# The Expected and Unexpected Literacy Outcomes of Bilingual Students 

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#### Abstract

The purpose of the study is to compare the writing proficiencies of first- and second-language learners and to examine their teachers' beliefs about the writing students produce. The four fifth-graders were nominated by their teachers as either strong or weak writers. Text analysis methods were used to analyze the writing proficiencies manifested in the compositions and interviews with the teachers about their views on writing.

The results suggest that the writing skills of strong second-language children writers are virtually indistinguishable from those of strong first-language children. Furthermore, the weak second-language writers in this study did not lag significantly behind the firstlanguage writers. Finally, parents' informal Spanish-language instruction, coupled with formal English instruction, was sufficient for some bilinguals to write in Spanish. The study has implications for expanding the L1 and L2 relationship-L2 can support expanding L1 literacy. It also provides direction for the type of writing instruction that second-language learners considered weak writers need in order to become strong.


## The Expected and Unexpected Literacy Outcomes of Bilingual Students

With the growing number of second-language children in this country, educators have become increasingly concerned about the challenges that these students present to their teachers (Moss \& Puma, 1995). For English language learners (ELLs) in particular, writing is as crucial a skill in their Englishlanguage development as speaking and reading. While it is a crucial skill, many English language learners are not acquiring the range of writing proficiencies needed for advanced academic tasks. Most of the research on
second-language writing, however, has been on foreign college students studying in the United States (e.g., Belcher \& Braine, 1995; Braine, 1996; Cummins, 1990; Kaplan, 1988; Kroll, 1990; Leki, 1992; Raimes, 1987; Reid, 1992; Zamel, 1992). Much less research has been conducted on elementary-school-age children learning to write in English as their second language (Edelsky, 1986; Hudelson, 1989; Kruse, 1995; Urzua, 1987). This study attempted to help fill this gap in the literature.

The purpose of this study is to compare and contrast the writing proficiencies of bilingual children with those of native English speakers at a critical time in their education: the end of their elementary schooling, just before they enter middle school. I examined the writing proficiencies students manifested in their compositions, while studying the literacy context of fifthgrade students, as part of my doctoral dissertation project. Through this study, I became acquainted with four students; one was a U.S. born monolingual English speaker and the other three were bilingual Spanish-English speakers who had been born in Mexico. All three bilingual students had entered a U.S. school either in kindergarten or first grade, and by fifth grade they were in mainstream English-only classrooms. However, two out of these three bilingual students, after four or five years of all-English instruction in mainstream classrooms, were still not considered as fluent English-proficient students who could be placed in the regular middle-school curriculum; instead they were placed in Village C, the English language development (ELD) track. The monolingual English student and the third Spanish-English bilingual student were both placed in Village A, the college-preparatory track.

By carefully analyzing the written compositions of these four students, I determined that although they were all roughly equivalent in their ability to generate and organize ideas, they differed substantially in the legibility of their handwriting and the mechanics of spelling and punctuation. These relatively surface factors affected their teachers' judgments of their writing skills, with dire consequences for two of the students. The ELD track, to which two of the Spanish English bilingual students were assigned, is basically intended to meet the language needs of newly arrived immigrant children, and therefore provides an education that is not equivalent to that of the regular and college-preparatory tracks.

The analysis of these case summaries can help illustrate one of the problems, that teachers of these bilingual students had, which was that the teachers had never taken courses on the theory and methodology of secondlanguage acquisition. In this respect, they are like most other $\mathrm{K}-12$ teachers in the United States (Valdés, 1992). Without such pedagogical knowledge, the teachers in my study-and K-12 teachers generally-do not recognize the differences between problems in writing and problems due to language acquisition. As a result, teachers tend to confuse developmental linguistic errors with limitations in writing and editing (Leki, 1992). Thus, this study can
help uncover conceptual and educationally applied guidelines for better understanding of the literacy development of bilingual students.

## The Conceptual Framework of This Study

The variables that I identified in my conceptual framework represent a synthesis of factors distilled from the literature on first-language writing, second-language acquisition, and second-language writing. There are two parts to the framework of this study: (a) the language background of the students, and (b) the contextual factors that influence their writing proficiencies.

## Language Background

One of the main factors of oral proficiency for first-language students is the variety of English spoken at home, which ranges from the vernacular to the mainstream to the academic (Hakuta, 1986; Labov, 1969; Rickford, 1999). From the perspective of the school, vernacular language carries less prestige, and academic language carries more prestige. Students' written language proficiencies, too, can be represented on a continuum from novice to mature writers. The varying levels of oral proficiency are influenced by personality as well as by environmental factors (Ellis, 1994; Hakuta, 1986).

For second-language students, language proficiency needs to be considered on at least two levels: (a) the variety of the first language spoken, and (b) the type and amount of exposure to the second language (Ellis, 1994; Hakuta, 1986). Second-language learners possess varying degrees of bilinguality, so each of their languages can be placed on a continuum of language proficiency. Their second language can range from very little English for an early English-language learner to fully developed English for a skilled English-language learner. All the ELLs in this study were considered fluent and English proficient according to the school's criteria and they were all competent in their native language, Spanish.

To what degree, after the age of five, ELLs are able to develop literacy and academic proficiency in their first language depends on the language or languages used in the community in which the child and family live, the literacy demands in the home, and the type of literacy program in the school. ESL language programs formally develop children's oral and academic proficiencies in only their second language. On the other hand, the various bilingual education models-early-exit, late-exit, and dual-language immersion-provide the medium for children to develop academic proficiency in both the first and second languages.

The bilingual education program models for learning a second language are based on Cummins's (1981) Common Underlying Proficiency (CUP) model, which posits that children's first and second languages are interdependent in
terms of developing literacy. In other words, children's second-language literacy depends on the literacy developed in the first language. Furthermore, as students study the content areas, they acquire the cognitive academic language proficiency (CALP) in their first language while learning the second language. Thereby, over time language minority students need to learn the academic language in order to succeed in school.

## Contextual Factors

The second part of my conceptual framework considers the various contextual factors that influence the written-language proficiencies of firstand second-language children. The composing processes and proficiencies of children writers are influenced by (a) their teachers' beliefs and knowledge about teaching literacy (Dyson, 1989; Hillocks, 1991; Valdés, 1992); (b) the teachers' instructional methodologies (Edelsky, 1986; Gutierrez, 1992; Hillocks, 1987); and (c) peer interactions during various phases of the writing process (Diaute, Campbell, Reddy, \& Tivnan, 1993; Dyson, 1989; Graves, 1983). In turn, these factors are nested within and influenced by the larger school culture (Fetterman, 1989). That is, teachers' beliefs and knowledge about writing, which influence the children in their classrooms, are significantly shaped by the school's view of literacy and the types of professional development the school encourages (Romano, 1991).

## Methodologies Used in the Study

Over a two-year period at Mission Elementary School in Oakville, California, I observed the writing events in four fifth-grade classrooms (pseudonyms are used for protecting the identity of the students and the site). In the first year, I conducted a pilot study of two of those classrooms. In the second year, I conducted my dissertation study (Hernández, 1999) of the other two. The dissertation study, which involved 400 contact hours, included general observations of the classes twice a week from September to October, interviews with the teachers and selection of the student participants from November to December, and focused classroom observations four days a week from January to June.

The writing events I observed included (a) the teachers' oral instructions: (b) the students' writing; (c) the student-student and student-teacher interactions; and (d) the views of writing voiced by the teachers, students, and parents. I used traditional qualitative research methods: participant observation, interviews, and fieldnotes (Bogdan \& Biklen, 1992; Fetterman, 1989; Rogoff, 1993). For collecting the writing samples, I used text analysis methods (Edelsky, 1986; Odell, 1999, Perera, 1984). My methodology also included audiotaping writing sessions, and photocopying students' first drafts, edited drafts, and final compositions. In addition to interviewing the teachers to ascertain their beliefs about their students' writing, I noted the kinds of
writing opportunities they gave the children. To obtain information about the students' cultural and linguistic background, I interviewed them and their parents in their homes.

I followed the tradition of the lone researcher observing classrooms (Dyson, 1989, 1993; Hudelson, 1989; Urzua, 1987), examining the classroom talk transcripts during the writing assignments and studying the student compositions to devise analytical categories (Cambourne \& Turbill, 1987; Edelsky, 1986). The iterative process of examining the transcripts, fieldnotes, and compositions was the basis for my findings (Bogdan \& Biklen, 1992; Miles \& Huberman, 1994).

## The Teachers

The study took place in Mrs. Martin's and Mrs. Smith's classrooms. Mrs. Martin, a young second-year teacher, had grown up and attended local schools in northern California. She received her teaching credential from a local state college, but had opted not to take the cross-cultural language and academic development credential courses to prepare for working with diverse student populations. Her first assignment after college was to teach fifth grade at Mission Elementary. She had not attended the district's English Language Academy in order to teach ESL, and she was not a proponent of the bilingual education program at the school. However, she did allow the beginning Spanish-speaking ELLs in her class to use their Spanish for several of their assignments while they acquired English.

Mrs. Smith, a middle-aged seasoned teacher, had grown up in New York City. She received her teaching credential and a special education credential from a local state college in New York. In her eighth year of teaching, she obtained a position with the Oakville School District and relocated to teach at Mission Elementary. Mrs. Smith was not bilingual and did not encourage any of her ELLs (either Spanish-speaking or Vietnamese-speaking) to write their assignments in their native language. However, toward the end of the school year, when a Russian-speaking boy was enrolled in her class, she encouraged him to write in Russian and to write unfamiliar English words in the RussianEnglish dictionary that his father had made for him. Unlike Mrs. Martin, Mrs. Smith did attend the district's English Language Academy. Beyond her regular teaching assignment, she worked for the Migrant Education Program to help migrant students with their homework. However, she did not believe that a bilingual education program was beneficial for students learning English, and she disapproved of the bilingual education program at the school.

When Mrs. Martin joined the faculty, she and Mrs. Smith immediately became working colleagues, sharing ideas and activities. I frequently observed them together planning assignments for reading, writing, social studies, and science. Thus, many of the writing assignments that I examined in both classes were similar.

## The Students

With the help of the school principal, I selected eight fifth-grade students to be participants in the study, three of whom were native speakers of English, five of whom were non-native speakers, and all of whom had attended Mission Elementary since kindergarten or first grade. Each of these students had been specifically identified by their fifth-grade teachers as either a "strong" or a "weak" writer-terms that, for the sake of reportorial accuracy, I will retain, although in quotation marks. I studied two "strong" and two "weak" writers in each of the two classrooms. For the purposes of the issues I wish to address in this article, however, I will focus on only four of the original eight students:

Aida-a Spanish-English bilingual, considered a"strong" writer by her teacher, Mrs. Smith.

Sue-a native English speaker, considered a "strong" writer by her teacher, Mrs. Martin.

Cindi-a Spanish-English bilingual, considered a "weak" writer by her teacher, Mrs. Smith.

Cristina-a Spanish-English bilingual, considered a "weak" writer by her teacher, Mrs. Martin.
During the interviews with the teachers, which occurred prior to my observing the writing events and prior to my analyzing the student compositions, I asked the teachers to outline the criteria they used to identify the students as "strong" or "weak" writers. Mrs. Martin and Mrs. Smith independently agreed on three factors: (a) specific strengths in expression, such as imagination and verbal ability; (b) independence in composing; and (c) motivation to write.

Mrs. Smith said that her most "creative" writer was Aida, who put feelings and "poetry" into her writing. Sometimes, she said, Aida's writing actually made her cry. Mrs. Smith added that Aida was a highly motivated writer who was always volunteering to write stories, thank-you letters, invitations, and other assignments on behalf of the class.

Mrs. Martin identified Sue as highly motivated to write. Sue regularly contributed poems to the school newspaper, The Mission News. Mrs. Martin noted that Sue had great ideas, which she often produced from the "top of her head."

When asked what makes a student's writing "weak," Mrs. Martin and Mrs. Smith identified two factors: (a) problems with expression and fluency, including vagueness, overgeneralization, and lack of imagination; and (b) problems with general school motivation.

About Cindi, whom Mrs. Smith regarded as a "weak" writer, she said, "Cindi has so many good ideas, but she doesn't expand or elaborate on them. I'm not sure she understands the process of writing." Mrs. Smith noted that Cindi wrote best when she was given a model to follow.

Mrs. Martin noted about Cristina that "it takes fifteen minutes to conference with her about her writing. Part of Cristina's problem is that she does not have basic knowledge of English." Having to devote so much time to one student was sometimes frustrating for a teacher who had twenty-two other children in the room and only an hour for the whole assignment. Furthermore, Mrs. Martin identified several specific writing problems among her students saying, "it is difficult to teach writing when so many of these students do not have the basics of writing, they have poor spelling and punctuation."

## Textual Analysis Methods

To analyze the writing proficiencies manifested in the compositions, I used a multidimensional approach that included the content of the writing as well as its organization, sentence complexity, and mechanics (Gentry, 1978; Hillocks, 1987; Hunt, 1965; Odell, 1999; Perera, 1984; Read, 1971). I read each composition four times, each time examining a different subprocess of writing. This allowed me to create a comprehensive picture of the students' writing repertoires. In the dissertation, I analyzed three compositions, only one of which I will be analyzing here. This one, which is typical of the students' efforts, was an essay about a fieldtrip that the children took to a marine institute to study the ecology of the bay.

## The Findings of the Study

To analyze the writing proficiencies of the students I used the writing instruction and interactions in the writing events to expand the textual analysis because the interactions and instruction the students received influenced their written compositions. After I compared the students' compositions using the multidimensional approach, I examined the bilingual students' experiences with their first language, Spanish, in and out of school.

## Writing Events and Writing Instruction

All the fifth-grade students at Mission Elementary School participated in a one-day science field trip to a marine institute. The field trip was the culminating activity of an oceanography unit. All the fifth-grade students studied the bay habitat by focusing on the sea-floor formations, the food web of large and microscopic marine animals, and the composition of the water in the bay. To help the students understand the vocabulary and the marine water concepts, the fifth-grade teachers organized "Marine Day" lessons.

On the day of the field trip, the students and teachers rode the school bus to the marine institute, where three institute guides met the children to introduce themselves and to explain the logistics of the boat trip. Once the boat was under way, the three guides on the lower deck gave a general introduction of the types of fish, plankton, and other sea animals the students might see. The students were organized into three working groups. When the boat was at one of the lowest points in the bay, each of the three groups was instructed to go to one of three stations: the mud station, the fish station, or the plankton station. The guides had the students assist with the gathering of the mud samples, water samples, and catching fish and other sea animals with a net. The students then studied each of the samples.

Because Mrs. Martin and Mrs. Smith scheduled their field trips on alternate weeks, I was able to observe the writing events in both classes. The day after the fieldtrip, each of the teachers had the students write an essay entitled "Marine Day." Rather than just assigning the essay for homework, the teachers systematically led the students in thinking through the assignment. Each of the two teachers began by having the students discuss the different animals and events of the experience. As the students shared ideas, the teachers wrote them on the board. In addition to the brainstorming of ideas for writing the essay, both teachers asked their students to begin with an introduction. For example, Mrs. Martin asked the students to explicitly begin with an introductory paragraph and modeled for them the first three sentences for that paragraph. She wrote on the blackboard:

On April 29, we went on our Marine Day field trip. We took a bus to Mar Vista, where we got on board a boat. The boat took us onto the bay, which is also called an estuary.
With these three sentences, Mrs. Martin encouraged the students to think about the other preparations the class had made and to include them in their introductory paragraph. Then she suggested that the second, third, and fourth paragraphs should each focus on one of the stations in which they participated.

Mrs. Smith, on the other hand, only provided one sentence to get the students started after the brainstorm of initial ideas. She wrote on the board: "We went on a fieldtrip on Tuesday, May 6."

The students had three class periods to write about what they had done and learned on the field trip. On the third day, when most of the students had finished writing the first four paragraphs, the teachers encouraged the students to write a concluding paragraph indicating what they had learned on the trip. Once the essays were written, the teachers corrected them and returned them to the students to rewrite on binder paper. After the students finished rewriting, they turned their essays into the teacher.

## Textual Analysis

Using the multidimensional approach, I found that second-language students' poor spelling and punctuation can lead teachers to miss the fact that some of these children have good ideas and organizational skills, and that they also use a variety of sentence types characteristic of mature writers.

## Ideas

Specifically, when I examined the content of the compositions, I found that the "weak" second-language writers were capable of presenting a variety of ideas persuasively. In the fieldtrip essays (see Appendix A), the "weak" writers were able to write proficiently about details of the trip and facts they had learned. All of them also included statements about the results of experiments they had conducted on the trip. There were five types of ideas that the writers included: trip details, facts learned, results of experiments conducted on the trip, evaluation statements about the activities of the trip, and personal observations. Table 1 illustrates the frequency and percentage of these themes for each writer.

Cristina, a "weak" writer, compared favorably with Aida, a "strong" writer, in the frequency of idea types selected in each of the five categories noted above. Cristina approximated Aida's number of sentences and percentages along many of the categories. Cindi, a "weak" writer, most closely matched the percentage of ideas emphasized by Sue, a "strong" writer.

Table 1
Frequencies and Percentages of Types of Ideas in the Field Trip Essays

|  | Trip Details | Facts Learned | Results | Evaluations | Observations |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Aida <br> (s/nn) | 14 <br> $(53 \%)$ | 4 <br> $(15 \%)$ | 4 <br> $(15 \%)$ | 2 <br> $(8 \%)$ | 2 <br> $(8 \%)$ |
| Cristina <br> (w/nn) | 20 <br> $(59 \%)$ | 4 <br> $(11 \%)$ | 3 <br> $(9 \%)$ | 1 <br> $(3 \%)$ | 6 <br> $(17 \%)$ |
| Cindi <br> $(w / n n)$ | 22 <br> $(61 \%)$ | 2 <br> $(6 \%)$ | 7 <br> $(19 \%)$ | 0 <br> $(0 \%)$ | 5 <br> $(14 \%)$ |
| Sue <br> $(\mathrm{s} / \mathrm{n})$ | 13 <br> $(62 \%)$ | 2 <br> $(9 \%)$ | 5 <br> $(24 \%)$ | 0 <br> $(0 \%)$ | 1 <br> $(5 \%)$ |

Notes: The $\mathrm{s}=$ "strong"; $\mathrm{w}=$ "weak"; $\mathrm{n}=$ native; $\mathrm{nn}=$ non-native.

## Organization

When I examined the organizational strategies that the students had used in their essays, I found that none of them used topic sentences consistently. However, one "weak" second-language student, Cristina, wrote topic sentences for six paragraphs in her fieldtrip essay, which was more than Aida and Sue wrote. Table 2 presents the students' organizational strategies within paragraphs (topic sentence and supporting details) and for the essay as a whole (introductory and concluding paragraphs).

Table 2
Organizational Strategies Used in the Field Trip Essays

|  | Whole-Essay Organization |  | Individual Paragraphs |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Introduction | Conclusion | Begins w/ <br> Topic Sentence | Begins w/ <br> Detail | No. of <br> Paragraphs |
| Cristina <br> (w/nn) | yes | yes | 6 | 0 | 6 |
| Aida <br> (s/nn) | yes | yes | 1 | 4 | 5 |
| Sue <br> (s/n) | yes | yes | 1 | 4 | 5 |
| Cindi <br> $(\mathrm{w} / \mathrm{nn})$ | yes | yes | 1 | 2 | 3 |

Notes: The $\mathrm{s}=$ "strong"; $\mathrm{w}=$ "weak"; $\mathrm{n}=$ native; $\mathrm{nn}=$ non-native.

Cristina began her paragraphs by signaling to the reader the order of the stations to which she proceeded (e.g., "We went to the fish station first" and "My second station was the mud station"). She then provided supporting details about what she had done at each of the stations.

The other writers, Aida, Cindi, and Sue, wrote a topic sentence with supporting details in at least one instance, using the one the teacher asked them to write. For example, Mrs. Smith suggested the sentence, "We went on a fieldtrip on May 6," with which all the writers began their essays. While Aida, Cindi, and Sue did not write completed topic sentences, some of them prefaced the first sentence with a phrase that resembled the beginning of a possible topic sentence. For example, Aida began the paragraph in the body
of her composition with a subtitle, "Mud," and with the sentence, "In the mud station, we put a claw into the water." The first part of the sentence, "In the mud station," signals to the reader that she will discuss the tasks of the mud station. However, she did not complete it in the manner that a topic sentence warrants. Instead, she provided a detail about the station. Cindi had two subtitles, "Fish" and "Conclusion," but did not include the phrase that Aida used. Sue used the phrase, "The first thing we did at the mud station." While none of these three students wrote a full topic sentence, their partial topic phrases signaled to the reader a transition in ideas.

## Sentence complexity

In conjunction with organizing and composing ideas, linguistic features such as writing complete sentences are signs of developmental growth in written language. For college students and adults, English handbooks and style guides recommend that, to create an engaging composition, writers use a variety of sentence structures and lengths to express basic units of thought (Lunsford \& Connors, 1996; Parker \& Timpane, 1989). Individuals who use run-on sentences with no subordination, or who use only simple sentences, produce monotonous writing. Compound and complex sentences show the relationships among the ideas that the writer is expressing (Perera, 1984). Five-year-old children can already do much of this orally, though not yet in writing. At the elementary school level, children commonly write simple sentences. My purpose for analyzing the use of compound and complex sentences was to examine the children's syntactical growth-a subsystem of written language.

A simple sentence consists of a single independent clause. However, it can have a compound subject and/or a compound predicate (e.g., "Joe and Mary came and went"). A compound sentence contains at least two independent clauses, with the writer giving equal emphasis to both. In a compound sentence, the ideas are usually closely related in some way (e.g., "Joe left and Mary arrived"). A complex sentence consists of an independent clause and a subordinate clause. The more important of the two ideas is placed in the independent clause, while the idea of secondary importance is placed in the dependent clause (e.g., "Joe left when Mary arrived").

When I examined the sentence types in the students' compositions, I found that all four children constructed ideas in a sophisticated way, using compound and complex sentences. While it is very common at the fifth-grade level for students to write a series of simple sentences, which all these children did, they also composed compound and complex sentences, showing some variety. Table 3 illustrates the frequency and percentage of the sentence types used by each of the students.

Table 3
Frequencies and Percentages of Sentence Types Used in the Field Trip Essays

|  | Simple | Compound | Complex |
| :--- | :---: | :---: | :---: |
| Cristina (w/nn) | $24(77.4 \%)$ | $3(9.7 \%)$ | $4(12.9 \%)$ |
| Sue (s/n) | $14(73.7 \%)$ | $2(10.5 \%)$ | $3(15.8 \%)$ |
| Aida (s/nn) | $20(76.9 \%)$ | $3(11.5 \%)$ | $3(11.5 \%)$ |
| Cindi (w/nn) | $32(91.4 \%)$ | $1(2.9 \%)$ | $2(5.7 \%)$ |

Notes: The $\mathrm{s}=$ "strong"; $\mathrm{w}=$ "weak"; $\mathrm{n}=$ native; $\mathrm{nn}=$ non-native.

The sentences below are examples of compound and complex sentences used by each of the students (with spelling corrected):

Aida: "We went to the bow of the ship and we talked about how the plankton starts the foodweb." (compound)
"After we caught the fish, we used a special key to identify them and study them." (complex)

Cindi: "We counted to three, dropped the rope, said mud, and the claw went to the bottom of the sea." (compound)
"After we washed it, we looked at the animals, shells, and worms." (complex)

Cristina: "We put the mud in the bin, and then we sprayed the mud." (compound)
"The bay is different than the ocean because it is mixed with fresh water." (complex)

Sue: "Then we spread out the mud and then we sprayed it all out."(compound)
"Then the chaperone put some fish in the bucket, and we had to identify some fish, using a book." (complex)

## Spelling

The fifth-grade teachers regarded spelling as one of the basics of writing. The research on young children's spelling has examined the types of hypotheses children make about the orthographic and sound systems of English (Bissex, 1980; Gentry, 1981; Read, 1971). This earlier research has noted the various phases of children's spelling, from the semi-phonetic to the conventional. At first, in the semi-phonetic phase, young children omit letters and do not represent all sounds. For example, they might spell chirp as chp. Then, in the phonetic phase, they represent all sounds, but still omit some letters-for example, letters that are part of another sound, such as the $r$ in the ir of chirp. Next, in the transitional phase, the children include vowels in every syllable, but still tend to transpose letters. For example, they may spell hcirp for chirp. Although misspelled, these constructions still look like English words. Common letter patterns such as oo, ou,igh, and ck begin to appear in children's writing. By this phase, the children usually spell inflectional endings correctly, such as -ed instead of $-d$, $-t$, or -id. In the conventional-or correct strategy-phase, the children recognize and recall the correct lexical representations of words.

In examining the students' spelling, I found that the misspellings of Aida and Sue fell within the transitional spelling category. Sue only misspelled 6 out of 310 words, or $1.9 \%$. Her misspellings included double vowels (mesured for measured), double consonants when a suffix is added (droped for dropped), $c$-for-s substitution (moct for most), a missing $r$ in the $s p r$ cluster (spayed for sprayed), ou-for-o substitution (introuduced for introduced), and confusion of two closely pronounced words (where for were).

Aida misspelled even fewer words ( 1 out of 305 , or $0.3 \%$ ). Her misspelling was the missing letter $n$ in a consonant cluster (plakton for plankton). In comparison, Cindi and Cristina were still developing their spelling skills; their misspellings fell within a wider range of phases from the transitional to the phonetic. Cindi had fewer misspelled words than Cristina (20 out of 279, or $7.2 \%$, compared to 46 out of 333 , or $13.8 \%$ ). Cindi's misspellings included 12 transitional phase misspellings (e.g., conclution for conclusion, floting for floating, idiea for idea, and microscop for microscope) and 8 phonetic phase misspellings (e.g., werked for worked, tipp for type, and did for died). Cristina's misspellings included 15 transitional phase misspellings (e.g., bei for bay, diffrent for different, and ainmol for animal) and 16 phonetic phase misspellings (e.g., bacet for bucket, and gurp for group).

Overall, the students divided into good spellers (the "strong" writers) and poor spellers (the "weak" writers), just as the teachers had indicated. While it may seem that $7.2 \%$ and $13.8 \%$ for misspellings are not drastic percentages, they were large enough to confirm for the fifth-grade teachers that these students had not gained command of the "basics" of writing. The teachers' evaluation of their students' writing skills corresponded well with

Gentry's $(1978,1981)$ developmental phases of spelling. However, Gentry's model was based on research with first-language children and not those acquiring English as a second language. For the latter, age does not correspond well with Gentry's phases.

In their overall assessments of the students' writing, the teachers applied the spelling generalizations of first-language children to their second-language children. In the teachers' minds, these children had been in U.S. schools since kindergarten or first grade, which should have given them enough time to have learned English spelling. Thus, the high percentage of misspellings that the teachers found in some of the children's writing demonstrated to them that the children had not mastered the basics of writing and thus were "weak" writers.

The question is, were the teachers' impressions accurate? My own conclusion is that "weak" control of mechanics does not necessarily mean that a child lacks the more profound aspects of writing, especially imagination and conceptualization. In content, organization, and sentence structure, Cindi and Cristina matched many of the writing proficiencies that Aida and Sue exhibited. They certainly did not compose "weak" pieces across all the dimensions of writing.

## Unexpected Outcomes of the Students' Spanish-Language Skills

After interviewing the children and their parents in their homes, I found several unexpected findings in the bilingual students' speaking and writing proficiencies in their first language, Spanish.

## Aida

Before Aida entered kindergarten, her mother, Mrs. Valles, taught her to read and write her own name and the names of her relatives, as well as a few basic Spanish words. When Aida began school at Mission, she was enrolled in an all-English kindergarten, although Spanish was the only language spoken at home. In second grade, she was placed in the English component of a bilingual classroom. Indirectly and informally, however, she had opportunities to hear reading and writing instruction in Spanish. Her mother, who spoke to me in Spanish, was very pleased that Aida had had opportunities in school to learn to read and write in that language.

As I did with all the bilingual children when I visited their homes, I asked them to write me a short story in Spanish. She replied that she did not write stories in Spanish but that she did transcribe Spanish language songs she heard on the radio and she proceeded to write some lyrics from memory. What was most surprising to me in the home visit was that Aida's mother, who had no formal education, was totally self-taught and regularly wrote entries in a journal both in poetry and prose, that despite their mechanical limitations, revealed great sensitivity and expressiveness. I learned at that time that Mrs. Valles
frequently showed her journal to Aida and asked for her responses both literary and emotional (see Appendix B for an example of the poems Mrs. Valles wrote). This clearly had an impact on Aida's writing appreciation and ability.

## Cristina

Before entering first grade at Mission, Cristina attended a full year of kindergarten in Mexico. Thus, her first experiences with school literacy were in Spanish. At Mission, in first and second grade, she was enrolled in allEnglish classrooms, because the school did not have any bilingual programs at that time. In third and fourth grades, however, she was enrolled in a bilingual education classroom for two years.

During the period that I observed her in Mrs. Martin's all-English classroom, Cristina wrote several of her stories in Spanish because she felt more comfortable in her native language. I have four of those stories, but will analyze only one, "El Misterio del Monstruo" [The Mystery of the Monster"] (see Figure 1). For the stories, I examined the rhetorical elements of narratives: (a) the orientation, which provides the information about the setting, time, characters, and general context; (b) the problem or complicating action; and (c) the resolution of the problem (Hatch, 1992; Labov \& Walestzky, 1967; Valdés, Dvorak, \& Hannum, 1989). I have kept her spelling and wording intact without making any corrections.

Figure 1. El Mesterio del Mostro

## Cristina wrote:

Habia una vez un señor que vivia en un castillo. El señor era un experimentador. Hacia varios experimentos. Pero un día se le ocureo una idea. Dijo que iba a inventar un mostro y haci lo hizo.

Tardo mucho para hacerlo y cuando lo termino el mostro lo ataco y al señor le pego un ataque al corzaon. El mostruo era grande, anarangado y verde su ojos y grandes brazos y piernas. El castillo y el mostro estaban en el pais de Mexico. Despues cuando el monstro supo que su amo era experimentador el tambien queria hacer.

Pero un día asta llego a inventar una maquina que cambiaba de paises. Despues el mostro se ceso saler del castillo y una persona le dijo a las otra gente que beo a un mostro y después las personas lo matarón.

## Translation

Once upon a time there was a man who lived in a castle. The man was a scientist. He conducted various experiments. But one day he got an idea. He was going to create a monster and that is what he did.

It took him a while to do it and when he was finished the monster attacked him and the scientist got a heart attack. The monster was big, orange and green eyes, and large arms and legs. The castle and the monster were in the country of Mexico. Then when the monster knew his master was a scientist, he too wanted to be one.

But one day, the monster invented a machine that changed countries. Then the monster wanted to leave the castle and a person told the other people that he saw a monster and afterwards the people killed the monster.

The story is written from a third-person point of view: a narrator telling about a scientist and a monster. Cristina's purpose was to tell the reader about what happened to the scientist and the monster. She used organizational elements to tell her narrative: orientation, complicating action, and resolution. She signaled the orientation of her story with "Una vez había . . ." ("Once upon a time . . .") and she named the scientist and characterized him:

Una vez habia una señor que vivía en un castillo. El señor era un experimentador. Hacia varios experimentos.
[Once upon a time there was a man who lived in a castle. The man was a scientist. He conducted various experiments.]

Next, she signaled the beginning of the complicating action with "una día se le ocurrió una idea" ["one day he got an idea"]. Cristina had two complicating actions: "Dijo que iba a inventar un monstruo y haci lo hizo" ["He was going to create a monster and that is what he did"]; "Después cuando el monstruo supo que su amo era experimentador el también quería hacer." ["When the monster knew his master was a scientist, he too wanted to be one"].

For the resolution of the story, Cristina had two occurrences: "Después el monstruo . . y una persona le dijo a las otra gente que vío a un monstruo" ["Then the monster . . . and a person told the other people that he saw a monster"]; and "después las personas lo mataron" ["afterwards the people killed the monster"].

Her Spanish vocabulary and grammar were fluent. For example, she used the phrase "le pegó un ataque al corazón" ["a heart attack"]; and in the sentence "cuando el monstruo supo que su amo era experimentador . . ." ["when the monster knew his master was a scientist . . ."].

Cristina's misspellings and omitted accent marks are typical of Spanish speaking children learning to write. While she received reading and writing instruction for two years in a bilingual classroom, she has not retained some of the basic spelling rules. However, her story contains several important narrative features that are characteristic of "strong" writing.

## Cindi

Before Cindi entered kindergarten, her mother taught her to read and write her own name and the letters of the alphabet, as well as a few basic Spanish words. When Cindi began school at Mission, she was enrolled in an all-English classroom from kindergarten through fifth grade, so she had no opportunities in school to use her knowledge of Spanish literacy. At home, her parents discontinued tutoring her in Spanish after kindergarten.

Cindi did not ordinarily write in Spanish for herself or others. She wrote the Spanish piece that I analyzed in response to my request that she write a
story in Spanish, which she willingly did. Two days after I made my request, she called to tell me that she had written a story about a witch, entitled " $L a$ Bruja y el Tavique" ["The Witch and the Brick"] (see Figure 2). I have kept her spelling and wording intact without making any corrections.

Figure 2. La Bruha y el Tavique

## Cindi wrote:

Una ves avia una bruha que se yamava pickls spop por que ya no tenea fuersas y estava muy vieha una ves la bruha fue al vosce.

Unos paharos estavan viendo ala bruha y le avientaron un tavice en la caveza la bruja se desmayo y cedo loca y la descalavraron la bruha ceria matar a las paharos para aserlos pollo la bruha comio mucho que se eso pasona y paresea pelota. La bruha se acosto en le sacate de el bosce y donde se acosto era como una montanya. La bruha se fue rodando y abian uno senyores escaruando un oyote la bruha se callo en el oyo y se descalavro otra vueta y se murio con la escouc.

## Translation

There was once a witch who's name was Pickles Spop because she was "weak" and very old. Once, the witch went to the forest.

Some birds were watching the witch and they threw a brick at her head. The witch fainted and became crazy and they injured her head. The witch wanted to kill the birds and make soup out of them. The witch ate so much that she became fat and looked like a ball. The witch layed down to sleep on the grass in the forest. Where she layed down was a hill. The witch went rolling and there were some men digging a big hole. Again she injured her head. And she died with her broom.

The story is written from a third-person point of view: No out Pickles Spop, the witch. Cindi's purpose was to tell the reader about something that had happened to Pickles in the past. To entertain the reader, Cindi provided a comedy of errors:

La bruja se acostó en el sacate de el bosce y donde se acostó era como una montanya. La bruha se fue rodando. Y habian unos senyores escarbando un oyote. La bruha se callo en el oyo y se descalavro otra vuelta.
[The witch lay down on the grass in the forest, and the place she lay down was a hill. The witch went rolling down. Some men were digging a big hole. The witch fell into the hole and broke her head again.]
Cindi used a few common stock words to tell her narrative. She signaled the beginning of her story with "Una vez había . . ." ["Once upon a time . . ."], and she signaled the beginning of the complicating action with "una vez fue al vosce" ["one day she went to the forest"].

She used organizational elements to tell her narrative: orientation, complicating action, and resolution. For the orientation, she named the witch and characterized her:

Una vez habia una bruha que se yamava pickls spop por que ya no tenea fuersas y estaba muy vieha.
[Once upon a time there was a witch whose name was Pickles Spop because she had no strength now. She was very old.]

Cindi had four complicating actions: "la bruha fue al bosque" ["the witch went to the forest"]; "unos pajaros . . . le aventaron un tavice en la cabeza" ["the birds . . . flung a brick at her head"]; "la bruja se fue rodando" ["the witch rolled down"]; and " $y$ habian unos senyores escarbando un oyote" ["some men were digging a big hole"].

For the resolution of the story, Cindi had three occurrences: "la bruja se desmayo y cedo loca y la desclavaron"["the witch fainted, went mad, and her head was injured"]; "la bruja comio mucho . . se acosto" ["the witch ate a lot . . . and took a nap"]; and "se callo . . . se descalabro . . . y se murio" ["fell in . . . was injured . . . and died"].

Her Spanish vocabulary and grammar were fluent. For example, she used the relatively sophisticated word descalabró ["injury to the head"] in her concluding sentence, "La bruja se cayo en el hoyo, y se decalavro otra vuelta." For a student who does not ordinarily read and write in Spanish, Cindi's misspellings are typical, but her story contains several important narrative features that are characteristic of "strong" writing.

## Conclusions and Recommendations

Some of my conclusions relate to three issues: (a) what the teachers believe about second-language child writers, (b) what they need to know about these writers, and (c) how they can best evaluate the written texts of such children. My remaining conclusions have to do with bilingual students' literacy in their first language.

The teachers believed that ELLs should gain control of the "basics" of writing (spelling, punctuation, and grammar) before moving on to the larger processes (ideas, organization, and audience considerations). It has been my experience that this belief is shared by many teachers who do not have extensive theoretical and pedagogical knowledge of second-language acquisition. It is true that "weak" second-language children writers have problems with the mechanics of writing, which can frustrate and sometimes overwhelm their mainstream teachers. However, teachers need to recognize that a child can be good at organizing and communicating ideas while having poor mechanical skills.

As this study illustrates, the writing skills of "strong" second-language child writers are virtually indistinguishable from the writing skills of "strong" first-language child writers. Furthermore, the writing proficiencies of the "weak" second-language writers in this study, in terms of organization and communication, did not lag significantly behind those of the "strong" writers (either first- or second-language), even when the "weak" writers had been in and out of mainstream and bilingual education programs.

Based on the findings of this study, teachers should use a multidimensional approach to evaluate writing proficiencies, especially of those students they consider "weak" writers. The teachers I observed, however, focused mostly on mechanics. Using a multidimensional approach would have enabled them to assess the different subcomponents of their students' writing skills, to describe the students' writing proficiencies in detail, and to design lessons to meet their students' needs.

As for bilingual students' literacy in their first language, bilinguals who did not receive first-language (L1) literacy instruction at school, but received it informally in the early childhood years at home, have the potential to become biliterate if the conditions for writing in Spanish can be provided by the school. Parents' informal Spanish instruction, coupled with formal English (L2) instruction, was sufficient for these types of bilinguals to write stories in Spanish. This is an area in which more research is needed to learn more about the Spanish-language background of bilinguals without schooling in their first language. This seems especially fruitful for researchers interested in heritage language students, those Spanish-English bilinguals enrolled in classes such as Spanish for Spanish-speaking students.

As for the contextual factors of my conceptual framework, the study suggests that the influence of the home is a key factor in explaining how children's writing proficiencies develop. Furthermore, the formal secondlanguage literacy development, coupled with informal literacy development in the first language during the late childhood years, may still lead to expanded literacy in the first language. Essentially, this suggests that Cummins's (1981) relationship between L1 and L2 literacy may be bi-directional (L1 $\longrightarrow$ L2) rather than just unidirectional $(\mathrm{L} 1 \longrightarrow \mathrm{~L} 2)$.

## References

Belcher, D., \& Braine, G. (Eds.). (1995). Academic writing in a second language: Essays on research and pedagogy. Norwood, NJ: Ablex Publishing Company.
Bissex, G. (1980). Gyns at work. London: Harvard University Press.
Bogdan, R., \& Biklen, S. K. (1992). Qualitative research for education: An introduction to theory and methods. Boston: Allyn and Bacon.

Braine, G. (1996). ESL students in first-year writing courses: ESL versus mainstream classes. Journal of Second Language Writing, 5 (2), 91-107.
Cambourne, B., \& Turbill, A. (1987). Coping with chaos. Rozelle, Australia: Primary English Teaching Association.
Cummins, A. (1990). Expertise in evaluating second language compositions. Language Testing, 7(1), 31-51.
Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In California State Department of Education Office of Bilingual Education, Schooling and Language Minority Students: A Theoretical Framework (pp. 3-49). Los Angeles: Evaluation, Dissemination and Assessment Center, California State University, Los Angeles.
Daiute, C., Campbell, G. T., Reddy, M., \& Tivnan, E. (1993). The social construction of written narratives. In C. Daiute (Ed.), The development of literacy through social interaction. San Francisco: Jossey-Bass Publishers.

Dyson, A. H. (1989). Multiple worlds of child writers: Friends learning to write. New York: Teachers College Press.
Dyson, A. H. (1993). Social worlds of children learning to write. New York: Teachers College Press.

Edelsky, C. (1986). Writing in a bilingual program: Había una vez. Norwood, NJ: Ablex.

Ellis, R. (1994). The study of second language acquisition. Oxford: Oxford University Press.
Fetterman, D. (1989). Ethnography step by step. Newbury Park, CA: Sage, Inc.
Gentry, R. (1978). Early spelling strategies. The Elementary School Journal 79, 88-92.
Gentry, R. (1981). Learning to spell developmentally. The Reading Teacher, 378-380.

Graves, D. (1983). Writing: Teachers and children at work. Portsmouth, NH: Heinemann.

Gutierrez, K. (1992). A comparison of instructional contexts in writing process classrooms with Latino children. Education and Urban Society, 24(2), 244-262.
Hakuta, K. (1986). Mirror of language. New York: Basic Books.
Hernández, A. C. (1999). The writing of fifth-grade English language learners and English monolingual students: Opportunities for writing, teachers' beliefs, and students' proficiencies. Unpublished doctoral dissertation, Stanford University.

Hillocks, G. (1987). Research on written composition. Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills.
Hillocks, G. (1991). The knowledge necessary to teach writing effectively. In M. Kennedy, (Ed.), Teaching academic subjects to diverse learners (pp. 142-161). New York: Teachers College Press.
Hudelson, S. (1989). A tale of two children: Individual differences in ESL children's writing. In D. Johnson \& D. Roen (Eds.), Richness in writing: Empowering ESL students (pp. 84-99). New York: Longman.
Hunt, K. (1965). Grammatical structures written at three grade levels. Urbana, IL: National Council of Teachers of English.
Kaplan, R. B. (1988). Contrastive rhetoric and second language learning: Notes toward a theory of contrastive rhetoric. In A. C. Purves (Ed.), Writing across language and cultures: Issue in contrastive rhetoric (pp. 275-304). Newbury Park, CA: Sage.
Kroll, B. (1990). Second language writing. Cambridge, UK: Cambridge University Press.
Kruse, S. (1995). Guiding bilingual students "through" the literacy process. Language Arts, 72 (1), 20-29.
Labov, W. (1969). The logic of nonstandard English. Georgetown Monographs on Language and Linguistics No. 22. Washington, DC: Georgetown University Press.
Labov, W., \& Waletzky, J. (1967). Narrative Analysis: Oral versions of personal experience. In (Editors) Essays on the verbal and visual arts (pp. 12-44). Seattle: University of Washington Press.
Leki, I. (1992). Understanding ESL writers: A guide for teachers. Portsmouth, NH: Heinemann.

Lunsford, A., \& Connors, R. (1996). The St. Martin's Handbook. New York: St. Martin's Press.
Odell, L. (1999). Assessing thinking. In C. Cooper \& L. Odell (Eds.), Evaluating writing: The role of teachers' knowledge about text, learning, and culture. National Council of Teachers of English.
Miles, B. M., \& Huberman, A. M. (1994). Qualitative Data Analysis. Thousand Oaks, CA: Sage.
Moss, M., \& Puma, M. (1995). Prospects: The congressionally mandated study of educational growth and opportunity. Cambridge, MA: Office of the Under Secretary, U.S. Department of Education, ABT Associates.
Parker, N. H., \& Timpane, J. (1989). Writing worth reading. A practical guide. Boston: Bedford Books of St. Martin's Press

Perera, K. (1984). Children's writing and reading: Analysing classroom language. Oxford: Basil Blackwell Inc.
Raimes, A. (1987). Language proficiency, writing ability, and composing strategies: A study of ESL college writers. Language Learning, 37, 439-467.
Read, C. (1971). Pre-school children's knowledge of English phonology. Harvard Educational Review, 41 (1), 1-32.
Reid, J. (1992). The writing-reading connection in the ESL composition classroom. Journal of Intensive English Studies, 6, 27-50.
Rickford, J. (1999). African American Vernacular English: Features, Evolution, Educational Implications. Oxford: Blackwell.
Rogoff, B. (1993). Observing sociocultural activity on three planes: Participatory appropriation, guided participation, apprenticeship. In A. Alvarez, P. del Río, \& J. V. Wertsch (Eds.), Perspectives on sociocultural research. NY: Oxford University Press.
Romano, T. (1991). Musts for writing teachers. In M. Kennedy (Ed.), Teaching Academic Subjects to Diverse Learners. New York: Teachers College Press.

Urzua, C. (1987). You stopped too soon: Second language children composing and revising. TESOL Quarterly, 21, 279-304.
Valdés, G. (1992). Bilingual minorities and language issues in writing: Toward professionwide responses to a new challenge. Written Communication, 9(1), 85-136.
Valdés, G., Dvorak, T., \& Hannum, T. (1989). Composición: Proceso y síntesis. New York: McGraw Hill.

Zamel, V. (1992). Writing one's way into reading. TESOL Quarterly, 26 (3), 463-485.

## Appendix A

## The Four Field Trip Writing Samples

## Aida's Field Trip Essay

## First Draft

We went on a field trip Tuesday May, 1997. Before that we studied Oceanography during science. The day when went on the trip we saw big mountain made of salt. The trip was called the Marine Institute field trip. It was in the Estuary An estuary is a body of water with both fresh and salt water.

## Mud

In the Mud station we put a claw into the water. We counted to three and droped the rope. We said mud when we let go of the rope The claw went to the bottom of the water and grabbed the mud. We used a book to identify the items. The animal I studied was the sea squirt.

## Fish

At the fish station we threw the fishing net to the water. In the net we caught a lot of small and big fish. Some of the fish we caught some of them died from the net. My group caught a baby bat ray. In my group I got to say "Bat" and my group would respond by saying "Ray" or I could say "Leopard" and my group would say "Shark." After we caught the fish we used a special key to identify them and study them.

## Plankton

The first station I went to was the Plankton station. We went to the bow of the ship and we talked about how the plankton starts the foodweb and hot it is important. We talked about two two kinds of plankton the Zooplankton and the Phytoplankton. We three a little bottle with a net at the end. We caught plakton and we took it to this little room with a microscope.

## Con

We learned many interesting things about the bay and the fish in the bay and how the ocean works together. The fieldtrip was really fun. I enjoyed it a lot.

# Cindi's Field Trip Essay 

First Draft

We went on a fild trip on Tuesday 61997 we paid money we went on a bus. We studied oceanography during science. We talked about the fieldtrip. We talked about the good behavior. We had a discovery day to have a idiea about what the trip was about. We saw a sea squirt. And put a claw into the water. We counted to 3 , drop the rope said mud and the claw went to the Bottom of the sea then we grabb the mud. We dumped the mud onto a screen and watched it, After we washed it we looked at the animals shells \& worms we found put mud on our nose to join we used a book to andentify the items we had to work as a team.

## fish

we three out a net then we then we pulld out the rope. We caught 3 bat rays. We fished a fish that was sick and then we caught a fish that was having babies then we used the fish to study in a book. We tauched the fish some fish died in the net. We werkd as a team to pull the rop the fish that lookd like if they were ded. They were floting in the water. We throw a bottle with a net to catch the plank ton we wer studing oubout it. Than we got The bottle and we went in with a big mcrocope and a man put some of the water in the microscop and saw all the plankton.

## Conclution

we learned how the Ocean workd to gether. We learnd how to drive the boet. We learnd about diffrenent tipp of fish.

## Cristina's Field Trip Essay <br> Draft 1 <br> Marine Institute

On Tuesday, April 29, 1997, we went on our Marine Institute field trip. We took a bus to Oakville where we got on board a boat. The boat took us out onto the bay which is also called an estua To go to the Marine Institute we had a bake sale and a flea market. And we had to pay $\$ 25$ dollars. The Bay is different than the ocean because it is mixEd with fresh water.

We went to the fish station first, at the fish station we turo a new to cat fish and we wer the most gurp that got mor fish and we got nacabe fish, a flat fish, bat ray and den we got a bacet of fish den you got a book and you got to fand out what canl of fish it was and then we wer fineg we put the fish back in the thee

My second station was the mud station in the mud station we thre the scoop in the porm (bottom) of the bei (bay) of the sea den we put the mod the din and we spuret (sprayed) the mod and we found a sei gorm and another animals den we pudm in a plaset conter (container) den we isamenddem (examined) and guat (what) ainmal it was.

My tree station was the Plankton station in the plankton station got a glass contenor and we tu some duras (drops) of water and we to on top of the glass a plasti scuer the woment tudem in the ordr to siem in measured and we got a ainmol in our.

I lean abut the bey and abut the animols and we gut pu and we wet to defret station and I lean abut the plankton the plankton are scam litter animals and plants. I leaned abut the water in the ben is fresh water that mixted with solt water and I learned about the diffrent fihs and I lild the filtrep.

## Sue's Field Trip Essay

On Tuesday, April 29, 1997, we went on our Marine Institute field trip. We took a bus to Oakville, where we got on board a boat. The boat took us out onto the bay which is also called an estuary.

In the fish station the first thing we did was that two people would stand in front on the boat and one person would throw the buoy in and the other to people would throw the net in. Then after a few minutes we pulled the net in and caught some anchovies, shrimp, and some other fish. Then the chaperone put some fish in a bucket and we had to identify some fish using a book.

The first thing we did at the mud station was dropped a thing called the scopp into the water and it went down to the bottom of the bay and picked up some mud and then we dumped a little bit of mud into each bucket. Then we spread out the mud and then we sprayed it all out and picked up some of the animals and put them in a small plastic tray. Then we had to identify animals we picked out. Then we had to see whether they where native or introuduced. Moct of the animals in the bay where introduced.

The first thing we did in the Plankton station was taking water samples for the temperture of water. We also mesured the salinity of the bay. Then we put a small net into the water and caught some zooplankton and phytoplankton. Then we put the plankton into a slide and put it underneath a microscope. One of the samples had three fish.

What I learned about the Marine Institute was about how most of the animals where introduced. And I also learned that we wouldn't be able to live without phytoplankton.

## Appendix B

An Example of the Poems Mrs. Valle (Aida's Mother) Wrote

Mrs. Valles Wrote:
Lamas Linda Señora en surrostro aymillones/de vesos que an dado/ asu vida tantos vellos recuerdos/ detantos noches /en velacuidan do asu / niño enfer mo aora el / tienpo apasa do y de ellos / queda el recuer do ca/ dauno tiene su Vida pero / de usted esupen samiento/ por que ho ay ma dre enel / mundo quesea mas queda / que a que lla que siem/pre mos cuido Cuando / era mos pequenos por esa/ ma dre mia tededico este umil de pensamiento (5-4-96)

## Translation

The Most Beautiful Woman. In her face there are millions of kisses that she has received. There have been so many beautiful memories in her life. Countless nights when she would watch over her child when he was ill. Time passes and only memories are left of her children. Each of her children has their own life, but those are your memories/ because there is no mother like the beloved onel and the that is left/ to her that always cared for us/ when we were young ones/ for my mother I dedicate these humble thoughts.

## Author Note

This article is based in part on the doctoral dissertation written by Anita C. Hernández titled, The writing of fifth-grade English language learners and English monolingual students: Opportunities for writing, teachers' beliefs, and students' proficiencies (Stanford University, 1999). The dissertation was supported in part by a grant from Stanford University. The chair of the doctoral dissertation committee, Guadalupe Valdés, was instrumental in the critique of the dissertation manuscript as were the other committee members, Kenji Hakuta, John Rickford, and Linda Darling-Hammond.

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This article reported the findings of only four of the eight participants in the two classrooms analyzing only one of their compositions. The other areas not included in the article, but that are part of the dissertation study include a discussion of the following: (a) the impact of bilingual education policy implementation on students' education; (b) the students' middle school placements; and (c) the teacher's instructional practices, other writing assignments, and the established classroom environments.

