

COHESION IN YOUNG LATINO ENGLISH-LANGUAGE
LEARNERS' ENGLISH NARRATIVE WRITTEN TEXT

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ABSTRACT

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Learners' English Narrative Written Text

(Under the direction of Jill Fitzgerald)

The purpose of the current study was to determine the extent to which third- through fifth-grade Latino English-language learners who attended English-as-a-Second Language classes and were intermediate level writers used cohesive ties in their English narrative written text. The participants wrote two narrative stories from two picture series they viewed during two separate 40-minute task administration sessions, one week apart. Participant protocols were coded for cohesive tie types and unresolved ties. Non-parametric tests were run to evaluate if differences existed between the two writing prompts and the three grade levels for the cohesive tie variables calculated per 100 words. The main analyses were conducted to describe the extent to which the participants' used cohesive tie-type domains and subdomains in their English narrative written text, and to consider some linguistic differences between Spanish and English that might have contributed to how text cohesion was realized for young English language learners in their English narrative written text.

The conclusions from the current study were as follows: (a) Reference, conjunction, and lexical tie subdomain use was frequent across the three grade levels with reference pronominal ties and lexical repetition used the most to maintain cohesion, and substitution, ellipsis ties, and exophoric references used the least to maintain cohesion; and (b) the

participants' unresolved cohesive ties could be attributed to differences between the way in which cohesion is expressed in Spanish and English.

Conclusions from the current study suggested that the participants might benefit from instruction in how to vary reference tie and conjunction tie use, and vocabulary instruction to expand word choice. The conclusions from the current study also suggested that the participants' application of their understandings of Spanish cohesion to English narrative written text might have lead them to (a) omit sentence subjects, (b) change reference pronoun gender, (c) change verb tense throughout their narrative written text, and (d) express movement as a state of action rather than as an indication of direction. The participants in the current study would likely benefit from writing extended English narrative text to apply what they already know about how text cohesion functions in Spanish and what they have learned about how text cohesion is expressed in English.

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CHAPTER 1

Introduction

Introduction and Rationale

The following research question guided the current study: To what extent did third-through fifth- grade Latino English-language learners who attended English-as-a-second language classes and were intermediate level writers use cohesive ties (reference, substitution, ellipsis, conjunction, and lexical) in their English narrative written text?

Cohesive ties function in writing to maintain unity within a sequence of sentences or whole text and ease interpretation for the reader (Halliday & Hasan, 1976; Rentel, 1988). Knowledge of how cohesive ties function to create unified and continuous text is necessary in the composition and interpretation of text (Halliday & Hasan, 1976).

The extent to which a writer uses cohesive ties can provide unity, continuity, and predictability throughout the text as the writer attempts to convey meaning through selected grammar and vocabulary (Halliday & Hasan, 1976; Kolln, 1999; Smith, 1994; Stoddard, 1990). Particular word choices (a) reduce the load on short-term memory; (b) decrease redundancy to allow for variation in vocabulary; and (c) fit into a predictable, contextual framework to enable efficient processing (Kolln, 1999; Stoddard, 1990).

The ability to write a clear and cohesive text is essential for all students, regardless of their linguistic backgrounds (Montanari, 2004). Knowledge of how cohesive ties function to express semantic relations between elements within the English language is important for students throughout elementary school. The ability to maintain cohesion between elements

within an English narrative written text from knowledge of the linguistic functions of the English language might be especially challenging for children who enter elementary school with a language background different from the instructional language (Liu, 2001). The challenge to maintain cohesion within narrative writing might be complicated by few opportunities to build cohesive links in extended, meaningful text in English, which is often the language of instruction.

As writing tasks become more complex, children learning and writing in a language different from their primary language might have access to fewer linguistic experiences and resources in the second language and might struggle to make explicit cohesive references to important details throughout written text (Montanari, 2004). As adequate linguistic resources for written text in the instructional language become more available to children the necessary skills to maintain cohesion between elements within the language might become more accessible (Montanari, 2004). Examining cohesive tie use can provide insight into the extent to which children from diverse linguistic backgrounds maintain cohesion in their English narrative.

Extensive evidence documents cohesive tie use in written text for elementary-aged students who received instruction in their primary language, English (Allard & Ulatowska, 1991; Cameron, Lee, Webster, Munro, Hunt, & Linton, 1995; Cox, 1986; Cox, Shanahan, & Sulzby, 1990; Crowhurst, 1987; Fitzgerald & Spiegel, 1986; Pellegrini, Galda, & Rubin, 1984; Scinto, 1983; Spiegel & Fitzgerald, 1990) or Dutch (Yde & Spoelders, 1985); and students who received instruction in both their primary and secondary languages, Cantonese or Spanish and English (Ammon, 1985), Korean and English (Bae, 2001), and Spanish and English (Montanari, 2004).

Virtually nothing is known about the extent to which elementary school-aged children from diverse linguistic backgrounds, whose primary language is not English and who learn in all-English classrooms, use cohesive ties in their English narrative written text.

The current study helped to describe the extent to which third- through fifth-grade Latino English-language learners, whose primary language is Spanish and who learn in all-English classrooms used cohesive elements in their English narrative written text as they gained control of linguistic features of English narrative written text.

Definitions

Latino English-Language Learners

Latino English-language learners, for the purpose of the current study, were students whose primary language was Spanish and who met state guidelines prior to the current study to be identified by the school upon school entry as limited in English proficiency across four language domains (speaking, listening, reading, and writing).

English-as-a-Second Language

English-as-a Second Language (ESL) was an educational program to service students who were identified by the school upon school entry as limited in English proficiency, and receive a majority of their instruction in English-only classrooms. Students received academic support provided by a state-licensed ESL teacher in either one of two ways: (a) A pullout format where the students worked directly with an ESL teacher in small groups in the ESL classroom, or (b) in an inclusion format where an ESL teacher went to the regular education classroom to provide consultative support to the students in particular content areas.

At the school where data was collected for use in the current study, students were identified as limited in English proficiency and qualified for academic support with an ESL

teacher when the composite score on any one of the four sections (speaking, listening, reading, and writing) of the Individualized Developmental English Activities English Language Proficiency Tests Grades 3-6 (IDEA-IPT) (Ballard & Tighe, 2005) was below a specified cut score (e.g., a score less than 44 out of 51 on the IDEA-IPT reading section). Students exited from or did not qualify for ESL services when the composite scores exceeded the specified cut scores for all four sections during the same IDEA-IPT administration (e.g., a score of 44 or more out of 51 on the IDEA-IPT reading section) (North Carolina Department of Public Instruction, 2003).

Cohesive Ties

Cohesive ties allow text to flow in such a way as to maintain consistency and connectedness throughout a passage (Cooper, 1983). Cohesive ties are text specific linguistic components used to construct unified, interpretable, and meaningful text (Halliday & Hasan, 1976; Hatakeyama, Petöfi, & Sözer, 1985). For text cohesion to be maintained and meaning-potential to be reached, one element within a text must relate to a presupposed or subsequent element within the same text (Halliday & Hasan, 1976). Halliday and Hasan, concerned with the English linguistic system's textual components, recognized micro-level structural text-forming features operating within the lexicogrammatical level. Cohesive tie elements, structurally unrelated, though dependent on each other, were categorized into five cohesive tie domains, four of which were grammatical text features and one of which was a lexical text feature. The grammatical and lexical cohesive tie domains identified and described by Halliday and Hasan (1976) are (a) reference, (b) substitution, (c) ellipsis, (d) conjunction, and (e) lexical ties. Cohesive tie domain and subdomain are defined below with examples in Table 1.

Reference tie. A reference tie is used to connect presupposed and subsequent elements within the same text. Reference tie subdomains include (a) personal references as pronominal (e.g., him, her, they) or nominal (e.g., ball, Milo, pond) references, (b) demonstrative references (e.g., this, that, the), and (c) comparative references (e.g., same, better, so many). The relationship among reference ties lies at the semantic level and relies on endophoric (internal to the text) references to maintain text cohesion. The reference ties in the following set of sentences are endophoric and cohesive: “*Milo jumped for the ball. He caught it.*” The words *he* and *it* in the second sentence are intelligible, but only interpretable and meaningful when the reader knows to whom and to what *he* and *it* refer (Halliday, 1977a).

In contrast to an endophoric reference, an exophoric reference does not refer to a contextualized element internal to the text, but rather to context external to the text. Exophoric reference elements do not bind with other elements within the text and do not contribute to the text’s cohesion (Halliday & Hasan, 1976). A reader assumes that exophoric references do not occur in written narratives and the writer contextualizes all references within the text (Halliday, 1977a). However, a writer might assume contextual knowledge on the part of the reader and include exophoric (external to the text) references within the text (McCarthy, 1991). Exophoric references can lead to a lack of cohesion within the text and remain unresolved to the reader who lacks the contextual knowledge of the passage (Fitzgerald & Spiegel, 1986; Halliday & Hasan, 1976; McCarthy, 1991). A writer might write the sentence: “*The children played with it.*” The definite article *the* refers to specified group of children. *The children* might refer to children in a picture or might be known only to the writer and intended reader. Also, the intended referent for *it* might be a ball, but the

writer did not explicitly state the word *ball* or any other clue to inform the reader what the supposed referent is. Therefore, the reference tie *it* is ambiguous and unresolved.

Substitution tie. A substitution tie within a text is used to replace one word for another, where the latter word in the text serves as the replacement and is used in lieu of repeating the former word or clause in the text. Substitution tie subdomains include (a) noun replacements (e.g., Milo dug a big *hole*. Maisy dug a small *one*.), and (b) verb replacements (e.g., I thought Erik would *catch* the ball, and he *did*.). In both examples above, substitution tie (*one*, *did*) interpretation relies on the context established in the preceding sentence. Substitution ties occur more frequently in oral language and dialogue than in written text (Halliday & Hasan, 1976; Hoey, 1983).

Ellipsis tie. An ellipsis tie maintains connection within text and allows the writer to omit (a) a noun (e.g., Ronald had a red *car*. Mine was blue.), (b) a verb (e.g., Milo *dug* a big hole, Maisy a small hole.), or (c) a clause following the presupposed element (e.g., Q: Do you *want to go shopping*? A: Yes.). The intended supposition can be inferred from the preceding sentence and context allowing the referent to be dropped from succeeding sentences (Taboada, 2004). Ellipsis ties are often considered a type of substitution reference with a substitution of nil. As with substitution ties, ellipsis ties occur more frequently in oral language and dialogue than in written text (Halliday & Hasan, 1976; Hoey, 1983).

Conjunction tie. A conjunction tie links together two structurally independent actions. Conjunction tie subdomains include (a) additive conjunctions (e.g., and, or, not), (b) adversative conjunctions (e.g., however, but, although), (c) causal conjunctions (e.g., so, therefore, thus), and (d) temporal conjunctions (e.g., then, next, finally). The sentence, “Julia went to the park to play *but* the gate was locked.” contains two independent clauses linked

together by the adversative conjunction *but*, allowing the reader to associate the latter phrase to the former.

Lexical cohesion. Lexical cohesion is achieved through the writer's selection of specific vocabulary (Halliday & Hasan, 1976). New lexical items or vocabulary contribute to the lexical category's complexity and can be continuously added to the lexical set (Halliday, 1985). For example, the lexical set for *door* extends as the context in which *door* occurs changes such that "*door* is in contrast with *gate* and *screen*; also with *window*, *wall*, *floor*, and *ceiling*; with *knob*, *handle*, *panel*, and *sill*; with *room*, *house*, *hall*; with *entrance*, *opening*, *portal*" (p. 63). Lexical cohesion can also be achieved through derivations of the same word (e.g., *play*, *played*, *playing*).

Within the lexical domain, Halliday and Hasan (1976) identified two lexical cohesive subdomains - reiteration and collocation. A reiteration can be (a) a repetition of the same word (e.g., My dog walks with a *leash*. He pulls tight on the *leash*.), (b) a synonym or near synonym of the referent (e.g., He *climbed* up a mountain. *The ascent* was long.), or (c) a superordinate of the referent often preceded by the word *the* (e.g., I bought a new *Mini*. I drive the *car* everywhere!). Collocation is the inclusion of two or more words that are likely to occur within the same context. In a narrative that takes place in a park, the writer might include words such as *trees*, *children*, *playground*, and *pond*. None of these words are semantically related, but occur by association within the same context to achieve lexical collocation.

Table 1:

Cohesive Tie Types and Cohesive Tie Type Examples

Cohesive Tie Type		Cohesive Tie Type Example
Reference Tie:	Personal	<i>Milo</i> jumped for <i>the ball</i> . <i>He</i> caught <i>it</i> .
	Demonstrative	I found <i>some keys</i> . Are <i>these</i> yours?
	Comparative	She kicked the ball <i>higher than</i> he did.
Substitution Tie:	Nominal	This <i>ball</i> is flat. I will get another <i>one</i> .
	Verbal	Evelyn <i>kicked the ball</i> . Steve <i>did</i> too.
Ellipsis Tie:	Nominal	He has a yellow <i>bicycle</i> . Mine is blue.
	Verbal	Q: Did you <i>find some keys</i> ? A: I might have.
	Clausal	Q: Do you <i>want to go out for dinner</i> ? A: No, thanks.
Conjunction Tie:	Additive	We bought a bell <i>in addition to</i> the bike.
	Adversative	We bought an ice cream <i>but</i> it melted too fast to eat.
	Causal	<i>Although</i> it rains everyday I always forget my umbrella.
	Temporal	We went to the zoo <i>then</i> to the park, and <i>finally</i> to the store.
Lexical Tie:		
Reiteration:	Repetition	He kicked <i>the ball</i> . She threw <i>the ball</i> .
	Synonym	He worked the <i>whole</i> day. He took <i>all</i> day to finish.
	Superordinate	She played with a <i>basketball</i> . She threw <i>the ball</i> high.
Collocation:		The <i>field</i> was wet, but they played <i>soccer</i> anyway.

Written text. Written text, as used in the current study, “is a passage of discourse [...] coherent with respect to the context of the situation, and therefore consistent in register; and [...] coherent with respect to itself, and therefore cohesive” (Halliday & Hasan, 1976, p. 23).

Narrative. A narrative in the current study refers to a sequential story composed of characters, setting, theme, problem, and resolution linked together by the writer’s particular word choices.

CHAPTER 2

Review of the Literature

Chapter Overview

In chapter two, I discuss the broad theoretical framework that guided the current study. First, I draw upon social-semiotic language theory to position the current study. Second, I consider text cohesion in narrative writing. Third, I address why text cohesion is important in narrative writing. Fourth, I describe text cohesion in Spanish and the challenges young Latino English-language learners might face when learning to write an English narrative written text. Finally, I conclude with a summary and the purpose for the current study.

Theoretical Framework

I drew upon Halliday and Hasan's (1976, 1985) social-semiotic theory to describe how cohesion relates to the "context of situation" (Halliday & Hasan, 1985, p.11).

Social-Semiotic Language Theory

Text cohesion functions under the broader social-semiotic language theory that refers to how particular words link to create meaning within the context of a social structure (Halliday & Hasan, 1985). Social-semiotics is "the study of meaning [concerned with] the relationships between language and social structure, [such that] language is understood in its relationship to social structure" (p. 4). The social-semiotic language theory arose from the perspective that learning is a social act and occurs within a social environment such as school (Halliday & Hasan, 1985). Language viewed through a social-semiotic theoretical lens

operates as three general metafunctions: Ideational, interpersonal, and textual (Halliday & Hasan, 1985). Ideational and interpersonal metafunctions, not considered in the current study, concern language functions related to experience and social relationships representative of the real world.

Textual metafunction, of which text cohesion is a component, addresses the linguistic elements available in a language that bind text together and puts meaning into grammatical and lexical wording (Halliday & Hasan, 1976). *Wording* is the “lexicogrammatical form, the choices of words and grammatical structures” (p. 5) that are of interest in the current study.

Grammar denotes general meaning and vocabulary denotes specific meaning within a social-semiotic theoretical framework as it relates to cohesion. Each grammatical and lexical element contributes to the text’s cohesive nature to allow predictability as to what will occur next within the text and to the text’s overall interpretability (Halliday & Hasan, 1976).

The context in which the text unfolds and in which the text is to be interpreted is the “context of situation” (Halliday & Hasan, 1985, p. 11). Interpretation that lies outside the context of the situation is exophoric and is not part of text cohesion. In order to keep text cohesive, a writer needs to include sufficient contextual description to allow the text to be interpretable apart from the external context. Sufficient information needs to be provided to the reader such that “the language is all part of the immediate situation [and can be] created by the stories themselves” (p. 7). Meaning and interpretability are maintained through selected words and can be analyzed as “an instance of social meaning in a particular context of situation” (p. 11). Cohesive tie elements link to other grammatical and lexical elements within the text to allow interpretability as each text element builds on context already provided within the text.

Language operates within the context of other events, such that elements within the written text extend beyond the text to the context of the immediate situation (Halliday, 2002). “Context of situation” features include the field, the tenor, and the mode of discourse (Halliday & Hasan, 1985, p. 11). The field of discourse is the language event in which the participants are engaged. A field of discourse might be a writing task where the writers are prompted with a series of pictures to compose a narrative text. The tenor of discourse is with whom the language event occurs. The language event might occur in a usual physical setting such as a classroom, but the intended audience might be unknown or unfamiliar. The mode of discourse is the role language plays in the situation. The mode of a language event can be a written product of a visually interpreted picture series meaningful apart from the referenced event.

How Text Cohesion Functions in Narrative Writing

Text cohesion refers to both the text’s grammatical and lexical features beyond text’s structural level “such as a clause or sentence” and to the text’s “semantic relations” across the text (Halliday & Hasan, 1976, p. 7). The structural relation between words within a sentence contributes to a sentence’s internal cohesion, while the semantic relations provide cohesion and allows the text to function as unit “with respect to its environment” (p. 2). Text cohesion functions linguistically to create a semantic relationship between elements within the same text as necessary for text interpretation (Gutwinski, 1976; Halliday & Hasan, 1976). Although cohesive relations, expressed by anaphoric and cataphoric referencing, are not affected by sentence boundaries, sentence boundaries “tend to determine the way in which cohesion is expressed” [emphasis removed], as a sentence is the “highest unit of grammatical structure” (Halliday & Hasan, 1976, p. 8), and the sentence’s structural relation creates cohesion. Cohesion as used by Halliday and Hasan “is a more general notion, and one that is

above considerations of structure” (p. 9) and sentence boundaries. Cohesion within text extends beyond any single structural relation or sentence, and accounts for the non-structural relations that extend beyond sentence boundaries to allow text to cohere and be “coherent with respect to itself” (p. 23).

Halliday and Hasan’s (1976) seminal book, *Cohesion in English*, provides a comprehensive theoretical model from which to describe cohesion within narrative written text. Drawing on “the relation[ship] of words or groups of words to one another in sentences” (Curme, 1931, p. 1), Halliday and Hasan identified text-level linguistic characteristics and features that identify text as a single unit. Linguistic devices such as cohesive ties produce unity at the intratextual level (Stoddard, 1990). Cohesive ties extending within the text level are effective and necessary components of written text, and contribute to the reader’s understanding of main ideas embedded within the text (Halliday & Hasan, 1976; Stoddard, 1990; Witte & Faigley, 1981). Text cohesion is established when two elements within the same text link to facilitate meaning and interpretability narrowing the text’s predictability, eliminating ambiguity, and resolving suppositions made throughout text (Nystrand, 1982).

Language’s lexical and grammatical resources allow writers to make, whether consciously or not, particular word choices to keep written text continuous and cohesive (Stoddard, 1990). Linguistic properties expressed through grammatical and lexical word choices establish coreferential links across sentences, contribute to the text’s meaning, and define the text as a unified whole (Halliday, 1977b; Halliday & Hasan, 1976, 1985). Readers assume a text is meaningful and will continue to read and link the text together with cohesive propositions in an attempt to clarify potential ambiguity (Cook, 1994; McCarthy, 1991). Text with weak or minimal cohesive devices can result in discontinuity throughout text and

cause the intended meaning to be misinterpreted. Discontinuity can result if a writer has not set up linking suppositions to reduce ambiguity (Nystrand, 1982). A supposition might refer to something external to the text that the writer might assume is shared knowledge with the reader. However, such exophoric references do not allow the text to stand on its' own and do not contribute to the text's internal cohesiveness (Halliday & Hasan, 1976).

Words used to build a linguistic relationship and maintain cohesion at the grammatical level often have very little meaning beyond the cohesive relationships they express (Fries, 1940). Grammatical ties (reference, substitution, ellipsis, and conjunction) function to complete the meaning of the sentence or sentences. At the lexical level, written text has identifiable attributes that build linguistic relationships within the text to maintain a meaningful, unified whole. Lexical ties hold meaning independent of other words, share a common referent within the text to provide relevant information, and allow for a predictable context for intended text interpretation (Halliday & Hasan, 1976). Effective grammatical and lexical cohesive ties allow readers to gain sufficient contextual information in one sentence to understand the preceding and succeeding sentences, and the text as a unified, interpretable whole (Halliday & Hasan, 1976). Anaphoric linguistic relationships remind readers of preceding context and allow the subsequent elements to be effectively resolved from presupposed elements within the text. Cataphoric linguistic relationships set up anticipation for readers and allow the ambiguous reference elements to be resolved from subsequent elements to maintain cohesion within the text.

Anaphoric references. Anaphoric referencing is a common literary strategy in narrative written text. For example, in the children's book *Moon Rope*, Lois Ehlert (1992) used numerous anaphoric references to set up the plot for the Peruvian tale about a Fox and a Mole:

1. Mole was taking a break from digging for worms when Fox came by.
2. “Mole,” *he* said, “if *you* could have anything in the world, what would it be?”
3. “Worms, worms, more worms,” Mole said. “What about *you*?”
4. “*I* want to go to the moon.”
5. “The moon!” Mole gulped. “*How*?”
6. “I’ll think of *something*,” said Fox, and he ran off through the grass (p. 1; italics and line numbers added for discussion).

Ehlert’s purpose in the introduction was to identify the story’s characters and problem, and entice the reader to read on to see if and how Fox gets to the moon. This text is internally cohesive and provides sufficient information for the reader who knows about traditional folktales in which animals talk, and either teach a lesson or explain a natural phenomenon.

The words *Mole* and *Fox* maintain lexical cohesion and allow the reader to identify who is speaking and at what time. Fox is identified as male by the reference pronoun *he* in Line 2 that ties with the character (*Fox*) in the preceding sentence, Line 1. Such placement reduces the load on short-term memory and allows the reader to maintain a predictable framework for who will speak or act next. Mole’s response (*worms, worms, more worms*) in Line 3 to Fox’s question about having anything in the world, Mole’s subsequent question (*What about you?*) in Line 3, and Mole’s question (*How?*) in Line 5 are elliptical ties to each of Fox’s prior question or statement. The omission of specific phrases in Mole’s statements, such as *I would have worms, worms, more worms; what about you what would you have; how will you go to the moon*, reduces the text’s redundancy. In the final line (Line 6) the word *something* substitutes the word *how*, as asked by Mole in Line 5. The example from Ehlert’s (1992) book illustrates how cohesive ties can effectively reduce redundancy and remind the reader what happened in the previous text while setting up anticipation for what is to come next in the text.

Cataphoric references. Cataphoric referencing and eliminating or reducing important grammatical or lexical cohesive markers is a literary strategy authors use to build the context

to engage and entice a reader to read on (Cook, 1994; Halliday & Hasan, 1976; Irwin, 1986; Stoddard, 1990). Ernest Hemingway's (1936) acclaimed short story, *The Snows of Kilimanjaro* demonstrates cataphoric references used as a literary style. Hemingway used ambiguity with cataphoric references at the beginning of the story to entice his audience to continue reading:

1. "The MARVELOUS thing is that it's painless," he said. "That's how you know when it starts."
2. "Is it really?"
3. "Absolutely. I'm awfully sorry about the odor though. That must bother you."
4. "Don't! Please don't."
5. "Look at them," he said. "Now is it sight or is it scent that brings them like that" (p. 1; line numbers added for discussion)?

Hemingway constructed the text with the clear purpose of ambiguity to meet a specified audience's need and engage the reader to search for an interpretation for the word *it* (Halliday & Hasan, 1976; Witte & Faigley, 1981). Cohesion is maintained through the frequent occurrence of the reference item *it* throughout the opening lines from *The Snows of Kilimanjaro*. The story begins as though the reader knows to what *it* refers. "[I]*t* [italics added] appears to presuppose a great deal that has gone before, but in fact nothing has gone before so we have to supply *it* [italics added] for ourselves" (Halliday & Hasan, 1976, p. 298). Hemingway used numerous ambiguous references (e.g., *it*, *he*, *that*, *I*, *you*, *them*, *the odor*) at the onset of the story, all of which are resolved later in the text. The reader has to read on to make sense of Hemingway's opening lines. It is not until the next paragraph in the story that the reader learns that *them* in Line 5 refers to nearby birds. *It* in Line 1 and *odor* in Line 3 are not clarified until two and a half pages later when the reader learns through cataphoric cohesive references that the man (*he*) suffers from gangrene in his right leg. The person with whom *he* is conversing in these opening lines is his female travel companion. The ambiguous references Hemingway presents at the story's beginning resolve as the story

unfolds. However, taken out of context, the initial text cited above is meaningless. Without a context in which a text is meaningful and can stand on its own, the text remains intelligible but not interpretable for the reader (Halliday, 1977a). A reader, who is not able to interpret the text, will either seek resolution within the text, seek resolution external to the text, or discard the text and all efforts to gain meaning (Cook, 1994; Enkvist, 1990; McCarthy, 1991; Stoddard, 1990; Witte & Faigley, 1981).

Exophoric references. Written text might lack identifiable grammatical cohesive markers to link the text internally but connect by exophoric references to the external context and remain a unified whole that is meaningful and interpretable to an intended reader (Cook, 1994). For example, Enkvist (1990) demonstrates how context related to the reader's experiences but external to the text influences text meaning and interpretability: "*The* net bulged with *the* lightning shot. *The* referee blew his whistle and signaled. Smith had been offside. *The* two captains both muttered something. *The* goalkeeper sighed for relief." (p. 12; italics added). The definite determiner *the* used throughout the Enkvist's example "indicates that the item in question is specific and identifiable ... [and] all immediate situational instances of *the* are exophoric" (Halliday & Hasan, 1976, p. 71; emphasis removed; italics added). The information required to interpret *the* can only be found in the context external to the text and shared between writer and reader (Brown & Yule, 1983). Since, *the* does not contribute to the text's endophoric cohesiveness, such that the text can stand on its own, *the* with the noun it modifies are exophoric. The cohesive elements in this example supplied by the lexical ties (*net, referee, blew his whistle, offside, captain, goalkeeper*) pull the text together through lexical collocation and allow interpretability to occur for a reader who knows the context about which the piece is written – soccer.

Why is Text Cohesion Important?

Text is cohesive when suppositions are linked together with cohesive ties to form a unified, meaningful whole (Halliday, 1977b; Halliday & Hasan, 1976). Grammatical and lexical word choices when used effectively contribute to the text's cohesion. Text cohesion allows text elements to be interpreted with ease, reduces the load on short-term memory, decreases word and meaning redundancy through variation in vocabulary, and allows efficient processing within a predictable framework (Kolln, 1999; Stoddard, 1990).

Short-term memory. A proposition that occurs within text is held in short-term memory and connects to subsequent suppositions throughout the text (Frederiksen, Donin-Frederiksen, & Bracewell, 1987). Grammatical and lexical cohesive ties help connect textual suppositions and keep the text continuous. These particular word choices that connect to references and suppositions within the text reduce short-term memory load and allow the reader to maintain contextual understandings and make inferences throughout the text (Matsuhashi, 1981). A reader who has to refer back to the text or to seek elements outside the text to connect suppositions might lose the text's meaning, misunderstand inferences, and struggle to maintain cohesion (Irwin, 1986).

Ensuring a cohesive text to reduce short-term memory load goes beyond the actual number of cohesive ties a writer includes in an attempt to link suppositions throughout a text. Inserting pronouns or conjunctions might not be sufficient to maintain cohesion, particularly if the supposition to which the tie refers is exophoric (Allard & Ulatowska, 1991). Incomplete or ambiguous exophoric references that do not allow a supposition to be resolved at the intratextual level cause the reader to hold either the supposition in short-term memory until resolved or abandon the text altogether (Stoddard, 1990).

Variation in vocabulary. In order to produce a well-formed narrative text a writer must make particular word and vocabulary choices to maintain cohesion throughout the text and reduce redundancy (Stoddard, 1990). Text might become repetitious when, for example, the same noun is repeated without a pronominal reference or synonym (Stoddard, 1990). Repetitious and redundant writing can be avoided by effectively using reference ties, substitution ties, conjunction ties, or lexical reiteration.

Reference ties can identify a specified noun with a nominal pronoun, or with a demonstrative pronoun or definite article. Substitution ties allow the context to be established early within the text and reduce redundancy. Omitting or substituting a noun or verb for the subject or predicate provides “a complete expression of thought” (Curme, 1931, p. 1) and allows the text to remain cohesive. Conjunction ties allow text to sequentially link what has gone before to what is forthcoming in an additive, adversative, causal, or temporal way. Lexical reiteration expressed through synonyms or superordinates allows meaning to be expressed through varied vocabulary.

Varied vocabulary as demonstrated through cohesive links can allow a writer to expand and elaborate ideas in narrative writing. As children move through the school years, vocabulary increases (Kolln, 1999), and the ability to contextualize information, account for the reader’s needs, and determine how much knowledge might need to be shared with the reader develop (Applebee, 1978; Britton, Burgess, Martin, McLeod, & Rosen, 1975). Over time, typically developing native speakers acquire the ability to link ideas cohesively throughout written text and reduce redundancy through varied and extended vocabulary (Fitzgerald & Spiegel, 1986; Irwin, 1986; Kolln, 1999; Pellegrini et al., 1984; Witte & Faigley, 1981). Such vocabulary acquisition indicates that older children with more words in their lexicon can reduce redundancy through a greater use of synonyms and collocation

lexical ties (Crowhurst, 1987). Younger school-aged children with a less extensive vocabulary tend to increase redundancy through lexical repetition, contributing to a more repetitious narrative writing style (Crowhurst, 1987).

Predictable framework. The context established through a linguistic interaction creates a predictable framework (Halliday & Hasan, 1985). A reader predicts upcoming text based on what occurred previously within the text. Words used to create grammatical and lexical cohesion contribute to text predictability and allow the context to remain consistent throughout the text. Predictability allows a reader to understand the context about which the text is written through a consistent flow of resolved suppositions. Disruptions to the flow caused by the lack of predictable cohesive links might cause the reader to make contextual inferences and possibly misinterpret the text. Inconsistent pronoun gender or number use might cause the text to lose its predictability and send the reader searching back through the text for the presupposed element (Stoddard, 1990). Grammatical cohesion carried through with reference, conjunction, ellipsis, and substitution ties allows the reader to anticipate and predict the subsequent context. In a narrative about children playing at a park, the reader might draw on ideational experience and expect references to outdoor children's games. The expected references might be used as nominal or pronominal references with temporal conjunctions to sequence time and events or particular word choices to meet the reader's anticipated park activities. A writer meets the reader's contextual expectations by linking sentences together through particular grammatical choices such as pronominal ties, conjunction ties, and lexical choices such as lexical reiteration or collocation ties.

Text cohesion within a predictable context might function as a means to reference characters, to denote the passage of time with temporal conjunctions, or provides cues to the reader to build context (Montanari, 2004). For example, if a writer begins a story with, *Two*

children were at a park, the reader might draw on personal experiences of what is already known about a park and what children might do at a park (Halliday & Hasan, 1985). The ideational and interpersonal context in which the text occurs sets a predictable framework from which the reader can fulfill grammatical and lexical expectations, all of which contribute to the reader's understanding of the text as a unified whole.

Effective cohesive devices. If a writer helps to build context for the reader through particular cohesive devices, the aspects of text cohesion that are most effective for maintaining cohesion and building context within narrative writing are not whether a writer uses cohesive devices, but rather which cohesive devices and the extent to which a writer employs these cohesive devices effectively (Allard & Ulatowska, 1991; McCulley, 1985). A writer's effective cohesive tie use, particularly referential and lexical ties, can contribute to the text as a whole by adding to the text's predictability, summarizability, and interpretability (Allard & Ulatowska, 1991; Bae, 2001; Cameron et al., 1995; Crowhurst, 1987; Fitzgerald & Spiegel, 1986; McCulley, 1985; Spiegel & Fitzgerald, 1990; Witte & Faigley, 1981). Specifically, referential ties and lexical subdomains, including synonymy, superordinates, and collocation might contribute the most to the text's overall quality (Bae, 2001; Crowhurst, 1987; McCulley, 1985; Witte & Faigley, 1981).

Particular grammatical and lexical word choices reduce the load on short-term memory, decrease word and meaning redundancy, provide a predictable context in which to interpret text, and contribute to keep text a unified whole and contextually cohesive. Writers draw upon lexical and vocabulary knowledge to use particular grammatical and lexical ties to keep text meaningful and cohesive (Allard & Ulatowska, 1991; Ammon, 1985; Cameron et al., 1995; Cooper, 1983; Crowhurst, 1987; Fitzgerald & Spiegel, 1986; Stoddard, 1990; Yde & Spoelders, 1985).

Text Cohesion in Spanish

To understand potential challenges Latino English-language learners might face when writing English narrative text, I first consider the ways in which text cohesion is realized at the text level by identifying Spanish cohesive elements and discussing how such elements function to maintain cohesion in Spanish. Second, I address how text cohesion is expressed and consider how particular linguistic differences between Spanish and English might contribute to how narrative written text cohesion is realized in English for young Latino English-language learners.

Cohesive Ties in Spanish

Cohesion as a means to maintain unity across sentences or within a whole text, and ease interpretation for the reader can be realized in Spanish in similar ways as English (Mederos Martín, 1988; Taboada, 2004). Below are Spanish examples¹ for cohesive tie type domains followed by an explanation of the cohesive elements:

Referencia (Reference). In the example, “¿Me puedes dejar *mil pesetas*? Mañana te *las* doy.” (Mederos Martín, 1988, p. 16) (Could you lend me *1000 pesetas*? I will give them back to you tomorrow.), reference cohesion is realized with the definite pronoun *las*. *Las* is an anaphoric reference to *mil pesetas*. The familiar form of the reference pronoun *te* is cohesive to *puedes* and tacit to the inferred audience external to the text (Mederos Martín, 1988).

Sustitución (Substitution). In the example, “No te molestes en decirle *que pinte la puerta*. No piensa *hacerlo*.” (Mederos Martín, 1988, p. 16) (Don't bother telling him/her to *paint the door*. He/She doesn't want to *do it*.), *hacerlo* is an anaphoric substitution tie to *que pinte la puerta* (Mederos Martín, 1988). *Lo* is attached to the verb *hacer* and is necessary for

¹ The Spanish examples in this section are from Mederos Martín, 1988, p. 16. Italics were added to identify cohesive ties. English translations were added.

complete interpretation to what the referred person does not want to do. In Spanish, a pronoun used as a direct object can be attached to the infinitive, hence *lo* is attached to the verb *hacer*. When *hacer* replaces the verb, it “form[s] what is in effect a verb of reference which is typically anaphoric and cohesive” (Halliday & Hasan, 1976, p. 128).

Mederos Martín (1988) does suggest an additional general cohesive domain, *proform anaphora*, to address words that can realize cohesion in different ways. As in the above example, the word *hacer* can substitute the preceding action. *Hacer* can also link sentences together through lexical cohesion, where *hacer* is a subordinate of the same lexical class *pinte la puerta* (Taboada, 2004).

Elipsis (Ellipsis). The example, “¿Por qué no *la acompañas*? – No sé si *podré*.” (Mederos Martín, 1988, p. 16) (Why don't you *go with her*? I don't know if I *can*.), is cohesive at the text level with an ellipsis tie as *podré* completes the tie with *la acompañas*. The second sentence does not change structure or meaning if *acompañar* is added (No sé si *podré acompañar*.).

Conexion (Conjunction). In the sentences, “Descansaron un cuarto de hora. *Luego* siguieron corriendo” (Mederos Martín, 1988, p. 16) (They rested for fifteen minutes. *Then* they continued running.), *luego* used as a temporal conjunctive tie links the two sentences together to indicate a sequence of events. As with the *Referencia (te)* and *Elipsis (la)* examples above, the morpheme *-on* in *descansaron* is not identifiable from the immediate text and relies on contextual knowledge for complete text interpretation.

Léxicos (Lexical). The example “*El taxi* que nos trajo se averió en el trayecto. *El automóvil* era muy viejo” (Mederos Martín, 1988, p.16) (*The taxi* that brought us broke down on the way [here]. *The car* was very old.), demonstrates a lexical tie where *el taxi* is a subordinate of *el automóvil* (Mederos Martín, 1988).

Examples from Halliday and Hasan's (1976) book, *Cohesion in English* translated from English into a standard Spanish demonstrate how cohesive ties can be realized differently, but just as effectively in Spanish:

1. Is *there going to be an earthquake*? They say *so*. ¿Va a haber un terremoto? Eso dicen.
2. Did *they leave*? I think *so*. / I hope *not*. ¿Se han marchado? Creo que sí. / Espero que no (Taboada, 2004, p. 174; italics added).

The English text in Example 1 above is an instance of a substitution tie where *so* takes the place of *there [is] going to be an earthquake*. In the Spanish translation for Example 1, the demonstrative pronoun *eso* is used as a reference tie to replace *a haber un terremoto*. The English text in Example 2 above shows where a substitution tie (*so, not*) is used in lieu of repeating the question. In the Spanish translation for Example 2, the ellipsis ties (*creo que sí; espero que no*) are used as each response can repeat the question without changing the sentence structure or meaning (e.g., *Creo que sí se han marchado, espero que no se hayan marchado*) (Taboada, 2004).

The preceding examples demonstrate ways in which cohesion in Spanish can be categorized and realized at the text level in ways similar to how text cohesion is categorized and realized at the text level in English.

How Cohesion is Expressed: Differences Between Spanish and English

The way in which cohesion is expressed at the sentence level might contribute to the extent to which cohesion is realized at the text level. When describing text cohesion for Latino English-language learners, one needs to be cognizant of the grammatical and structural differences that exist between the languages under consideration. Young Latino English-language learners might rely on what they know about grammar and sentence structure in Spanish to write sentences in English, leading to a loss in text cohesion. To address how cohesion is expressed at the sentence level and realized at the text level for

native Spanish-speaking children's English narrative written text, I discuss three functional differences between Spanish and English: (a) Verb conjugation and subject identification, (b) definite article use, and (c) expression of time and movement.

Verb conjugation and subject identification. Spanish verbs are conjugated for the subject's person and number, and are adjoined to the verb (King, 1992). In English, verbs are also conjugated for the subject person and number, but the subject is expressed apart from the verb. For example, in Spanish, subject person and number (e.g., third person, plural) is part of the verb and one word (e.g., *descansaron*), whereas in English, subject person and number is not part of the verb conjugation, and a separate word (e.g., *they rested*). Verb conjugation in English is less systematic and the sentence subject must be included (King, 1992). For example, the Spanish sentence “¿Qué hacen los niños?” (p. 262) can be reduced to “¿Qué hacen?” (p. 262) without changing the sentence structure. However, in English, the sentence “What are the kids doing?” (p. 262) cannot be reduced to “What are doing?” (p. 262) because the subject is necessary to meet English language requirements.

Subject person and number included with the verb in Spanish allow the sentence subject to be dropped in subsequent sentences. The subject is then tacit to the previously mentioned or implied reference through verb conjugation (Fiestas & Peña, 2004). In English, the sentence subject must be explicit and either restated through a lexical tie or replaced by a reference tie in subsequent sentences. For example, in the sentences, *John* went running. *He* wore sneakers., *he* is a reference pronoun that maintains cohesion with *John* in the previous sentence. However, in Spanish, the pronoun can be omitted, as noun gender is tacit to the preceding sentence and part of the verb: *Juan* estaba corriendo. [*El*] Usaba zapatillas. Adding the subject pronoun *el* at the beginning of the second sentence, in the preceding example, is redundant, and is not necessary to maintain the meaning or language

requirements for the sentence structure (P. Orellana Garcia, personal communication, May 24, 2007). Additionally, in the preceding example, *usaba* is elliptical, as it is clear from the preceding sentence what the subject is (Guitierrez-Clellen & Heinrichs-Ramos, 1993; Taboada, 2004). However, if subject gender is unclear from the context a pronoun (*el* or *ella*) must be included in subsequent sentences as a pronominal reference tie to maintain cohesion.

Additionally, in Spanish the sentence subject is often identified as the agent of the action with an impersonal pronoun. For example, in a sentence used above in the previous section “El taxi...se averió...” a literal English translation would yield *the taxi broke itself*. *Se*, a gender-neutral impersonal pronoun, identifies the taxi as the agent of the action. A literal English translation from another example in the previous section, “No te molestes...,” would yield the command *do not bother yourself*. In this example *te* is a personal pronoun used to identify the subject as the agent of the action. In Standard English (the taxi... broke down; don’t bother), the subject is not explicitly identified as the agent of the action.

Definite article use. Definite articles function in Spanish and English to identify a specific context that is shared knowledge between writer and reader. However, the way in which Spanish and English contextualize nouns differs. In Spanish, the definite determiners *el* (masculine), and *la* (feminine) are part of the text’s structure and gender specific to the identified noun referent. In English, the definite determiner *the*, is gender neutral and identifies a contextualized noun referent. In English the definite determiner is omitted when the noun is a general classification (e.g., “Bread is cheap. *El pan es barato.*”) (King, 1992, p. 187). In Spanish, the determiner is omitted when the noun functions as a label (e.g., “*Mi padre es electricista.*” “My father is [an] electrician.”) (p. 185). Including the indefinite determiner in Spanish, *un electricista*, identifies the person who is an electrician (King,

1992).

Expression of time and movement. Time or verb tense as the manner in which the “temporal perspective with which the speaker chooses to associate a given real world situation” (King, 1992, p. 247) is expressed in different ways for Spanish and English. The Spanish language effectively communicates an event simultaneous with the event’s occurrence. The present verb tense in English indicates present action (e.g.; I *eat* cake.), and the present progressive, which includes an auxiliary verb, indicates continuous action in the present (e.g.; I *am eating* cake.). In Spanish, the present tense “allows for situations to be associated with the present temporal perspective without such a scheduling context” (p. 248) and holds the notion of the immediate future. For example, the present tense “¿Qué haces?” translates literally in English to “What you do?”, but conventionally to the present progressive tense “What are you doing?”, which when translated back to Spanish remains in the present tense and includes the participle of *hacer*, “¿Qué está haciendo?” And the question, “Te llamo más ¿de acuredo?” (p. 248) translates to “I call you later, okay?” (p. 248), but refers to the future “I will call you later, okay?” (p. 248).

English verbs express a more general temporal perspective that is inferred from the context (King, 1992). English uses the past tense for events that occurred (a) in the past (e.g.; I *ate* cake yesterday.) or (b) at the time of the utterance (e.g.; The cake *tasted* great.), and the past progressive requiring an auxiliary verb to express an action occurring over time in the past (e.g.: I *was eating* cake everyday when I was younger.).

Spanish verbs express greater specificity in describing at what point in time an event occurred, and whether the event occurred once and terminated in the past, or occurred over time in the past. Spanish uses (a) the *preterite* tense to describe a reaction to an event that occurred in the past, a single or consecutive action, action that began or ended in the past,

and a regular event limited in occurrence (e.g.; *Comí* pastel durante tres años. [*I ate* cake for three years.]); and (b) the imperfect tense to indicate an event that occurred over time in the past, but has ended or was interrupted (e.g.: *Comia* pastel. [*I used to eat* cake.]) (Iguina & Dozier, 2008). Spanish does not require auxiliary verbs to indicate when an event occurred. The specificity of Spanish verbs might cause a young Latino English-language learner to drop auxiliary verbs from the less specific English verbs.

The way in which movement is expressed differs between Spanish and English. In Spanish, the verb indicates “a change or state of location (e.g., *El niño se sube al árbol*. [*The boy ascends to the tree.*])” (Fiestas & Peña, 2004, p. 156;). In English, the direction of movement is expressed with an adverb and indicates the “the trajectory of motion (e.g., *He climbed up [or down] the tree.*)” (p. 156). The slight difference in expression of motion as indicated with a particular preposition might lead a young Latino English-language learner to write, “The boy climbed to the tree.”, creating to possible text misinterpretation.

The grammatical and structural difference that exist between Spanish and English as previously discussed in this section might contribute to the way in which cohesion is expressed within sentences and realized across sentences for young Latino English-language learners’ narrative written text.

Challenges to Maintain Text Cohesion for Latino English-Language Learners

The grammatical and structural differences related to verb conjugation and subject identification, definite article use, and expression of time and movement that exist between Spanish and English might present challenges to young Latino English-language learners attempting to maintain cohesion in their English narrative written text in the following ways:

(a) The way in which verb conjugation and subject identification differ in Spanish and English might lead a young Latino writer to omit the sentence subject throughout an English

narrative written text; (b) slight grammatical differences in the way in which determiners are used to identify contextualized nouns between the two languages might lead a young Latino writer to attempt to satisfy the text's structure and grammatical meaning rather than establish the text's context in an English narrative written text; (c) differences in the way in which time is expressed in Spanish and English might lead a young Latino writer to change verb tense or omit auxiliary verbs throughout the narrative leading to an unclear indication of the sequence of events in an English narrative written text; and (d) differences in the way in which movement is expressed in Spanish and English might lead a young Latino writer to denote direction or action with an incorrect preposition or include unnecessary reflexive pronouns.

Additionally, other challenges Latino English-language learners face when writing English narrative written text might be related to lexical and vocabulary knowledge, and an understanding of English written discourse. In order to achieve cohesion within a narrative written text, an English-language learner needs to draw on lexical and vocabulary knowledge, and understand how English written discourse functions (Ammon, 1985; Stoddard, 1990).

Lexical and vocabulary knowledge. Maintaining cohesion within an English narrative text goes beyond the text's sentence level and might be in part related to lexical cohesion and vocabulary knowledge. Limited vocabulary knowledge might lead to lexical repetition and redundancy, and reduced text complexity (Stoddard, 1990).

Text cohesion, in particular lexical cohesion, is maintained through specific vocabulary and word choices. As English-language learners become more proficient with the English language and their English narrative written text becomes more complex and accurate, vocabulary use expands and cohesive devices appear to indicate related events

throughout the text (Cumming, 2001). The ability to write cohesively, using cohesive ties to indicate semantic relations between elements within text, might be challenging for elementary school children learning to write in a second language (Liu, 2001). Native Spanish-speaking, English-language learners who lack sufficient English vocabulary (Snow & Kim, 2007) and who have few opportunities to write extended meaningful text might struggle to link sentences together cohesively (Irwin, 1986). They may have insufficient vocabulary knowledge to maintain lexical cohesion or may have difficulty effectively omitting certain elements with substitution or ellipsis ties (McCarthy, 1991). Additionally, English-language learners who experience difficulty when attempting to produce and identify multiple meanings for a single word might use single word repetition (Snow & Kim, 2007) essentially reducing the text's overall quality.

English written discourse. Maintaining text cohesion within an English narrative text might be related to particular English written discourse functions. First, English-language learners might not have yet applied written discourse knowledge from their first language to their second language. Learners might have knowledge of how written discourse functions in the first language, but not have fully applied such knowledge to the new language (Ammon, 1985; Montanari, 2004). For example, children might understand how cohesion functions in narrative text in their first language, but might be just learning or applying how cohesion functions in narrative text in the new language.

Second, learners might understand isolated linguistic functions of English written discourse, but might have not yet applied written discourse skills to extended text (Ammon, 1985). For example, English-language learners might be able to maintain cohesion in their oral discourse in the second language with the support of gestures but might not have consolidated the knowledge sufficiently to apply the skill to writing. The latter challenge of

applying skills to extended English written discourse might be related to (a) insufficiently consolidated linguistic knowledge leading to the learner's inability to access written discourse skills, (b) inability to apply available skills or knowledge to the task at hand, (c) insufficient linguistic knowledge to select appropriate linguistic items, or (d) motivational factors such as an unwillingness to make errors or take risks with writing in English (Ammon, 1985; Yde & Spoelders, 1985). School-aged English-language learners might know a cohesive device such as a pronoun is necessary, but might not select the appropriate pronoun gender or number to support reference cohesion, or might lack vocabulary necessary to support lexical cohesion (Connor, 1984). English-language learners might benefit when they access knowledge of how grammatical and lexical cohesive features functions in their first language, as such knowledge can influence how such features are understood in the second language (Gitsaki, 1999).

School-aged children new to English might lack native speakers' knowledge about how to correctly assign and interpret devices that signal cohesion and allow text to be unambiguous (Grimes, 1975; McCarthy, 1991). Grammatical and lexical resource retrieval in the second language might not yet be automatic and might require a conscious effort to attain (Weigle, 2005). Children whose primary language is not the instructional language might not have adequate opportunities to use cohesive ties in extended and meaningful written discourse. They may lack linguistic resources such as English grammar and vocabulary knowledge, or sufficient writing skills to make explicit cohesive references in the second language (Montanari, 2004). In order to produce cohesive narrative retells in their second language, children need "an array of linguistic devices at their disposal" (p. 449).

Chapter Summary and Study's Purpose

In this chapter, I described the theoretical framework that guided the current study. The social-semiotic language theoretical framework considers the social structure in relation to how language is understood within the social structure and context of the situation. Text cohesion functions in narrative writing through anaphoric and cataphoric references. Text cohesion is important because it reduces the load on short-term memory, allows for varied vocabulary, and builds a predictable framework within the text's context. Additionally, lexical and vocabulary knowledge, and an understanding of English written discourse features are needed to maintain cohesion throughout an English narrative written text.

In Chapter Two, I also addressed text cohesion in Spanish. Grammatical and structural linguistic differences between Spanish and English might challenge young Latino English-language learners' ability to maintain cohesion in their English narrative written text. Other challenges young Latino English-language learners face when writing an English narrative written text might be related to vocabulary knowledge and English written discourse understandings.

The current study focuses on the extent to which the participants used linguistic elements to maintain cohesion within the narrative text they produced rather than the processes involved for narrative text production or the reader's text interpretation. The current study is a first step to understand what knowledge English-language learners have about cohesion in English – particularly in writing English narrative text. The current study can help develop a new perspective of young Latino English-language learners' narrative written text, enrich our understanding of the ways cohesive tie use can effectively build children's English narrative written text, and help to clarify the understandings young Latino English-language learners have of the English language. This initial step can help guide

future research targeting what cohesive text properties are learned as English-as-a-second language is acquired and what text cohesion properties are accessed across languages.

CHAPTER 3

Methods

Chapter Overview

In this chapter, I give an account of the methods used in the current study. First, I give an overview of the current study's design, followed by a description of the setting in which the study occurred. I then detail the manner in which the participants were screened and provide demographic information about the participants. Information about the participants is followed by a description of the IDEA-IPT, a standardized measure used in part to determine the students' ESL service requirements. I then describe the materials used in the study to elicit English narrative writing samples from which to describe cohesive tie use. From there, I describe the procedures for data collection followed by a description of how the written protocols were coded, the variables created, and the manner in which reliabilities were established.

Design

Thirty-five ($N = 35$) third- through fifth-grade Latino students from a school in the southeastern United States participated in the current study. The participants were prompted to produce two English narrative written texts based upon events depicted in two wordless narrative picture-series during two 40-minute task-administration sessions, one week apart. The two wordless narrative picture-series were presented in counterbalanced order. The narrative written texts produced by the participants were coded to determine the number of reference, substitution, ellipsis, conjunction, lexical, unresolved, and total coded ties per 100

words. Descriptive analyses and non-parametric tests were used to evaluate the extent to which the participants used cohesive ties in their English narrative written text.

Setting

The current study took place in a rural elementary school in the southeastern United States. The school's total enrollment for the 2006-2007 academic year for kindergarten through fifth-grade was 706 students. The students represented a diverse ethnic population with 40.79% Latino, 29.05% African-American, 25.07% Caucasian, 4.67% Multi-ethnic, 0.28% Asian, and 0.14% Native American. Seventy-three percent (73.38%) of the students qualified for free and reduced lunch.

The total enrollment for grades three through five at the school was 388 students. The ethnicity of the students in grades three through five was 39.34% Latino, 30.76% African-American, 22.77% Caucasian, 6.61% Multi-ethnic, 0.31% Asian, and 0.31% Native American. The percentage of students in grades three through five who scored at or above grade level on the state 2006 End-of-Grade Tests were 74.5% for reading and 59.2% for math in grade three, 86.5% for reading and 55.2% for math in grade four, and 91.3% for reading and 71.7% for math in grade five. The percentage of students in grades three through five, by gender and ethnicity, respectively, who passed both the reading and math tests were 62.0% male, 60.3% female, 78.1% Caucasian, 64.7% Multi-ethnic, 60.0% Latino, and 50.9% African-American (North Carolina Office of the Governor, 2007). All students in grades three through five served by the ESL program were Latinos.

Participants

In this section, I describe the process by which I screened the students for participation in the current study followed by a description of the study's participants.

Participant Screening

In order to qualify to participate in the current study the students had to (a) be receiving ESL services at the time of data collection, (b) speak Spanish as their primary language, and (c) have achieved an IDEA-IPT writing raw score of 8 or higher on the 2007 test administration. See the IDEA-IPT Description section below for more details about the IDEA-IPT. I met with the two ESL teachers at the target school to inform them of the study, share participant qualifications, and request that they distribute the parental consent forms, typed in Spanish and English, to all third-through fifth-grade students who qualified for study participation in the current study. On the parent consent form, parents were asked to provide permission for child participation, and access to their child's demographic information and most current IDEA-IPT scores. The ESL teachers were asked to translate for parents who had questions regarding the study.

According to the ESL teachers, all 67 students who received direct and consultative ESL services in grades three through five qualified to participate in the current study. The ESL teachers collected all parental consent forms and returned the forms to me prior to data collection. Fifty-two percent of the parents returned parental consent forms to allow their child to participate in the current study and grant me access to their child's demographic information and IDEA-IPT scores. The current study included all of the students who were granted permission by their parents to participate.

Participant Description

Participants in the current study (a) were 14 male and 21 female Latino students in grades three, four, and five; (b) were recipients of either direct or consultative ESL program services; (c) spoke Spanish as their primary language as documented by the school district's most current Systems Information Management Summary (SIMS) report; and (d) had a

writing raw score of 8 or higher on the spring 2007 school-administered IDEA-IPT test.

There were 13 students in grade three, 14 students in grade four, and 8 students in grade five, for a total of 35 students who qualified to participate, submitted parent permission forms for study inclusion, and attended both task-administration sessions.

I collected the participants' spring 2007 IDEA-IPT scores, current age, home language, country of origin, number of years in a United States school, and type of ESL service received (direct or consultative) from the school district's administrative office. The participants' 2007 IDEA-IPT writing raw scores ranged from 9 to 26, and were identified as Novice High through Superior for writing skills as measured by the IDEA-IPT. See the IDEA-IPT description below for details about what the IDEA-IPT score range indicates. The participants ranged from age 9 to age 11, and all had been in school in the United States for two or more years. Forty-eight percent (48.57%) of the participants were born in the United States, 28.57% of the participants were born in Latin America, and birth country information was not available for 22.86% of the participants. Almost half (48.57%) of the participants received consultative services in which the ESL teacher went to the students' regular classroom to provide academic and language development support (personal communication, E. Arellano & M. Hildreth, April 23, 2007). Students qualified for consultative support when they scored Superior on any three of the four IDEA-IPT sections during a single test administration session. The remaining (51.43%) students received direct language and academic support daily for one hour from an ESL teacher in the ESL classroom.

IDEA-IPT Description

In order to meet guidelines set forth in No Child Left Behind (NCLB) Title III legislation, the ESL teachers in the school administered for the school district and the state the IDEA-IPT annually to all students who speak a language other than English as their

primary language (Ballard & Tighe, 2005). The NCLB Title III legislation requires students who speak a language other than English as their primary language be assessed to evaluate the students' English language proficiency level and to determine whether or not the student qualifies for ESL services (Ballard & Tighe, 2005).

The IDEA-IPT was field tested in 20 states across the United States with children from diverse linguistic backgrounds to ensure a reliable and valid measure of English language proficiency (Ballard & Tighe, 2005). The reliabilities for internal consistency for the IDEA-IPT 2005 version for the conventions and grammar writing tasks were .81 and .77, respectively. The inter-rater reliability for the IDEA-IPT 2005 version for the three productive writing tasks ranged from .73 to .82 (Ballard & Tighe, 2005).

The IDEA-IPT writing section is a standardized evaluation of the student's writing skills as demonstrated during test administration and does not account for what might be known by either the classroom teacher or ESL teacher about the student's overall writing ability (Ballard & Tighe, 2005). The person, who scores the writing samples, often the ESL teacher, is required to complete the IDEA-IPT writing rater training. The IDEA-IPT writing section consists of multiple-choice items to assess English conventions and grammar. Directions for the multiple-choice section ask each student to select the response with correct spelling or punctuation to complete the sentence provided, and to choose the answer from a list to grammatically complete the sentence provided. The writing section also includes three productive writing tasks: (a) a single picture description (e.g., write two sentences to describe a picture), (b) a narrative writing from three pictures presented in a series (e.g., write a narrative story about a common school activity/event presented in a series of pictures), and (c) an extended narrative as a response to a written topic (e.g., write a narrative essay in response to a topic) (Ballard & Tighe, 2005).

Each productive writing task is rated across five writing aspects (content/ideas, organization, vocabulary, grammar, and conventions) with a four-point (0 to 3) holistic rubric. The number correct from the multiple-choice items is combined with the rubric scores for the three productive writing tasks to yield a raw score (ranging from 3 to 28 for grades 3 to 5) for the IDEA-IPT writing section. The raw score can be interpreted to label the student as Novice Low (a raw score of 3 to 7 for grade 3, and 3 to 8 for grades 4 and 5), Novice High (a raw score from 8 to 11 for grade 3, 9 to 12 for grade 4, and 9 to 13 for grade 5), Intermediate Low (raw score from 12 to 16 for grade 3, 13 to 17 for grade 4, and 14 to 18 for grade 5), Intermediate High (a raw score from 17 to 19 for grade 3, 18 to 20 for grade 4, and 19 to 21 for grade 5), Advanced (a raw score of 20 to 23 for grade 3, 21 to 23 for grade 4, and 22 to 24 for grade 5), and Superior (a raw score of 24 to 28 for grades 3 and 4, and 25 to 28 for grade 5) (NCDPI, 2003).

Study Materials

Writing Prompts

Writing a narrative story from a wordless picture-series prompt was purposefully chosen for the current study to allow participants the opportunity to write a cohesive text in a familiar genre consistent with the classroom context and format. Narrative writing prompted from a wordless picture-series (a) provides a visual support for story content (Berman & Slobin, 1994), (b) has been found to be a valid method to elicit and analyze cohesive ties within text written by elementary school-age children (Ammon, 1985; Bae, 2001; Cameron et al., 1995; Cox, 1986; Cox et al., 1990; Rentel & King, 1983; Stein & Glenn, 1979; Yde & Spoelders, 1985), and (c) can reduce variation in the content to provide a common context for comparison of narrative written text samples when used consistently across participants (Bae, 2001; Tamor & Bond, 1983; Scinto, 1983; Yde & Spoelders, 1985).

A narrative wordless picture-series prompt used to elicit narrative written text can reduce potential ambiguity that might arise with printed or verbal narrative prompts and assist the writer to establish a context for the narrative task. Written prompts or story stems might contain ambiguous words at (a) the phonological level (e.g., “I have enough for *eight tea // eighty* cups.”), (b) the lexical level (e.g., “The lady wiped the *glasses.*”), (c) the surface structure (e.g., “He fed her *// dog* biscuits” versus “He fed her dog *// biscuits.*”), or (d) the deep structure (e.g., “The *duck* is ready to eat.”) (Nippold, 1998, p. 140). Although meaning and context might be clear to the researcher, the participants who have vastly different experiences and whose primary language is not English might misunderstand context, double meanings, or misinterpret words in a sentence used to prompt the writing task.

The narrative genre was chosen for the current study because students might have frequent opportunities in school to experience narrative text (Bae, 2001; Cox et al., 1990; Duke, 2000; Fitzgerald, Spiegel, & Webb, 1985; Pappas, 1993; Tamor & Bond, 1983; Yde & Spoelders, 1985). A narrative’s sequential nature provides organization to a story and access to content as cognitive resources consumed by idea generation, planning, and organizing are freed up (MacArthur, Harris, & Graham, 1994). Story content visually represented can further reduce cognitive demands and allow the participants to focus on the writing task rather than story development. A narrative schemata in a visual form used to elicit narrative text allows the writer to anticipate upcoming events and scaffolds the writer to organize text in a meaningful way (Bamberg, 1984).

Lorraine Guthrie drew the wordless narrative picture-series specifically for the current study. See Appendix I for the two picture-series. The content across the two wordless narrative picture prompts was held constant through five pictures with similar characters, setting, problem, and resolution. Holding the narrative content constant across

the two wordless narrative picture prompts ensured that the writing samples were a valid representation of what the students could write within the identified narrative framework. Sports themes were chosen, as soccer and basketball are two cross-gender activities and are likely to be events with which elementary school-age children are familiar. The 11 x 17-inch pictures were mounted individually on foam board. The school's ESL teachers viewed the two series of wordless narrative picture prompts used for the current study in advance of data collection and verified that the narrative wordless picture prompts and task directions represented the participants' usual learning experience and were not contrived or unusual stimuli to the participants (Cox, 1986).

Wordless narrative picture prompt Series A (Prompt A). The first wordless picture-card series depicted five park scenes. The first picture depicted a girl sitting under a tree in a park petting her dog. A soccer field and a pond were in the background. The second picture depicted a boy with a soccer ball under his arm standing next to the girl and her dog. The boy was looking at the girl and pointing to the soccer field. The third picture depicted the girl kicking the soccer ball over the net towards the pond, and the boy was jumping up in an attempt to catch the ball. The fourth picture depicted the girl's dog in the pond pushing the soccer ball with its nose toward the girl who was kneeling and the boy who was standing beside the pond. The fifth picture depicted the boy, girl, and dog sitting under a tree with the ball nearby. The soccer field and pond were in the background.

Wordless narrative picture prompt Series B (Prompt B). The second wordless picture-card series depicted five park scenes. The first picture depicted a boy sitting under a tree in a park playing with his dog. A basketball court and a pond were in the background. The second picture depicted a girl with a basketball in her hands standing next to the boy and his dog. The third picture depicted the boy throwing the ball toward the basketball net, and

the girl was trying to block the ball. The fourth picture depicted the boy's dog in the pond pushing the basketball with its nose towards the boy who was clapping for the dog and the girl who was kneeling beside the pond. The fifth picture depicted the boy laying under the tree, the girl sitting under the tree petting the boy's dog, and the basketball nearby. The basketball court and pond were in the background.

Study Procedures and Data Collection

In this section, I describe the procedures used in the current study for data collection. I describe how the participant groups were formed, how I acquired participant verbal assent, and the manner in which I administered the narrative writing tasks to elicit writing samples from the participants.

Participant Groups

The ESL teachers met with the grades three through five teachers to determine the most suitable time for the ESL students to participate in the current study. The participants were grouped based on classroom teacher placement to ensure minimal disruption to the participants' and teachers' daily routine. Participants who received consultative support from the ESL teacher were grouped with participants from the same class or grade level who received direct ESL support and brought together to the ESL classroom for the writing task administration. Students who did not receive participation consent from their parents continued with their usual ESL instruction.

For each scheduled data collection time, one ESL teacher picked up the participant-groups from their regular classrooms and brought them to the ESL classroom to participate in the study. I escorted the participants back to their regular classrooms upon task administration completion.

Participant Verbal Assent

During the first task-administration session, I recorded verbal assent for participation from all the students whose parents consented to their participation. Each student agreed to participant in the study.

Task Administration

I administered the narrative writing task to groups of 5 to 10 children at a time in the ESL classroom during a time arranged by the ESL and classroom teachers. I administered all narrative writing tasks to each participant-group during two 40-minute task-administration sessions, one week apart. I allowed 5 minutes for the participants to get seated, the directions to be read, and materials to be distributed. I gave the participants 30 minutes for the writing task and 5 minutes at the end of the writing session to read their narrative writing sample aloud to me. The narrative writing tasks were administered in counterbalanced order to participant-groups in each session.

Directions to participants. The following directions to the participants were modeled after directions used in similar studies to elicit narrative writing from elementary school-age children (Bae, 2001; Cox, 1986; Fitzgerald & Spiegel, 1986). After introductions, I told the participants:

Today you are going to write a story in English for children who are the same age as you, but go to another school. I will show you the pictures and you will write your own story based upon the pictures. You can give the children and the dog in the pictures names if you would like. Be sure to add as much detail to your story as possible because the children who will read your stories will not be able to see the pictures. The stories will be typed later so do not worry about spelling and punctuation. Although you will not be graded on this writing task, I will not be able to help you with spelling. Spell words the way that makes the most sense to you. You will have 30 minutes in which to think about a story to write based upon the pictures, write your story in English, and revise or edit your story. I will keep track of the time and let you know periodically how much time you have left. I ask that you not talk while you write your story. After you finish writing your story, I will ask you to read it to me so I will know what you wrote.

Writing task procedures. After delivering the preceding directions, I asked the participants if they had any questions. Participants asked questions related to format (e.g., Do I need to indent?) and handwriting (e.g., Do I have to write in cursive?). I provided each participant with lined paper and a pencil, and set the pictures in order along the board where all participants could view the pictures throughout the entire narrative writing task. Thirty minutes were allowed for the participants to think about what to write for their story, compose their narrative, and revise what they wrote for the narrative writing task. Cox (1986), and Yde and Spoelders (1985) in studies similar to the current study indicated 30 minutes was sufficient time for students in grades three and five, and ages eight to eleven, respectively, to complete a narrative writing task. I did not need to encourage the participants to write, nor did I need to help with spelling or clarify the picture prompts. I alerted the participants when 10 minutes and 5 minutes remained in the session.

In order to identify possible illegible handwriting the participants read their English written narratives individually to me at the end of each task-administration session. I asked the participants to say illegible words and I penciled the given word next to the illegible text. See Appendix II for additional guidelines used to accommodate the participants' oral reading of their writing samples. All 35 participants wrote two narratives over two separate 40-minute task-administration sessions one week apart. All of the participants completed each writing task within the 30-minute writing time limit allotted for each session.

Coding, Variables, and Reliabilities

In the following section I describe (a) the procedure to parse T-units, identify tie items, and code ties; (b) the variables created from the coding sheet for the preliminary analyses and the variables created for the main analyses; and (c) the manner in which I established reliability for parsed T-units and identified and coded tie types.

Coding

The coding scheme described below was followed for each writing sample. First, the participants' handwritten sample was typed into individual protocols. See Appendix III for guidelines for typing the participants' hand-written narratives. All protocols were typed as written by the participants. Illegible handwriting clarified by the participants during the oral reading was inserted with brackets into the typed protocol. Coding guidelines were created based upon Halliday and Hasan's (1976) description. See Appendix IV for coding guidelines.

Second, each protocol was parsed into T-units. Boundary markers (//) identified each T-unit in the protocol. The protocol was retyped into a new document with one T-unit per numbered line and all boundary markers, capitals letters (except proper nouns), and punctuation removed (Cooper, 1983; Cox, 1986; Fitzgerald & Spiegel, 1986; Hunt, 1964; Neuner, 1987). See Appendix V for a protocol example.

A T-unit, the shortest, and most grammatically complete unit in a sentence is an independent clause with related dependent or subordinate clauses (Hunt, 1964). A T-unit represents a single idea, event, or action and serves as a reliable standard measure that avoids phrase, clause, and sentence length ambiguities. For example, the sentence, "Milo *chased* the bouncing ball." represents a single action and one T-unit. Whereas, the sentence, "Milo was *running* and *jumping* across the grass." represents two actions and two T-units linked together with the conjunction *and* (Cox et al., 1990). Longer T-units indicate more complex sentences (Hillocks, 1986). A writer, as shown in the example below, can increase text complexity by reducing the number of T-units from three T-units in Example 1 to one T-unit as shown in Example 2. In Example 2, the writer eliminates repetitious words (*cat*) and references (*it*), and increases the sentence length for a single T-unit:

1. Once upon a time I had a cat. This cat was a beautiful cat, it was also mean.
2. Once upon a time I had a beautiful but mean cat (p. 65).

Third, a coding sheet was used to list and code cohesive ties for each protocol (see the coding scheme used for the protocol example in Appendix V). I used the following procedure for the coding sheet's first two columns: (a) The line number corresponding to the numbered T-unit in the protocol was identified in column one, (b) the cohesive tie item was listed in column two with one cohesive tie item per line, and (c) the number of cohesive tie items per line was tallied in column three. In columns four through nine each listed tie item was coded as Reference (R), Substitution (S), Ellipsis (E), Conjunction (C), Lexical (L), or Unresolved (U). For use in main analyses, the cohesive tie subdomains (e.g., Pronominal, Nominal, Demonstrative, and Comparative) were coded and analyzed with the respective cohesive tie domain (e.g., Reference). Unresolved coded ties included exophoric references and cohesive tie errors (e.g., inaccurate or unclear references) (Bae, 2001).

Halliday and Hasan's (1976) description of ellipsis ties focused on dialogue. In dialogue, a tie is coded as an ellipsis when the omitted information can be retrieved from the dialogue text. For the purpose of the current study, a tie was coded as an ellipsis if the omitted phrase was retrievable from within the text. For example, "A girl is sitting on the grass petting her dog. Then a boy comes [to the girl sitting on the grass]." The word *comes* was coded as an ellipsis, as the phrase *to the girl sitting on the grass* is omitted from the sentence. In the sentences, "*A girl is petting her dog. Then a boy came.*", *came* was identified as exophoric and coded as unresolved as there is no indication as to where the girl was or the boy went. The reader must rely on information external to the text to interpret the text.

Variables

Two variables were created for each protocol to describe the participants writing and provide a context in which the findings can be interpreted: (a) Total Number of Words, and (b) Total Number of T-units. Seven cohesive tie variables calculated per 100 words were created for each protocol to determine if the scores could be collapsed across the two writing prompts: (a) Total Number of Coded Ties per 100 Words; (b) Total Number of Reference Ties per 100 Words, (c) Total Number of Substitution Ties per 100 Words, (d) Total Number of Ellipsis Ties per 100 Words, (e) Total Number of Conjunction Ties per 100 Words, (f) Total Number of Lexical Ties per 100 Words, and (g) Total Number of Unresolved Ties per 100 Words (Cooper, 1983; Crowhurst, 1987; Fitzgerald & Spiegel, 1986; Pritchard, 1980). The variables were calculated per 100 words to account for varying text lengths, as the longer a piece of text, the more opportunities one has to use cohesive ties.

Seven cohesive tie variables for scores averaged across the two protocols were created for the main analysis. Averages were calculated for each variable by adding the total number of ties per 100 words in Prompt A to the total number of ties per 100 words in Prompt B and dividing by two. The seven new resultant averaged cohesive tie variables were as follows: (a) Averaged Total Number of Coded Ties per 100 Words, (b) Averaged Total Number of Reference Ties per 100 Words, (c) Averaged Total Number of Substitution Ties per 100 Words, (d) Averaged Total Number of Ellipsis Ties per 100 Words, (e) Averaged Total Number of Conjunction Ties per 100 Words, (f) Averaged Total Number of Lexical Ties per 100 Words, and (g) Averaged Total Number of Unresolved Ties per 100 Words.

Reference tie subdomains (pronominal, demonstrative, and comparative), conjunction tie subdomains (additive, adversative, causal, and temporal,), and lexical tie subdomains (repetition, synonymy, superordinate, and collocation) were calculated by totaling the number each subdomain occurred within each cohesive tie domain per 100 ties. The three

resultant variables for the reference ties subdomains were as follows: (a) Total Number of Pronominal Ties per 100 Reference Ties, (b) Total Number of Demonstrative Ties per 100 Reference Ties, and (c) Total Number of Comparative Ties per 100 Reference Ties. The four resultant variables for the conjunction tie subdomains were as follows: (a) The Total Number of Additive Ties per 100 Conjunction Ties, (b) the Total Number of Temporal Ties per 100 Conjunction Ties, (c) the Total Number of Causal Ties per 100 Conjunction Ties, and (d) the Total Number of Adversative Ties per 100 Conjunction Ties. The four resultant variables for the lexical tie subdomains were as follows: (a) The Total Number of Repetition Ties per 100 Lexical Ties, (b) the Total Number of Synonymy Ties per 100 Lexical Ties, (c) the Total Number of Superordinate Ties per 100 Lexical Ties, and (d) the Total Number of Collocation Ties per 100 Lexical Ties.

Reliabilities

Reliability for T-unit parsing, and tie type identification and coding was established through a two-step process; first with T-unit parsing, and second with cohesive tie type identification and coding. I randomly selected one-third of the participants' protocols to establish reliability for T-unit parsing, cohesive tie identification, and tie type coding. Cohen's Kappa was calculated to determine inter-coder reliability with the 12 randomly selected participants' protocols from both writing Prompt A and writing Prompt B.

First, to train the independent coder to parse T-units, I defined a T-unit and provided examples of written text parsed into T-unit lengths. Together the independent coder and I practiced parsing T-units with three student-writing samples. To establish reliability, the trained independent coder and I independently parsed each the 12 randomly selected participant protocols into T-units. Cohen's Kappa for inter-coder reliability for parsed T-units was .99.

Second, to train the same independent coder to identify and code cohesive tie types, I defined each cohesive tie type and provided examples of how each tie type was used in text. A sheet with coding guidelines (Appendix IV) and examples was used as a reference during the coding process (Appendix V). Together the independent coder and I practiced cohesive tie identification with the three student-writing samples we parsed into T-units. We used the coding sheet procedure previously described in the Coding section to code the cohesive ties identified in each protocol. To establish reliability for cohesive tie identification and tie type coding, the coders independently identified and coded cohesive ties with the same already parsed 12 randomly selected participant protocols. Cohen's Kappa for inter-coder reliability for cohesive tie identification was .86.

Chapter Summary

This chapter provided a detailed account of the methods used in the current study. Thirty-five Latino students from grades three through five wrote two separate narratives prompted by two wordless narrative picture series. The participants' handwritten narratives were typed, parsed into T-units, and coded for cohesive tie domain and subdomain types. Two variables were created to describe the participants' writing and provide a context for subsequent results. Seven variables calculated per 100 words were created for the preliminary analysis to test for writing prompt differences. The writing scores were collapsed across the two writing prompts to create seven variables for the main analysis, with an additional eleven variables created to further describe the cohesive tie subdomains. Reliabilities for T-unit parsing, cohesive tie identification, and tie type coding were acceptable. The analyses and the results from the analyses are discussed in the next chapter.

CHAPTER 4

Results

Chapter Overview

In the current chapter, I address the research question: To what extent did third-through fifth- grade Latino English-language learners who attended English-as-a-Second Language class and were intermediate-level writers use cohesive ties in their English narrative written text? In the current chapter, I (a) provide background on the non-parametric tests used in the study, (b) detail the set of preliminary analyses, (c) provide the main analyses results, and (d) summarize the chapter.

Non-Parametric Tests

I chose the Wilcoxon and Jonckheere-Terpstra non-parametric tests for current study because the sample size for each grade level was small and the Total Number of Words and the Total Number of T-units for Prompt A were not normally distributed. All the cohesive tie variables used in further analyses were calculated per 100 words to account for the length variations in the participants' English narrative written text length.

Wilcoxon Test

The Wilcoxon test was used to determine whether the distribution of scores for each of the seven cohesive tie variables calculated per 100 words from the two writing samples for each participant differed significantly. The Wilcoxon test tested differences across the two dependent writing prompts by comparing the ranks for all cases for each of the seven variables calculated per 100 words. The Wilcoxon test grouped the scores on each of the

cohesive tie variables calculated per 100 words from both writing Prompts A and B together, ranked all cases based on the total sample, then separated the groups back out into Prompts A and B to show the mean rank for each group. The mean rank was the sum of the ranks in each group divided by the number of cases in the whole rank. If the summed ranks for both prompts for each variable were statistically the same, there was no difference in the distribution of the cohesive tie scores between the two writing samples (i.e., the null hypothesis was true).

Jonckheere-Terpstra Test

The Jonckheere-Terpstra test was used to determine whether the distribution of scores for each of the seven averaged cohesion variables calculated per 100 words across the three grade levels differed with the assumption that scores increased at each consecutive grade level. The Jonckheere-Terpstra test rank ordered the scores from each of the seven averaged cohesion variables calculated per 100 words from lowest to highest across the three grade levels, then separated the scores back out into grade level groups. There was no significant differences among the grade levels if the sum of the ranks in each group was the statistically the same (i.e., the null hypothesis was true).

Preliminary Analysis

Two questions guided the preliminary analysis. First, I addressed the following question to describe the participant's writing and provide a context in which the subsequent results could be interpreted: What was the participants' writing like for the two writing prompts and three grade levels for Total Number of Words and Total Number of T-units? Second, I addressed the following question to determine if differences existed between the two prompts for the seven cohesive tie variables calculated per 100 words: Did the extent to

which the seven cohesive tie variables calculated per 100 words were used differ significantly across the two writing prompts?

The Participants' Writing

What was the participants' writing like for the two writing prompts and three grade levels for Total Number of Words and Total Number of T-units? Table 2 shows the mean, standard deviation, and range for the Total Number of Words and the Total Number of T-units for the two writing prompts and three grade levels. The results presented in Table 2 are discussed below. Table 3 shows the results from the Wilcoxon test for the Total Number of Words, the Total Number of T-units, and the seven cohesive tie variables calculated per 100 words for the two writing prompts. Table 3 is discussed following the frequency distribution figures (Figure 1 and Figure 2). Table 4 shows the mean, standard deviation, and range for the cohesive tie variables calculated per 100 words.

Writing prompts: Total Number of Words. For Prompt A, as shown in Table 2, the Total Number of Words was on average 112 with a range of 50 Total Number of Words to 371 Total Number of Words. For Prompt B, the Total Number of Words was on average 93 with a range from 50 Total Number of Words to 187 Total Number of Words. Overall, the average Total Number Words was higher than prior reported number of word averages for children in first and second grade writing in their second language (Bae, 2001) and lower than children aged 8 to 11 writing in their first language (Yde & Spoelders, 1985). Bae (2001) reported native Korean speaking first and second graders averaged 68 English words for a written narrative based on a seven-picture prompt series. Yde and Spoelders (1985) reported native Dutch speaking children ages 8-11 produced a range from 150-271 Dutch words for a written narrative based on a six-picture prompts series, with the older participants writing more than the younger participants.

There was a slight significant distribution difference at the .05 significance level between the two writing prompts for the Total Number of Words (Wilcoxon $z = -2.35$, $p = .02$) (see Table 3). This significance occurred because the mean rank for the distribution of Total Number of Words for Prompt A was slightly significantly higher than mean rank for the distribution of Total Number of Words for Prompt B.

I examined the data further to better understand the source of the significant distribution difference for the two writing prompts for the Total Number of Words. Three protocols contributed to the skewed and peaked distribution for the Total Number of Words for Prompt A. The three protocols had 371 Total Number of Words (Protocol 4813²), 328 Total Number of Words (Protocol 4811), and 202 Total Number of Words (Protocol 4812) on Prompt A. These same protocols had 187 Total Number of Words (Protocol 4913), 155 Total Number of Words (Protocol 4911), and 143 Total Number of Words (Protocol 4912), respectively on Prompt B. Figure 1 and Figure 2 show the frequency distribution for the Total Number Words in Prompt A and Prompt B, respectively. The participants who wrote the three writing samples with the high Total Number of Words were in the same group as arranged by the classroom and ESL teachers. The three protocols that contributed to the skewed and peaked distribution for the Total Number of Words for Prompt A were left in the current study because the seven cohesive tie variables used in the Main Analysis were calculated per 100 words to account for text length variations.

Table 2:

Mean, Standard Deviation, and Range: Total Number of Words and Total Number of T-units

² Protocols were identified by grade level (3, 4, 5), writing prompt (A = 8, B = 9), and participant number (1-grade level n) (e.g., 4813 is a third grade participant, writing on Prompt A, assigned the number 13 (of 13). This participant corresponds with 4913 for Prompt B.

	Mean (S.D.)		Range	
	Total Number of		Total Number of	
	Words	T-units	Words	T-units
	Low to High			
Prompt A (<i>n</i> =35)	111.60 (67.57)	16.03 (10.25)	50.00-371.00	8.00-55.00
Prompt B (<i>n</i> =35)	93.09 (33.64)	14.03 (5.79)	50.00-187.00	7.00-33.00
Grade Three (<i>n</i> =26)	84.46 (27.50)	13.00 (5.46)	50.00-173.00	7.00-29.00
Grade Four (<i>n</i> =28)	126.32 (73.85)	18.04 (11.34)	50.00-371.00	8.00-55.00
Grade Five (<i>n</i> =16)	88.89 (21.77)	13.06 (3.46)	52.00-120.00	8.00-20.00

Figure 1:

Frequency Distribution for Total Number of Words in Prompt A

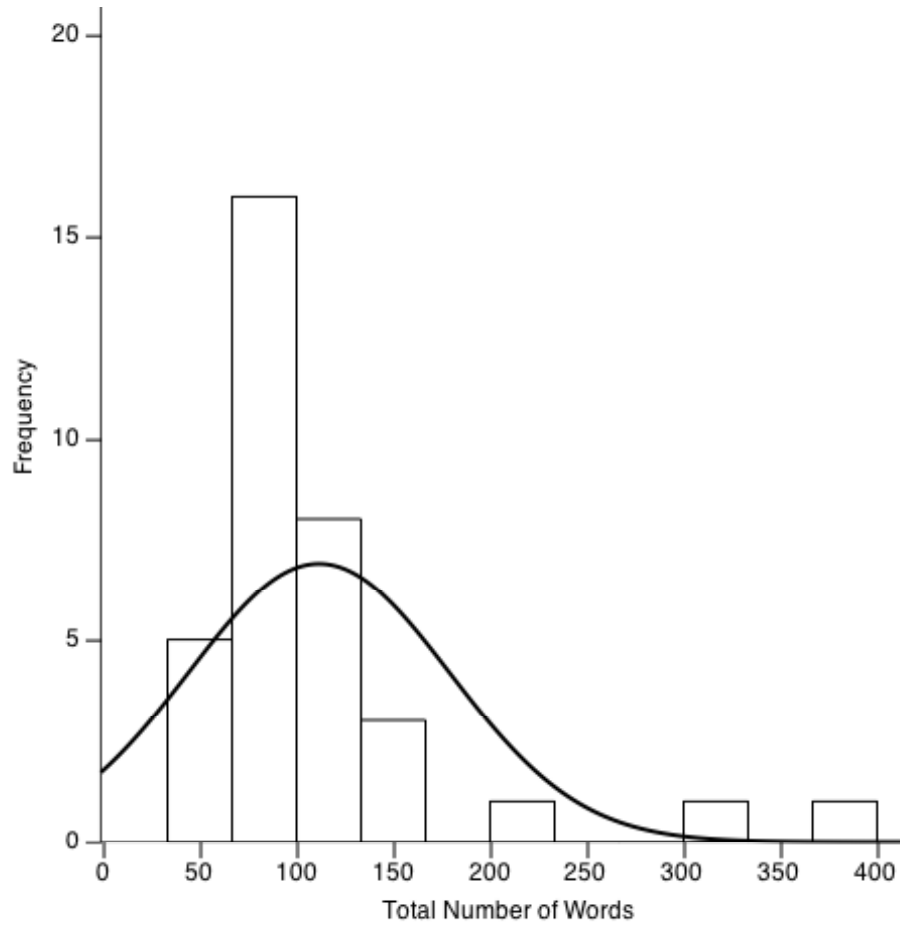
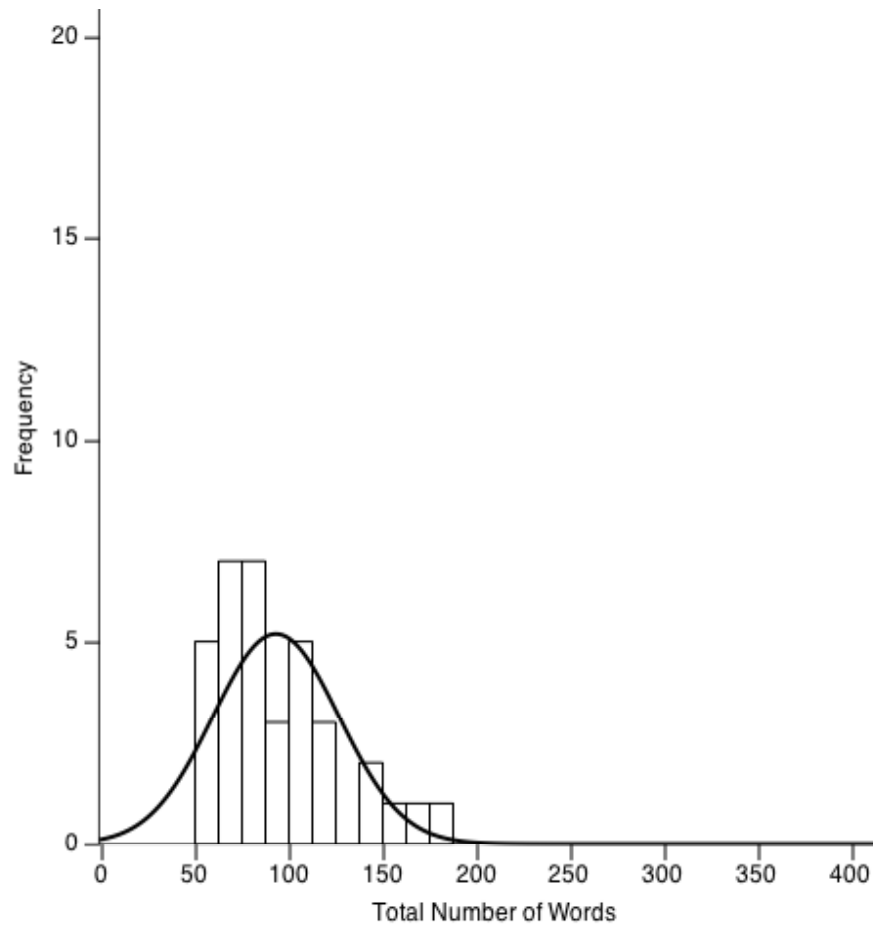


Figure 2:

Frequency Distribution for Total Number of Words in Prompt B



Writing prompts: Total Number of T-units. There were no significant distribution differences for the Total Number of T-units between the two writing prompts (Wilcoxon $z = -1.52, p = .13$) (see Table 3). The protocols averaged 16 T-units for Prompt A and 14 T-units for Prompt B.

Grade levels: Total Number of Words. There were no significant distribution differences for the Total Number of Words across the three grade levels ($J-T = 1.38, p = .17$). For Grade Three, the Total Number of Words averaged 84 with a range from 50 Total Number of Words to 173 Total Number of Words.

Grade levels: Total Number of T-units. There were no significant distribution differences for the Total Number of T-units among the three grade levels ($J-T = 0.92, p = .36$). Grade Three averaged 13 T-units, Grade Four averaged 18 T-units, and Grade Five averaged 13 T-units.

Cohesive Tie Variables Calculated per 100 Words

Did the extent to which the seven cohesive tie variables calculated per 100 words were used differ significantly across the two writing prompts? There were no significant distribution differences between the two writing prompts for each of the seven variables calculated per 100 words: Total Number of Coded Ties per 100 Words (Wilcoxon $z = -0.68, p = .49$), Total Number of Reference Ties per 100 Words (Wilcoxon $z = -1.85, p = .06$), Total Number of Substitution Ties per 100 Words (Wilcoxon $z = -1.72, p = .09$), Total Number of Ellipsis Ties per 100 Words (Wilcoxon $z = -0.26, p = .80$), Total Number of Conjunction Ties per 100 Words (Wilcoxon $z = -0.51, p = .61$), Total Number of Lexical Ties per 100 Words (Wilcoxon $z = -0.25, p = .81$), and Total Number of Unresolved Ties per 100 Words (Wilcoxon $z = -1.75, p = .08$). Table 3 shows the Wilcoxon test results. The seven cohesive tie variables calculated per 100 words were normally distributed. Table 4 shows the mean,

standard deviation, and range for the writing prompts and grade levels for the seven cohesive tie variables calculated per 100 words.

Since no differences emerged between the two writing prompts for the seven cohesion variables calculated per 100 words, the scores for the cohesive tie variables were collapsed across the two writing prompts.

Table 3:
Writing Prompts: Wilcoxon Test Mean Ranks

Variables	Mean Rank		Wilcoxon z (p value)
	Prompt A	Prompt B	$p < .05$ ($N = 70$)
Total Number of Words	20.81	13.19	-2.35 (.02)
Total Number of T-units	18.16	14.08	-1.52 (.13)
Coded Ties per 100 Words	19.83	16.06	-0.68 (.49)
Reference Ties per 100 Words	21.40	13.47	-1.85 (.06)
Substitution Ties per 100 Words	8.93	11.50	-1.72 (.09)
Ellipsis Ties per 100 Words	14.50	18.08	-0.26 (.80)
Conjunction Ties per 100 Words	16.71	19.22	-0.51 (.61)
Lexical Ties per 100 Words	16.67	19.41	-0.25 (.81)
Unresolved Ties per 100 Words	14.86	20.10	-1.75 (.08)

Table 4:

Mean, Standard Deviation, and Range: Writing Prompts and Grade Levels

	Variables	Means (S.D.)		Means (S.D.)			Range		
	Total Number per 100 Words	Prompt A (<i>n</i> =35)	Prompt B (<i>n</i> =35)	Grade 3 (<i>n</i> =24)	Grade 4 (<i>n</i> =28)	Grade 5 (<i>n</i> =18)	Grade 3	Grade 4	Grade 5
92	Coded	39.34 (6.58)	37.89 (6.66)	40.56 (8.02)	38.40 (4.66)	36.35 (6.70)	27.14-56.52	28.99-50.00	21.31-48.33
	Reference	16.37 (4.34)	14.38 (4.34)	15.24 (8.85)	16.32 (3.36)	14.10 (5.77)	7.14-25.00	9.38-22.34	3.90-23.46
	Substitution	0.42 (0.53)	0.24 (0.48)	0.33 (0.55)	0.31 (0.49)	0.39 (0.50)	0.00-1.69	0.00-1.49	0.00-1.30
	Ellipsis	1.24 (1.35)	1.19 (1.30)	0.99 (1.18)	1.09 (1.08)	1.71 (1.71)	0.00-5.17	0.00-4.69	0.00-5.77
	Conjunction	5.85 (2.55)	6.25 (3.53)	6.27 (4.22)	6.14 (2.24)	5.62 (2.41)	0.00-8.18	2.17-12.00	1.30-9.65
	Lexical	15.45 (4.65)	15.82 (4.25)	17.74 (4.36)	14.55 (3.91)	14.52 (4.45)	10.31-25.00	9.52-21.93	7.41-23.00
	Unresolved	3.12 (2.35)	3.89 (2.73)	3.63 (1.71)	3.16 (2.59)	3.89 (3.40)	0.70-7.14	0.00-10.78	0.00-13.11

Differences Across the Three Grade Levels for Averaged Cohesion Variables

Cohesive tie scores from both writing prompts were collapsed and averaged together ($N = 35$) to determine whether the extent to which the averaged seven cohesive tie variables calculated per 100 words were used differ significantly across the three grade levels. The seven resultant averaged cohesive tie variables were as follows: (a) Averaged Total Number of Coded Ties per 100 Words, (b) Averaged Total Number of Reference Ties per 100 Words, (c) Averaged Total Number of Substitution Ties per 100 Words, (d) Averaged Total Number of Ellipsis Ties per 100 Words, (e) Averaged Total Number of Conjunction Ties per 100 Words, (f) Averaged Total Number of Lexical Ties per 100 Words, and (g) Averaged Total Number of Unresolved Ties per 100 Words. Seven non-parametric tests were run to determine whether there were significant differences across the three grade levels for each of the seven averaged cohesion variables calculated per 100 words. I present the results for the three grade levels together. I also present the results for the three grade levels separately to reveal any emerging patterns in cohesive tie use that might not have been apparent if results were viewed as a single group.

No significant distribution differences emerged for the seven averaged cohesion variables calculated per 100 words across the three grade levels: Averaged Total Number of Coded Ties per 100 Words ($J-T = -1.79, p = .07$), Averaged Total Number of Reference Ties per 100 Words ($J-T = -0.58, p = .56$), Averaged Total Number of Substitution Ties per 100 Words ($J-T = 0.44, p = .66$), Averaged Total Number of Ellipsis Ties per 100 Words ($J-T = 1.02, p = .31$), Averaged Total Number of Conjunction Ties per 100 Words ($J-T = -0.12, p = .90$), Averaged Total Number of Lexical Ties per 100 Words ($J-T = -1.95, p = .05$), and Averaged Total Number of Unresolved Ties per 100 Words ($J-T = -0.82, p = .41$). Table 5 shows the Jonckheere-Terpstra test results, range, mean, and standard deviation for each of

the seven averaged cohesion variables calculated per 100 words for the three grade levels together and the three grade levels separate.

Overall, the participants' writing was similar across the three grade levels for the averaged cohesive tie scores calculated per 100 words. This finding of no differences in distribution for cohesive ties is similar to what Yde and Spoelders (1985) found when examining native Dutch-speaking children age eight to eleven writing narrative text in Dutch. Fitzgerald and Spiegel (1986) found an overall decline in number of cohesive ties with the exception of lexical ties for native English-speaking children from grade three and grade six writing narrative text in English.

Table 5:

Grade Levels: Jonckheere-Terpstra Test Results, Range, Mean, and Standard Deviation

	Averaged Total Number per 100 Words						
	Coded	Reference	Substitution	Ellipsis	Conjunction	Lexical	Unresolved
<i>J-T, p < .05</i> <i>N = 35</i>	-1.79 (.07)	-0.58 (.56)	0.44 (.66)	1.02 (.31)	-0.12 (.90)	-1.95 (.05)	-0.82 (.41)
	Range						
Grades 3-5	30.85-54.42	9.28-22.64	0.00-1.27	0.00-5.52	1.76-12.61	10.74-23.51	0.67-11.56
	Means (Standard Deviations)						
Grades 3-5 <i>N = 35</i>	38.52 (5.03)	15.28 (3.26)	0.33 (0.38)	1.22 (1.12)	6.05 (2.50)	15.59 (3.60)	3.51 (2.21)
Grade 3 <i>n = 13</i>	40.15 (7.01)	15.14 (4.04)	0.30 (0.43)	1.16 (1.02)	6.30 (3.31)	17.13 (4.12)	3.67 (1.54)
Grade 4 <i>n = 14</i>	38.38 (2.92)	16.28 (1.75)	0.35 (0.34)	0.90 (0.70)	6.27 (2.00)	14.59 (3.06)	3.07 (2.06)
Grade 5 <i>n = 8</i>	36.11 (3.37)	13.75 (3.65)	0.35 (0.42)	1.86 (1.64)	5.28 (1.79)	14.86 (3.04)	4.03 (3.31)

Preliminary Analysis Summary

Overall, a slight significant difference emerged across the two writing prompts for Total Number of Words, and no significant differences emerged for Total Number of T-units. The significant difference for Total Number of Words was attributable to three protocols with a high word count on Prompt A. The protocols with the high word count were left in the sample as the seven cohesive tie variables used in the analyses were calculated per 100 words. There were no significant differences across the three grade levels for Total Number of Words or Total Number of T-units. The seven cohesive tie variables calculated per 100 words were normally distributed and no significant differences emerged between the two writing prompts for each of the seven cohesion variables calculated per 100 words. No significant differences emerged between the two writing prompts for cohesive tie variable or across the three grade levels for averaged cohesion scores. A closer look at cohesive tie domains and subdomains in the Main Analysis provide further insight into the extent to which the participants used cohesive ties in their English narrative written text.

Main Analysis

In this section I address two questions: (a) To what extent were substitution ties, ellipsis ties, exophoric reference, and reference tie subdomains, conjunction tie subdomains, and lexical tie subdomains used; and (b) can unresolved cohesive ties be attributed to difference between the ways in which cohesion is expressed in Spanish and English?

Extent to Which Participants Used Cohesive Ties

As the results discussed in the previous section showed, there were no significant differences among the three grade levels for the seven averaged cohesive tie variables calculated per 100 words. Although no significant differences emerged among the three grade levels for the seven averaged cohesive tie variables calculated per 100 words, breaking

down each cohesive tie domain into respective subdomains at each grade level allowed access to a clearer understanding of the extent to which the participants at each grade level used each tie subdomain type. In this section, I describe the occurrence of substitution and ellipsis ties, exophoric references, and cohesive tie subdomains (e.g. pronominal pronouns, demonstrative pronouns, definite articles, and comparatives) within each of the three other cohesive tie domains (e.g., reference). I examined the three grade levels grouped together and each grade level separately to gain a better understanding of the extent to which the participants used cohesive devices.

Substitution and ellipsis ties. As Table 5 in the previous section shows, substitution and ellipsis tie use were on the whole used infrequently. The protocols averaged less than one substitution tie per 100 words and one ellipsis ties per 100 words across the three grade levels. Substitution and ellipsis ties were not partitioned into specific grammatical use because of their infrequent occurrence. Substitution and ellipsis ties occurred when the participants engaged the characters in the written narratives in dialogue. For example, a substitution tie indicated a response to a statement from a character. In the Grade Three example below³, the word *did* substitutes *play soccer* in the previous sentence:

“Oh” what a wonderful day said Silvia to her dog Julie “woof woof!” They were close to a pond when. Alex came and said lets *play soccer*. “So they *did*!” They played soccer all day long. The girl made 5 goals. And the boy made 6 goals. After that the boy threw the ball in the pond. The dog went to get the ball. Then they just sat there. They talked [*italics added to identify substitution tie*] (Protocol 386).

In the Grade Four example below, *do* substitutes *want to play soccer* in the preceding sentence:

One day a gril named Cristal was with her dog were seting on the grass doing nothing. Suddenly a boy came and said. “Do you *want to play soccer*.” She said “yes I *do*.” So thay went to play soccer and. She made a lot of gols and the last gol. She

³ Examples in chapter 4 were taken from the participants’ protocols. I preserved participants’ spelling, punctuation, and grammar.

did not make it, because the boy had stoped it from going in. And when the boy stoped it from going in it fell in the pond and. So the dog had to go in the pond to get the ball. Then thay got tierd of plaing so thay went to set down [italics added to identify substitution tie] (Protocol 483).

Additionally, in both the examples above, the participants created ellipsis ties retrievable from the preceding text to identify to where the boys *came*. In the Grade 3 protocol above, the participant established the setting *close to a pond when Alex came* [*close to the pond*]. In the Grade 4 protocol above, the participant established the setting *on the grass when a boy came* [*to where they were seting on the grass*].

Ellipsis ties were used in question/response dialogue between the characters. *Okay* in the Grade Three example below is an ellipsis tie to the preceding statement, *Let's go play soccer please*, and *yes I am* links as an ellipsis tie to the question *are you ready*. *To get the ball*, omitted from the end of *are you ready*, links as an ellipsis tie to the previous sentence, *you going to get the ball*.

Ho what a wonderful day. Setting in the grass it color was green the lake was blue He! Sandy how are [you?] fande and you [?] exaclily like. What do you got holding in your hand [?] it a soccer ball. *Let's go play soccer please*[?] *okay* whis my dog called Pal. But where can we play soccer said Sandy. Over there said Sam. Sandy said I am going to kick the ball and you going to get the ball. *Are you ready* [?] *yes I am* said Sam. Kick then okay. As she threw the ball she throw it up. She did not maid a gol. Go get the ball Pal good dog. So the sat down and talk [italics added to identify ellipsis ties; punctuation inserted in brackets for reading clarity] (Protocol 388).

Exophoric references. Exophoric references did not contribute to the text's cohesion and were coded as unresolved ties. Protocols averaged three to four Total Number of Unresolved Ties per 100 Words across the two writing prompts and three grade levels (see Table 5). The participants used the definite article *the* to refer without a presupposition to items in the picture prompts. A Grade Three protocol demonstrates exophoric references that does not contribute to the text's cohesion:

The girl is with her dog the dog is at *the tree* then a boy comes and siad to the girl to play sccore with hem the siad yes the girl kicks *the ball* and the boy chaches *the boll* the dog is chost waching. The boll gose to *the pound* the dog go get the bool the gril is waching how the dog get the boll and the boy too then day sit downen to tlka the dog has the bool the girl is waching the dog and the boy to [italics added to identify exophoric references] (Protocol 3813).

At the protocol's beginning, "*The girl* is with her dog *the dog* is at *the tree*." The first and third *the* (*the girl*, *the tree*) are references to picture elements external to the text. The second *the* (*the dog*) is a definite article and refers to *her dog* in the previous sentence. Although *the ball* identified later in the text is not presupposed, *the ball* might be considered a collocation lexical tie with *soccer*. *The pond* is not presupposed by any element within the text and is an exophoric reference to information external to the text, the picture prompt.

Cohesive tie subdomains. The variables for the cohesive tie subdomains for Averaged Total Number of Reference Ties per 100 Words were as follows: (a) Total Number of Pronominal Ties per 100 Reference Ties, (b) Total Number of Demonstrative Ties per 100 Reference Ties, and (c) Total Number of Comparative Ties per 100 Reference Ties. The subdomain variables for Averaged Total Number of Conjunction Ties per 100 Words were as follows: (a) Total Number of Additive Ties per 100 Conjunction Ties, (b) Total Number of Temporal Ties per 100 Conjunction Ties, (c) Total Number of Causal Ties per 100 Conjunction Ties, and (d) Total Number of Adversative Ties per 100 Conjunction Ties. The subdomain variables for Averaged Total Number of Lexical Ties per 100 Words were as follows: (a) Total Number of Repetition Ties per 100 Lexical Ties, (b) Total Number of Synonymy Ties per 100 Lexical Ties, (c) Total Number of Superordinate Ties per 100 Lexical Ties, and (d) Total Number of Collocation Ties per 100 Lexical Ties. Non-parametric tests were not preformed on the cohesive tie subdomain variables, as the rate of use for each cohesive tie subdomain variable was low. Rather, I calculated each cohesive tie subdomain per 100 of its respective domain.

Reference tie subdomains. The protocols averaged 16 reference ties per 100 words across the three grade levels (see Table 5). Table 6 shows each reference tie subdomain variable for the three grade levels together and each grade level separately. The results for the three grade levels were as follows: Sixty-two of the Averaged Total Number of Reference Ties per 100 Words occurred as Total Number of Pronominal Ties per 100 Reference Ties, 33 of the Averaged Total Number of Reference Ties per 100 Words occurred as Total Number of Demonstrative Ties per 100 Reference Ties, and 5 of the Averaged Total Number of Reference Ties per 100 Words occurred as Total Number of Comparative Ties per 100 Reference Ties.

Pronominal tie results for Grade Three averaged 46 Total Number of Pronominal Ties per 100 Words per 100 Reference Ties, Grade Four averaged 68 Total Number of Pronominal Ties per 100 Words per 100 Reference Ties, and Grade Five averaged 73 Total Number of Pronominal Ties per 100 Words per 100 Reference Ties (see Table 6). Participants used pronominal reference ties to refer to characters and objects within the narrative written text. The Grade Five protocol below, which averaged 86 Total Number of Pronominal Ties per 100 Reference Ties, demonstrated pronominal tie use:

On a hot sunny day me and my dog were sitting on a hill. *My* friend came and told *me* if could go play with *him* and *I* said yes. *We* went to the field and play. Suddenly *I* kicked the ball and *it* went up the goal. *It* went to a pond. *Me* and *my* friend were sad. *My* dog Bubbles went to the pond and get *it*. When Bubbles came out *we* went to the hill and sat down [italics added to identify pronominal ties] (Protocol 582).

Demonstrative tie results for Grade Three averaged 50 Total Number of Demonstrative Ties per 100 Reference Ties, Grade Four averaged 28 Total Number of Demonstrative Ties per 100 Reference Ties, and Grade Five averaged 20 Total Number of Demonstrative Ties per 100 Reference Ties (see Table 6). Participants used demonstrative reference ties as definite articles to refer to characters or objects previously mentioned the

narrative written text. The Grade Three protocol below, which averaged 84 Total Number of Demonstrative Ties per 100 Reference Ties demonstrated above average demonstrative tie use:

A girl was petting her dog. I think her brother came and asked her if she wants to play soccer? *The girl* said yes and *the girl* and *the boy* start playing soccer and *the dog* watched *the boy* and *the girl* playing soccer and then *the girl* kicked *the ball* and *the ball* went to the pond. *The dog* went to get *the ball* from *the pond*. Then *the dog* start playing soccer by himself and *the boy* and *the girl* start watching *the dog* play soccer [italics added to identify demonstrative ties] (Protocol 384).

Comparative tie results for Total Number of Comparative Ties per 100 Reference Ties indicated an infrequent use of comparative ties, with less than eight Total Number of Comparative Ties per 100 Reference Ties across protocols at all three grade-levels (see Table 6). A Grade Four protocol with one comparative tie out of 14 identified reference ties, demonstrates a way in which a comparative pronoun was used:

One day a boy was playing with his dog near a basketball field and. suddenly a girl came and asked, "him do you want to play basket ball with me." he said, "yes I do." So they went to a field and through the ball at each *other* and. in a accident. the boy through the ball in the pond. So the dog had to go get the ball. When the dog had got the ball out they. were tired so they went to a tree and set down in the shade [italics added to identify comparative tie] (Protocol 493).

Table 6:
Reference Tie Subdomains

Reference Tie Subdomains		Grade Levels		
Total Number per 100	Grades	Grade 3	Grade 4	Grade 5
Reference Ties	3, 4, and 5			
Pronominal Ties (<i>he, she, his, her, it</i>)	62.32	46.22	68.18	72.56
Demonstrative Ties (<i>the</i>)	32.57	50.15	28.02	19.54
Comparative Ties (<i>as, like, other</i>)	5.11	3.63	3.80	7.9

Conjunction tie subdomains. The protocols averaged six conjunction ties per 100 words across the three grade levels (see Table 5). Table 7 shows each conjunction tie subdomain variables for the three grade levels together and for each grade level separately. Results across the three grade levels showed 43 of the Averaged Total Number of Conjunction Ties occurred as Total Number of Additive Ties per 100 Conjunction Ties, 23 of the Averaged Total Number of Conjunction Ties occurred as Total Number of Temporal Ties per 100 Conjunction Ties, 22 of the Averaged Total Number of Conjunction Ties occurred as Total Number of Causal Ties per 100 Conjunction Ties, and 11 of the Averaged Total Number of Conjunction Ties occurred as Total Number of Adversative Ties per 100 Conjunction Ties.

Additive tie results showed Grade Three averaged 53 Total Number of Additive Ties per 100 Conjunction Ties, and both Grade Four and Grade Five averaged less than 40 Total Number of Additive Ties per 100 Conjunction Ties (see Table 7). Additive ties were used to link successive independent events together as shown in the following Grade Three example:

A little girl was playing with her dog. A boy that plays soccer comes up *and* tell her if she wants to play. The girl kicks the ball *and* she throw it way to th lake. The dog had to get the ball from the lake. They set down bisayed a a tree a rest *and* the dog was playing with the ball [italics added to identify additive ties] (Protocol 381).

Temporal ties were used to indicate a “sequence in time” (Halliday & Hasan, 1976, p. 261) often with the temporal cohesive tie *then*. The results showed all three grade levels averaged 23 Total Number of Temporal Ties per 100 Conjunction Ties (see Table 7). The Grade Four example below demonstrates exceptional temporal tie use:

Woof! Woof! Good boy said May and her brother Michale. So what you wanna do. asked Michale let me see. lets go to the park and play soccer all right said her brother they were racing with there dog to the park the dog was to fast *finally* we get to play soccer in peace kick it May exclaimed Michale she kicked it as hard as she could splash! went the ball. Oops said May with an exprecion on her face. *Just then* they saw puppy that was runnig as fast as he could exclaimed Michale when he saw puppy swimming for the ball and in a blink of and eye puppy was racing through the water

with the soccer ball on his mouth. Good puppy said Michale and May then they leted puppy rest under a nice green tree *a few minutes later*. Puppy was plying with the soccer ball! Michale and May started laughing at what puppy was doing [italics added to identify temporal ties] (Protocol 4810).

Causal ties were used in simple forms such as *so* or *that* to indicate a result of something that occurred previously in the text. Grade Three participants averaged 17 Total Number of Causal Ties per 100 Conjunction Ties, and Grade Four and Grade Five averaged near 25 Total Number of Causal Ties per 100 Conjunction Ties (see Table 7). The Grade Five protocol below demonstrates causal tie use with the word *so*:

One day in the morning there was a boy name Daniel. He was sitting with his dog Bubble in a hill. Then a girl named Christina came and asked Daniel if he wanted to play basketball with her and Daniel said yes. *So* they went to the basketball field and started playing. Soon Daniel threw the ball and it went to the pond that was near. Bubbles saw the ball and went into the pond and get the ball. When Bubble came out of the pond the ball was wet. *So* they went back to the hill and sat down and talk [italics added to identify causal ties] (Protocol 592).

Adversative ties use was infrequent across the three grade levels. The results for Grade Three averaged five Total Number of Adversative Ties per 100 Conjunction Ties, and Grade Four and Grade Five averaged 14 Total Number of Adversative Ties per 100 Conjunction Ties (see Table 7). The Grade Five protocol below demonstrates an adversative conjunction tie use.

One day there was a boy name Thomas, he didn't know what to do with his dog named Jack. *But* later on a girl named Mayra came up with a basketball. Mayra told Thomas if he wanted to play, Thomas said sure. Then when they were playing the ball flew over to the pond. Next Jack went swimming to the pond and got the ball. Finally when they got tired they went to rest under a tree [italics added to identify adversative tie] (Protocol 591).

Table 7:
Conjunction Tie Subdomains

Conjunction Tie Subdomains	Grade Level			
Total Number per 100	Grades	Grade 3	Grade 4	Grades 5
Conjunction Ties	3, 4, and 5			
Additive Ties (<i>and</i>)	43.16	53.03	37.32	39.13
Temporal Ties (<i>then, after that</i>)	23.16	24.42	24.40	20.65
Causal Ties (<i>so</i>)	22.47	17.42	23.92	26.09
Adversative Ties (<i>but</i>)	11.17	5.13	14.36	14.13

Lexical tie subdomains. The protocols averaged 16 lexical ties per 100 words across the three grade levels (see Table 5). Table 8 shows each lexical tie subdomain variable for the three grade levels together and for each grade level separately. Results for the three grade levels show 78 of the Average Total Number of Lexical Ties per 100 Words occurred as Total Number of Repetition Ties per 100 Lexical Ties, 16 of the Average Total Number of Lexical Ties per 100 Words occurred as Total Number of Collocation Ties per 100 Lexical Ties, four of the Average Total Number of Lexical Ties per 100 Words occurred as Total Number of Superordinate Ties per 100 Lexical Ties, and two of the Average Total Number of Lexical Ties per 100 Words occurred as Total Number of Repetition Ties per 100 Synonymy Ties.

Lexical ties occurred in the protocols when the same item was reiterated as the same word or derivation of the same word (e.g., *play, played, playing*), in collocation to other words in the same set (e.g., *playing soccer, kicked the ball, threw the ball*), as superordinates (e.g., *ball, soccer ball*), or as synonyms (e.g., *pond, water*). The Grade Five protocol below demonstrates each lexical tie subdomain. A description of the lexical tie subdomains demonstrated in the example below follows.

The girl is at the *park* with her dog and her brother. The girl is petting her dog beside a *tree* then her brother comes and told her if she wanted to *play soccer* and she said yes I want to *play soccer*. When they went to the *soccer field* the girl was going to *kick the ball* and her brother is going to be the *goalie* and the girl almost *made a goal* but her brother *push the ball* up so it won't *make a goal*. Then her dog went to a *pond* and he went *swimming* then they went to go sit down a *shady place* because they were tired [italics added to identify lexical ties] (Protocol 583).

Tree and *shady place* are examples of lexical synonyms and maintain cohesion through lexical collocation with *park* in the first sentence. *Play soccer, soccer field, kick the ball, goalie, made a goal, and push the ball* are examples of lexical collocation and can be expected to occur in a narrative written text about a soccer game. *Pond* and *swimming* are

also examples of lexical collocation. *Made a goal* and *make a goal* are examples of lexical reiterations and derivations of the same word.

Table 8:
Lexical Tie Subdomains

Lexical Tie Subdomains		Grade Level			
Total Number per 100		Grades	Grade 3	Grade 4	Grades 5
Lexical Ties		3, 4, and 5			
Repetition Ties		78.49	83.95	72.50	78.81
Collocation Ties		16.35	13.68	21.38	13.99
Superordinate Ties		3.67	2.11	4.24	4.66
Synonymy Ties		1.56	0.26	1.88	2.54

Overall, on average the participants' used pronominal and demonstrative reference ties refer to characters and objects with their English narrative written text. On average, the participants used additive ties to link a sequence of events together and temporal ties to sequence time. As might be expected, the participants maintained cohesion at the lexical level, mainly through repetition.

Cohesive Ties and Language Differences

There was some evidence to indicate that the different ways in which cohesion is expressed in Spanish and in English might have impacted how cohesion was maintained in the participants' English narrative written text. Evidence emerged in the following areas: (a) The way in which verb conjugation and subject identification differ between Spanish and English, (b) the way in which noun gender is identified in Spanish, (c) the way in which time is expressed through verb tense, and (d) the way in which movement is expressed in Spanish and English.

Omitted sentence subject references. Language differences related to verb conjugation and subject identification occurred as omitted sentence subjects. In Spanish, the sentence subject is combined with the verb conjugation and is inferred in subsequent sentences (Fiestas & Peña, 2004). In English, a sentence subject is necessary for complete understanding and omitting the subject can lead to text misinterpretation. Omitted sentence subject references were identified in 14 protocols. Four protocols were in Grade Three, seven in Grade Four, and three in Grade Five. Omitted sentence subject references occurred when the participant did not reference a presupposed item necessary for complete text interpretation. The Grade Three protocol below demonstrates an omitted sentence subject that might be attributable to writing in a second language:

“Oh” how wonderful it is I said to *my dog Alex* this park has a tree and we can even sit above it and look at the people that are playing soccer. My dog kept looking at a

pond beside us. Just then *a boy named Jack* past throw us and said do you want to play some soccer yes I said we want and when Yessenia kicked it it fell in the water *Alex went and got it. Then we sat down and [Jack] talked to me* at the same time Alex was playing with the ball [italics added to identify omitted reference; omitted reference inserted in brackets] (Protocol 385)⁴.

In the final sentence, a proper noun or personal pronoun was omitted in the sentences, “Alex went and got it. Then [Jack] sat down and talked to me...[paragraph continues].” The writer established early in the narrative that *Alex* was a dog and *Jack* was a boy character. Omitting *Jack* from the final sentence requires the reader to look back into the text to determine who sat down and talked to the narrator, as *Alex* the dog, mentioned in the previous sentence, inserted between *and* and *talked* would not make sense. With *Jack* inserted into the second sentence, it becomes clear to the reader to whom the narrator talked.

Another protocol demonstrated the way in which a participant omitted the sentence subject. In the example below the participant dropped *I* from the second sentence. In Spanish, *I* is tied in with the verb *could* (*poder*) and can be inferred from *my* at the beginning of the sentence.

On a hot sunny day me and my dog were sitting on a hill. My friend came and told me if [*I*] *could* go play with him and I said yes. We went to the field and play. Suddenly I kicked the ball and it went up the goal. It went to a pond. Me and my friend were sad. My dog Bubbles went to the pond and get it. When bubbles came out we went to the hill and sat down [italics added to identified inferred subject; omitted reference inserted in brackets] (Protocol 582).

Additionally, Spanish explicitly identifies the agent of the action with an impersonal pronoun. There was no evidence in the protocols to suggest that the participants in the current study explicitly identified the subject as the agent of the action with a reflexive pronoun.

⁴ Examples in chapter 4 were taken from the participants’ protocols. I preserved participants’ spelling, punctuation, and grammar.

Reference pronoun gender change. The Spanish language identifies nouns with a gender specific article (*el, la*) but identifies possession with a gender-neutral pronoun (*su, tu*). The English language identifies possession with a pronoun gender specific to the item's owner. A change in reference pronoun gender used to identify possession was identified in two protocols: One protocol from Grade Three and one protocol from Grade Four. The impact of Spanish on the change in possessive pronoun referent might be twofold: (a) The two participants, who used an incorrect possessive pronoun gender, might be using what is known about Spanish articles to designate noun gender; and (b) the participants might be using what is known about possessive pronouns in English to designate noun ownership.

For example, in the Grade Three protocol below, the first line suggests that *the dog* belongs to *a girl*, but towards the end of the protocol, the reference to the dog changes to *his dog*. *Dog* is a masculine noun in Spanish (*el perro*) and the writer designated the dog as male. The Spanish third-person singular possessive does not change with the gender of the object (*su perro*). The change in referent element might be partially related to second language learning and partially related to relying on what is known in the first language.

A girl in the park wath a dog was laying down I the midow bosid a tree a poud that was as cristl blue water and a soccer fiould. Suddenly a boy said do you want to play soccer yes I love to play soccer she kikes the ball up hiy to the soccer goal he reach up hiy in went up hiy in the goal into the poud and his dog went to get the ball he brat the ball in went back in the midow the girl and the dog in the boy it was piace and quiet [italics added to identify change in pronoun use] (Protocol 389).

Whether the source of the change in possessive pronoun use is second language learning or accessing first language knowledge, in English, the text's cohesion is compromised as the unexpected *his* causes the reader to search for the supposition within the text to determine whose dog *went to get the ball*.

A Grade Four protocol provided another example of a participant shifting possessive pronoun gender use. In the example below, the first three possessive pronouns agree in

gender with the object rather than with the noun. The fourth possessive pronoun was used as one would expect in English as it agrees in gender with the preceding subject noun:

One marvelous day *Lilly* was playing with Spike in the backyard then *his big brother* Max came outside and said went to play in the soccer field and *her sister* said yes do they cross the road to get to the soccer field. The big brother gets were the net is at *her sister* Lilly kicked the ball hard it went over *her brother's* head and went inside the lake so they couldn't get the ball they tried using a stick and a pole that would not work so the called Spike a man's best friend and they said Spike get the ball and bring it to us so the dog got in the lake and got the ball and took the ball to them [italics added to identify possessive pronoun use] (Protocol 484).

Again, whether the source of possessive pronoun use is second language learning or accessing first language knowledge, in English the text's cohesion is compromised with the unexpected pronoun/noun disagreement.

Verb tense change. Spanish effectively communicates an event simultaneous with the event's occurrence through specific verb tense (King, 1992). English uses auxiliary verbs combined with a present participle to indicate an ongoing action in the past. An auxiliary verb such as *was* indicates past action, requiring subsequent verbs to be past tense. Eleven participants (six in Grade Three, two in Grade Four, and three in Grade Five) changed verb tense throughout a text leading to an unclear sequence of events. Because Spanish has more specificity in describing the event's occurrence in time, the participants might be confused as to which verb tense to use when writing about the general English reference to time. The Grade Three protocol below demonstrated inconsistent verb tense:

A sunny day I *saw* boy with is dog in the park. He *was sitting* in the grass his dog *want* to jumb. The trees *were* so beautiful like the dog. A moment later a girl *was standing* bisside him and his dog. behind them *is was* huge pound with green grass in it. The girl *ask*, the boy if he want play. They *when* to play basketball. The *jumb* and *thow* the ball. The girl *tried* to watch the ball. The ball *went* up the winning basket. The ball *lea* down in the pond. The dog *run* to bring the ball. The kids *were waiting* doe the dog. They *were* happy that the dog *was* save and the ball too. The dog *was* with the girl. The boy *was leaing* down in the grass. They *were* good friend and they *talk* [italics added to identify verbs] (Protocol 397).

The participant began writing in past and past progressive tense, and action verbs (*want, ask, jump, throw, lay, run, talk*) were written in present tense, leading to an unclear timing of events. The participant might not have sufficient knowledge to how English verbs function to indicate the occurrence of events in time.

The Grade Three protocol below demonstrated a narrative in which the participant switched verb tense throughout with past progressive, past, and present tense. A reader might expect past and past progressive tense throughout a narrative written to retell an event.

A dog name Sam and a girl name Mayra. *Were playing* in the park. The tree are big as high as 3 yard long. A boy *came* were Sam and Mayra were. The boy name *is* Mark. He *ask* Mayra to go play with him. They *play* soscors. Mayra *kick* the soscors ball. The ball *went* up the gooly. The ball *felled* into a pond. Sam *went* to bring the ball. They *rest* sitting in the grass. Sam *is play* with soscors ball. Mayra and Mark *are talking* [italics added to identify verbs] (Protocol 387).

In the example above, the writer switched verb tense throughout. The change in verb tense might make it difficult for a reader to determine if the writer was describing events that occurred in the present or retelling a past event about children at the park.

Expression of direction of motion. In Spanish, the verb indicates “a change or state of location” (Fiestas & Peña, 2004, p. 156). In English a preposition or adverb can establish the state of the location. Three protocols in the sample expressed direction of motion in a manner to lead to text misinterpretation. The reduced clarity in the participants writing might be related to inexperience with writing narrative text, learning to write in a second language, or insufficient word knowledge to express potential meaning. The Grade Three protocol below illustrated an incident in which the manner movement was expressed reduced the clarity of the writer’s intent. *Sam went to bring the ball* is an example of a state of action; whereas, in English the sentence would be either *Sam went to bring the ball back* or *Sam went to get the ball* to express a direction of action.

A dog name Sam and a girl name Mayra. Were playing in the park. The tree are big as high as 3 yard long. A boy came were Sam and Mayra were. The boy name is Mark. He ask Mayra to go play with him. They play soscor. Mayra kick the soscor ball. The ball went up the gooly. The ball felled into a pond. *Sam went to bring the ball.* They rest sitting in the grass. Sam is play with socsor ball. Mayra and Mark are talking [italics added for discussion] (Protocol 387).

The Grade Three protocol below illustrates how an incorrect preposition to indicate how location is expressed can lead to text misinterpretation.

A boy was playing with his dog sitting beside a tree. A girl came with a basecketball. The boy ane the girk starded playing basecket the boy axedely tro it to the lake. The dog had to get it from the lake. When the dog got it they rest *on* the some tree [italics added to identify preposition] (Protocol 387).

The writer states in the first sentence that the boy and the dog were *beside a tree*. The reader would expect the characters to *rest under* or *beside the same tree* rather than *on the same tree*.

The protocol examples in the current section indicate that young English-language learners might (a) omit necessary sentence subjects, (b) use possessive pronouns reflective of the sentence object rather than preceding subject noun, (c) vary verb tense throughout their narrative written text, and (d) express movement as a state of action rather than a direction of action in their English narrative written text.

Chapter Summary

To summarize, I conducted the preliminary analysis (a) to describe the participants' writing across the two writing prompts and the three grade levels for the Total Number of Words, Total Number of T-units, and the seven cohesive tie variables calculated per 100 words to provide a context in which the subsequent results could be interpreted; and (b) to determine whether significant differences existed between the two prompts for the seven

cohesive tie variables calculated per 100 words. The preliminary analysis yielded slight significant differences for Total Number of Words and no significant differences for Total Number of T-units across the two writing prompts. No significant differences emerged for Total Number of Words and Total Number of T-units across the three grade levels or across the two writing prompts for the seven cohesive tie variables calculated per 100 words. The scores from the two prompts for each of the seven cohesion variables calculated per 100 words were averaged across the two prompts for each participant. No significant differences emerged across the three grade levels for the averaged total number of cohesive ties calculated per 100 words.

In the main analysis, substitution and ellipsis tie use was on the whole infrequent across the three grade levels. On average, the participants used pronominal and demonstrative reference ties to refer to characters and objects in their English narrative written text. On average, the participants used additive and temporal ties to link a sequence of events together. As might be expected, the participants maintained cohesion at the lexical level mainly through lexical repetition.

There was some evidence to suggest that the participants' knowledge of how cohesion is expressed in Spanish might have impacted how cohesion was maintained in an English narrative written text. The findings from the main analysis to address differences in text cohesion between Spanish and English indicated that participants (a) omitted sentence subject references, (b) changed reference pronoun gender, (c) changed verb tense throughout narrative text, and (d) expressed movement as a state of action rather than a direction of motion. Unresolved cohesion in their English narrative written text might have been related to the participants learning to write in a second language, relying on what is known in the

first language, inexperience writing extended narrative texts, or insufficient word knowledge to express potential meaning and reduce ambiguity.

CHAPTER 5

Conclusions and Discussion

Introduction

In the present chapter, I first address a limitation to the current study. I then state the main conclusions for the main research question and sub-research questions, and discuss possible meanings for each conclusion. I also consider the implications for narrative written text instruction for young Latino English-language learners' learning in all-English classrooms and discuss some direction for future research with young Latino English-language learners' narrative written text. I close with a chapter summary.

Limitation

The participants' hand-written English narrative texts presented a limitation to the current study. I typed, parsed, and coded the English narrative written texts based on the participants' handwritten texts. All efforts were made to remain true to the handwritten text, yet "it is often the case that the individual reproducing the text in a printed version has to make a considerable effort of interpretation to assign value to some of the less legible words" (Brown & Yule, 1983, p. 8). The participants read their narrative texts aloud to me during data collection to clarify illegible words. However, there were incidences in the written samples where the participants placed punctuation incorrectly, omitted punctuation, and assigned dialogue without quotation marks, line spacing, or other means to indicate a dialogue shift.

Incorrectly used or omitted punctuation might affect how a reader interprets or understands the text. The Grade Five protocol below demonstrates how omitted punctuation could lead to text misunderstanding:

The girl is petting her dog. And she want to play with a friend. But suddenly a boy comes and asks the girl if she want to play with him. And the girl said yes I do. Ok My name is Jack and my name is Dianna. Lets go play soccer. They were playing but they didn't know there was a lake at the back of them. So Dianna kiked the ball to the lake and *Dianna's dog saw the dog go to the lake* and the dog went to get it and they stopped playing and the dog was playing with the ball [italics added for discussion] (Protocol 584)⁵.

The italicized sentence in the above example could be interpreted in the following ways: (a) The reader could interpret that Dianna's dog saw another dog go to the lake, (b) the reader could get clarity from the next sentence and interpret that it was Dianna's dog who saw the ball and went to get the ball, or (c) the reader could assume the writer intended to write *the ball* (i.e., Dianna's dog saw *the ball* go to the lake) and wrote *the dog* in error. The three fore-mentioned ways to interpret the italicized sentence in the above example could impact the text's cohesion in the following ways: (a) If the reader interpreted another dog going after the ball, *the dog* would be exophoric to the text as it was not presupposed; (b) if the reader inferred that Dianna's dog went after the ball from subsequent information, *the dog* would be a lexical reference to *her dog* in the first sentence; or (c) if the reader assumed the writer made an error in word choice and changed *the dog* to *the ball*, a lexical link to *the ball* in the previous sentence would be created, and would have fulfilled the text's predictability. Identifying and correcting the error would have allowed cohesion to be maintained between *the ball* in the preceding sentence and *it* in the subsequent sentence.

⁵ Examples in chapter 5 were taken from the participants' protocols. I preserved participants' spelling, punctuation, and grammar.

Thus, without punctuation or words to clarify meaning, the writer's intent might be misunderstood and the text might lose its cohesiveness and predictability (Irwin, 1986; Stoddard, 1990).

Conclusions

The conclusions to the study were as follows: (a) Reference, conjunction, and lexical tie subdomain use was frequent across the three grade levels with reference pronominal ties and lexical repetition used the most to maintain cohesion, and substitution and ellipsis ties and exophoric references used the least to maintain cohesion; and (b) the participants' unresolved cohesive ties could be attributed to differences between the ways cohesion is expressed in Spanish and English. The conclusions are discussed below.

Discussion

In this section, I first discuss cohesive tie use for each tie type domain and subdomain for the three grade levels together and the three grade levels separately. I then discuss the ways in which the participants' unresolved cohesive ties might be attributable to the different ways cohesion is expressed in Spanish and English.

Cohesive Tie Use

Reference ties. The number of reference ties calculated per 100 words the participants used in the current study were on average higher than previously reported reference tie averages for children ages 6 to 8 writing in English, their second language (Bae, 2001) and for children in grades 3 and 6 writing in English, their first language (Fitzgerald & Spiegel, 1986), but on average lower than previously reported percentages for children of the same age writing in Dutch, their first language (Yde & Spoelders, 1985). This finding suggested that the participants' reference tie use was on average more than what one might expect to find in an English narrative written text.

A breakdown of the reference ties into the three subdomains (pronominal ties, demonstrative ties, and comparative ties) gave a clearer picture of the participants' reference tie use. Overall, pronominal ties were the preferred way to reference presupposed items for the three grade levels. The preference to tie sentences together with reference pronouns is not unusual in narrative writing for young children writing in their second language (Bae, 2001). A reliance on pronominal references to link nouns to elements within the text suggested that the young English-language learners in the current study understood that in English, the subject is not tacit to preceding sentences and needs to be made explicit with a reference tie in the subsequent sentences. The participants' frequent pronominal reference tie use suggested that the participants might not have yet learned many other ways to reference text elements and maintain text cohesion.

An interesting pattern emerged when the reference tie subdomains were broken down for each grade level. The patterns suggested pronominal and comparative tie use might increase from third to fifth grade, while demonstrative tie use might decrease from third to fifth grade. The pattern of increased pronominal reference tie use suggested that the older participants might have had a better understanding of how reference ties function to maintain cohesion, reduce text redundancy, and add complexity to narrative written text. The pattern of increased comparative reference tie use also suggested that the older participants might be better able to write more complex sentences by comparing and contrasting text elements.

Further, the pattern of decreased demonstrative reference tie use from Grade Three, Grade Four, and Grade Five suggested that the younger participants repeated items or character labels to maintain text cohesion, rather than connecting the elements with pronominal reference ties. The reliance on demonstrative ties for Grade Three was also evidenced in a pattern to suggest that Grade Three might have used more demonstrative ties

than pronominal ties to link nouns across the text, while both Grade Four and Grade Five might have used more pronominal ties than demonstrative ties to link nouns across the text.

Conjunction ties. The number of conjunction ties calculated per 100 words was on average higher than previously reported conjunction tie averages for children ages 6 to 11 writing in their first or second language (Bae, 2001; Yde & Spoelders, 1985). Overall, the participants in the current study did not rely heavily on conjunction ties to link text elements as compared to other cohesive tie types. When used, the participants used additive ties over other conjunction tie subdomain types to link elements. Previous studies (Bae, 2001; Yde & Spoelders, 1985) reported proportionally low conjunction tie use with temporal conjunction ties as the preferred conjunction tie choice when compared to other cohesive tie types.

A pattern emerged indicating that causal and adversative ties use might increase from grades through five, while additive and temporal tie use might decrease through the three grades levels. These patterns suggested that as young English-language learners gain more experience with the English language their writing might become more complex (Bae, 2001; McCulley, 1985; Yde & Spoelders, 1985).

Lexical ties. The number of lexical ties calculated per 100 words was on average lower than previously reported lexical tie averages for children ages 6 to 11 writing in their first or second language (Bae, 2001; Yde & Spoelders, 1985). The participants in the current study relied mainly on lexical repetition to maintain lexical cohesion. Yde and Spoelders (1985) reported lexical repetition as the preferred strategy for children ages 8-11 writing in their first language. The participants frequent use of lexical repetition to maintain cohesion in their English narrative written text supports the claim that more lexical ties does not mean a better use of lexical ties (Allard & Ulatowska, 1991; McCulley, 1985). While lexical repetition can reduce text lexical density and complexity, and lead to redundancy (Halliday &

Hasan, 1976; Kolln, 1999; Stoddard, 1990), the purpose of lexical repetition as an effective feature of text cohesion is to frame new information in the context of old information (Hoey, 1983).

The participants also used collocation ties to achieve lexical cohesion, “a subcategory of cohesion that best indicates overall writing quality” (McCulley, 1985, p. 278) when considering narrative text (Crowhurst, 1987). As stated in Chapter One, collocation is the inclusion of two or more words that are likely to occur within the same context. Collocation occurred in the English narrative written text through words contextually related through the sports themes, soccer or basketball, presented in the English narrative written text prompts.

Evidence from the current study supported the claim that lexical cohesion with synonymy and collocation tends to increase in frequency during the school-aged and adolescent years (Crowhurst, 1987). The older participants in the current study used some lexical synonymy and superordinates in their English narrative written text indicating greater word knowledge (Crowhurst, 1987; Kolln, 1999; Nippold, 1998). Varied word choice exhibited through reiterations with synonyms or superordinates of words used as cohesive devices can lead to more text density and complexity (Halliday, 1985; Kolln, 1999). More lexical synonymy and elaboration within text allows greater complexity to occur within the text. The results from the current study suggested that the older participants drew on their English word knowledge to achieve lexical cohesion (Ammon, 1985) and may be beginning to employ a variety of lexical cohesion tie types to add complexity to their writing.

Ellipsis and substitution ties. The participants in the current study did not use substitution or ellipsis ties frequently in their English narrative written text. This finding is not unexpected as these two cohesive tie types tend to be used more frequently in oral language than in written language (Halliday & Hasan, 1976). Substitution and ellipsis ties

were on average higher than reported averages for children ages 6 to 8 writing in their second language (Bae, 2001) and lower than previously reported percentages for children 8 to 11 writing in their first language (Yde & Spoelders, 1985).

Although substitution and ellipsis ties are not necessary features for written text cohesion and do little to contribute to overall writing quality, the young English-language learners in the current study appear to have understood that substitution and ellipsis ties can be an effective narrative literary strategy to engage characters in dialogue (Bae, 2001).

Exophoric references. Although the participants were prompted to write a story based on a series of five picture prompts for other children who would not see the pictures, all of the participants in the current study included exophoric references preceded by the definite determiner *the* referring to the pictures in their English narrative written text. Definite articles function to identify context shared between the reader and writer. In the participants' written protocols, the exophoric references preceded by *the* were made to elements external to the text and recoverable from the picture prompts, the context to which the narrative texts referred. The current analysis suggested that the participants understood the gender-neutral noun reference of *the* in English, but might not have fully understood the function of *the* to refer to a contextualized noun.

The participants might have been beginning to learn the importance of introducing new information with indefinite articles and contextualizing the information with a definite article. The occurrence of exophoric references in the young English-language learners' narrative written text indicated that they might need to further develop their understanding that a reader might struggle to maintain text understanding without sufficient contextual information. The writer needs to contextualize information so the reader can make predictions and draw inferences from the narrative's context (Carrell, 1982).

Frequent exophoric references may parallel what one might find had the participants written their narrative text in Spanish. This finding suggested that the participants may not adequately contextualize information in their first language, Spanish, as definite articles function to identify specific context that is shared knowledge between the reader and writer in both Spanish and English

Text Cohesion and Language Differences

There was evidence in the current study to suggest that the participants' unresolved cohesive ties might have been attributable to differences in the way cohesion is expressed in Spanish and English. Unresolved cohesive ties can cause a breakdown in text cohesion that in turn increases the load on the reader's short-term memory, increase text redundancy, and reduce the text's predictability. The different ways cohesion is expressed in Spanish and English might have impacted how the young Latino English-language learners maintained cohesion in their English narrative written text. The young Latino English-language learners in the current study might have applied their understandings of how cohesion is expressed in Spanish to their English narrative written text, which at times led to unresolved text cohesion. Their understandings of Spanish cohesion and application to English narrative written text might have lead the young learners to (a) omit sentence subjects, (b) change reference pronoun gender, (c) change verb tense throughout their English narrative written text, and (d) express movement as a state of action rather than direction.

Below I discuss four ways unresolved cohesion ties might have been attributable to the participants applying their knowledge of how cohesion is expressed in Spanish to their English narrative written text.

Sentence subject omission. Analysis of the narrative written protocols suggested that the different ways in which verbs are conjugated and the subject is identified in Spanish and

English might have been associated with the participants' omission of the sentence subject in English narrative written text. From the participants' English narrative written text, it was evident that most of the young Latino English-language learners who participated in the current study understood that a subject is required for sentence construction in English. There was evidence to suggest that some of the participants might not have yet fully learned this required grammatical feature of English narrative written text. The few young writers who dropped the subject in their English narrative written text might have been applying their understandings of the Spanish language to their English narrative written text. As discussed in Chapter Two, in Spanish the sentence subject is tacit to the previously mentioned or implied reference through the verb's conjugation and is dropped from subsequent sentences (Fiestas & Peña, 2004), whereas in English the sentence subject is a necessary component for complete text understanding.

Change in reference pronoun gender. The analysis of the protocols suggested that some participants might have applied their understandings of the way possessive pronouns function to specify gender in Spanish to their English narrative written text. Possessive pronoun use in a few of the participants' English narrative written text indicated that some of the young Latino English-language learners in the current study attempted to agree the possessive pronoun with the noun it preceded, rather than the noun it modified (e.g.; *Mary* went to see *his* brother). The young writers who wrote possessive pronouns in the gender of the noun the pronoun preceded rather than the subject the pronoun modified might have applied their knowledge of noun gender identification in Spanish to English. In Spanish, definite articles are noun gender specific and possessive pronouns are noun gender neutral. In English, definite articles are noun gender neutral, and possessive pronouns that function as adjectives limit the meaning of the noun to which they refer are noun gender specific to the

referent noun. The results from the analysis suggested that the participants understood the function of possessive pronouns to identify ownership, but might not have fully learned how the gender of the possessive pronoun is identified in English.

Change in verb tense. Evidence from the participants' English narrative written text indicated that the English-language learners changed verb' tense throughout their narrative written text and omitted auxiliary verbs used to indicate an on-going action occurring in the past. Because Spanish has more specificity in describing an event's occurrence in time, the participants might not have fully understood which English verb form to use to show the more general reference to the time of the action. In Spanish, the imperfect verb tense functions similarly to the past progressive verb tense in English, but the verb is not conjugated with an auxiliary verb as in English. Omitting auxiliary verbs or verb endings needed for verb conjugation in English can change the meaning of when the action occurred. A narrative written in past tense suggests the writer is retelling an event that occurred in the past as a one-time event. A narrative written in past progressive tense suggests the writer is retelling a past action that took place over a period of time. Whereas, a narrative written in present tense suggests that the writer is describing a scene rather than events that occurred over time. Knowing how to interpret the timing of a sequence of events allows the reader to anticipate whether the narrative is a retelling of a series of events or a description of a scene. From the participants' protocols it was apparent that some participants were not yet clear on how verbs are used or conjugated in English, and might have applied their knowledge of verb use and conjugation in Spanish to English.

Movement expressed as a state of action. Movement is expressed in English as a trajectory of motion with prepositions or adverbs and in Spanish as a state of action with the verb (Fiestas & Peña, 2004). There was evidence in the protocols to suggest that some

participants might not have yet fully understood prepositional meanings or adverb use in English, suggesting a need for vocabulary development rather than particular grammatical understandings related to text cohesion.

Implications for Instruction

The participants used reference pronominal ties frequently to maintain cohesion within their English narrative written text. The participants might benefit from instruction on how to vary reference cohesion across sentences with other types of reference ties or lexical ties, or how to write more complex sentence in which fewer references are needed. Decreasing the number of reference ties can reduce text redundancy, and using other cohesive tie types such as lexical ties can add complexity to their English narrative written text (Crowhurst, 1987; Stoddard, 1990).

Conjunction tie use was low in the English narrative written text with *and*, *so*, and *then* occurring most frequently. Although the participants seemed to understand that conjunction ties systematically connect what went before to what followed in the text (Halliday & Hasan, 1976), they still might benefit considerably from instruction on how to vary conjunction ties to show adversative, causal, or temporal links; and frequent opportunities to try out a variety of conjunction ties in extended narrative text. Using a variety of conjunction ties can add complexity to text and make the text more interesting. Writing extended narrative text might lead writers to take more risks with their writing, try out new vocabulary, and further increase the text's complexity with a greater variety of conjunction links (Montanari, 2004). Employing a greater variety of conjunction ties might indicate greater word knowledge and a willingness to experiment with ways to link events together adversatively, causally, or temporally in narrative written texts.

The participants relied heavily on lexical repetition ties in their English narrative written texts to maintain cohesion. The participants' reliance on lexical repetition might be related to their inexperience writing extended English narrative texts and limitations to their English vocabulary (Hoey, 1991). The participants' extensive use of lexical repetition to refer to lexical items throughout the narrative texts indicated that overall, the participants might have not yet learned other more complex ways to maintain text cohesion, such as using lexical synonymy or superordinates. The participants would benefit from instruction to show how words collocate and fall within a lexical set and how lexical sets can be extended to include a variety of words within a particular context.

Ellipsis and substitution tie use by the participants was what one might expect in an English narrative written text. Instruction to include dialogue in their writing to make the writing more interesting was evidenced in the participants' English narrative written text. An implication for instruction for the way in which ellipsis and substitution ties were used in the participants' English narrative written text would be to emphasize dialogue punctuation use. Punctuation, although not a necessary component for text cohesion, allows the reader to correctly identify the preceding element the ellipsis tie omitted and the element the substitution tie replaced, leading to a reduced load on short-term memory and supporting a predictable framework.

Instruction in both the grammatical and lexical features of English can help young Latino English-language learners' understandings of how English functions to maintain cohesion in English narrative written text. Drawing their attention to and providing instruction in specific English language requirements such as (a) sentence subject inclusion, (b) gender-neutral definite article reference and gender-specific pronoun reference, (c) verb tense conjugation to indicate when events occurred, and (d) prepositional meanings can help

move young English-language learners forward in their ability to maintain cohesion in their English narrative written text.

The participants showed evidence that they have learned many English text features that keep English narrative written text cohesive. The social structure of the classroom is a suitable environment in which young Latino English-language learners can build linguistic knowledge to facilitate their understandings of how cohesion functioned within a particular context. Within a classroom, young Latino English-language learners can gain an understanding of how the English linguistic systems function to maintain text cohesion. Both classroom and ESL teachers need to provide opportunities for young English-language learners to engage with more complex text to help them learn effective ways to maintain cohesion in their English narrative written text (Montanari, 2004).

Directions for Future Research

The English narrative written texts the participants wrote for the current study are rich data sources that can provide insight into young English-language learners' achievements for English narrative written texts. The current study has only brushed the surface of what young Latino English-language learners' English narrative written text can reveal about their understandings of how text cohesion functions. In this section, I provide suggestions for directions for future research with young Latino English-language learners and their ability to maintain text cohesion in their English narrative written text.

Young Latino English-language learners' Spanish and/or English reading ability may impact the extent to which the participants maintained cohesion in their English narrative written text and serve as a predictor to determine the extent to which the participants maintained cohesion in their English narrative written text. Supporting young English-language learners in their reading development may facilitate their understandings of how

cohesion is expressed in English. It might be possible from the data collected for the current study to group the participants by their IDEA-IPT (Ballard & Tighe, 2005) reading scores rather than by grade level as a way to describe the extent to which they maintained cohesion in their English narrative written text. A study that considers the participants first and/or second language reading ability may add information to what is already known about the impact of reading on young English-language learners' writing ability.

Young Latino English-language learners' Spanish and English oral language ability may also impact the extent to which they maintain cohesion in their English narrative written text and serve as an indicator to determine the extent to which the participants maintained cohesion in their English narrative written text. Supporting young English-language learners in their oral language development may facilitate their understandings of how cohesion is expressed in English. It might be possible from the data collected for the current study to group the participants by their IDEA-IPT (Ballard & Tighe, 2005) English speaking scores rather than by grade level as a way to describe the extent to which second language oral language ability might have impacted the extent to which the participants maintained cohesion in their English narrative written text. A study that considers the participants' second language oral language ability may add information to what is already known about the impact of second language oral language ability on writing.

The current study suggests that the grammatical and lexical relationships between English and Spanish should be studied with an eye towards gaining useful knowledge about young Latino English-language learners' grasp of English text cohesion. The current study can be expanded in future research to compare English-language learners who received ESL service, English-language learners who did not receive ESL service, and their English-speaking peers. Research comparing groups of students can focus on the use of cohesive tie

subdomains in their English narrative written text to describe the extent to which each group used each tie type over time.

Also, one might study the extent to which young Latino English-language learners can maintain cohesion through oral story retelling. Oral story retelling might allow children to produce longer oral narrative retells than written narrative retells (Pellegrini et al., 1984), as longer narratives provide more opportunities to create cohesion within text. A close examination of the oral narrative retells and written narrative retells of children whose primary language is not the language of instruction can add information to what is already known about which linguistic skills transfer across languages and which skills need to be learned in the new language.

Chapter Summary

In this final chapter, I addressed a limitation to the current study, summarized and discussed the main conclusions, considered implications for instruction, and suggested directions for future research. One must take care when interpreting children's English narrative written texts that has misplaced or omitted punctuation because such grammatical errors can lead to misunderstood text references.

The conclusions of the current study were as follows: (a) Reference, conjunction, and lexical tie subdomain use was frequent across the three grade levels with reference pronominal ties and lexical repetition used the most to maintain cohesion, and substitution, ellipsis ties and exophoric references used the least to maintain cohesion; and (b) the participants' unresolved cohesive ties could be attributed to differences between the way in which cohesion is expressed in Spanish and English.

Engaging the participants in the current study in extended meaningful writing might facilitate their learning of how text cohesion functions in English and expand word

knowledge as they experiment with a variety of cohesive ties. Writing extended narrative text might also lead to reduced text' redundancy and varied word choice with a greater variety of conjunction ties, reference ties, and lexical ties.

The participants' unresolved ties provided insight into their understanding of how cohesion was expressed in both Spanish and English. A breakdown in text cohesion might be attributable to language differences and provide a direction for classroom instruction for English narrative written text.

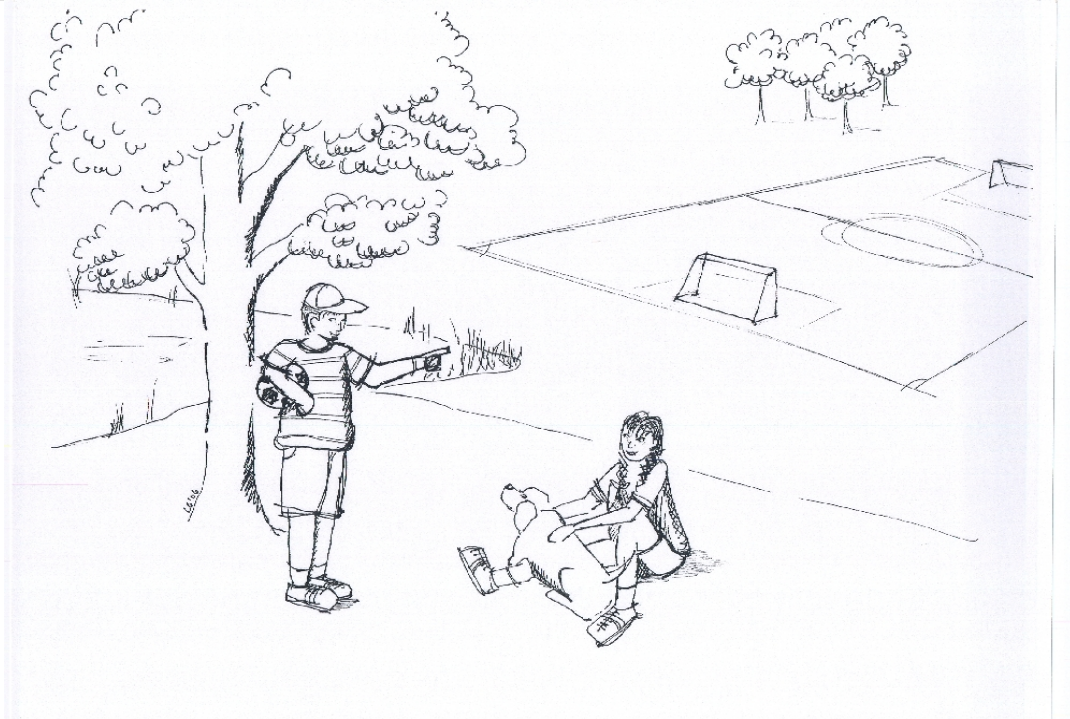
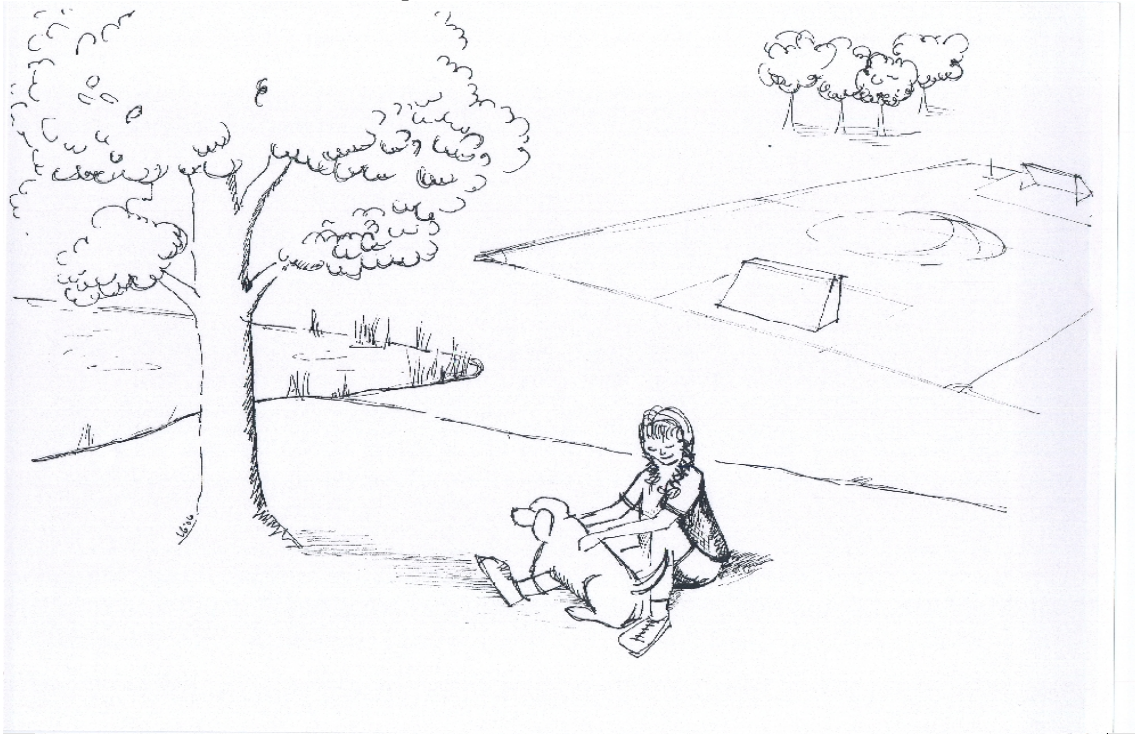
Much more needs to be known about the linguistic skills that young Latino English-language learners access when they attempt to maintain cohesion in their English narrative written text. The current study was an initial attempt to understand the extent to which a small group of third through fifth grade Latino English-language learners learning in all-English classroom attempted to maintain cohesion in their English narrative written text.

APPENDICES

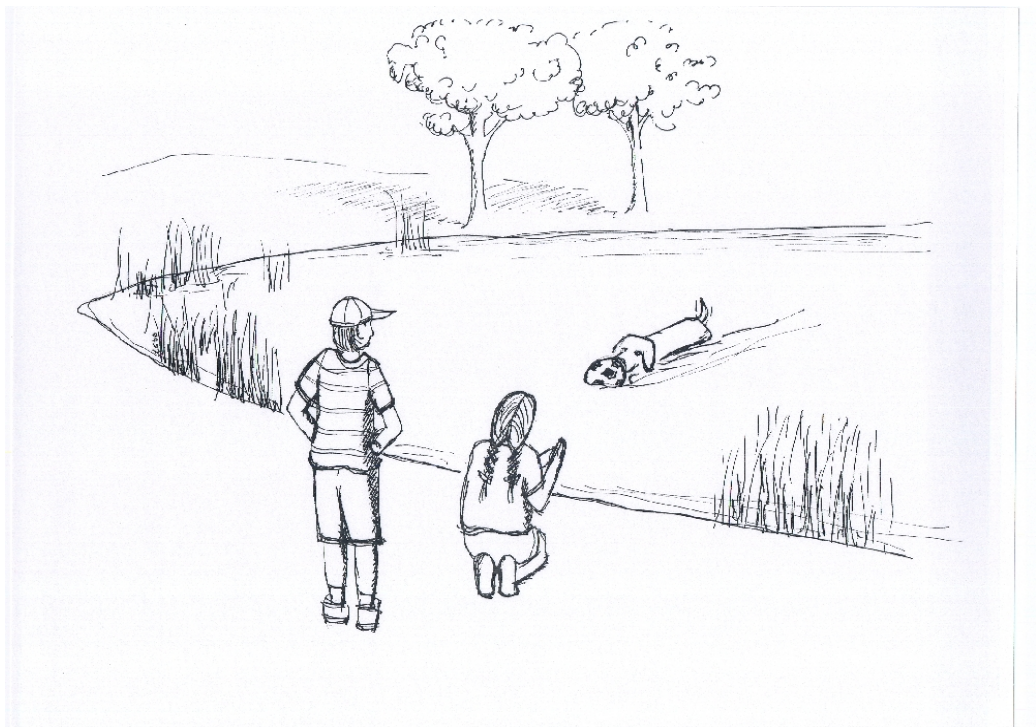
Appendix I:

Wordless Narrative Picture Prompt Series A and Series B

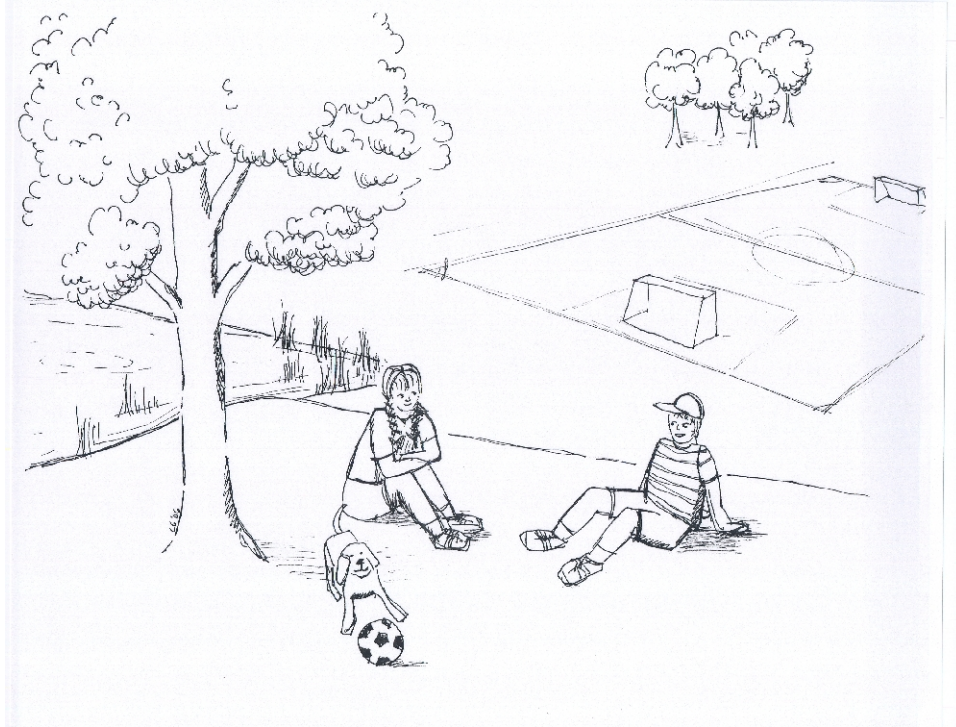
Wordless Narrative Picture Prompt Series A



Wordless Narrative Picture Prompt Series A continued



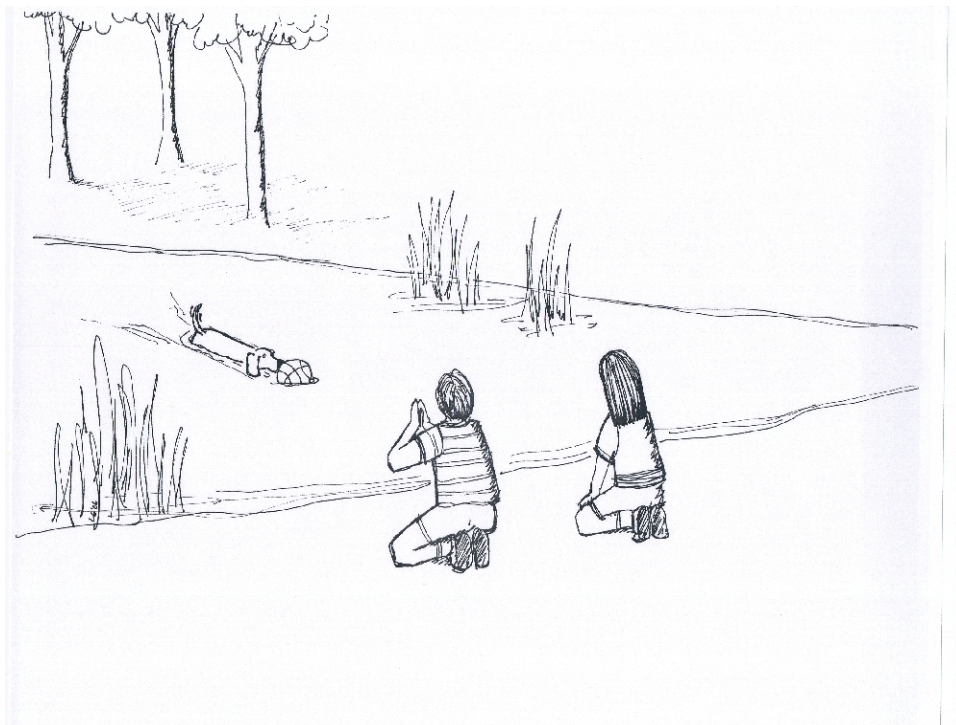
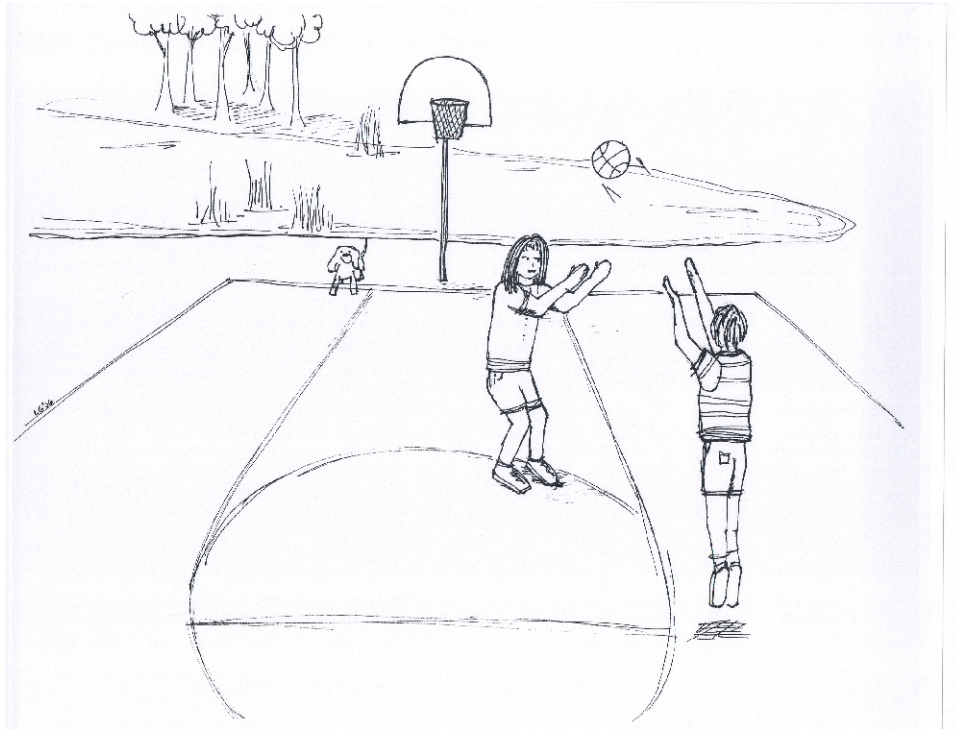
Wordless Narrative Picture Prompt Series A continued



Wordless Narrative Picture Prompt Series B



Wordless Narrative Picture Prompt Series B continued



Wordless Narrative Picture Prompt Series B continued



Appendix II:

Guidelines for Participants' Oral Reading of Written Narratives

The following guidelines were used to accommodate the participants' oral reading when they read their writing samples aloud upon writing task completion:

1. Identify illegible text by writing the word in brackets above the illegible word.
2. If the participant read a word not in the written text, insert the added word on the participant's paper with parentheses (e.g., He wore a (blue) striped shirt.).
3. If the participant omitted a word included in the written text when reading the text aloud, underline the omitted word on the participant's paper (e.g., He wore a blue striped shirt.) (Pappas, 1981).

Appendix III:

Guidelines for Typing Participants' Written Narratives

The following guidelines were used to type each participant's handwritten narrative:

1. Type each handwritten sample as written by the participant.
2. Include all punctuation (e.g., periods, quotation marks, etc.) as used by participants.
3. Do not correct spelling, add omitted punctuation, or insert additional spacing.
4. Use brackets to insert words that were written in brackets in the text from the participant's oral reading.
5. Do not include words inserted with parentheses (e.g., He wore a (blue) striped shirt.).
6. Include all underlined words (e.g., He wore a blue striped shirt.).
7. Review participants' oral readings of their written narratives to identify any illegible words not already identified by brackets.

Appendix IV:

Protocol Coding Guidelines⁶

Domain - Code	Subdomain	Example
Reference - R	Pronoun Possessive Demonstrative Definite article Comparative	I, he, she, it (include contractions) mine, his, hers, theirs this, that, there the (presupposed in text) same, other, else, as + adjective
Substitution – S (used in place of repeating words)	Nominal Verbal Negative	one, the same do, be, have, do so, do that not
Ellipsis – E (something understood from the text, but not stated) (See #5 below)	Nominal Verbal Clausal	Items omitted, but presupposed in text Often a response to WH-?s yes/no/okay The sky is falling.... I <u>know</u> . They ran all day.... They were <u>tired</u> . Where should we go? <u>There</u> .
Conjunctive – C (links T-units and action, not as part of a list)	Additive Adversative Causal Temporal (indication time passed)	and, nor, or (only when linking) yet, but so, if, then (a cause of something occurring) then, next, soon (external to text)
Lexical – L	Same item Synonym Superordinate Collocation	Baseball bat...baseball bat baseball...ball baseball...sports baseball...bat...base...pitch...hitting... plays baseball
Unresolved – U	Incorrect usage Not presupposed within text Exophoric	Alex...they He hit <u>it</u> . (no indication what 'he hit' within the text) The (not presupposed in the text)

1. Do not code first T-unit, unless lexical ties are exophoric (e.g., *the car* is exophoric – not presupposed in text versus *a car*).
2. Ties are coded across T-units, not within T-units.
3. Underline and the write letter for each code above the word(s) coded.
4. Identify subdomains for reference, conjunction, and lexical ties.
5. A tie is coded as an ellipsis if the omitted phrase can be retrieved from the text (e.g., *The ball went in the lake. The dog went [to the lake] to go get it.*).

Appendix V:

⁶ From Halliday and Hasan (1976).

Participant Protocol Example⁷

Grade Five Participant's Text

The girl is peting the dog. The girl is also playing with the dog. Then a boy came and told the girl if she wants to play sccore with him. Then they started to play. The girl kicked the ball. Then it went to the lake. Then the dog went to the lake. Then the dog went to go get it. They both sat down and were talking. (Protocol 587)

Parsed T-units

	Total Words
1 the girl is peting the dog	6
2 the girl is also playing with the dog	8
3 then a boy came	4
4 and told the girl if she wants to play sccore with him	12
5 then they started to play	5
6 the girl kicked the ball	5
7 then it went to the lake	6
8 then the dog went to the lake	7
9 then the dog went to go get it	8
10 they both sat down	4
11 and were talking	3
	68

⁷ Appendix V is a participant's protocol. Spelling, punctuation, syntax, word choice, and grammar were preserved in the typed sample. For T-unit parsing, punctuation and capitals were removed as set forth by T-unit parsing guidelines.

Coding Scheme

Line	Cohesive Tie	Ties	R	S	E	C	L	U	Presupposed item
1	the (girl) the (dog)							• •	(exophoric) (exophoric)
2	the girl also the dog	1 2 3 4 5	• D • D			• A	• •		the girl L.1 girl L.1 L.1 the dog L.1 dog L.1
3	then came	6				• T		•	(external) (exophoric)
4	and the girl she him	7 8 9 10 11	• P • P • P			• A	•		L.3 the girl L.1 girl L.1 the girl L.1 a boy L.3
5	then they play	12 13 14	• P		•	• T			(external) the girl L.1& a boy L.3 to play soccer L.4
6	the girl the (ball) kicked the ball	15 16 17	• D				• •	•	the girl L.1 girl L.1 (exophoric) soccer L.4
7	then it the (lake)	18 19	• P			• T		•	(external) the ball L.6 (exophoric)
8	then the dog the lake	20 21 22 23 24	• D • D			• T	• •		(external) the dog L.1 dog L.1 the lake L.7 lake L.7
9	then the dog went it	25 26 27 28 29	• D • P		•	• T	•		(external) the dog L.1 dog L.1 to the lake L.8 the ball L.6
10	they both down	30 31	• P • C					•	the girl L.1& a boy L.3 the girl L.1& a boy L.3 (exophoric)
11	and	32				• A			L.10
Coded Ties		32	14	0	2	8	8	6	

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