from the students' reading comprehension could indirectly reveal their use of schemata in retrieving background knowledge appropriate to the topic of the text they are reading. Therefore, the focus of the investigation is on the background knowledge, not the knowledge structure per se. Schema background knowledge of the students is important to investigate because it affects comprehension.

The term Schema, or related terms by different writers, does not necessarily refer to the same concept, but to interrelated concepts. Rumelhart (1980) stated:

The notion of schema and the related notions of beta structures, frames, scripts, plans and so on have formed the focus of research in Cognitive Science over the past 3 or 4 years. These various terms have been used by different authors to refer to any of a set of interrelated concepts. These terms are not all synonymous. Different authors have different things in mind when they use these different terms (p. 33).

Carrell and Eisterhold (1983) explained schema and its application to ESL reading comprehension when they stated that, "new information, new concepts, new ideas can have meaning only when they can be related to something the individual already knows, this applies as much to second language comprehension as it does to comprehension in one's native language" (p. 553).

Further support for Carrell and Eisterhold's claims is provided by Steffensen et al.: "When a person reads a story, the schemata embodying his background knowledge provide

the framework for understanding the setting, the mood, the characters, and the chain of events. It stands to reason that readers who bring to bear different schemata will give various interpretations to a story" (1979, p. 11). The study by Steffensen et al. included subjects from the U.S.A. and India. They read passages about an Indian and an American wedding. Subjects who got the native passage read more rapidly, recalled a larger amount of information, produced more culturally appropriate elaborations, and produced more culturally-based distortions of the foreign passage. The interpreted results showed the pervasive influence of schemata embodying knowledge of the content of a discourse on comprehension and memory (Steffensen et al., 1979).

ESL students bring to the classroom different schemata that are typical of their cultures. These schemata may be responsible for the misunderstandings these students may encounter while reading foreign texts or while conversing with the natives of the language they are learning. When the schema is limited, students are likely to fail to appropriately understand the language of people and of texts of a foreign nature.

When the situation is culturally different, the ESL readers could possibly experience extreme difficulties in reading, for the lack of appropriate schema makes inference difficult. Moreover, if an inference is reached by the ESL reader, it may be an inaccurate one.

The schemata of ESL students can certainly be expanded, reshaped, or broadened through additional knowledge about the foreign culture. Perhaps the more knowledgeable the students become, the better understanding they will have about the foreign language and its culture.

Steffensen et al. suggested that "an individual who reads a story that presupposes the schemata of a foreign culture will comprehend it quite differently from a native, and probably will make what a native would classify as mistakes" (1979, p. 11).

Rumelhart (1980) stated three reasons some readers fail to understand a passage. They are: 1) the reader may not have appropriate schemata which would result in misunderstanding the concept being communicated; 2) the reader may have the appropriate schemata, but clues provided by the author may be insufficient to activate them; and 3) the reader may find a consistent interpretation of the text although not the one intended.

The reasons mentioned above apply very well to ESL students. Some students can be proficient in the second language, but when they encounter something typically cultural in the second language that is different from their own culture, they may struggle and their comprehension may suffer.

Background knowledge is a term used to account for all sorts of knowledge accumulated through instruction, reading and experience. Background knowledge includes linguistic knowledge, text structure knowledge, and cultural knowledge.

Background knowledge is vital in understanding reading materials of any kind. Relating what is already known about the subject to the text is one of the most important strategies of comprehension. "... the more specific the content, the more specific the real world knowledge required to comprehend the text" (Campbell, 1981, p. 13).

Similarly, Obah (1983) expressed some concern about readers' background knowledge: "What if, for a body of readers, a goodly portion of the texts they read is nearly meaningless because their large store of prior knowledge is not related to the new material? New information cannot be integrated with old knowledge because of the gap between the two. This is a painful dilemma" (p. 129).

Relating existing knowledge to the text may be the ESL students' biggest problem, particularly if this knowledge is found outside the school setting. Most English texts

assume a great deal of general knowledge, and this could pose problems for ESL students who appear to be competent readers.

In quest for new knowledge, many Third World students encounter a cultural problem arising from the fact that their background experiences reflect a world very different from that portrayed in much of the material, academic or recreational, that they read. New knowledge is acquired, but slowly and painfully, not because they lack ability, not necessarily because they are poor readers, but because their prior knowledge does not function as actively in the reading process as it does for the readers elsewhere (Obah, 1983, p. 130).

A major difference between a native and a non-native speaker of English lies in the contextual area of reading. Johnson (1981) stated that, "The effects of the language complexity and the culturally determined background of a text on reading comprehension have always been recognized as elements of concern in the selection of reading materials for foreign language learners ..." (p. 169). Therefore, absorbing the language and culture of the society in which the native speaker lives should help the non-native speaker when it comes to reading English texts.

Campbell (1981) addressed this question concerning the teaching of world knowledge to ESL students. "How does the teacher compensate for limited real world knowledge and language knowledge which children acquire for the most part outside the classroom? Perhaps the first step towards a solution is an awareness of the fact that there is a problem, and that needs of ESL children are not the same as those of the native speaker" (p. 14).

Schemata and background knowledge of the foreign culture are two important and related factors in learning a second language.

... according to schema theory, a text only provides directions for listeners or readers as to how they should retrieve or construct meaning from their own, previously acquired knowledge. This previously acquired knowledge is called the reader's background knowledge, and the previously acquired knowledge structures are called schemata. According to schema theory, comprehending a text is an interactive process between the reader's background knowledge and text. Efficient comprehension requires the ability to relate the textual material to one's own knowledge" (Carrell, 1983, pp. 556-7).

Further, Steffensen et al. (1979) have shown that passages that presuppose knowledge of culture are easier for native speakers to read and comprehend, while they can be difficult when read by non-natives who lack appropriate schemata.

Linguistic Background

Through the acquisition of language, children learn phonology, semantics, and syntax. Phonology includes the knowledge of the different phonemes in the language and how sounds blend together to create words. Semantics include the knowledge of word meanings and the relationships among words. Syntax includes the knowledge of word order, vocabulary arrangement in sentences, or sentence patterns.

All of these components contribute to the meaning of language. According to Richgels (1982):

Linguistic theory is a source of varied perceptions of text. A common thread in these perceptions is the idea that a sentence may be seen as the surface level manifestation of a more fundamental level, or a 'base component' of a language production. It is this base component which is capable of best characterizing the syntactic and, some would argue, even the semantic -- relationship among the sentence's parts. The case relationship of a sentence's noun phrases to its verb, for example, encapsulizes much of the sentence's meaning (p. 57).

If the linguistic factor is considered to be of great importance, then "each word, each well-formed sentence, and every satisfactory text passage 'has' a meaning. A failure to comprehend a non-defective communication can, in principle, always be traced to a language specific deficit. Therefore, it is assumed, difficulties in comprehension can be traced to failures of skill" (Anderson et al., 1977, p. 368). However, these assumptions are questioned by Anderson et al. later in the article. They stated that it is not simply a matter of applying linguistic knowledge to comprehend discourse, comprehension involves one's knowledge of the world, and problems in reading comprehension are traceable to deficits in knowledge rather than deficits in linguistic skills. Anderson et al. concluded that text structures are not as important as knowledge structures that the reader brings to the text. Therefore, knowledge of the second language alone without background and appropriate schemata is not enough to provide understanding of the foreign materials.

Some ESL teachers may concentrate on teaching the linguistic aspects of the language while ignoring more important aspects or issues such as background knowledge and culture that should be taught to the students. In this case, the students' reading development may not rapidly be achieved. Nussenbaum and College (1983) stated that, "While foreign and second language teachers have devoted their efforts to the development of the linguistic competence of their students, not enough attention has been paid to their communicative competence, which is the ability to adjust their language according to social context" (p. 121). This communicative competence includes the functional as well as the structural aspects of language (Littlewood, 1983).

ESL readers encounter some difficulties caused by the linguistic factor at the early stages of learning English as a second language. This factor alone does not seem to have as much impact on the learning or reading of the ESL students as does the lack of appropriate background or schemata.

The teaching of words and word order is not enough when the students cannot relate to the meanings and feelings of these words. According to Hendon (1980): "If we teach a foreign language without introducing at the same time the culture in which that language operates, we are merely conveying words to which the student attaches the wrong meaning ..." (p. 192). Additional support to the point of view that the syntactic and semantic complexity can be of minimal effect when compared to background knowledge and culture knowledge comes from Winfield and Felfeli (1982). They pointed out that the cultural origin of a story has a more powerful effect than the level of syntactic and semantic complexity on reading comprehension for students of English as a second language.

Text Structure

Text structure is a combination of content, grammar, language and style. Text structure includes cues such as the topic sentence, macro-connectors (prepositions), time, location, characters and content. When the ESL student encounters difficulties with the text structure cues, for example, the prepositions, he might give inappropriate interpretation to the text. But when he does not have any problems with the text structure, but lacks background knowledge, the difficulty with the text mounts to its peak (Johnston, 1983).

Text structure is a factor that influences reading comprehension to a certain degree. Pearson and Johnson (1978) call it the factor "Outside the head" because text structure includes word, sentence, beyond the sentence, story structure, and thematic information. Word difficulty is dependent on the frequency and/or abstractness of that word. Long and more complex sentences are certainly more difficult than short simple ones. On beyond the sentence, Pearson and Johnson discussed a new branch of linguistic and psychological

investigation broadly labeled discourse analysis. "Discourse analysis goes beyond the sentence to consider characteristics of paragraphs and passages as well as relations between sentences" (p. 17).

A research study contrasting the effects of text schemata on the reading comprehension of native English speaking students and ESL students was conducted by Carrell in 1983. She investigated the individual and interactive effects of context, transparency (concreteness-abstractness), and familiarity on the reading comprehension of both native (English) and non-native (ESL) readers. Carrell found out that while natives utilized context, textual transparency clues, and were influenced by their prior knowledge, the non-natives did not utilize context or textual clues. However, the comprehension of these non-native students was affected by familiarity. Therefore, it appears that textual clues, or text structure, could be a factor affecting the reading comprehension of ESL readers (Carrell, 1983).

Story structure includes grammar and the fashion used in writing a text. "There appear to be some particular story structures that create more difficulty than others. For example, passages that proceed in a more-or-less cause-effect to cause-effect fashion appear to be more comprehensible than those which are characterized by detail after detail without such neat causal link between the ideas in the stories" (Pearson and Johnson, 1978, p. 17).

Further evidence of the importance of story structure is provided by Kintsch and Greene, who conducted three experiments. Experiment I showed that subjects with appropriate story schema can write better summaries of such stories but not stories for which they lack that appropriate story schema. The researchers said that the story schema effect is related to the overall organization of a story. Experiment II tested sequential recalls of a story which deviated in various ways from the subjects' story schema, and sequential

recalls of a story which deviated in various ways from the subjects' story schema, and sequential recalls of a story for which the subjects had a well-structured schema-base. Sequential recalls of the first story resulted in poor performance and the stories tended to break down after five sequential recalls. Sequential recalls of the second story resulted in good performance and subjects recalled quite completely and without serious distortions. The researchers suggested that a culture-specific schema aids in both comprehending and reconstructing stories (Kintsch and Greene, 1978).

Cohesion is another element of the text structure. According to Tierney and Mosenthal (1982): "Text derives texture from the fact that it functions as a unity with respect to its environment and the fact that this unity can be described by the ties that exist between presupposing and presupposed items. It is these cohesive ties within a text that establish a text's continuity. That is, cohesive ties represent a kind of linguistic mortar which connects the text together" (p. 70).

The quantity of a text has a lot to do with what the reader can recall. Johnston (1983) said, "One aspect of text which affects what a reader recalls is the sheer quantity of information as measured by passage length, density of information, and density of new information" (p. 21). Quantity of information includes explicit as well as implicit information in a text. A text may contain a large quantity of information which is not necessarily explicit. This kind of text structure is considered hard or difficult to recall, especially when the reader lacks the background information needed to infer the implicit information in the text.

When the native speaker of a language is capable of using background knowledge, he is likely to comprehend, recall, and store information in his long-term memory. Carrell (1983) stated that: "Adult native English research has shown that the better a reader is able

to access background knowledge about either the content area of a text or the rhetorical, formal structure of a text, the better he or she will be able to comprehend, to store in long term memory, and to recall the text" (p. 183).

The same thing can be said about the ESL reader. The better reader he is, the more able he can access background knowledge about content area of a text, and text structure, and the better he will be able to comprehend and recall information from a foreign text. When background knowledge, and especially the cultural knowledge, is available to the ESL reader, his reading comprehension can be better when he reads foreign materials.

Some ESL readers resort to primarily text-based processing strategies when encountering difficulties with text. Using this strategy alone may result in struggling with the text as well as poor reading. Therefore, comprehension of written text may be poor because of the failure to make adequate use of prior knowledge. Also important is the ability to use schemata in reading and this may differ from one reader to another (Taylor, 1979).

Taylor's study investigated good and poor readers' use of prior knowledge in reading familiar and unfamiliar text. The study included 31 third graders and 31 fifth graders who read on the third-grade level, and 20 fifth graders who read on the fifth-grade level. The subjects read two passages written on a third-grade level, one familiar and the other unfamiliar. Both fifth-grade groups recalled more than the third graders on the familiar passage. Fifth grade good readers recalled more of the unfamiliar passage than either the poor readers or the third graders. All groups recalled more of the familiar passage than the unfamiliar passage. Taylor's findings suggest that poor readers' comprehension suffers when their use of prior knowledge is restricted, especially when

reading unfamiliar topics. She also concluded that poor readers' comprehension can be adequate when given familiar material on an appropriate level (Taylor, 1979).

When background information is readily available, inference and recall are much easier than when background is poor or unavailable. With implicitly designed texts, ESL students might face extreme difficulties. Their performance on such texts should not be expected to be adequate when tested. "Specifying what must be inferred is especially important for developing test items and understanding performance on them, particularly the specific use of background knowledge" (Johnston, 1983, p. 22).

Cultural Background

Personal knowledge is conditioned by a person's culture. "... culture influences knowledge, beliefs and values, and that knowledge, beliefs, and values influence comprehension processes" (Reynolds, Taylor, Steffensen, Shirey, and Anderson, 1982, p. 354).

The desire to communicate with other people was probably the first step that encouraged man to learn a second language. The learning of a second language certainly increased the desire to know about other people's culture. But the ability to speak a foreign language does not guarantee smooth communication when knowledge of the foreign culture is minimal.

According to Kelly (1977):

One of the natural reactions to this growing acceptance of other cultures has been an interest in learning a second language. The obvious reason for this impetus toward bilingualism is a desire to communicate with people who do not speak English. Yet the question which must be examined is whether the ability to speak a second language is sufficient to enable one to communicate with someone of another culture. If understanding is sometimes difficult between two members of one culture who speak the same language, it is expected that the issue becomes more complex when two cultures and two languages are involved. There are countless areas of attitudes and behavior which are directly related to culture and are, therefore, potential barriers to communication if they are not accurately perceived (p. 201-202).

It is very obvious that knowledge of the foreign culture is crucial to understanding and communicating between the ESL students and the people of the foreign culture. "If we were never to deal with another culture, perhaps we would never have to stop to understand our own. However, once we need to relate to another culture, we must come to grips with our culture. After we have examined some of our basic cultural experiences, we are better able to see how people of other cultures deal with the same experiences" (Muniz and Chasnoff, 1983, p. 25).

People from different cultures share some similarities, whereas many differences exist. Then, providing individuals with adequate knowledge pertaining to the foreign culture should facilitate the learning of the language, understanding of the culture, and relating to the people.

Encountering all the differences between two cultures is inconceivable, for each culture has degrees of differences among its subcultures. Thus, learning about the similarities existing among cultures can be of great help to ESL students in aiding them with schoolwork and social activities. "It is certainly not possible to convey to a student every detail about culture-related thought process and behavior which he may encounter in dealing with a culture group. It is possible, however, to develop cultural sensitivity and perceptual skills in a student that will enable him to be aware of cultural differences which, if undetected, could cause conflict" (Kelly, 1977, p. 203).

In United States bilingual maintenance programs, the students' home language and culture are taught concurrently with English and mainstream culture. Similarly, ESL programs could possibly teach English along with its culture to help students communicate, function, and relate to the culture of the language without affecting the students' own cultures.

Knowledge of a foreign culture should facilitate communication with its people even though mastery of the language of that culture has not yet been achieved. Awareness, or knowledge availability, of other cultures should ease the learning and communication among people of different cultural backgrounds (Bedford, 1981; Hendon, 1980; Johnson, 1982; Kelly, 1977). Learning more about the foreign culture should enhance the development of self-concept among the ESL students, which in turn will improve the learning and communication in the foreign language. With social maturation, the ability to learn and communicate should increase within the ESL learner.

Not only does knowledge of other people's culture make communication easier; such knowledge also makes the speaker socially successful in that social environment. Morrison and Stoltz (1976) stated, "If one wants to be successful in another social world, then one must learn the attitudes and behaviors of that other world but without denying one's own social self and world" (p. 5).

The dominant culture of the ESL student and the foreign culture to be acquired (English) clash when there is no link between them. This link is the cultural background knowledge needed by the ESL student with adequate understanding of its implications. Perhaps if this could be accomplished, the student would not have as much difficulty with learning the new language along with its culture. In language learning, two languages and two cultures come in contact, therefore, a great deal of sympathetic understanding of the cultural patterns of the second language is absolutely necessary (Trivedi, 1978). ESL programs need to move toward a culturally integrated curriculum where the students would retain a healthy ethnic pride, an abiding sense of their own culture, and a respect for and appreciation of people from ethnically and culturally different heritages. "If language is described as a mode of human behavior and culture as 'patterned behavior' it is evident

that language is a vital constituent of culture. You cannot learn a new language unless you have a sympathetic understanding of the cultural setting of that language" (Trivedi, 1978, pp. 92-93). Evidently, the teaching of culture is so important to the ESL students in order to achieve and advance while learning the foreign language.

Some authorities (Hendon, 1980; Strasheim, 1980) believe that the teaching of the foreign culture should start as soon as the students begin to learn a second language. The ESL teacher should believe that language and culture are truly inseparable, and the teaching of the culture of the foreign language should be taught at the early level or levels of teaching the foreign language. In support of this point of view, Hendon (1980) reminded the reader that, "In the foreign language classroom, culture should definitely be included from the beginning of language instruction" (p. 193).

Strasheim (1980) also emphasized the idea of teaching culture to the foreign students, and encouraged the language teachers to pay attention to this demanding need. "Whether or not individual foreign language teachers wish to become involved with global education, the status of the teaching of culture in foreign languages requires concerted professional attention, especially in view of the fact that repeated surveys of students have emphasized both speaking and culture. We should emphasize the integrative culture, not 'add on' or supplementary teaching of it" (pp. 67-68).

More attention to the cultural aspects of the second language and the need for such information by the ESL learners can enrich the students' schemata, which may in turn facilitate the teachers' job and the students' learning of the second language. For example, a study on attitude of foreign language students (Tuttle, Guitart, Papalia, and Zampogna, 1979) concluded that attitudes are changed positively by presentations which stress similarities of daily life activities rather than differences. Tuttle et al. (1979) stated that,

"In helping students to become more positive toward the language group, foreign language teachers should, at the beginning of language instruction, limit the use of materials which emphasize the differences between the two cultures. A presentation of differences at the beginning of language study is not a good starting point for promoting positive feelings about other cultures" (p. 181). Background of such kind should help the ESL students understand the foreign culture and enable them to form their best judgment when encountered by the foreign culture while studying abroad or merely visiting.

Kabakchy (1978) warned against differences between cultures, "Students should be warned of existing differences between the cultures of different nations; they must realize that things familiar to one nation may be unheard of among people of other countries and need special explanation" (p. 317).

Tuttle et al. (1979) proceeded to inform that, "Teachers can continue the presentation by introducing events and showing how these are logical within the cultural framework. Such daily approaches to culture will help the students to become positive towards the new culture" (p. 182).

As soon as the students express relaxed feelings toward the foreign culture and show positive attitude and appreciation, differences between cultures can be analyzed and discussed. Hendon (1980) stated, "... by analyzing basic differences between cultures, students will soon learn a great deal about their own culture, and they will become conscious of certain cultural attitudes they have never questioned before. And most important, they will begin to develop the insight necessary to accept another culture on its own terms, for what it means to the members of that culture" (p. 192).

Edwards (1984) goes one step farther when he said that the students can be exposed to literary materials. "Literary exposure to other cultures not only familiarizes us with

particular differences in custom or tradition, but also, on the larger scale, shows differences in perspective, values, and philosophies" (p. 72).

Words in any language most often bear cultural meanings. Thus, words represent the culture of the people who speak them natively. "It is true that the meanings of words can be learned only together with the bits of culture they represent" (Kabakchy, 1978, p. 315). Here it can be sensed that culture is and will always be behind the meaning of words we speak, listen to, read, or write.

Some scholars encouraged the teaching of culture with its language in the home of the foreign students (Clavijo, 1984), while others prefer that it is done in the native environment (Allen, 1969; Jaeckel, 1969; Kelly, 1977; Rivers, 1964). Further, some advocate the teaching of the foreign culture in the native language of the student (Scanlan, 1979). Scanlan (1979) stated, "While the goal ought to be the acquisition of as much of the vocabulary as possible, the cultural explanation called for can be given if necessary in the learner's native language" (p. 69).

The teaching of a foreign culture in the home environment of the learner is necessary especially when the students cannot travel abroad to learn that foreign language. Not everyone can afford this luxury anyway. Clavijo (1984) stated,

... it appears that attempts to teach culture in an artificial environment approximates the realia of living in the foreign culture. Since it is not always possible to send students or management personnel learning a foreign culture to the target country, finding ways to create a 'natural' environment in the classroom or training locations is very important. However, positive results have been found when the subjects have been exposed to cultural information as a result of living in the foreign country itself. Certainly in study-abroad programs, there is much potential for interaction and discussion of ideas, habits, and customs (p. 88).

It is definitely advantageous to learn a foreign language abroad for real life interactions with the natives, availability of sources, and practice purposes. Rivers (1964) warned, "Ideally the foreign language should be learned in as close association as possible with the culture of the country where it is spoken, if its full 'meaning' is to be plunged to any depth" (p. 139).

Jaeckel (1969) supports the preceding, "There can be no disagreement with the view that the 'ideal way' to learn a language must be in the environment in which it is natively spoken" (p. 305). Kelly (1977) further confirmed this point of view: "It is an accepted fact that the most effective way of learning to understand another culture is by direct immersion in the culture" (p. 202). Allen (1969) stated that where language is studied, social formulas are learned, and she supposed that this could only happen in the native environment. "Certainly social formulas need to be learned in their cultural setting, and I suppose that kind of learning does take place when the language is studied abroad" (p. 325).

Indeed, the language and its culture should be taught and learned in its natural native environment, and the students should take great advantage of the availability of such setting. "The foreign language should desirably become a second nature, a second way of life, to the individual through identification with the foreign language and culture. Thinking, feeling, reacting, behaving as the foreign speaker does, should be the ideal goal of language study" (Titone, 1969, p. 307).

Materials that include cultural aspects of the foreign culture should be an integrated part of a foreign language teaching program either at the home of the learner or in the native environment of the foreign language. If necessary, it can be taught in the native language of the learner, but preferably taught in the foreign language. The use of the

teaching of cultural materials should start as soon as the learner begins to study the foreign language. "Cultural material can be taught initially in the native language, through visual media, through a comprehension approach, or through observational learning in the environment" (Winfield and Felfeli, 1982, p. 378).

Clavijo (1984) concluded, "... it appears that presenting culture-specific materials and presenting them in discussion-oriented and role-play modes can significantly improve attitudes toward another people. Culture-specific instructions can increase the subject's perception of similarities between one's own culture and the target culture, and such similarity may enhance intercultural attraction" (p. 90). Cultural materials could include anything that might be useful in teaching the culture of the foreign language. The foreign language teacher should make as much use as possible of pictures, films, tapes, field trips, and texts concerning the history, geography, customs, and art of the people speaking the foreign language taught to the students. "Cultural materials should be used only when they assist in achieving the desired education objectives of creating more positive attitude toward the new culture" (Tuttle et al., 1979, p. 182).

Summary

This chapter presented a review of the literature in the areas of schema theory and background knowledge, linguistic background, text structure, and cultural background.

The section on cultural background is intended to be more comprehensive because of its importance to the study. The previous sections are intended to support and interrelated those topics to the issue of cultural background.

In the section on schema and background knowledge, some definitions of terms are given. Explanation of how important schema and prior knowledge are in acquiring new knowledge especially to ESL learners is provided.

The section on linguistic background was not intended to be comprehensive. It is meant to show how minimal the linguistic factor is when compared with the schema and background knowledge factors. The section on text structure is intended to explain what the written text consists of besides words and word-order.

In the cultural background section, the importance of culture and its value for communication with other people is explained. Encouragement to teach the cultural patterns or aspects of the foreign culture is emphasized, especially the similarities between cultures and then the differences.

CHAPTER 3

DESIGN OF STUDY

In this chapter, the following will be presented: 1) purpose of the study, 2) subjects, 3) instruments, 4) procedures, and 5) analysis of data.

Purpose of the Study

It is the purpose of this study to investigate the relationship of cultural background and comprehension of ESL students when reading a culturally based passage written in English and dealing with the American culture. In doing so, the study was designed to test the ability of non-English speakers (ESL students) to comprehend texts or passages that include cultural aspects typical to native speakers of American English. Two culturally based passages were used. One of the passages was considered familiar, the other was unfamiliar. Familiarity and nonfamiliarity of the passages was determined from the results of a survey that had been conducted with the ESL students.

The outcome of the study should provide evidence concerning the need to teach language along with its culture in order to bridge the cultural gap between the ESL students' native languages and the target language. The study may also indicate a need for cultural materials for ESL students, as well as the inclusion of such materials in the curriculum designated for language students.

Subjects

The subjects were English as a Second Language (ESL) students from the Center for English as a Second Language (CESL) at the University of Arizona. Forty-eight (48) students were randomly selected from the total number of students (59) at the CESL

program who volunteered to participate in the study. There were nineteen volunteers from the beginning group, twenty from the intermediate group, and twenty from the advanced group.

Random selection techniques resulted in three groups for the study, with 16 students in each group. Each group included two of the CESL instructional levels. The beginning group consisted of the levels 20 and 30, the intermediate group consisted of the levels 40 and 50, and the advanced group consisted of the levels 60 and 70. Students were assigned to the CESL levels according to their degree of English language proficiency as measured by the Comprehensive English Language Test (CELT).

The CELT is a test for speakers of English as a second language used by the CESL program to test English proficiency of the ESL students. The test consists of three sections: listening, structure, and vocabulary. The listening section is administered by using a cassette recording. The section has three parts (answering questions, understanding statements, and comprehending dialogue) with a total of 50 items. The structure section contains 75 problems to be answered. "Each item consists of a brief printed dialogue in which one or more words are omitted from the last sentence. The student completes the sentence by selecting from among the four alternatives appearing beneath the dialogue" (Harris & Palmer, 1986, p. 13).

The vocabulary section consists of two parts with a total of 75 items.

Part I consists of 35 sentences from which one word has been omitted, followed by sets of four test words. For each problem, the student selects the one alternative that completes the sentence in a logical way.

Part II consists of 40 short definitions followed by sets of four test words. The student selects the one word from among the alternatives which matches each definition (Harris & Palmer, 1986, p. 14-15).

Of the research on the CELT, most notable is the study by Moran in 1978. He recognized the importance of the test for the evaluation and placement of the ESL students as well as for keying results on the CELT-structure section to U.S. grade level instructional materials.

This research has resulted in a means to interpret a score on the CELT-Structure test in terms of a U.S. grade equivalent standard. Such information should prove useful to the ESL instructor who is utilizing instructional materials designed for use in U.S. classrooms and who wishes to use standardized test scores as an aid in matching the level of difficulty of material with proficiency of the ESL student (Moran, 1978, p. 142).

Moran (1978) compared students' performance on the CELT-structure section with the Stanford Achievement Reading Test (Reading Comprehension Intermediate Level I) (Madden et al., 1973a, 1973b) to investigate whether the CELT-structure could be used as a reading test for the ESL students.

According to Moran, "The CELT-structure correlated most highly with reading comprehension" (1978, p. 139). The exact correlation obtained between the Stanford Reading Comprehension Test and the CELT-structure was .80 as reported by Moran. Carroll (1972) supports Moran's point of view.

To judge from the data arrayed in the preliminary manual, this battery would appear to be a promising instrument for gauging in English proficiency of persons (high school age and above) who are learning English as a second language. All parts of the test assume reading knowledge of English. The structure test is introduced as a test of how well the learner knows the grammar of English. This is a correct claim only if one assumes that knowing the grammar of English corresponds to the ability to read and select constructions that are acceptable and idiomatic in choice of words or word order (p. 548-9).

Harris and Palmer (1970, p. 9) reported a correlation of .83 between the CELT-structure section and the Test of English as a Foreign Language (TOEFL) (Sharpe, 1979)

providing further evidence that the CELT structure is a valid reading test for use with ESL students. Therefore, it appears that the CELT structure can predict the reading ability of ESL students.

According to CESL teachers' recommendations, students in levels 20 and 30 represent a U.S. 3rd grade equivalency, and students in levels 60 and 70 represent a U.S. 8th grade equivalency. A description of the procedures by which the teachers indicate the reading levels appropriate for these student groups is found in a subsequent section under the subheading "Passages".

Including three reading ability groups of students was thought to be important for the study because reading ability may affect students' comprehension of culturally based passages. Additionally, the ESL curriculum of the subjects for this study is divided into seven levels and at least three groups appeared necessary to capture reading differences among participating students.

The students chosen for the study were natives of different countries, each with its own cultural background. They were all adults, and most of them had a high school diploma, although their ages and levels of education varied. The advanced and intermediate groups consisted of eight different cultural backgrounds each. However, the beginning group consisted of ten different cultural backgrounds. It appears that the cultural backgrounds were distributed evenly in each group.

Age

The average age for the beginning reading group was 19.5 years, and for the intermediate group, it was 20.7 years, while it was 25.4 years for the advanced group. There were eleven males and five females in the beginning group, and ten males and six females in the intermediate group, while there was an equivalent number of eight males and eight females in the advanced group (see Table 1).

Table 1. Average Age of ESL Students and Average Time Spent in USA and in CESL.

| Reading Level | Age | Time in USA | Time in CESL |
|---|------------|-------------|--------------|
| Beginning Males = 11 Females = 5 | 19.5 years | 3.4 months | 3.1 months |
| Intermediate Males = 10 Females = 6 | 20.7 years | 2.9 months | 2.9 months |
| Advanced Males = 8 Females = 8 | 25.4 years | 9.9 months | 4.8 months |

Time in U.S.A.

The average time spent in the U.S.A. by the beginning group was 3.4 months, and it was 2.9 months for the intermediate group, while it was 9.9 months for the advanced group (see Table 1).

Time at CESL

The average time spent at the CESL, Center for English as a Second Language, by the beginning group was 3.1 months, and it was 2.9 months for the intermediate group, while it was 4.8 months for the advanced group (see Table 1).

The subjects came from fifteen different countries, with Japan contributing the largest number of participants in this study (see Table 2). There were nine native languages spoken by the subjects, with Arabic as a native language to fourteen students who belonged to six different countries (see Table 2).

The purposes for learning English were established from self-reported data on the survey that has been given to the students prior to the main study. The major purpose reported by the majority of students was to join a college or university in the U.S.A. (see Table 3).

Instruments

For this study, a one-step student survey was administered to gather demographic information about the students. The survey was also used to determine the topics of the passages to be used as reading materials. Two passages, based on two different topics, were developed and written at two reading levels appropriate for the beginning and advanced reading ability groups within the study. Questions and answers based on the passages were developed as comprehension measures.

Table 2. Languages, Countries, and Number of Students in Each Group.

| Language | Countries and Number of Students | Number of Students | Students in Each Group | | |
|-----------------|----------------------------------|--------------------|------------------------|---|---|
| | | | B | I | A |
| Arabic | Kuwait (1) | 14 | | | 1 |
| | Lebanon (1) | | 1 | | |
| | Oman (2) | | 1 | 1 | |
| | Qatar (4) | | 2 | 2 | |
| | Saudi Arabia (3) | | | 2 | 1 |
| | United Arab Emirates (3) | | 2 | 1 | |
| Japanese | Japan (13) | 13 | 3 | 3 | 7 |
| Spanish | Ecuador (1) | 11 | 1 | | |
| | Mexico (8) | | 3 | 4 | 1 |
| | Panama (1) | | 1 | | |
| | Venezuela (1) | | 1 | | |
| French | Belgium (1) | 2 | | | 1 |
| | Mauritania (1) | | | | 1 |
| Portuguese | Brazil (2) | 2 | | 1 | 1 |
| Urdu | Pakistan (2) | 2 | | | 2 |
| Pashto | Pakistan (2) | 2 | | 1 | 1 |
| Balushi | Pakistan (1) | 1 | 1 | | |
| Farsi (Persian) | Pakistan (1) | 1 | | 1 | |

Table 3. Purposes for Learning English Reported by ESL Students.

| Level | College or University | Job | Fun | Improve English | Totals |
|-------|-----------------------|-----|-----|-----------------|--------|
| B | 12 | 4 | | | 16 |
| I | 10 | 4 | 1 | 1 | 16 |
| A | 12 | 3 | | 1 | 16 |
| Total | 34 | 11 | 1 | 2 | 48 |

Survey

A survey was developed to reveal the following: native languages of the students, gender, duration of residency in the U.S.A., time spent in the CESL program, age, native country, and purpose of learning English as a second language (see Appendix A). Results revealed that there were nine languages spoken by the ESL students, with 29 males and 19 females. The average time spent in the U.S.A. by all students was 5.4 months, while the average time spent in the CESL program was 3.6 months. The average age of the students was 21.9 years. The students came from 15 countries and their major purpose for learning English was to join a college or university in the United States.

One hundred thirty-six students, including the 48 subjects used in the study, completed the topic survey, which consisted of a recognition list of seventy holidays, events and occasions (see Appendix C).

Holidays, events or occasions were selected for the passage topics because they represent American cultural information with which ESL students could be expected to have varying degrees of familiarity. For example, some of the ESL students have been in the U.S.A. for more than one semester, which means they have encountered or lived through at least a few American cultural experiences that could include a holiday, an event, an occasion, and/or some other sort of experience.

Holidays, events and occasions are appropriate topics to investigate the role of cultural familiarity for several reasons. First, definitions of culture can include vocabulary items such as customs, habits, social patterns, system of knowledge, learned behavior, language, beliefs, tradition, religion, social activities, ideas, etiquette, food habits, art, law, morals, marriage, attitude, techniques, values, manners, crafts, skills, ethics, sanctions, family, material objects, artifacts, property system, rules and ways, thoughts, feelings, bodily acts, labor, politics, and economy. Concentrating on one aspect could reveal

something about a culture. For example, customs of marriage could possibly involve other aspects of culture. Marriage certainly includes customs, habits, a social pattern, a learned behavior, religion, beliefs, tradition, ideas, etiquette, food habits, etc. Additionally, it could be expected that ESL students have varying degrees of familiarity with customs of marriage. Second, a study by Steffensen et al. (1977), using passages centering around the customs of marriage in India and the U.S.A. yielded information about the effects of cultural background knowledge. However, the authors did not give any reasons or rationale behind the choosing of the topic "marriage". The assumption was that marriage includes numerous aspects of culture.

Further, the definition of culture that best fits the scheme of this study is the one by Slotkin in 1950. Slotkin said that, "By definition, customs are categories of actions learned from others ... A culture is the body of customs found in a society, and anyone who acts according to these customs is a participant in the culture" (Kroeber and Kluchohn, 1952, p. 58-59).

Brunvand (1968) defines and explains holidays as cultural customs:

A custom is a traditional practice -- a mode of individual behavior or a habit of social life that is transmitted by word-of-mouth or imitation, then ingrained by social pressure, common usage, and parental authority. When customs are associated with holidays, they become calendar customs, and when such events are celebrated annually by a whole community, they become festivals (p. 198).

Customs include all the things people do through their social lives, and people celebrate holidays, events, and occasions as part of the customs of a culture. Thus, customs appear to be a greater indicator of people's culture.

Lastly, George Gerbner (1970), the founding father of cultural indicators (C.I.), was interested in culture and the analysis of cultural symbols to study the cultural change in

society. Since he could not study all kinds of symbols, he concentrated on media (television in particular).

In support of Gerbner's approach, Reijnders and Bouman (1984) stated,

Does not culture consist of symbols and is not culture conveyed by means of symbols? In our Western civilization, the mass media are preeminently responsible for culture and the conveyance of culture. When one tries to prove changes in the cultural environment over a period of many years, one should certainly pay attention to the role of the media in this process (p. 34).

Rosengren (1984), in Sweden, used newspapers as cultural indicators of culture change. He suggested that "... Serious study of culture will ultimately necessitate the systematic and sustained development of cultural indicators (p. 13) ... A set of reliable and valid cultural indicators applied over time and space will permit comparative studies of culture at a higher level of precision than before" (p. 14).

Rosengren further discusses some definitions of culture and continues by reminding,

It would take us too long, however, to try and disentangle the complexities and niceties inherent in definitions such as these. Here and now it must suffice to note that all the definitions quoted refer to culture as a class of abstract phenomena having material embodiment. Culture is abstract. Therefore, it can only be indirectly observed. Each single embodiment of culture, of course, can be observed and described in great detail. But culture as such -- a class of abstract phenomena -- cannot be directly observed. It must be studied by means of indicators (p. 14).

Rosengren mentions some names of scholars who use cultural indicators and comments, "There are at least a dozen such pioneers, each in his own way grappling with the problem of measuring aspects of culture, each creating his own set of cultural indicators, even if not using that term" (p. 15).

Since customs, such as holidays, events and occasions, are cultural symbols or cultural indicators, it seems legitimate to use them in this study to investigate the effects of cultural background on the reading comprehension of ESL students.

The list was developed by asking 15 native Americans from the University Reading Department faculty, staff, and graduate students to list as many holidays, events, and occasions as they possibly could. The students were asked to indicate their familiarity or unfamiliarity with the items listed. Then, for the items they marked as familiar or unfamiliar, the students were asked to rate their degree of familiarity with the holidays, events and occasions on a Likert-type scale with ratings of (1) to (7), with (1) meaning least familiar and (7) meaning most familiar.

The most frequently mentioned topic on the survey was "The Weekend" with 105 students rating it as a familiar topic, and the topic rated as least frequently familiar on the survey was "Groundhog Day" with 130 students rating it as an unfamiliar topic. Directions and examples were given to the students prior to rating the list of holidays, events and occasions (see Appendix B).

Passages

Two topics were selected for the reading passages to be developed for the study. The topics of the passages were chosen as a result of the survey given to participating ESL students. The familiar passage was "The Weekend", and the unfamiliar passage was "Groundhog Day".

Each topic was written at two reading difficulty levels. The high difficulty passages were written for CESL levels 60-70; the low difficulty passages were written for CESL levels 20-30. The Fry formula was used as a guide to passage development.

Appropriateness of passages for this study were decided and recommended by the CESL teachers. The teachers were given unnumbered graded samples from Basic Reading Inventory (1978) and Advanced Reading Inventory (1981) by Jerry L. Johns to decide on the suitable difficulty level of the passages. The inventories included samples from pre-primer to the ninth-grade level.

All paragraphs in the Basic Reading Inventory were evaluated by one or more readability formulas. Such formulas provide one estimate of the difficulty level of reading material. The preprimer and primer selections were evaluated with the Fry (1968) readability formula. The selections written for grades one through three were evaluated with the Spache (1974) readability formula and the Fry readability formula. The remaining selections were evaluated with the Dale-Chall (1948) readability formula and the Fry readability formula (Johns, 1978, p. 4).

The samples were randomly ordered, and the teachers were asked to select a sample suitable for levels 20-30, and another sample suitable for levels 60-70. Nine CESL teachers were involved in the selection process. The majority of teachers (7) recommended the third-grade level sample to be suitable for levels 20-30, and the eighth-grade level sample to be suitable for levels 60-70 (see Appendix D). Therefore, passages for this study were written at third-grade and eighth-grade for the low and high difficulty levels, respectively (see Appendices E through H).

Using teachers' judgment and readability formulas together to guide the writing of the passages appears to be an acceptable practice. For example, according to Dreyer (1984), "Formulas can yield useful information, but only teachers themselves can take into account the many factors that affect their own students' comprehension and make better judgments on this basis than are possible on the basis of formula scores alone" (p. 1). Furthermore, Shugert (1983) adds that teachers' professional judgment should be considered. "The English language arts teacher is a professional and uses professional judgment in selecting books for

students to study" (Shugert, 1983, p. 1). In addition, Gambell (1986) said, "English teachers are better qualified than most other educators or persons to choose and recommend books for their classes" (p. 99).

The Fry Readability Formula (Fry, 1968) was used to predict the reading difficulty levels of the passages. Since there is a high correlation of all readability formulas (Estes and Vaughan, 1978), it seems reasonable to choose the Fry Readability Formula for its ease of use and familiarity in the academic arena.

The Fry Readability Formula "... estimates the reading ability a reader will need to understand the material with 50 to 75 percent accuracy ... the Fry graph suggests a level somewhere between the frustration and instructional reading levels" (Estes and Vaughan, 1978, p. 27). The reading difficulty of the passages was controlled by manipulating the sentence lengths and the number of syllables in each word.

When the topics of the familiar and unfamiliar passages were identified as a result of the ESL students' survey, two familiar and two unfamiliar variations, respectively, were written for the two topics according to the reading abilities of the students.

The passages were developed according to a certain pattern for each of the two levels, the high and the low, and for the familiar and the unfamiliar topics. The attempt was to include as many aspects of the culture as possible in each passage. These aspects include the history of the event, such as dates, places, where celebrated, names of people, and things related to the event. Another aspect was the nature of the event which explained if the event was social, historic, regional, or national. Preparation for the event was included to explain what people do inside the homes and outside in the streets related to the event. Duration and impact of the event was described to explain the time spent during the event and the kind of impact on the people celebrating the event. Further, the passages included

those who celebrated the event, what they ate and wore, where they went, and what they did. Furthermore, the importance of the event was discussed. Each passage consisted of about 500 words, an appropriate length for use in typical ESL classes at the CESL program. These passages were developed by the researcher with the assistance of three reading experts.

The differences between the low difficulty and high difficulty passages were controlled by sentence length and number of syllables in words. The low difficulty passages consisted of short sentences and short words, while the high difficulty passages consisted of longer sentences and long multi-syllabic words. The following examples are taken from the passages titled "Groundhog Day" with the low difficulty example given first and the high difficulty example given second.

Example 1 (Low Difficulty)

Groundhog Day is on the second of February. In the East and Midwest of the U.S.A., people watch the groundhog. They wait for his sunrise actions. In Wisconsin, some members of the Groundhog Club have watched him on this day since 1948. On this day, they eat moose milk, coffee, and sweet rolls.

Example 2 (High Difficulty)

The groundhog and his sunrise actions on Groundhog Day, the second of February, have become the focal point of many American observances in the East and Midwest. In Wisconsin, some members of the Groundhog Club have watched the groundhog actions on this day since 1948. The members eat breakfast consisting of moose milk, coffee, and sweet rolls.

Comprehension Measures

A pre-test was given to the students to ascertain subjects' prior knowledge. It consisted of questions based on the two passages used for the study. Literal and inferential questions were developed for both the familiar and the unfamiliar passages. By including the two kinds of questions, the students were given the opportunity to reveal how much information or knowledge they had which was relative to culture, whether it was text-based, part of their background knowledge, or a combination of both.

The researcher and three reading experts developed as many questions as possible in the categories of 1) literal; and (2) inferential, some of which required cultural background to be answered. The reading experts then sorted the questions according to the two different categories. After both kinds of questions were sorted into the two categories or types, the reading experts ranked the questions in each category according to their importance and usefulness. Then, appropriate questions for each category were used for the study (see Appendices I through L).

There were five literal questions and five inferential questions for each passage. Ten questions, based on each passage, seemed appropriate since other researchers used ten or a lesser number of questions in their studies. Hansen (1981) used ten questions following the stories used in her study with two questions for each of the first three categories, literal, inferential, and strategy. Furthermore, Raphael (1984) used six questions following the passages used in her study with two questions for each QARS (Question Answer Relationships) category.

A post-test was given to the students three weeks after the pre-test had been administered. The post-test was the same test that was given to the students as a pre-test.

A multiple choice procedure was used to answer the questions following the reading of each passage. Each question was followed by four options from which the students selected a correct answer. Foils were developed by including one correct answer and three answers that were wrong but included information from the passage or something similar to what had been mentioned in the passage.

Procedures

The study itself was administered in one session so that the results would not be affected by history, maturation, or attrition. Further, this assured no possibility of students sharing information concerning the respective passages and answers to questions.

Students read two passages, one familiar and one unfamiliar at reading levels that were assigned using a stratified random sampling procedure. All combinations of familiar vs. unfamiliar topics, high and low passage difficulty levels, and order of presentation were assigned to readers from the three reading ability groups. Therefore, some students read passages at their reading ability while others read passages higher or lower than their reading ability. Three groups, with sixteen students in each group, were exposed to both treatments (the familiar and the unfamiliar passages).

Written and oral directions concerning the test were given to the students before they read the passages. Students were asked to read the passages carefully, turn the passages in to the examiner, answer the comprehension questions, and use all the information available to them from the passages and from their background knowledge. The students were not allowed to reread the passages. Reading and answering were not timed, and the students used an entire class period to finish the task.

Analysis of the Data

A three-way analysis of variance for dependent samples was used to analyze the data. Two analyses were conducted to determine the effects of the independent variables of reading ability, passage type and passage difficulty on the dependent variable, reading comprehension gain. The first analysis included questions involving literal meaning, and the second analysis included questions involving inferential meaning.

The dependent variable was measured by a ten-item reading comprehension test. Five questions were utilized to measure literal meaning, and five questions were utilized to measure inferential meaning. The difference between scores from the pre-test to post-test for each measure was utilized as the dependent variable. The possibility score on the literal section ranged from zero to five, and the possibility score on the inferential section also ranged from zero to five. The possibility score on the entire test for each passage ranged from zero to ten.

A one-way analysis of variance was performed to test the difference between the mean score for literal meaning on the pre-test for the three reading level groups. A one-way analysis of variance was performed to test the difference between the mean score for literal meaning on the post-test for the three reading level groups. A Scheffé post hoc test was performed to determine which groups were significantly different.

A one-way analysis of variance was performed to test the difference between the mean score for inferential meaning on the pre-test for the three reading level groups. A one-way analysis of variance was performed to test the difference between the mean score for inferential meaning on the post-test for the three reading level groups. A Scheffé post-hoc test was performed to determine which groups were significantly different.

A t-test was performed to test the difference between the means for passage type on the dependent variable pre-test score for literal meaning. Another t-test was performed to test the difference between the means for passage type on the dependent variable post-test score for literal meaning. A t-test was performed to test the difference between the means for passage type on the dependent variable pre-test score for inferential meaning. Another t-test was performed to test the difference between the means for passage type on the dependent variable post-test score for inferential meaning.

A t-test was performed to test the difference between the means for passage difficulty on the dependent variable pre-test score for literal meaning. Another t-test was performed to test the difference between the means for passage difficulty on the dependent variable post-test score for literal meaning. A t-test was performed to test the difference between the means for passage difficulty on the dependent variable pre-test score for inferential meaning. Another t-test was performed to test the difference between the means for passage difficulty on the dependent variable post-test score for inferential meaning.

Summary

In this chapter, the purpose of the study, subjects, instruments, procedures, and analysis of data were introduced. The purpose of this section was to explain how the study was designed. The section on subjects gave information about the people used for the study and how they were selected and assigned. The instruments used for this study included a survey, reading passages selected based on results of the survey, and a comprehension measure. The procedures outlined the steps to accomplish this study. The section on the analysis of data discussed the analysis procedures which were used for this study.

CHAPTER 4

RESULTS AND DISCUSSION

The purpose of this chapter is to present the results of the study. The findings and discussion are presented under the following headings: 1) results and discussion related to research question one; 2) results and discussion related to research question two; 3) results and discussion related to question three; and 4) summary of the findings.

Results Related to Research Question One

Does reading ability affect the reading comprehension of ESL beginning readers, intermediate readers, and advanced readers when reading culturally different passages with familiar or unfamiliar topics?

Data to answer this question were gathered according to literal and inferential comprehension questions.

Literal Questions

A comparison of scores between the pre-test and the post-test to predict gain was utilized on the literal questions with reading level of the students as a factor affecting the reading comprehension. The results indicate that the reading level of the students appears to have no significant effect on performance gain of the three reading groups (see Table 4).

The beginning group's mean score on the pre-test literal questions is 1.88, while their mean score on the post-test on the same questions is 3.66. This shows a gain of 1.78. For the intermediate group, the mean score on the pre-test literal questions is 2.13, while their mean score on the post-test on the same questions is 3.88. This shows a gain of 1.75. The advanced group mean score on the pre-test literal questions is 2.47, while their mean score on the post-test on the same questions is 4.56. This also shows a gain of 2.09.

Table 4
Comparison of Means and Standard Deviations for
Pre-Test, Post-Test and Gain Scores for
Literal Questions by Reading Level

| | Pre-Test | Post-Test | Gain |
|---------------------|----------|-----------|------|
| Total Group | | | |
| Mean | 2.16 | 4.03 | 1.87 |
| Standard Deviation | 1.42 | 0.98 | |
| | (96) | (96) | |
| Beginning | | | |
| Mean | 1.88 | 3.66 | 1.78 |
| Standard Deviation | 1.36 | 1.07 | |
| | (32) | (32) | |
| Intermediate | | | |
| Mean | 2.13 | 3.88 | 1.75 |
| Standard Deviation | 1.31 | 0.91 | |
| | (32) | (32) | |
| Advanced | | | |
| Mean | 2.47 | 4.56 | 2.09 |
| Standard Deviation | 1.57 | 0.72 | |
| | (32) | (32) | |

The gain difference scores indicate that the advanced group's gain score was slightly higher than the beginning and the intermediate groups. However, the analysis of variance on the gain scores does not reveal an effect for reading level (see Table 5). The pre-test and post-test scores differed by ability and in the predicted direction. Gains of the beginning and intermediate groups were about the same with gain scores on literal questions higher for the advanced group than scores achieved by the beginning and intermediate students. Amount of gain for the advanced group might have been affected by the number of literal test items. Since these students scored 4.56 out of a possible 5 items on the post-test, the amount of gain of the advanced students could have been limited by a ceiling effect on the post-test items. This means that the reading ability of ESL students might have affected their reading comprehension, even though the three-way analysis of variance did not reveal significance due to the small number of test items.

The analysis of variance, which is presented in Table 5, demonstrates no significant two-way interactions nor significant three-way interactions. The analysis does reveal a significant main effect for passage type ($F = 46.73$, $df = 1/84$, $p < 0.001$) on gain scores in literal meaning. This means that students' gain scores differed across levels according to familiar/unfamiliar passage type. These differences by passage type will be discussed in a subsequent section.

There were no main effects for reading level nor passage difficulty on gain scores. The absence of two-way and three-way interactions means that the effect of one independent variable is the same across all levels of the other independent variables.

Because of the lack of significant interactions, a one-way analysis of variance was performed to test the difference among the mean scores for literal questions on the pre-test for the three reading level groups. No significant difference was observed at $p < .05$ ($F = 1.41$, $df = 2/93$, $p = .25$) (see Table 6). This means that there were no differences

Table 5
 Three Way Analysis of Variance Summary Table
 for Literal Gain Scores as a Function of
 Reading Level, Passage Type and Passage Difficulty

| Source of Variation | Sum of Squares | DF | Mean Square | F | Signif of F |
|-----------------------|----------------|----|-------------|--------|-------------|
| Main Effects | 80.021 | 4 | 20.005 | 12.133 | 0.000 |
| RDLEV | 2.313 | 2 | 1.156 | 0.701 | 0.499 |
| PASSTYP | 77.042 | 1 | 77.042 | 46.726 | 0.000 |
| PASSDIF | 0.667 | 1 | 0.667 | 0.404 | 0.527 |
| 2-Way Interactions | 9.208 | 5 | 1.842 | 1.117 | 0.358 |
| RDLEV PASSTYP | 1.896 | 2 | 0.948 | 0.575 | 0.565 |
| RDLEV PASSDIF | 7.271 | 2 | 3.635 | 2.205 | 0.117 |
| PASSTYP PASSDIF | 0.042 | 1 | 0.042 | 0.025 | 0.874 |
| 3-Way Interactions | 2.771 | 2 | 1.385 | 0.840 | 0.435 |
| RDLEV PASSTYP PASSDIF | 2.771 | 2 | 1.385 | 0.840 | 0.435 |
| Explained | 92.000 | 11 | 8.364 | 5.073 | 0.000 |
| Residual | 138.500 | 84 | 1.649 | | |
| Total | 230.500 | 95 | 2.426 | | |

Table 6
Results from Four One-Way Analyses of Variance
Comparing Reading Level Groups for Pre- and Post-Testings
for Literal and Inferential Questions

| Source | D.F. | Sum of Squares | Mean Squares | F Ratio | F Prob. |
|------------------------------|------|----------------|--------------|---------|---------|
| Pre-Test Literal | | | | | |
| Between Groups | 2 | 5.69 | 2.84 | 1.41 | .248 NS |
| Within Groups | 93 | 186.97 | 2.01 | | |
| Post-Test Literal | | | | | |
| Between Groups | 2 | 14.31 | 7.16 | 8.69 | .000 ** |
| Within Groups | 93 | 76.5938 | 0.82 | | |
| Pre-Test Inferential | | | | | |
| Between Groups | 2 | 0.19 | 0.09 | 0.05 | .950 NS |
| Within Groups | 93 | 165.44 | 1.78 | | |
| Post-Test Inferential | | | | | |
| Between Groups | 2 | 14.65 | 7.32 | 6.19 | .003 * |
| Within Groups | 93 | 110.0938 | 1.18 | | |

* Significant at $p < .01$

** Significant at $p < .001$

NS Not Significant

according to reading ability levels of the students on their prior knowledge as measured by the pre-test literal questions as a dependent variable.

Another one-way analysis of variance was performed to test the difference among the mean scores for literal meaning on the post-test for the three reading level groups. Significant differences were observed at $p < .05$ ($F = 8.69$, $df = 2/93$, $p = .0003$) (see Table 6). This means that there were effects for reading ability levels on the students' reading comprehension when measured by the post-test literal questions as a dependent variable. A Scheffé post hoc test was performed to determine which groups were significantly different at $p < .1$. (On the Scheffé post hoc tests, $p < .1$ was used because of the conservative nature of the test.) The advanced reading group scored higher on the post-test for literal meaning than did the beginning and intermediate groups. This is similar to the findings of Taylor in 1979.

Inferential Questions

A comparison of scores between the pre-test and the post-test to predict gain was utilized on the inferential questions with the reading level of the students as a factor affecting the reading comprehension. The results indicate that the reading level of the students appears to have no effect on performance gain of the three reading groups (see Table 7).

The beginning group's mean score on the pre-test inferential questions is 2.00, while their mean score on the post-test on the same questions is 2.69. This shows a gain of 0.69. For the intermediate group, the mean score on the pre-test inferential questions is 2.09, while their mean score on the post-test on the same questions is 2.88. This shows a gain of 0.79. The advanced group mean score on the pre-test inferential question is 2.09, while their mean score on the post-test on the same questions is 3.59. This shows a gain of 1.50.

Table 7
Comparison of Means and Standard Deviations for
Pre-test, Post-test and Gain Scores for
Inferential Questions by Reading Level

| | Pre-Test | Post-Test | Gain |
|---------------------|----------|-----------|------|
| Total Group | | | |
| Mean | 2.06 | 3.05 | 0.99 |
| Standard Deviation | 1.32 | 1.15 | |
| | (96) | (96) | |
| Beginning | | | |
| Mean | 2.00 | 2.69 | 0.69 |
| Standard Deviation | 1.46 | 0.97 | |
| | (32) | (32) | |
| Intermediate | | | |
| Mean | 2.09 | 2.88 | 0.79 |
| Standard Deviation | 1.06 | 1.16 | |
| | (32) | (32) | |
| Advanced | | | |
| Mean | 2.09 | 3.59 | 1.50 |
| Standard Deviation | 1.44 | 1.13 | |
| | (32) | (32) | |

The gain difference scores indicate that the advanced group's gain score was slightly higher than the beginning and the intermediate groups. However, the analysis of variance on the gain scores does not reveal an effect for reading level (see Table 8). There were essentially no differences by ability among the pre-test scores. The post-test scores differed by ability and in the predicted direction. The advanced students' gain score on inferential questions seems higher than gain scores achieved by the beginning and intermediate students, a similar pattern as that observed with the literal gain scores. However, overall gain in inferential comprehension is lower than literal comprehension for ability levels.

The analysis of variance, which is presented in Table 8, demonstrates no significant two-way interactions nor significant three-way interactions. The analysis does reveal a significant effect for passage type ($F = 13.57$, $df = 1/84$, $p < 0.001$) on gain scores in inferential meaning. This means that students' gain scores differed across levels according to familiar/unfamiliar passage type. The differences by passage type will be discussed in a subsequent section.

There were no main effects for reading level nor passage difficulty on gain scores. The absence of two-way and three-way interactions means that the effect of one independent variable is the same across all levels of the other independent variables.

Because of the lack of significant interactions, a one-way analysis of variance was performed to test the difference among the mean scores for inferential meaning on the pre-test for the three reading level groups. No significant difference was observed at $p < .05$ ($F = .05$, $df = 2/93$, $p = .95$) (see Table 6). This means that there were no differences according to reading ability levels of the students on their prior knowledge as measured by pre-test inferential questions as a dependent variable.

Table 8
Three Way Analysis of Variance Summary Table
for Inferential Gain Scores as a Function of
Reading Level, Passage Type and Passage Difficulty

| Source of Variation | Sum of Squares | DF | Mean Square | F | Signif of F |
|---------------------------|----------------|----|-------------|--------|-------------|
| Main Effects | 45.917 | 4 | 11.479 | 4.942 | 0.001 |
| RDLEV | 12.646 | 2 | 6.323 | 2.722 | 0.072 |
| PASSTYP | 31.510 | 1 | 31.510 | 13.565 | 0.000 |
| PASSDIF | 1.760 | 1 | 1.760 | 0.758 | 0.386 |
| 2-Way Interactions | 7.927 | 5 | 1.585 | 0.683 | 0.638 |
| RDLEV PASSTYP | 2.521 | 2 | 1.260 | 0.543 | 0.583 |
| RDLEV PASSDIF | 5.146 | 2 | 2.573 | 1.108 | 0.335 |
| PASSTYP PASSDIF | 0.260 | 1 | 0.260 | 0.112 | 0.739 |
| 3-Way Interactions | 0.021 | 2 | 0.010 | 0.004 | 0.996 |
| RDLEV PASSTYP PASSDIF | 0.021 | 2 | 0.010 | 0.004 | 0.996 |
| Explained | 53.865 | 11 | 4.897 | 2.108 | 0.028 |
| Residual | 195.125 | 84 | 2.323 | | |
| Total | 248.990 | 95 | 2.621 | | |

Another one-way analysis of variance was performed to test the difference among the mean scores for inferential meaning on the post-test for the three reading level groups. Significant differences were observed at $p < .05$ ($F = 6.19$, $df = 2/93$, $p = .003$ (see Table 6). This means that there were effects for reading ability levels on the students' reading comprehension when measured by the post-test inferential questions as a dependent variable. A Scheffé post hoc test was performed to determine which groups were significantly different at $p < .1$. (On the Scheffé post hoc tests, $p < .1$ was used because of the conservative nature of the test.) The advanced reading group scored higher on the post-test for inferential meaning than did the beginning and intermediate groups. This supported the work of Taylor (1979) who also found that good readers achieved higher scores than poor readers whether reading familiar or unfamiliar text.

Reading Ability Differences by Passage Type

Because of the main effect for passage type, comparison of means on the pre-test and post-test questions was utilized to obtain gain scores on literal and inferential questions for each reading level that read a familiar high passage, a familiar low passage, an unfamiliar high passage, and an unfamiliar low passage. Since there were sixteen students in each reading level, with each student reading two passages, one familiar and one unfamiliar, a group of eight students from every reading level read each type of passage mentioned above. Tables 9, 10 and 11 display data for literal questions and Tables 12, 13 and 14 display data for inferential questions.

Literal Questions

According to Table 9, there was a good deal of variability among the pre-test literal scores by passage type and by reading ability. In general and as expected, readers of all abilities displayed less prior knowledge of the unfamiliar passage content than of the

Table 9
Pre-Test Means of Literal Questions
for Reading Level
by Passage Type and Reading Difficulty

| Reading Level | Passage Type | | | |
|---------------------|--------------|------|------------|------|
| | Familiar | | Unfamiliar | |
| | Difficulty | | Difficulty | |
| | High | Low | High | Low |
| Beginning | 3.12 | 2.13 | 1.38 | 0.88 |
| Intermediate | 3.25 | 2.75 | 1.13 | 1.38 |
| Advanced | 3.38 | 3.88 | 1.25 | 1.38 |

familiar content at the literal level. Advanced readers appeared to have slightly more prior knowledge than readers of other ability groups about the literal information of the familiar passage. For the unfamiliar passage, readers did not appear to differ by ability in their prior knowledge at the literal level.

On the post-test scores for literal comprehension, there was less variability by passage type and difficulty level among reading ability groups (see Table 10). In general, advanced readers scored slightly higher than beginning and intermediate readers.

Table 11 indicates a general trend for higher gain on unfamiliar passage comprehension at the literal level for all ability groups, with advanced readers outperforming beginning and intermediate readers. It is possible that the no effect of passage difficulty, and the small population had caused the variability in gain scores. However, the amount of variability among the pre-test scores makes the difference in gain scores difficult to interpret.

Background knowledge seems to be a factor causing variability in the pre-test mean scores and gain scores. The students' mean scores were higher on the familiar passages when compared with their mean scores on the unfamiliar passages for the pre-test. The students seem to have higher background knowledge on the familiar topic; therefore, gain scores were lower on the familiar passages when compared with the higher gain scores obtained on the unfamiliar passages.

In general, results indicate that the beginning, intermediate, and advanced groups did not have problems with the difficulty of the passages, which is indicated by the closeness of post-test mean scores, but the type of the passages (familiar, unfamiliar) had an impact on the students' gain scores, as expressed in Table 5. The results also indicate that, as a group, the advanced level achieved higher post-test scores than the beginning and intermediate levels (see Table 6).

Table 10
Post-Test Means of Literal Questions
for Reading Level
by Passage Type and Reading Difficulty

| Reading Level | Passage Type | | | |
|----------------------|---------------------|------------|-------------------|------------|
| | Familiar | | Unfamiliar | |
| | Difficulty | | Difficulty | |
| | High | Low | High | Low |
| Beginning | 3.50 | 3.75 | 3.63 | 3.75 |
| Intermediate | 4.13 | 3.75 | 3.88 | 3.75 |
| Advanced | 4.75 | 4.50 | 4.38 | 4.63 |

Table 11
Mean Gain Score of Literal Questions
for Reading Level
by Passage Type and Reading Difficulty

| Reading Level | Passage Type | | | |
|---------------------|--------------|------|------------|------|
| | Familiar | | Unfamiliar | |
| | Difficulty | | Difficulty | |
| | High | Low | High | Low |
| Beginning | 0.38 | 1.63 | 2.25 | 2.88 |
| Intermediate | 0.88 | 1.00 | 2.75 | 2.38 |
| Advanced | 1.38 | 0.63 | 3.13 | 3.25 |

Inferential Questions

According to Table 12, there was less variability among the pre-test inferential scores by passage type and reading ability than pre-test literal scores. In general and as expected, readers of all abilities displayed less prior knowledge of the unfamiliar passage content than of the familiar content at the inferential level. Advanced readers appeared to have slightly more background knowledge than readers of other ability groups about the inferential information of the familiar passage, but this was not the case for unfamiliar text. Similar trends were observed for inferential as for literal pre-test scores where readers did not appear to differ by ability in their prior knowledge at the inferential level.

On the post-test scores for inferential comprehension, there was a good deal of variability by passage type and difficulty level among reading ability groups (see Table 13). In general, advanced readers scored slightly higher than beginning and intermediate readers.

Table 14 indicates a general trend for higher gain on unfamiliar passage comprehension at the inferential level for all ability groups, with advanced readers outperforming beginning and intermediate readers. It is possible that the lack of effect of passage difficulty, and the small population, had caused the variability in gain scores. However, the amount of variability among the pre-test scores makes the difference in gain scores difficult to interpret.

Background knowledge seems to be a factor causing variability in the pre-test mean scores and gain scores. The students' mean scores were higher on the familiar passages when compared with their mean scores on the unfamiliar passages for the pre-test. The students seem to have higher background knowledge on the familiar topic, therefore, gain scores were lower on the familiar passages when compared with the higher gain scores obtained on the unfamiliar passages.

Table 12
Pre-Test Means of Inferential Questions
for Reading Level
by Passage Type and Reading Difficulty

| Reading Level | Passage Type | | | |
|----------------------|---------------------|------------|-------------------|------------|
| | Familiar | | Unfamiliar | |
| | Difficulty | | Difficulty | |
| | High | Low | High | Low |
| Beginning | 2.88 | 2.75 | 1.00 | 1.39 |
| Intermediate | 2.38 | 2.50 | 1.75 | 1.75 |
| Advanced | 2.63 | 3.38 | 1.25 | 1.13 |

Table 13
Post-Test Means of Inferential Questions
for Reading Level
by Passage Type and Reading Difficulty

| Reading Level | Passage Type | | | |
|---------------|--------------|------|------------|------|
| | Familiar | | Unfamiliar | |
| | Difficulty | | Difficulty | |
| | High | Low | High | Low |
| Beginning | 3.25 | 2.38 | 2.88 | 2.25 |
| Intermediate | 2.88 | 2.88 | 3.00 | 2.75 |
| Advanced | 3.25 | 4.38 | 3.38 | 3.38 |

Table 14
Mean Gain Score of Inferential Questions
for Reading Level
by Passage Type and Reading Difficulty

| Reading Level | Passage Type | | | |
|---------------|--------------|-------|------------|------|
| | Familiar | | Unfamiliar | |
| | Difficulty | | Difficulty | |
| | High | Low | High | Low |
| Beginning | 0.38 | -0.38 | 1.88 | 0.88 |
| Intermediate | 0.50 | 0.38 | 1.25 | 1.00 |
| Advanced | 0.63 | 1.00 | 2.13 | 2.25 |

In general, results indicate that the beginning level did not have problems with the difficulty of the passages, which is indicated by the closeness of post-test mean scores, and also by the small loss on the familiar low difficulty passage, while experiencing a small gain on the familiar high difficulty passage. The intermediate and advanced levels also did not have problems with the difficulty of the passages, which is indicated by the closeness of the post-test mean scores. However, the passage type (familiar, unfamiliar) had an impact on the students' gain scores, as expressed in Table 8. The results also indicate that, as a group, the advanced level achieved higher post-test scores than the beginning and intermediate levels (see Table 6).

It had been assumed that the reading level of the students might have an effect on their performance when reading culturally different material. The three-way analysis of variance performed on gain scores for literal questions revealed no significant effect for reading level. Also, the three-way analysis of variance performed on gain scores for inferential questions revealed differences although they were not significant. However, the lack of a difference could be interpreted to show that reading level might have an effect on the performance of the students.

The one-way analyses of variance that were performed on gain scores for literal and inferential questions on the pre-tests revealed no significant effects for reading level on the students' performance. But the one-way analyses of variance that were performed on gain scores for literal and inferential questions on the post-tests revealed significant effects for reading level on the students' performance (see Table 6). The Scheffé post hoc tests indicated that the advanced group scored higher than the beginning and the intermediate groups.

The lack of background knowledge seemed to have an effect on the ESL students' lower scores on the pre-tests as reflected by the no significant effect for the reading level on

their performance. However, the treatment seemed to have an effect on the students' performance and this was reflected by their higher scores on the post-tests, especially for the advanced students, who excelled and scored higher than the beginning and intermediate students. The higher scoring by the advanced students appeared to have caused the significant difference in the reading level, as detected by the Scheffé post hoc tests.

In general, the findings indicate that performance of ESL students on culturally different material should be expected to be relatively close when the reading levels of these students are not far apart. However, if the reading level of the ESL students is advanced, it is likely that they would perform slightly higher than levels that are way below their reading level. It appears that the advanced ESL students had an advantage over the beginning and the intermediate students because of their longer exposure to language instruction since they have been in the U.S.A. and at the CESL Program for a longer time than the other students. It is also possible that they are better readers and more mature than the other two reading groups, for their average age is over five years older.

Results Related to Research Question Two

Does reading a culturally familiar topic and a culturally unfamiliar topic affect the reading comprehension of ESL readers?

Data to answer this question were gathered according to literal and inferential questions.

Literal Questions

A comparison of scores between the pre-test and the post-test to predict gain is utilized on the literal questions with passage types as a factor affecting the reading comprehension. The results indicate that the passage type seems to have an effect on the performance of the students.

The mean score on the familiar passage pre-test literal questions is 3.08, while the mean score on the post-test on the same questions is 4.06. On the other hand, the mean score on the unfamiliar passage pre-test literal questions is 1.22, while the mean score on the post-test on the same questions is 4.00. The gain difference score of 0.98 is obtained for the familiar topic, and a gain difference score of 2.78 is obtained for the unfamiliar topic (see Table 15). This indicates that the students who read the familiar passage did not gain much after exposure to the treatment, which is the reading of the familiar passage. But the students who read the unfamiliar passage improved their score on the post-test with the gain difference score of 2.78. Literal comprehension of the students increased after reading the unfamiliar passage (see Table 5).

A t-test was performed to test the difference between the means for passage type on the dependent variable pre-test score for literal meaning. A significant difference was observed ($t = 8.39$, $df = 94$, $p = .000$). The group which was familiar with the passage scored higher than the group which was unfamiliar with the passage (see Table 16).

A t-test was performed to test the difference between the means for passage type on the dependent variable post-test score for literal meaning. No significant difference was observed ($t = .31$, $df = 94$, $p = .756$). The group which read the familiar passage achieved a mean score of 4.06, and the group which read the unfamiliar passage achieved a mean score of 4.00. This means that there was no effect for passage type on the students' reading comprehension after reading both types of passages and answering the post-tests (see Table 16).

Inferential Questions

A comparison of scores between the pre-test and post-test to predict gain is utilized on the inferential questions with passage type as a factor affecting reading comprehension.

Table 15
 Comparison of Means and Standard Deviations for
 Pre-test, Post-test and Gain Scores for
 Literal Questions by Passage Type

| | Pre-Test | Post-Test | Gain |
|--------------------|----------|-----------|------|
| Total Group | | | |
| Mean | 2.16 | 4.03 | 1.87 |
| Standard Deviation | 1.42 | 0.98 | |
| | (96) | (96) | |
| Familiar | | | |
| Mean | 3.08 | 4.06 | 0.98 |
| Standard Deviation | 1.16 | 1.00 | |
| | (48) | (48) | |
| Unfamiliar | | | |
| Mean | 1.22 | 4.00 | 2.78 |
| Standard Deviation | 0.99 | 0.97 | |
| | (48) | (48) | |

Table 16
Results of t-Tests Comparing Passage Type
for Pre- and Post-Testings
for Literal and Inferential Questions

| | Passage Type | | | | t | |
|-----------------------|--------------|------|------------|------|------|----|
| | Familiar | | Unfamiliar | | | |
| | Mean | SD | Mean | SD | | |
| Pre-Test Literal | 3.08 | 1.16 | 1.23 | 0.99 | 8.39 | ** |
| Post-Test Literal | 4.06 | 1.00 | 4.00 | 0.97 | 0.31 | NS |
| Pre-Test Inferential | 2.75 | 1.24 | 1.38 | 1.00 | 5.96 | ** |
| Post-Test Inferential | 3.17 | 1.06 | 2.94 | 1.23 | 0.98 | NS |

** Significant at $p < .001$

NS Not Significant

The results indicate that the passage type seems to have an effect on the performance of the students.

The mean score on the familiar passage pre-test inferential questions is 2.75, while the mean score on the post-test on the same questions is 3.17. On the other hand, the mean score on the unfamiliar passage pre-test inferential questions is 1.38, while the mean score on the post-test on the same questions is 2.94. The gain difference score of 0.42 is obtained for the familiar topic, and a gain difference score of 1.56 is obtained for the unfamiliar topic (see Table 17). This indicates that the students who read the familiar passage did not gain much after exposure to the treatment, which is the reading of the familiar passage. But the students who read the unfamiliar passage improved their score on the post-test with the gain difference score of 1.56. Inferential comprehension of the students increased after reading the unfamiliar passage (see Table 8).

A t-test was performed to test the difference between the means for passage type on the dependent variable pre-test score for inferential meaning. A significant difference was observed ($t = 5.96$, $df = 94$, $p = .000$). The group which was familiar with the passage scored higher than the group which was unfamiliar with the passage (see Table 16).

A t-test was performed to test the difference between the means for passage type on the dependent variable post-test score for inferential meaning. No significant difference was observed ($t = .31$, $df = 94$, $p = .756$). The group which read the familiar passage achieved a mean score of 3.17, and the group which read the unfamiliar passage achieved a mean score of 2.94. This was the reason for the no significant difference observed for the passage type on the post-test inferential questions. This means that there was no effect for passage type on the students' reading comprehension after reading both types of passages and answering the post-tests (see Table 16).

Table 17

**Comparison of Means and Standard Deviations for
Pre-test, Post-test and Gain Scores for
Inferential Questions by Passage Type**

| | Pre-Test | Post-Test | Gain |
|--------------------|----------|-----------|------|
| Total Group | | | |
| Mean | 2.06 | 3.05 | 0.99 |
| Standard Deviation | 1.32 | 1.15 | |
| | (96) | (96) | |
| Familiar | | | |
| Mean | 2.75 | 3.17 | 0.42 |
| Standard Deviation | 1.25 | 1.06 | |
| | (48) | (48) | |
| Unfamiliar | | | |
| Mean | 1.38 | 2.94 | 1.56 |
| Standard Deviation | 1.00 | 1.23 | |
| | (48) | (48) | |

Discussion

It had been assumed that even though ESL students claim familiarity with a topic, they indeed may not have enough background knowledge or may not have the appropriate schemata to effectively process the text. A look at the post-test literal questions for mean scores on the familiar and the unfamiliar topics indicates that students' performance should be expected to be almost equal (see Table 15). However, equality of performance could be credited to availability of background knowledge on the familiar topic, while it should be credited to treatment effect on the unfamiliar topic. Another look at the students' mean difference scores of 1.86 on the pre-test for the familiar and the unfamiliar (3.08-1.22) shows that difference in performance before the application of treatment.

Furthermore, a look at the post-test inferential questions for mean scores on the familiar and the unfamiliar topics indicates that students' performance should be expected to be almost equal (see Table 17). However, equality of performance could be credited to availability of background knowledge on the familiar topic, while it could be credited to treatment effect on the unfamiliar topic. A look at the students' mean scores difference of 1.37 on the pre-test for the familiar and the unfamiliar (2.75-1.38) shows that difference in performance before the application of treatment. Therefore, passage type could have an effect on ESL students' achievement when measured by a pre-test, while it may not have any effects on students' comprehension after reading the passages.

The three-way analysis of variance performed on the literal questions revealed a significant effect for the passage type. Also, the three-way analysis of variance performed on the inferential questions revealed a significant effect for passage type (see Tables 5 and 8). The two t-tests performed to test the difference between the means for passage type on the dependent variables, the post-test scores for literal and inferential questions,

revealed no significant differences. Further, the two t-tests that were performed to test the difference between the means for passage type on the dependent variables, the pre-test scores for literal and inferential questions, revealed significant differences. For all tests, it was observed that the students who read the familiar passage scored higher than those who read the unfamiliar passage.

The students' claim of familiarity with the topic (The Weekend) was not, indeed, reflected by their performance of 58% on the pre-test on that familiar topic. However, that percentage was certainly higher than their performance of 26% on the pre-test on the unfamiliar topic (Groundhog Day). These findings support schema theory which emphasizes that topic familiarity is associated with topic knowledge. However, the students' performance of 72% on the post-test on the familiar topic was not far apart from their performance of 69% on the post-test on the unfamiliar topic. This implies that providing ESL students with reading material with varied degrees of familiarity should not affect their performance on a comprehension test based on such material. However, these findings may not be generalizable to all topics.

Results Related to Research Question Three

Does reading difficulty of a high readability passage and a low readability passage affect the reading comprehension of ESL readers when reading a culturally different passage?

Data to answer this question was gathered according to literal and inferential questions.

Literal Questions

A comparison of scores between the pre-test and the post-test to predict gain is utilized on the literal questions with passage difficulty as a factor affecting the reading

comprehension. The results indicate that the passage difficulty seems to have no effect on performance of the students, as indicated by the similarity of the high difficulty passage scores and the low difficulty passage scores (see Table 18).

The mean score on the high passage pre-test literal questions is 2.25, while the mean score on the post-test on the same questions is 4.04. On the other hand, the mean score on the low passage pre-test literal questions is 2.06, while the mean score on the post-test on the same questions is 4.02. The gain difference score of 1.79 is obtained for the high passage, and a gain difference score of 1.96 is obtained for the low passage. The results indicate that the students performed almost equally on the pre-test, and also on the post-test after reading both the high difficulty passages and the low difficulty passages. They also gained in comprehension about equally from the passages, which is reflected by the gain difference scores of 1.79 for the high passages and 1.96 for the low passage. This indicates that passage difficulty does not appear to have an effect on the ESL students' performance, even though there was a difference of four US grade levels involved (see Table 5).

A t-test was performed to test the difference between the means for passage difficulty on the dependent variable pre-test score for literal meaning. No significant difference was observed ($t = .64$, $df = 94$, $p = .552$). A t-test was performed to test the difference between the means for passage difficulty on the dependent variable post-test score for literal meaning. No significant difference was observed ($t = .10$, $df = 94$, $p = .918$). The students who read the high difficulty passages and the students who read the low difficulty passages scored almost equally on the pre-test and the post-test literal questions. This means that there was no effect for passage difficulty on the students' reading comprehension (see Table 19).

Table 18
Comparison of Means and Standard Deviations for
Pre-test, Post-test and Gain Scores for
Literal Questions by Passage Difficulty

| | Pre-Test | Post-Test | Gain |
|--------------------|----------|-----------|------|
| Total Group | | | |
| Mean | 2.16 | 4.03 | 1.87 |
| Standard Deviation | 1.42 | 0.98 | |
| | (96) | (96) | |
| High | | | |
| Mean | 2.25 | 4.04 | 1.79 |
| Standard Deviation | 1.39 | 0.99 | |
| | (48) | (48) | |
| Low | | | |
| Mean | 2.06 | 4.02 | 1.96 |
| Standard Deviation | 1.46 | 0.98 | |
| | (48) | (48) | |

Table 19
 Results of t-Tests Comparing Passage Difficulty
 for Pre- and Post-Testings
 for Literal and Inferential Questions

| | Passage Difficulty | | | | t | |
|-----------------------|--------------------|------|------|------|-------|----|
| | High | | Low | | | |
| | Mean | SD | Mean | SD | | |
| Pre-Test Literal | 2.25 | 1.39 | 2.06 | 1.47 | 0.64 | NS |
| Post-Test Literal | 4.04 | 0.99 | 4.02 | 0.98 | 0.10 | NS |
| Pre-Test Inferential | 1.98 | 1.23 | 2.15 | 1.41 | -0.62 | NS |
| Post-Test Inferential | 3.10 | 0.99 | 3.00 | 1.29 | 0.44 | NS |

NS Not Significant

Inferential Questions

A comparison of scores between the pre-test and post-test to predict gain is utilized on the inferential questions with the passage difficulty as a factor affecting the reading comprehension. The results indicate that the passage difficulty seems to have no effect on the performance of the students, as indicated by the similarity of students' scores (see Table 20).

The mean score on the high difficulty passage pre-test inferential questions is 1.98, while the mean score on the post-test on the same questions is 3.10. On the other hand, the mean score on the low difficulty passage pre-test inferential questions is 2.15, while the mean score on the post-test on the same questions is 3.00. The gain difference score of 1.12 is obtained for the high difficulty passage, and a gain difference of 0.85 is obtained for the low difficulty passage. This indicates that reading a difficult or easy passage does not necessarily have an effect on the performance of ESL students (see Table 8).

A t-test was performed to test the difference between the means for passage difficulty on the dependent variable pre-test score for inferential meaning. No significant difference was observed ($t = -.62$, $df = 94$, $p = .539$). A t-test was performed to test the difference between the means for passage difficulty on the dependent variable post-test score for inferential meaning. No significant difference was observed ($t = .44$, $df = 94$, $p = .658$). The students who read the high difficulty passages and the students who read the low difficulty passages scored almost equally on the pre-test and the post-test inferential questions. This means that there was no effect for passage difficulty on the students' reading comprehension (see Table 19).

Table 20
Comparison of Means and Standard Deviations for
Pre-test, Post-test and Gain Scores for
Inferential Questions by Passage Difficulty

| | Pre-Test | Post-Test | Gain |
|--------------------|--------------|--------------|------|
| Total Group | | | |
| Mean | 2.06 | 3.05 | 0.99 |
| Standard Deviation | 1.32 (96) | 1.15 (96) | |
| High | | | |
| Mean | 1.98 | 3.10 | 1.12 |
| Standard Deviation | 1.23 (48) | 0.99 (48) | |
| Low | | | |
| Mean | 2.15 | 3.00 | 0.85 |
| Standard Deviation | 1.41 (48) | 1.29 (48) | |

Discussion

The assumption was that the difficulty of the passage might have an effect on the outcome of the students' performance on the comprehension test. On the contrary, a look at the post-test literal questions for mean scores on the high difficulty and the low difficulty passages indicates that the students' performance should be expected to be almost identical. The same can be said about the students' performance on the post-test for inferential questions for the high and the low difficulty passages. Therefore, passage difficulty may not necessarily affect ESL students' reading comprehension when measured by a post-test.

For this study, passage difficulty was assigned according to teacher judgment of passages which were written according to the Fry readability formula guidelines. It is recognized that in reality, passage difficulty is a complex phenomenon which may not be completely captured by readability formulas. For example, such text qualities as text structure, stylistic devices, degree of abstractness or concreteness, word frequency, passage coherence and the like are not necessarily reflected in readability guidelines. Therefore, although this study showed that passage difficulty did not significantly affect ESL students' reading comprehension, passage difficulty may be a factor of difficulty if measured according to means other than readability formulas. However, these findings may not be generalizable to all difficulty levels.

The three-way analyses of variance performed on the literal and inferential questions also revealed no significant effect for the passage difficulty levels. The two t-tests performed to test the difference between the means for passage difficulty on the dependent variables pre-test and post-test scores for literal questions revealed no significant difference. Further, the two t-tests that were performed to test the difference between the means for passage difficulty on the dependent variables pre-test and post-test scores for inferential questions revealed no significant difference.

Summary of the Findings

The following is a summary of the findings of this study presented in response to the research questions stated in Chapter 1.

1. The advanced level students demonstrated better reading comprehension than the beginning and the intermediate levels.
2. Students who read the familiar topic demonstrated greater prior knowledge than students who read the unfamiliar topic, but their reading comprehension was similar.
3. Students who read the high difficulty passage show no differences in reading comprehension from students who read the low difficulty passage. However, the findings for this study were obtained with a population of 48 students and two different passage topics, written at two difficulty levels each. It is possible that other results might have occurred with a larger population, different passage topics, or other reading difficulty levels.

CHAPTER 5

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

This chapter presents (1) a restatement of the problem, (2) a review of related research, (3) design and procedures of the study, and (4) findings of the study. Conclusions, implications and recommendations for further research that emanate from the results of this study are also presented.

Restatement of the Problem

The purpose of the study was to investigate the possible effects of reading levels, topic familiarity and text difficulty on ESL students' reading comprehension when reading a culturally different text.

The research questions addressed in this study were:

1. Does reading ability affect the reading comprehension of ESL beginning readers, intermediate readers, and advanced readers when reading culturally different passages with familiar or unfamiliar topics?
2. Does reading a culturally familiar topic and a culturally unfamiliar topic affect reading comprehension of ESL readers?
3. Does reading difficulty of a high readability passage and a low readability passage affect the reading comprehension of ESL readers when reading a culturally different passage?

Related Research

Relevant literature to the study was identified and reviewed. Particularly relevant studies which investigated the effects of readers' prior knowledge on comprehension were

included (Anderson et al., 1977; Carrell and Eisterhold, 1983; Carrell, 1983; Steffensen et al., 1979). Also, studies that investigated the effects of background knowledge on readers dealing with familiar and unfamiliar topics were included (Kintsch and Greene, 1978; Taylor, 1979). In general, such studies showed that readers' prior knowledge affected their reading comprehension. Most studies also indicated effects for familiar over unfamiliar topics.

Design and Procedures

The 48 ESL students in the study were selected from the Center for English as a Second Language (CESL) program at the University of Arizona. Three groups were used (beginning, intermediate, and advanced).

A one-step survey was administered to determine the topics of the passages that were used in the study. Two topics were selected to be included in the study with one familiar and one unfamiliar. Each topic was written at two reading difficulty levels.

A pre-test was given to the students to control for background knowledge. It consisted of questions based on the two passages. Each passage had ten questions, five literal and five inferential questions. Three weeks later, students read two passages, according to stratified random sampling procedures. Students answered a post-test, consisting of the same questions used as the pre-test. A multiple choice procedure was used to answer the questions with four options from which to choose.

Each subject's scores on literal and inferential questions were tallied for both the pre- and post-tests. Two three-way analyses of variance for dependent samples were used. The first analysis was applied on questions involving literal meaning, and the second analysis included questions involving inferential meaning. Further tests were applied to detect significant differences as needed. Variables investigated included reading ability, passage familiarity, and passage difficulty.

Findings of the Study

The results of the data analyses indicated significant effects for reading levels on the reading comprehension of ESL students. The data analyses also indicated significant effects for passage type on reading comprehension gain scores of students but no effects on their comprehension scores. There was no significant effect for passage difficulty on reading comprehension of the students.

The advanced students scored noticeably higher on the comprehension measure than the beginning and the intermediate students on the post-tests.

Students demonstrated greater knowledge on the pre-test for the familiar topic than for the unfamiliar topic. However, students scored almost equally on the comprehension post-tests for the familiar and unfamiliar topics.

Students who read the high difficulty passages, and students who read the low difficulty passages scored almost equally on the comprehension measure, which indicates that the passage difficulty did not have any effects on the students' reading comprehension.

Conclusions

The following conclusions are based on the findings of this study.

1. ESL students of advanced reading ability should be expected to have higher reading comprehension than ESL students of lower reading ability levels when reading culturally different passages with familiar and unfamiliar topics. With adult ESL populations, differences in reading ability between beginning and intermediate populations may be difficult to measure accurately.
2. ESL students should be expected to achieve higher scores on pre-tests based on culturally familiar topics but not on topics that are culturally unfamiliar. But, ESL

students who read about topics that are culturally familiar and unfamiliar should be expected to achieve almost equally on comprehension tests following the readings with a slight edge for the familiar topics.

3. ESL students who read culturally different passages with familiar and unfamiliar topics should be expected to achieve equally on tests based on such materials regardless of passage difficulty levels. Passages written at third-grade difficulty and eighth-grade difficulty levels may not present real differences to adult ESL readers.

Implications

The following implications are suggested by the conclusions of this study:

1. ESL students with various reading levels or abilities can learn from materials that are culturally different, especially students at advanced reading levels.
2. ESL students can learn from cultural material both familiar and unfamiliar.
3. Within the range of third- to eighth-grade readability levels, passage difficulty may not be a factor affecting the reading comprehension of ESL students, particularly adult learners.
4. Readability formulas may not be reliable sources in predicting appropriate reading material for ESL students.
5. Teachers' recommendations may be reliable sources in predicting reading ability of students.

Recommendations for Further Research

1. Replication of this study using subjects from only one ethnic group.
2. Replication of this study with a comparison population of sixteen native English speakers from the USA.

3. Replication of this study using more subjects.
4. Replication of this study using different cultural events for topics.
5. Replication of this study using native English speakers from the USA and ESL students.
6. Replication of this study using foreign college students as an additional group.
7. Replication of this study using native English speakers from the USA, foreign college students, and ESL students.
8. Replication of this study using explicit, implicit, and scriptal questions.
9. Replication of this study using science, arts, religion, . . . , etc. for topics.
10. Replication of this study using greater range of difficulty between high and low difficulty level passages.
11. Replication of this study using retellings in addition to questions as a comprehension measure.
12. Re-evaluation of the data, deleting the intermediate group.

APPENDIX A
DEMOGRAPHIC INFORMATION

SURVEY

1. Name _____
 2. Country _____
 3. Native Language (First Language) _____
 4. Age _____
 5. Sex: Male _____ Female _____
 6. How long have you been in the U.S.A.? Year(s) _____ Months(s) _____
 7. How long have you been a student at C.E.S.L.? _____
 8. CESL level 20, 30, 40, 50, 60, 70
 9. Why are you learning English? Choose one only.
 - a. To join a university or college.
 - b. For my job.
 - c. To do research.
 - d. To travel.
 - e. To read English materials.
 - f. For fun.
- (other) _____

APPENDIX B
DIRECTIONS AND EXAMPLES

DIRECTIONS:

Please read the following list of holidays, events and occasions.

First, for each item, put a check mark (✓) in the column labeled "Unfamiliar" if you do not know about the item. If you know about the item, put a check mark (✓) in the column labeled "Familiar".

Second, circle () the number which best indicates how much you know.

EXAMPLE:

| | Unfamiliar | I don't know about | I know about | Familiar |
|------------------|------------|--------------------------|-----------------|----------|
| Pan American Day | ✓ | 1 2 3 4 5 6 7 | | |
| Christmas | | 1 2 3 4 5 6 7 | | ✓ |

APPENDIX C

RECOGNITION LIST OF HOLIDAYS, EVENTS, AND OCCASIONS

| | Unfamiliar | I don't know about | I know about | Familiar |
|---------------------|------------|--------------------|--------------|----------|
| Thanksgiving | | 1 2 3 4 5 6 7 | | |
| Fourth of July | | 1 2 3 4 5 6 7 | | |
| Labor Day | | 1 2 3 4 5 6 7 | | |
| Memorial Day | | 1 2 3 4 5 6 7 | | |
| Halloween | | 1 2 3 4 5 6 7 | | |
| New Year's Day | | 1 2 3 4 5 6 7 | | |
| Valentine's Day | | 1 2 3 4 5 6 7 | | |
| Groundhog Day | | 1 2 3 4 5 6 7 | | |
| Presidents' Day | | 1 2 3 4 5 6 7 | | |
| Birthdays | | 1 2 3 4 5 6 7 | | |
| Veterans' Day | | 1 2 3 4 5 6 7 | | |
| Mother's Day | | 1 2 3 4 5 6 7 | | |
| Saint Patrick's Day | | 1 2 3 4 5 6 7 | | |
| Weddings | | 1 2 3 4 5 6 7 | | |
| April Fools' Day | | 1 2 3 4 5 6 7 | | |
| Father's Day | | 1 2 3 4 5 6 7 | | |
| Flag Day | | 1 2 3 4 5 6 7 | | |
| Anniversaries | | 1 2 3 4 5 6 7 | | |
| Columbus Day | | 1 2 3 4 5 6 7 | | |
| Election Day | | 1 2 3 4 5 6 7 | | |
| Graduation Day | | 1 2 3 4 5 6 7 | | |
| Pearl Harbor Day | | 1 2 3 4 5 6 7 | | |
| May Day | | 1 2 3 4 5 6 7 | | |
| Party | | 1 2 3 4 5 6 7 | | |
| Super Bowl | | 1 2 3 4 5 6 7 | | |
| Last Day of School | | 1 2 3 4 5 6 7 | | |
| Picnic | | 1 2 3 4 5 6 7 | | |
| World Series | | 1 2 3 4 5 6 7 | | |

| | Unfamiliar | I don't know about | I know about | Familiar |
|--------------------|------------|--------------------|--------------|----------|
| Bill of Rights Day | | 1 2 3 4 5 6 7 | | |
| Forefather's Day | | 1 2 3 4 5 6 7 | | |
| Patriots' Day | | 1 2 3 4 5 6 7 | | |
| Sweetest Day | | 1 2 3 4 5 6 7 | | |
| Reformation Sunday | | 1 2 3 4 5 6 7 | | |
| Loyalty Day | | 1 2 3 4 5 6 7 | | |
| Grandparents' Day | | 1 2 3 4 5 6 7 | | |
| Engagement | | 1 2 3 4 5 6 7 | | |
| Sweet 16 Party | | 1 2 3 4 5 6 7 | | |
| Debutante Ball | | 1 2 3 4 5 6 7 | | |
| Baby Shower | | 1 2 3 4 5 6 7 | | |

APPENDIX D**PRE-PRIMER GRADE**

It was fall. Sue went for a walk. She took her dog Sam. They walked for a long time. They saw trees. Some were red. Some were green. Sue and Sam saw birds too. They were brown. Sam did not run after them. They liked their walk. It was very nice.

PRIMER GRADE

Jack woke up Saturday morning. He looked out of the window. The ground was white. The trees were white.

"Oh boy," said Jack, "snow."

"What did you say?" asked John, rubbing his eyes.

"It snowed last night. Get up and see," said Jack.

Both boys ran to the window.

"Look at that!" said John. "Come on. Let's get dressed."

Jack and John ran into the kitchen.

"Mom!" they said. "Snow! It snowed last night."

"Yes," said Mom. "Dad went out to get your sleds. First we will eat. Then we can have some fun. The first snow is the best!"

FIRST GRADE

One day Spotty went for a walk. The sun was warm. Spotty walked to the pond. There he saw a frog. The frog was on a log. Spotty wanted to play. Spotty barked. The frog just sat.

Spotty jumped into the water. Frog jumped in too. Spotty started to walk. The water got very deep. Spotty did not know what to do. The water went over his head. Spotty moved his legs. Soon his head came out of the water. He kept on running. He came to the other side of the pond. That is how Spotty learned to swim.

SECOND GRADE

It was the first time Bill went to camp. He was very happy to be there. Soon he went for a walk in the woods to look for many kinds of leaves. He found leaves for some maple and oak trees. As Bill walked in the woods, he saw some animal tracks. At that minute, a mouse ran into a small hole by a tree. Bill wondered if the tracks were made by the mouse. He looked around for other animals. He did not see any other animals. The only thing Bill saw was a bird's nest in an old tree.

THIRD GRADE

The bees were making honey during the day. At night it was cool and quiet. I had slept well until I heard a scratching noise at my window. It sounded as if someone was trying to break in. As I moved a little closer, I could see something black over a part of the window. In fright I knocked on the windowpane. Very slowly and quietly the great shadow moved down and walked away. In the morning we found bear tracks there. He had come for the honey that the bees were making in the attic of the cabin.

FOURTH GRADE

The world of plants is an exciting one. Most plants spend all their time in one place. We sometimes forget that plants work hard all day long when they are growing. Plants grow almost everywhere in the world around us - in all sizes and shapes. Some are so small that they are smaller than the period at the end of this sentence. These plants, called microbes, can only be seen with a microscope. Other plants, like tree plants, tower high in the sky. Plants grow in soils, oceans, rivers, lakes, swamps, deserts, rocks, trees, old bread, and even old shoes!

FIFTH GRADE

My uncle and I went camping this past week. We left home Friday after school and reached our campsite Friday night. After setting up our tent we went to bed. I could not fall asleep because I was eager to go trout fishing for the first time in my life. Finally I fell asleep only to be shook by my uncle telling me it was time for breakfast. I got up out of my sleeping bag, got dressed, and went out by the fire. I enjoyed a breakfast of ham and eggs which Uncle Joe had prepared on the fire.

SIXTH GRADE

The heavy fog swept across a pumpkin field where the Great Orange Witch lived in her shady hut. At night dim lights were seen in the cloudy windows and odd sounds drifted out from under doors and through cracks in the walls. No one had ever seen the witch but kids imagined her to look like any other sorceress. They were sadly mistaken. She was no ordinary witch but one who decided the fate of weather on Halloween Eve. If the witch thought that it should storm in October, she would drop more grape jelly beans in her evil brew.

SEVENTH GRADE

The noise of sixteen cars warming up for the race echoed across the race track. Paul felt his stomach tightening, knotting, trembling, flipping up to his throat, and tumbling down again. His eyes flickered across the faces of the other drivers who were staring intently at the track in front of them. His car was tuned perfectly and the engine thundered as if it wanted to convince the others that it would win. Paul nervously fingered the steering wheel and planned for the moment the flag would drop. As the pace car moved away, the flag fell. The race began.

EIGHTH GRADE

The mountain loomed ominously in the foreground. There it was, the lonely unconquered giant, Mt. Kilarma. In sheer size there was nothing imposing about the 15,000 foot height of Mt. Kilarma. The danger rested in the skirt of glaciers climbing the steep sides of the mountain and the fiercely changing winds that tore at the summit. Many had tried to defeat this magnificent creation of nature, but to date no one had. Mindful of this, the band of mountaineers stared at the huge mass of ice. Could they do what no one had ever accomplished? Could they scale Mt. Kilarma?

NINTH GRADE

In that colorful Edwardian period, from the day the Wright brothers made their first flight in 1903 to the outbreak of war in 1914, man learned how to fly. Without benefit of textbook or teacher, he learned by trial and error. He learned in strange contraptions that looked like no craft seen before or since. He learned in monoplanes, biplanes and triplanes of various shapes and sizes. He powered his frail machines with motors of thirty or forty horsepower and of uncertain performance. He rolled along the ground, or practiced "grass cutting," or made hops of ten, twenty, or a hundred feet. As he mastered the controls, he learned to skim the treetops, to cut figure eights, and to climb precariously to the clouds - there to switch off the engine and descent to what he hoped would be a graceful landing. Again and again he risked his neck to win applause from the crowds below. He rapidly set new marks for altitude, distance, duration - and bones were broken as often as the records.

There was something in the personal make-up of the first flyers that set them apart from their fellow men: a fascination with flight that fused a sense of escape with a sense of fulfillment. Individually the pioneers differed in background, temperament, and personal characteristics. Collectively they were like members of a club. They were bound together by the mysteries of flight, by a sense of fatalism, and by the hero worship they received from an earthbound public.

APPENDIX E
FAMILIAR LOW DIFFICULTY PASSAGE

The Weekend

On the weekend, Americans usually do many things to relax and have fun. At this time of the week, they have time off from their job or school. They watch television on the weekend. Some watch the programs they like. Others like to watch sports. The sports they like are football, basketball, and baseball. Friends get together to watch a game, eat munchies, and drink some beer.

Some people go on a picnic at the park. They buy food and drinks and all kinds of picnic needs. They make a fire to cook their food, like hotdogs. Sometimes they also play ball. Soft drinks and beer are the main drinks at a picnic.

Another fun thing to do is to have friends over for a potluck. All guests bring a dish to share with the friends. At a potluck dinner, people taste different kinds of good foods. The guests also have a drink. They meet new people. They talk about food. They tell each other how to cook different kinds of dishes.

Dining out can be a lot of fun on the weekend. Two or more people arrange the time and pick the place where they will go to eat. The man usually picks up the lady and gives her a ride back home. He also pays for dinner. Some people go Dutch. At times, the woman chooses to pay for the dinner. At the restaurant, the waiter or waitress brings the food to your table. When the food is nice and the service is good, the waiter gets rewarded with a tip.

Some people prefer to go to the movies on the weekend. They go to see the shows with their good friends. The twilight show is the best time to go to the movies if you are looking for a bargain. At prime time the show tickets cost more and the lines are longer.

If you get hungry, you can buy food at the movie theater. At the movies, they sell all kinds of snacks. For example, they sell soft drinks, popcorn, candy bars, hotdogs, and pretzels. These are the main snacks sold at the movies.

Yard work is another thing to do on the weekend. Some older people like to do yard work. They cut the grass and trim the trees. They plant flowers and water the plants. Most younger people do not like yard work very much. They think that it is a boring thing to do on the weekend. Yard work is a hard job to do, but it can be rewarding. It is so much fun to get fruit and vegetables, flowers and seeds from your own yard.

It is not necessary that you have to do something special on the weekend. People do different things on the weekend. Housewives shop, visit, or read. Some people wash cars and cruise. Some might have to work, or fix things around the house. Sometimes on the weekend people go to a concert, fair, disco, circus, or a show. Some like to go to parties and dance. Weekends can be fun no matter what you do.

APPENDIX F
FAMILIAR HIGH DIFFICULTY PASSAGE

The Weekend

On the weekend, Americans usually do many things to relax and have fun because they have time off from their job or school. Watching television is a typical thing to do on the weekend. People watch their favorite programs or sports such as football, baseball, or basketball, and friends sometimes gather around to watch a game while eating munchies and drinking the King of beers.

Going on a picnic at the park is another fun thing to do on the weekend. People get their picnic needs like munchies, drinks, charcoal, lighter fluid, hotdogs and buns. They start a fire and cook the hotdogs while playing softball or football. Soft drinks and beer are usually the main drinks on a picnic.

Another fun thing to do is having friends over for a potluck. All the guests bring a dish to share with friends who gather around to eat a variety of nicely prepared foods. The idea of having a potluck is to gather around and to taste the different kinds of delicious food. Also, to have a drink, meet new people, and talk about different subjects. People exchange recipes and talk about their favorite dishes and kinds of food.

Dining out can be a pleasant experience when you have a fun partner for company. Eating out is usually arranged between two people or maybe more. They choose the time and agree on the type of restaurant. The man usually picks up the lady and gives her a ride back home, and also pays for dinner, while some other people prefer to go Dutch, and sometimes the woman chooses to pay for the dinner. When the food is good and the atmosphere is nice, the waiter or waitress gives you very nice service, they certainly deserve a tip for their efforts.

Some people prefer going to the movies to watch their favorite film and movie stars. The twilight show is probably the best time to go to the movies if you are looking for a bargain. Show tickets at prime time are more expensive and usually have longer lines. Movie theaters sell different kinds of snacks for hungry people before and during the shows. Besides soft drinks, food such as popcorn, candy bars, hotdogs, and pretzels are the main snacks sold at movie theaters.

Some people, especially the elderly, do yard work on the weekend. Some older people enjoy doing yard work such as mowing the lawn, trimming the bushes and trees, raking, planting flowers, and watering the plants. The younger generation does not really enjoy doing yard work because they think it is boring. Certainly it is a hard job to do, but can be a rewarding one. Fruits and vegetables, flowers and seeds are gathered at harvest seasons and these can be very enjoyable.

It is not necessary that everyone has to do something special on the weekend. People do different things on the weekend. Some might shop, swim, read, study, cruise, car wash, visit, hike, jog, cycle, cook, paint, or clean. Some other people might have to work, fix their car, repair things around the house or baby sit. Sometimes people go to theaters, concerts, festivals, rodeos, circuses, or shows when such activities are available. Weekends can be fun no matter what you do.

APPENDIX G
UNFAMILIAR LOW DIFFICULTY PASSAGE

Groundhog Day

The groundhog is a small rodent that lives in North America. It has short legs and a small fat body. The body has brown and soft fur. The groundhog is also called the woodchuck. It lives under the ground. It feeds on nuts, tree leaves and bark. It can eat insects, too. This is its main diet. You can see this small animal in Tucson. It can be found at the Randolph Park Zoo. It can also be found at the Arizona Sonora Desert Museum.

In the United States, Groundhog Day is a time for telling the weather for the next six weeks. This custom of Groundhog Day was brought to America by the Germans. They were used to this custom in their country. When they came to America, they kept this custom. They noticed when the groundhog comes out of his small winter hole. When he sees his shadow, he goes back into his hole. He will go back to sleep for awhile longer. This means that winter will last six weeks longer. But, when the groundhog does not see his shadow, he will not go back to sleep. This means that spring will start soon. In Germany, people watch the badger at the time of breaking its sleep to look at the skies.

Groundhog Day is on the second of February. In the East and Midwest of the U.S.A., people watch the groundhog. They wait for his sunrise actions. In Wisconsin, some members of the Groundhog Club have watched him on this day since 1948. On this day, they eat moose milk, coffee, and sweet rolls.

People from Pennsylvania care a lot about Groundhog Day. Most of these people came from Germany. They live in this state and have made it their home. These people watch the groundhog every year. They live in the Dutch region. This area is in the south

and the eastern parts of Pennsylvania. Certainly, this is one group of people interested in watching the groundhog. They wait for him to awake from his hibernation. They watch him come out. They look for his shadow, then they go back to town. They tell their friends about what they have seen. Then, they celebrate on that day and eat all kinds of food. Some of this food is called Woodchuck Jello Salad. They also eat Swiss Steak a la Seer of Seers. Whipped potatoes, gravy, and green beans are served too. The people also dance to music. They play the drums, symbols and banjos, guitars and fiddles. They sing some songs. Some typical songs sung are "Me and My Shadow" and "Baby Its Cold Outside."

Weathermen and others doubt that the groundhog can tell about the weather. They think that he is not right most of the time. The Board of Hibernating Governors believes that he can tell about the weather all the time. The National Geographic Society has done a survey for sixty years. It says that the groundhog is right 28 percent of the time. The board does not believe in this survey. The board says that it has faith in the groundhog. Their records show that he has always told the weather and was right 100 percent of the time.

APPENDIX H
UNFAMILIAR HIGH DIFFICULTY PASSAGE

Groundhog Day

In almost any dictionary of the English language, the groundhog is defined as a common rodent of North America. It has a short-legged, heavy-set body and grizzled brownish fur. The groundhog has also been called the woodchuck. It is a small animal that lives underground, and feeds on nuts, tree leaves and bark, and insects for its main diet. The groundhog can be seen at either the Randolph Park Zoo, or the Arizona Sonora Desert Museum in Tucson

In the United States, Groundhog Day is a time for predicting the weather for the next six weeks. This custom of observing Groundhog Day was brought to America by immigrants from Germany. When the groundhog comes out of his winter quarters on this day and sees his shadow, it is said that winter will last six weeks longer. However, if the day is cloudy, he will not return to sleep and spring will start soon. In Germany, the badger is watched at the time of breaking its sleep to observe the skies. In the U.S.A., the belief was transferred to the woodchuck.

The groundhog and his sunrise actions on Groundhog Day, the second of February, have become the focal point of many American observances in the East and Midwest. In Wisconsin, some members of the Groundhog Club have watched the groundhog actions on this day since 1948. The members eat breakfast consisting of moose milk, coffee, and sweet rolls. At the Erich Lenz farm, the groundhog is cared for by the Prairie Groundhog Club and the Sun Prairie Chamber of Commerce.

More attention is paid to Groundhog Day in Pennsylvania, which was largely settled by Germans, than anywhere in the United States. There are a number of groundhog

observances in the Dutch region of Southeastern Pennsylvania, where large numbers of Germans settled in the 18th century. In fact, this group of people is interested in the awakening of the animal from its sleep and its emergence into the outer air. After watching the groundhog, they return to town and report his action to their friends. In celebration of this day, banquets are held with food served such as Woodchuck Jello Salad, Soothsayers gravy, green beans, Swiss Steak a la Seer of Seers, and whipped potatoes. People also dance to music of drums and symbols, banjos and guitars, and fiddles. Some songs are played. Songs include "Me and My Shadow," and "Baby Its Cold Outside."

Weathermen and others may doubt the groundhog's ability of predicting the weather. The Board of Hibernating Governors believes that the groundhog is accurate all the time. The National Geographic Society has done a survey over a sixty-year period and came to the conclusion that the groundhog is right 28 percent of the time. The Board of Hibernating Governors has faith in the groundhog and says that their records show that the groundhog has always forecast the weather with absolute 100 percent accuracy.

APPENDIX I

FAMILIAR PASSAGE LITERAL QUESTIONS

1. When is the best time to go to the movies if you are looking for a bargain?
 - a) prime time
 - b) weekend
 - c) twilight show
 - d) at night

2. What is the idea behind having a potluck?
 - a) to make hotdogs
 - b) to watch TV
 - c) to play football
 - d) to taste foods

3. Who usually pays when people go out to dinner?
 - a) the waiter
 - b) the Dutch
 - c) the man
 - d) the woman

4. Who receives a tip for providing services at a restaurant?
 - a) the waiter
 - b) the guest
 - c) the cook
 - d) the owner

5. Why do some young people dislike yard work?
 - a) they don't like fruit
 - b) they think it is boring
 - c) they like flowers
 - d) they are not old

APPENDIX J

FAMILIAR PASSAGE INFERENTIAL QUESTIONS

1. What kind of games can not be played at the park?
 - a) video games
 - b) flying kites
 - c) sports games
 - d) ball games

2. Why is it recommended to go to the movies at the twilight show?
 - a) Tickets are more expensive
 - b) It takes less time to go into the theater
 - c) Snacks and soft drinks are less expensive
 - d) More movies are offered

3. Why do most American people do fun things on the weekend?
 - a) because they like to watch TV
 - b) because they are not allowed to have fun during the week
 - c) because they have to go to work on the weekend
 - d) because they do not have to go to work on the weekend

4. What should you do when the meal and the service are terrible at a restaurant?
 - a) leave a tip
 - b) bring your own food
 - c) leave no tip
 - d) have a potluck

5. Why is yard work rewarding?
 - a) because it is hard to do
 - b) because it makes the yard look nice
 - c) because you don't have to go to work or school
 - d) because the plants need water

APPENDIX K
UNFAMILIAR PASSAGE LITERAL QUESTIONS

1. **When is Groundhog Day?**
 - a) February 12
 - b) February 21
 - c) February 2
 - d) February 22

2. **What kind of animal is the groundhog?**
 - a) pig
 - b) dog
 - c) rodent
 - d) hog

3. **What is another name for the groundhog?**
 - a) badger
 - b) woodchuck
 - c) rodent
 - d) dog

4. **Which state cares about or pays the most attention to Groundhog Day?**
 - a) Arizona
 - b) Wisconsin
 - c) California
 - d) Pennsylvania

5. **Who brought the Groundhog Day custom to the United States?**
 - a) Americans
 - b) Germans
 - c) Dutch
 - d) South Americans

APPENDIX L

UNFAMILIAR PASSAGE INFERENTIAL QUESTIONS

1. How long will the groundhog sleep if he sees his shadow?
 - a) four weeks
 - b) six months
 - c) six weeks
 - d) sixteen days

2. Why might farmers pay attention to Groundhog Day?
 - a) They would know when to go hunting for groundhogs.
 - b) They would know when to plant their fields.
 - c) They would know when to put out food for the groundhog.
 - d) They would know when the groundhog would leave to go South for the winter.

3. According to official information, how often is the groundhog wrong?
 - a) He is never wrong.
 - b) He is wrong less than 50 percent of the time.
 - c) He is wrong more than 50 percent of the time.
 - d) He is always wrong.

4. Why do people observe Groundhog Day?
 - a) because it is a legal holiday
 - b) because they think the groundhog is a cute animal
 - c) because they believe that it helps them know when spring will arrive
 - d) because they are interested in animals

5. Name the season in which Groundhog Day occurs:
 - a) spring
 - b) winter
 - c) autumn
 - d) summer

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