Transitions to Biliteracy: Focus on Writing of Spanish/English Emerging Bilinguals

Diana Geisler
University of Colorado, Boulder
UCB 247 – The School of Education
Diana.Geisler@colorado.edu
303-492-1968 (phone)
303-492-2883 (fax

Kathy Escamilla
Susan Hopewell
University of Colorado, Boulder

Olivia Ruiz
Pearson Learning Group

Abstract

The present study examined the writing behaviors and cross-language transfer of these behaviors of early elementary simultaneous bilinguals who are learning to write both in Spanish and English. The study focused on 2 research questions: 1) the relationship between Spanish and English writing, and 2) the identification of specific skills, strategies and content the children are transferring across languages. The methods used were both qualitative and quantitative. Spanish and English writing sample data were collected on 563 children in first through third grades who were receiving literacy instruction in both Spanish and English. The writing sample data were compared across languages by calculating correlation coefficients. The quantitative analyses revealed that emerging bilingual writers are positively transferring what they know across languages. The qualitative analyses yielded insight into the rule-governed nature of the early stages of cross-language transfer between Spanish and English. Overall, the findings confirm that Spanish literacy is a scaffold, not an impediment, to English literacy and indicate the value of examining the writing development of bilingual children in both languages.

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Introduction

The need to improve the academic achievement of the 5 million (NCELA, 2004) English Language Learners (ELLs) in U.S. schools is a national priority. U.S. researchers and practitioners agree that efforts to improve the achievement of ELLs must center on improving literacy acquisition for these children of whom 75% speak Spanish as a first language. While there is agreement on the need for improved academic achievement of ELLs, how to do so has been the subject of much controversy and debate for about the past forty years.

This controversy includes different perspectives about which language or languages should be used for initial literacy acquisition. English only proponents believe that initial literacy instruction should be in English while proponents of bilingual approaches advocate for initial literacy instruction to be in the native language. The debate about language of instruction has frequently overshadowed discussion about quality of instruction, that is, about effective methodology. Typically, literacy programs for ELLs in U.S. elementary schools align with one of the two approaches mentioned above. Spanish-speaking ELLs either receive initial literacy instruction in English or in Spanish, but rarely in both. Further, little attention has been paid in either approach regarding how to assist children in making cross-language connections between Spanish and English.

Newly released syntheses of research on this topic (August & Shanahan, 2006; Gersten & Baker, 2000; Slavin & Cheung, 2003; Thomas & Collier, 2003) offer the following insights. First, if literacy achievement in emerging bilinguals is to be improved, debates, discussions and program development must move beyond the issue of language of instruction. Second, there is a need for fresh educational approaches that focus on the quality of instruction in both languages.

Also, research that is designed specifically for emerging bilinguals is needed. Furthermore, the syntheses cited above reaffirm the value of acquiring literacy in Spanish and all conclude that there is a positive correlation between learning to read in Spanish and subsequently learning to read in English. They add, however, learning to read first in Spanish when combined with oral proficiency in English is the best predictor of success in English literacy for second language learners.

Much of the research base on cross-language transfer and on bilingual literacy development has been done on reading (August & Shanahan, 2006; Rodriguez, 1988; Slavin & Cheung, 2003). However, there is growing evidence that writing skills also transfer across languages particularly English and Spanish. In fact, some researchers have argued that writing instruction, perhaps even more than reading instruction, provides a powerful vehicle for cross-language transfer (Carlisle & Beeman, 2000; Carlo & Royer, 1999; Escamilla, Geisler, Ruiz & Hopewell, 2006).   There is also research to support the view that children learn to read by learning to write (Riojas-Clark, 1995; Vernon & Ferriero, 1999). In addition, there is research evidence in the U.S. context that demonstrates a positive correlation between writing in Spanish and writing in English (Carlisle, 1989; Garcia, 2004; Escamilla et. al., 2006). Further, this same research demonstrates that students who learn to write in their first language while learning to write in their second language will write just as effectively in their second language as those students who learn to write only in their second language. Finally, research by Hernández (2001) has demonstrated that cross language transfer is bidirectional (Spanish to English as well as English to Spanish). In short, the literature supports the theory that learning to write in one's native language can provide a powerful scaffold for learning to write in a second language.

Purpose and Conceptual Framework

The purpose of this paper is to examine the writing behaviors of early elementary simultaneous bilinguals who are learning to write both in Spanish and English. More specifically, the paper scrutinizes the nature of the cross-language transfer of writing behaviors, both what children write as well as how they write it.

Research Questions

The following two research questions were addressed in this study:

1. What is the relationship between Spanish and English writing for early elementary simultaneous bilinguals?

2. What specific skills, strategies and content are children transferring across languages?

Methods, Subjects and Data Collection

The methods used in this study were both qualitative and quantitative. Data were collected as a part of a larger study on biliteracy development titled, "Literacy Squared" (Escamilla, Geisler, Ruiz & Hopewell, 2006). The larger study is a three-year longitudinal study examining the literacy and biliteracy development of children in 15 schools and 7 school districts in Colorado and Texas. The children in the study included first, second and third grade emerging bilinguals who were receiving literacy instruction in both Spanish and English from a Literacy Squared teacher.

Data for this particular paper were collected during December/January of 2005-2006. Writing sample data were collected by classroom teachers whose classrooms were a part of the Literacy Squared research study. Classroom teachers used a common protocol for collecting writing sample data. Children had a total of 30 minutes to complete their writing sample in Spanish. Two weeks later, using the same protocol, teachers collected a writing sample using a

different prompt in English. Only children who wrote in both Spanish and English were included in this analysis. Writing sample data were collected on 563 children: 200 first graders, 221 second graders, and 142 third graders.

The writing prompts varied by grade level. Within a grade level, writing prompts were similar in Spanish and English, but not the same. The within grade level similarity was created in order to elicit cross language transfer. The prompts were not simply translations; sameness was avoided so as to not encourage direct translation. The writing prompts were as follows:

Grade 1 Spanish: Escribe sobre tu animal favorito. (*Write about your favorite animal.)*

Grade 1 English: Write about your favorite toy.

Grade 2 Spanish: ¿Qué es tu libro favorito? ¿Y por qué es tu favorito*?*

(What is your favorite book? Why is it your favorite?)

Grade 2 English: What is your favorite TV program? Why is it your favorite?

Grade 3 Spanish: ¿Qué es la mejor cosa que te ha pasado en la escuela este año?

(What is the best thing that has happened to you in school this year?)

Grade 3 English: What is the best thing that has happened to you in your life?

The writing samples were mailed to the Literacy Squared research team who scored and analyzed them using a holistic writing rubric, the Literacy Squared Writing Rubric (See Appendix A) that was developed for the research project. Inter-rater reliability of the writing rubric was established in 2005 (Escamilla, Geisler, & Ruiz).

The Literacy Squared Writing Rubric was developed during the pilot year of the project. It is designed to assess the Spanish and English writing of bilingual students in grades 1-4 and consists of 3 areas of consideration: content, punctuation, and spelling. The rubric also guides teachers' analyses of students' bilingual behaviors and their errors.   This writing rubric is a tool

to determine how a bilingual (Spanish-English) child is progressing as a writer in both Spanish and English. It is used to document student growth, and as a way to examine how to improve writing instruction.

Holistic writing assessment that utilizes writing rubrics is thought to be a more reliable means of assessing student writing progress than the use of traditional standardized tests (Fredericks & Rasinski, 1997; Rhodes & Shanklin, 1993). The value of assessing the writing of emerging bilingual students using Spanish and English rubrics has been established in research by Escamilla & Coady (2001), and Coady & Escamilla (2005).

The inter-rater reliability for the Literacy Squared Writing Rubric was established by the Literacy Squared research team of 3 experts and 20 teacher leaders independently rate 10 students' Spanish and English writing samples on the Literacy Squared Writing Rubric. The scores of the experts and the 20 teacher leaders were compared to each other to determine whether teacher leaders agreed on the rubric scores. Accuracy rates between teacher leaders and the experts ranged from perfect agreement to within 1 point indicating a high level of agreement with regard to scoring of student writing samples. Overall, the Literacy Squared Writing Rubric is a reliable measure for the purposes of this study (Escamilla, Geisler, & Ruiz, 2005).

Findings

When the writing sample data were compared across languages moderate to strong, positive correlations were found between children's Spanish writing and their English writing. The qualitative analyses revealed that emerging bilingual writers are positively transferring what they know across languages and that they employ a variety of strategies, working across both languages. Furthermore, the qualitative analyses yielded insight into the rule-governed nature of the early stages of cross-language transfer between Spanish and English. Overall, the findings

indicate the value of examining the writing development of bilingual children in both Spanish and English.

Research Question 1: Research question #1 of this study examined the issue of how writing sample data compared across languages. To address this question, mean score ratings on the Literacy Squared Writing Rubric (Appendix A) were calculated for Spanish and English and were compared across languages and grade levels. Then, the relationship between Spanish and English scores was determined by calculating the correlation coefficients between Spanish and English for all grade levels. Four types of scores on the Literacy Squared Writing Rubric are considered. An overall score is reported; this overall score is the composite of three subscores: content, punctuation, and spelling. Results are presented in Tables 1-3.

The mean overall scores for Spanish and English in each grade are reported in Table 1. Not surprising is that in each grade the students scored higher in Spanish writing than in English writing. Furthermore, each grade cohort scored higher on average than the earlier grade cohort in both Spanish and English. The mean overall Spanish score ranged from 6.85 in first grade to 8.21 in third grade and the mean overall English score ranged from 4.58 in first grade to 6.15 in third grade. While English writing outcomes are not as high as Spanish, results indicate that students are learning to write in English as well as Spanish and are thus becoming biliterate.

Insert Table 1 Here
Literacy Squared 2005-2006 Spanish and English Writing Outcomes
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Findings of the correlation analyses indicate a moderate to strong, positive correlation between writing results in Spanish and those in English. The correlations between Spanish and

English writing across grades is found Table 2. Results are strong for the overall score and for the content subscore. Results are moderate for punctuation. The correlation for spelling was the weakest which is not surprising given how different English spelling is from Spanish spelling.

Analyses of correlations by grades are shown in Table 3. Strong correlations were found for the overall scores; in fact, in each grade the strongest correlation was for the overall score, ranging from .57 in grade 3 to .61 in grade 1. The correlations of the content scores were moderately strong in all 3 grades, as were the correlations of the punctuation scores. In each grade the spelling score was found to be the lowest correlation, ranging from .45 in grade 3 to a .29 in grade 2.

Insert Table 2 Here
Literacy Squared 2005-2006 Correlations Between Writing in Spanish & Writing in English
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Insert Table 3 Here
Literacy Squared 2005-2006
Correlation Between Writing in Spanish & Writing in English, By Grade
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Research Question 2: This question was analyzed using qualitative methods. First, the research team of 3 experts and 20 teacher leaders analyzed the writing samples in Spanish and English, according to the procedures in Appendix B. As they analyzed the writing samples, the members were asked to make qualitative notes on the Literacy Squared Writing Rubric form with regard to specific cross language behaviors: code-switching, organizational schema, bilingual strategies, and English errors.

Particular attention was given to English errors that included spelling errors, syntactic and semantic errors. The English errors were sorted into two categories: "typical monolingual

English errors" and "English language development" (ELD) errors. "Typical monolingual

English errors" included spelling and other errors that are commonly made by English

monolingual children in the elementary grades. "ELD errors" included syntactic errors, semantic

errors, and spelling errors that were attributable to Spanish influence. After all student' writing

was analyzed, the English spelling errors of all students were compiled. For each word

misspelled the following information was noted: the frequency, the various misspellings, and

how the error had been classified as either "typical of monolingual English children" or "ELD".

Further sorting of the misspelled English words was done and four patterns of misspelled English

words were noticed.

The following are the five major findings from this qualitative analysis:

1. The early stages of cross-language transfer between Spanish and English is rule-
    governed but may be misinterpreted by teachers.

2. Spanish writing skills, strategies and content serve as a scaffold to English not a
    source of interference. For individual students, there is a high correspondence across
    languages with regard to content, form and use of conventions.

3. English errors were as likely to be typical of English monolingual children in
    elementary grades as they were to be attributable to Spanish being the first language.

4. Bilingual living produces bilingual writing. Bilingual living creates the need for and
    the use of code-switching across languages.

5. Emerging bilingual writers use multiple strategies to express themselves in English
    and Spanish.

In the next five sections, each of these findings is more fully and illustrated with

children's writing samples. Overall, the findings illustrate that emerging bilingual children have

and utilize multiple skills and strategies when they write in Spanish and English. The authors

argue that the use of these multiple strategies are cognitive, linguistic, and academic strengths

that first must be recognized by classroom teachers, and then must be utilized to create effective

writing instruction to enhance and expand cross-language transfer.

The Early Stages of Rule-governed Cross-language Transfer - The early stages of cross-

language transfer between Spanish and English is rule governed. A comparison of the writing

samples of Diana (Writing Samples #1 and #2) and Lili (Writing Samples #3 & #4) will illustrate

this finding.

As can be seen in Writing Samples #1 and #2, Diana is an emergent writer whose

approach to writing is to produce word-like strings of familiar letters without any attempt to

assign a sound value to the letters. This early stage of writing is common to both emerging

Spanish writers (Ferreiro & Teberosky, 1982) and emerging English writers (Clay, 1975).

Further, Diana demonstrates knowledge of word boundaries and a sense that written language

uses punctuation. Note that Diana uses all this knowledge in both languages.

Insert Writing Sample #1 Here
Diana's Spanish Writing Sample, Grade 2

Insert Writing Sample #2 Here
Diana's English Writing Sample, Grade 2

Lili's writing (Writing Samples #3 and #4) reflects a more advanced stage of writing that

includes sound analysis. In Spanish, Lili's writing reveals that she was hearing and recording

sounds in sequence and that she knew some high-frequency words, such as 'porque.' When

writing in English, Lili was also hearing and recording sounds in sequence; however, she was

using Spanish graphemes to record the sounds and she sometimes substituted Spanish phonemes for English phonemes. For example, Lili used the Spanish "ai" to write the English word 'I' and she substituted the Spanish sound of 'a' for the English sound of 'au' in 'because.'

There is a difference between Lili's rule-governed behaviors in her English writing and the random word-like strings that Diana produces and there is a possibility of misinterpreting rule-governed behaviors. This is especially likely when the teacher is a monolingual English speaker or a monolingual Spanish speaker who is unfamiliar with the ways emergent Spanish-English bilingual writers spell in English. A bilingual teacher familiar with the ESL spelling strategies used by emergent bilingual writers may be able to recognize that Lili approached English writing using Spanish phonology and graphemes. Teachers need to know the difference between a random string of letters and logical, strategic approaches to English spelling.

Insert Writing Sample #3 Here
Lili's Spanish Writing Sample, Grade 1

Insert Writing Sample #4 Here
Lili's English Writing Sample, Grade 1

Spanish Writing A Scaffold to English Writing - Another key finding from the qualitative analyses is that Spanish is a scaffold to English, not a barrier or source of interference. What children know in one language directly and positively transfers to a second language. There was evidence in the children's writing that this 'using what one knows from one language to work in another language' is a bidirectional process in which the languages are mutually reinforcing. Working in each language contributes to a student's biliteracy creating a greater pool of resources from which the student can draw. For the purposes of this paper, the researchers chose

to focus on how students are transferring what they know from Spanish to English. Spelling in

English is definitely influenced by Spanish, but it is important to note that the children's English

errors are logical. For individual students, there is a high correspondence across languages with

regard to approach, content, spelling and punctuations. Spanish writing skills, strategies and

content serve as a scaffold to English.

For example, Diana (Writing Samples #1 & #2) employed the very same approach to

writing in English that she did to Spanish writing – creating word-like strings of familiar letters

with no sound value attached to any letters. Lili, too, exhibited the same behaviors in English

writing that she did in Spanish writing (Writing Samples #3 and #4): directionality under

control, hears and sounds in sequence, did not use punctuation, and was random in her use of

capital letters.

Insert Writing Sample #5 Here
Maria's Spanish Writing Sample, Grade 3

Insert Writing Sample #6 Here
Maria's English Writing Sample, Grade 3

The children's Spanish writing closely corresponded to their English writing with respect

to content and punctuation. For example, Maria's scores (Writing Samples #5 and #6) on the

Literacy Squared Writing Rubric were nearly identical in Spanish and English. She scored a 5 in

content and a 3 in spelling in both languages. For punctuation Maria scored a 2 in Spanish and a

3 in English. Alicia's writing (Writing Samples #7 and # 8) shows similar correspondences.

For content Alicia scored a 4 in Spanish and a 3 in English. In Spanish and English Alicia

scored a 1 on punctuation and spelling. In both languages, Alicia's writing strength is in the

content and her punctuation and spelling are weak. The having of complex and sophisticated

ideas seems to precede grammatical and mechanical competence. The recording of sophisticated

ideas requires more of the writer; so, it's to be expected that the demand increases the likelihood

that the student will find him/herself in new grammatical territory.

Insert Writing Sample #7 Here
Alicia's Spanish Writing Sample, Grade 2

Insert Writing Sample #8 Here
Alicia's English Writing Sample, Grade 2

It is clear that the students are transferring what they know from Spanish to English.

While spelling in English is definitely influenced by Spanish, the children's English spelling

errors are logical. There is a strong correspondence across languages with regard to approach,

ideas/content, form and use of conventions.

English Errors – An interesting finding of the qualitative analyses was that the English

errors were just as likely to be "typical of English monolingual speakers" as they were "ELD."

Further, there was a tendency for evaluators to classify an error as "ELD" when it was a "typical

grade level error". For example, when all of the students' English errors were compiled, the

word 'beautiful' was misspelled 10 times. It is not unusual for English monolingual children in

elementary school, especially in the primary grades, to misspell this word. However, 9

evaluators classified the misspelling of 'beautiful' as "ELD". Similarly, the word 'because' was

misspelled 114 times; 88 times the misspelling was classified as "ELD".

As can be seen in Chart 1, an analysis of Maria's English writing sample (Writing

Sample #6) demonstrates the distribution of the two types of errors. About half of Maria's

English errors are typical of English monolingual children in the early grades. The other half of

Maria's errors fall into the ELD category. The way Maria wrote "risens" for 'reasons' reveals

her use of the Spanish i for the English long e sound. Some of Maria's ELD errors involve word

choice, such as "handstanding" for 'standing on my hands' and "risens of" for 'reasons for'.

Insert Chart 1 Here
Maria's English Errors

Another example of the analyses of English spelling errors is given in Chart 2 which is a

writing sample from a second grader. About half of the misspelled words are typical first grade

mistakes and about half are ELD mistakes. It is very common for English monolingual first

graders to misspell words such as these: little, bears, with, girl, woods. Among the ELD errors

are misspellings that arise from the child's use of Spanish graphemes to represent English

sounds, such as "u" for the 'oo' sound in 'book' and "I" for the long e sound in 'she'. Another

ELD error is the substitution of the Spanish b sound for the English v sound in 'favorite' and

'have'.

Insert Chart 2 Here
My feibret buck, 2ⁿᵈ Grader

The English misspellings were sorted by strategic approach. Four categories or spelling

strategies emerged (See Chart 3). When Lili (Writing Sample # 4) wrote "a" for 'I' and "laik"

for 'like' she employed ESL Spelling Strategy 1, hearing and recording sounds in sequence using

Spanish graphemes and frequently substituting Spanish phonemes for English phonemes. When

Alicia (Writing Sample #8) wrote "cace" for "case" she employed ESL Spelling Strategy 2,

hearing/recording sounds in sequence, some use of Spanish graphemes, some substitution of Spanish phonemes, and evidence of visual knowledge of English words. When Alicia (Writing Sample #8) wrote "fruits" for 'fruits', she used ESL Spelling Strategy 3, spelling with correct letters in the wrong order. Maria (Writing Sample #6) employed ESL Spelling Strategy 4, hearing/recording sounds in sequence using English graphemes, when she wrote "wen" for 'when' and "thos" for 'those.' The researchers do not assume that there is a specific sequence to these ESL spelling strategies.

Insert Chart 3 Here
Strategies for Spelling in English as a Second Language

Bilingual Living = Bilingual Writing – A most interesting finding from the qualitative analyses is that the children's bilingual experiences are reflected in their writing. In which language an event is lived impacts the writing and produces a need for writing in two languages, that is, a need for code-switching. For example, in Maria's Spanish narrative (Writing Sample #5) about the best thing that had happened to her in school that year, she described a time when she went back and forth across the "Munky bars" three times. The term "Munky bars" is the only English phrase in her Spanish narrative.

Alicia's writing (Writing Sample # 7) about her favorite television series, "That's So Raven", is an example of a conceptual code-switch created because Alicia had lived the experience, e.g. the television show, in English. Hence, in her Spanish narrative one can see that Alicia switched to English in places that the English accurately represents her retelling of the event, such as: Dat's so raven/That's So Raven, midnite/midnight, cuntry cosins/country cousins, sicic/psychic, scare crow/scarecrow, babysitter/babysitter, Cory and Chelsey/Chelsea.

Insert Writing Sample #9 Here
Lorenso's Spanish Writing Sample, Grade 3

One of the most interesting examples of "bilingual living = bilingual writing" was written by Lorenso (Writing Sample #9) describing his visit to Moody Gardens. He wrote that he saw "gupy's" ('guppies') and "clown fish" and he learned that the favorite food of sea turtles is "jellyfish." Lorenso wrote "jellyfish", "gupy's", and "clown fish" into his Spanish narrative because he had learned the English vocabulary words while at Moody Gardens. Note that Lorenso wrote quotation marks around the word "jellyfish" which demonstrates some knowledge about how one indicates in writing that one is switching languages. Lorenso code- switched when it was appropriate for the content and context, in fact, even necessary.

Bilingual Writers Employ Multiple Strategies – This last finding reveals the complexity of emerging biliteracy: emerging bilingual writers use multiple strategies to express themselves in Spanish and in English. They employ a multifaceted approach to the tasks of writing in either language, drawing upon their knowledge of both languages and making connections across languages. Some of these strategies which were noted include: borrowing a word or phrase from the other language, intersentential and intrasentential codeswitching, substitution of Spanish phonemes for English phonemes, transfer of graphemes, and syntax transfer. These bilingual strategies are noted on the Literacy Square Writing Rubric (Apppendix A).

The following quote is an excerpt from a 3rd grader's written response to the prompt, "What is the best thing that has happened to you in your life?" A teacher who is unfamiliar with the strategies employed by emerging bilingual writers might have difficulty understanding the

child's message and perceiving any strengths of the child as a writer. There are many errors:

spelling, punctuation, capitalization, and syntax.

The Best Thing That has Ever Happened to Me
May best its wen I went ta Masapplan becas ders a oshen and Hoteles and ders a
mauten dut its cald du mauten of a debl and wal you go tu massapplan ders a brell
that its cold du brin of da debl and ders fishig and sharcs in the oshin and it's a
bich and a fan bich and a latf pepol and in a da oshen….

On the other hand, a bilingual teacher who is familiar with the multiple strategies of

emerging bilingual writers would be able to perceive the message and the strengths of the child's

content, ideas and vocabulary. An interpreted rendition would be something like this:

My best is when I went to Mazatlan because there's an ocean and hotels and there's a
mountain that is called the mountain of a devil and, well, you go to Mazatlan, there's a
trail that is called the [undecipherable] of the devil and there's fishing and sharks in the
ocean and it'sa beach and a fun beach and a lot of people and in the ocean….

Below is a list of some of the bilingual strategies employed by this emerging bilingual

writer.

1. Intersentential code-switching: "…becas ders a oshen and Hoteles…."

2. Discourse transfer: The writer has written in English connecting many phrases

   together using "and". In English this would be considered run-on sentences, in

   Spanish it is not. Spanish writing is characterized by long, long sentences.

3. ESL Spelling Strategy 1, hears/records sounds using Spanish graphemes, often

   substituting Spanish phonemes for English phonemes: "May" = 'my', "da" = 'the'.

4. ESL Spelling Strategy 2, hears/records sounds sometimes using Spanish graphemes,

   sometimes substituting English phonemes, and has some visual knowledge of English

   words: "mauten" = 'mountain', "debl" = 'devil', "ders" = 'there's'.

5. ESL Spelling Strategy 4, hears/records sounds in sequence using the English code:

   "oshen" = 'ocean', "cald" = 'called'.

The list above provides some examples of the complex behaviors in which emergent bilinguals engage when they write. The multifaceted nature of the bilingual strategies employed by emerging bilinguals is a major finding of this study.

Discussion

This study is significant because it adds to the growing body of research that establishes the positive correlations between literacy in one language and literacy in a second language. Furthermore, this paper adds a new dimension to the research in that it is focused on writing, and examines children's cross language transfer using both quantitative methodology and qualitative methodology. Not only does this paper establish that there is a positive cross-language transfer between Spanish and English, it also elucidates specifically what skills, strategies and knowledge are transferring across languages. The notion of 'negative transfer' across languages is challenged: writing behaviors that to some may be viewed as negative transfer are, in reality, evidence of using Spanish as a scaffold to English. Finally, findings from the study have specific implications for the instruction of bilingual children and for teacher education.

Emergent Bilingual Writers –   This study found that emerging bilingual writers positively transfer what they know from Spanish to English writing, thus, affirming the growing body of evidence that writing skills, as well as reading skills, positively transfer across languages, particularly English and Spanish (Carlisle, 1989; Garcia, 2004; Escamilla et. al., 2006). Emergent bilingual writers engage in complex writing behaviors to produce their narrations, utilizing multiple writing strategies simultaneously. Furthermore, in emergent bilingual writers the ability to express complex and sophisticated ideas precedes grammatical and mechanical competence. The findings indicate that emergent bilingual writers draw upon several

sources of information when writing in Spanish or English, which include the following: 1) their knowledge of the world, 2) their knowledge of Spanish, 3) their knowledge of English, and 4) intricate networks of bilingual strategies

The writing "errors" made by emergent bilingual writers are usually rule-governed and strategic in nature. About half of their English errors are errors typically made by English monolingual children in the elementary grades and about half of their English errors can be attributed to English being their second language, such as syntactic and semantic errors and spelling errors that were attributable to Spanish influence. Furthermore, living life bilingually influences the children's writing; this is especially evident when children write in one language about an experience that occurred in the other language. Bilingual living creates a need to code-switch.

Implications for Instruction – The most recent syntheses of research in the field emphasize the need for research designed specifically for emerging bilinguals in order to improve the *quality* of instruction in both languages (August & Shanahan, 2006; Gersten & Baker, 2000; Slavin & Cheung, 2003; Thomas & Collier, 2003). Additionally, these syntheses found that direct, interactive instructional approaches work best for ELLS and that ELLs need explicit instruction in the English language arts. Findings from this study offer relevant, specific implications for the instruction of bilingual children.

First of all, this study affirms that literacy development, especially writing, in English and Spanish is a good idea. Learning to write in Spanish is helpful to learning to write in English. The findings corroborate the argument that writing instruction provides a powerful means for cross language transfer (Carlisle & Beeman, 2000; Carlo & Royer, 1999; Escamilla, Geisler,

Ruiz & Hopewell, 2006). Teachers would do well to support their emergent bilingual writers by making explicit cross language connections between Spanish and English.

The findings of this study underscore the value of teachers examining the writing development of bilingual children in both Spanish and English. A comprehensive assessment of emergent bilingual writers must include an examination of their processing in and across languages. This requires that the teacher be bilingual and have training in the assessment of bilingual writers. The authors suggest that a monolingual teacher should work with a bilingual colleague to assess the writing of bilingual children.

Implications for Teacher Development – Teachers of emergent bilingual writers need specific training in order to understand how these children process in each language and across languages. What do teachers of emergent bilingual children need to know in order to better support the children's literacy achievement? The following list arises from the findings of this study. 1) Literacy skills, including writing, positively transfer from Spanish to English. 2) Comprehensive writing assessment of emergent bilingual writers must include analyses of their writing in both Spanish and English, of how they children process in each language and across languages. 3) Emergent bilingual children's writing process is complex and characterized by multifaceted, strategic, rule-governed behavior. Writing behaviors that to some may be viewed as negative transfer are, in reality, evidence of using Spanish as a scaffold to English. Teachers need to be familiar with the similarities and differences of Spanish and English and to know the strategies frequently employed by emergent bilingual writers. There is logic to most of the children's writing errors. For example, there is a huge difference between rule-governed behavior in misspellings and the random strings of letters often produced by young children in the earliest stages of writing development. 4) The ability of emergent bilingual writers to

express complex ideas precedes grammatical competence. 5) Bilingual children are frequently

asked to write narratives about their lives. Teachers need to know that writing in one language

about an event that was lived in another language is an experience that invites the children to

code-switch.

 Further Research Needed – Usually the language and literacy development of Spanish-

English bilingual children in the United States is compared to "normal" or "common"

development of monolingual English-speaking children or monolingual Spanish-speaking

children. While this study adds to the literature on the nature of the development of biliteracy of

Spanish-English bilingual children in the United States, more research is needed about the

"normal" paths of literacy and language development of these children. Additionally, educators

need more specific methods that are proven to work with emergent bilinguals, such as specific

instructional strategies to use to make explicit cross language connections between Spanish and

English.

 Conclusion – In conclusion the authors emphasize how important it is that teachers of

emerging bilingual writers understand the complex ways in which these children work across

languages building up bilingual networks of information. This is essential in order to increase

the academic achievement of ELLs. Teachers must recognize the multiplicity of bilingual

strategies the children employ in order to: 1) perceive the intended meanings and processing

behaviors of the children, and 2) to make the most accelerative instructional moves. Gordon

Wells (1986) wrote "…that children are active meaning makers and that the best way in which

adults can help them to learn is by giving them evidence, guidance, and encouragement" (p.

215).

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Appendix A

Literacy Squared Writing Rubric

Literacy Squared Writing Rubric: Grades 1-3

SPANISH SCORE	LEVEL	CATEGORIES & CRITICAL DESCRIPTORS: CONTENT	ENGLISH SCORE
	7	Superior/Excellent Writing: Creativity that reflects children's literature	
	6	Highly competent Writing: Varying sentence patterns	
	5	Competent Writing: Sense of completeness	
	4	Transitioning Intermediate Writing: More than 2 ideas, main idea discernable, may be incomplete	
	3	Beginning Writing: 2 ideas	
	2	Beginning Writing: 1 idea	
	1	Prewriting: Not readable or incomplete thought. (Also, written in a language other than the prompt.)	
	0	The student did not prepare a sample	

PUNCTUATION				SPELLING			
SPANISH SCORE	LEVEL	DESCRIPTORS: PUNCTUATION	ENGLISH SCORE	SPANISH SCORE	LEVEL	DESCRIPTORS: SPELLING	ENGLISH SCORE
					4	Accurate spelling	
	3	Accurate punctuation			3	Some spelling errors; Mostly correct	
	2	Some punctuation errors; Mostly correct			2	Many spelling errors; Meaning not affected	
	1	Many punctuation errors-meaning not affected, or minimal punctuation used			1	Many spelling errors; Sometimes affects meaning	
	0	Punctuation errors affect meaning, or no punctuation			0	Spelling errors affect meaning	

Common ELD Errors	Bilingual Strategies	Common Grade Level Errors
	• Interesentential Code switching (I love my new ropa) • Intrasentential code switching (Begins in one language and ends in the other) • "" inserted to indicate knowledge that a word is borrowed from another language (vimos el "jellyfish") • Bidirectional phonetics transfer (japi/happy) • Bidirectional phonetics transfer (The bike of my sister) • Other?	

Literacy Squared Rubric: Grades 1-4

Level	Critical Descriptors	Category
7	Complete story or summary that demonstrates consistency, Creativity, and that reflects grade level literature.	Superior Writing
6	Complete story using varied sentence structures and/or descriptive vocabulary	Highly Competent Writing
5	Sense of completeness Has connecting or transitioning words Logical sequence	Competent
4	More than 2 ideas The main idea can be inferred or stated explicitly Story or summery may be incomplete	Transitioning Intermediate Writing
3	Two ideas (not necessary separate sentences)	Beginning Writing
2	One idea within a story or summery (not necessary within the same sentence)	Emergent Writing
1	The sample does not have complete thoughts that can be easily understood. The sample may have letters, syllables, and/or various words, but it does not have a complete thought. Written in a language other than the prompt	Prewriting
0	The student did not prepare a sample	No Writing

ASSUMPTIONS:
- Critical descriptors are cumulative. To receive a 7, the student must exhibit all of the relevant indicators listed in the previous levels.
- Students should write to the prompt.
- "Logical" order means any order that would be appropriate in EITHER Spanish or English. A Monolingual reader may need to consult a bilingual colleague to determine wether or not the order is logical.
- Spelling should be analyzed by a bilingual person.

Appendix B

Procedures for Research Team to Use to Evaluate Literacy Squared Writing Samples

(Note: You are Rater # ___. You will only mark papers with your Rater # at the top.)

1. It is important that you follow these steps in the suggested order.
2. Use the Literacy Squared Writing Rubric.
3. Work with one students' pair of Spanish and English writing samples before proceeding to assess another student's writing.
4. First, read the student's Spanish writing sample. Next, assign a Content score. Third, assign a punctuation score. Last, assign a spelling score.
5. Next, read the student's English writing sample. Then, assign a Content score. After that, assign a punctuation score. Last, assign a spelling score.
6. Now, lay the writing samples side. Analyze the English errors; code them in the following manner:

<u>Typical Monolingual English Error</u>	Draw a single line (error) underneath an error that is an error that is common or typical of English monolingual children in the elementary grades.
<u>ELD Error</u>	Draw a line (error) underneath an error that is a typical English language development error. For example, English language learners frequently misspell words with double consonant endings: "star" for 'start', "aroun" for 'around', "kill" for 'killed'

7. Then, circle words on both English and Spanish writing samples where the child uses code-switching. For example, in Spanish writing the child writes "store" instead of 'tienda', or in English writing the child write "horno" instead of 'stove'.
8. With the two writing samples still side-by-side, place check marks in the Bilingual Strategies box to indicate bilingual strategies the child employed.
9. Note any comments or questions about the writing samples on the score sheet.
10. Finally, attach the rubric to the child's writing samples.

Table 1

Literacy Squared 2005-2006 Spanish and English Writing Outcomes

Grade	N	Minimum	Maximum	Mean	Std. Deviation
Grade 1					
Spanish Writing Overall	200	0	12	6.85	2.781
English Writing Overall	200	0	10	4.58	2.352
Valid N (listwise)	200				
Grade 2					
Spanish Writing Overall	221	0	13	7.84	2.443
English Writing Overall	221	0	12	5.44	2.571
Valid N (listwise)	221				
Grade 3					
Spanish Writing Overall	142	0	12	8.21	2.170
English Writing Overall	142	0	11	6.15	2.640
Valid N (listwise)	142				

* Note: Mean scores are based on a total possible score of 13.

Table 2

Literacy Squared 2005-2006 Correlation Between Writing in Spanish & Writing in English

	Spanish Content	Spanish Punctuation	Spanish Spelling	Spanish Overall
English Content	.58			
English Punctuation		.48		
English Spelling			.38	
English Overall				.61

Table 3
Literacy Squared 2005-2006
Correlation Between Writing in Spanish & Writing in English, By Grade

		Spanish Content	Spanish Punctuation	Spanish Spelling	Spanish Overall
GRADE 1	English Content	.51			
	English Punctuation		.51		
	English Spelling			.43	
	English Overall				.61
		Spanish Content	Spanish Punctuation	Spanish Spelling	Spanish Overall
GRADE 2	English Content	.59			
	English Punctuation		.42		
	English Spelling			.29	
	English Overall				.59
		Spanish Content	Spanish Punctuation	Spanish Spelling	Spanish Overall
GRADE 3	English Content	.51			
	English Punctuation		.52		
	English Spelling			.45	
	English Overall				.57

Chart 1

Maria's English Errors

Typical Errors	ELD Errors
becus/because acter/actor wen/when coud/could thats/that's happend/happened	look/lock holwis/always risens/reasons risens of/reasons for handstanding/standing on my hands

Chart 2

Excerpt from Miguel's English Writing, 2nd Grader

My feibret buck
My feibret buck is the thrie letle bers. Do you hab e feibret buck? Well I do. My feibret buck starts wet a litle groal and shi went to de wuds….

Typical Grade Level Errors	ELD Errors
• Letle, litle = little • bers = bears • wet = with • groal = girl • wuds = woods	• buck = book (Spanish u for "oo" sound) • thrie = three (Spanish i for "ee" sound) • Spanish e for the English word 'a' • shi = she, i for e • feibret = favorite, b for v • hab = have, b for v

Chart 3

Strategies for Spelling in English as a Second Language

ESL Spelling Strategy 1: The student hears and records sounds in sequence using Spanish graphemes, often substituting Spanish phonemes for English phonemes.	japi = happy rices = recess evibari = everybody wy = we ov = of may = my rolorcoster = rollercoaster trein = train
ESL Spelling Strategy 2: The student still hears and records sounds in sequence sometimes using Spanish graphemes, and sometimes substituting Spanish phonemes for English phonemes. Additionally, the student's spelling reflects some visual knowledge of some English words.	Becas, becose = because hause = house burda = birthday rowom = room gongre = hungry
ESL Spelling Strategy 3: The student spells the English words using the correct letters, but the letters are not in order.	Paepr = paper aet = ate flet = felt ni = in wrold = world
ESL Spelling Strategy 4: The student hears and records sounds in sequence using the English code.	Wen = when wer = were longr = longer exidid = excited hom = home plad = played

List of Writing Samples

Writing Sample #1   Diana's Spanish Writing Sample, Grade 2

Writing Sample #2   Diana's English Writing Sample, Grade 2

Writing Sample #3   Lili's Spanish Writing Sample, Grade 1

Writing Sample #4   Lili's English Writing Sample, Grade 1

Writing Sample #5   Maria's Spanish Writing Sample, Grade 3

Writing Sample #6   Maria's English Writing Sample, Grade 3

Writing Sample #7   Alicia's Spanish Writing Sample, Grade 2

Writing Sample #8   Alicia's English Writing Sample, Grade 2

Writing Sample #9   Lorenso's Spanish Writing Sample, Grade 3

Writing Sample #1

Diana's Spanish Writing Sample, Grade 2

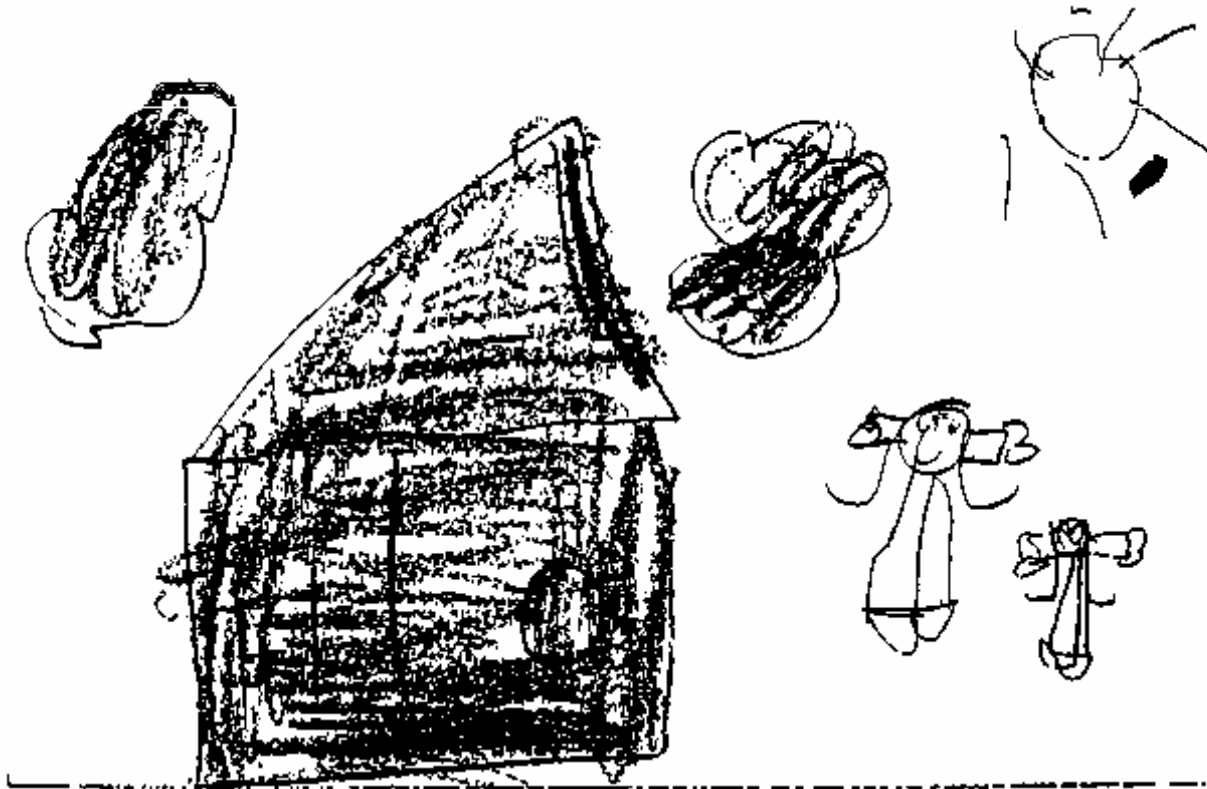Writing Sample #2

Diana's English Writing Sample, Grade 2

Writing Sample #3

Lili's Spanish Writing Sample, Grade 1

Writing Sample # 4

Lili's English Writing Sample, Grade 1

I laik Barbi Biacs e a dt

Writing Sample # 5

Maria's Spanish Writing Sample, Grade 3

Lo mejor qué me a pasado en
todo el año es cuando yo pude
ir tres veses patras y padelante en
Los Muncky bars. Primero, por-
que yo Le jugué carreras con
otra niña y Le gane. Yo me puse
muy contenta. Segundo, porque
era duro y si Lo pude hacer.
Tercero, porque era la primer-
a ves que Lo había echo. Por es-
tas razones fue La mejor casa
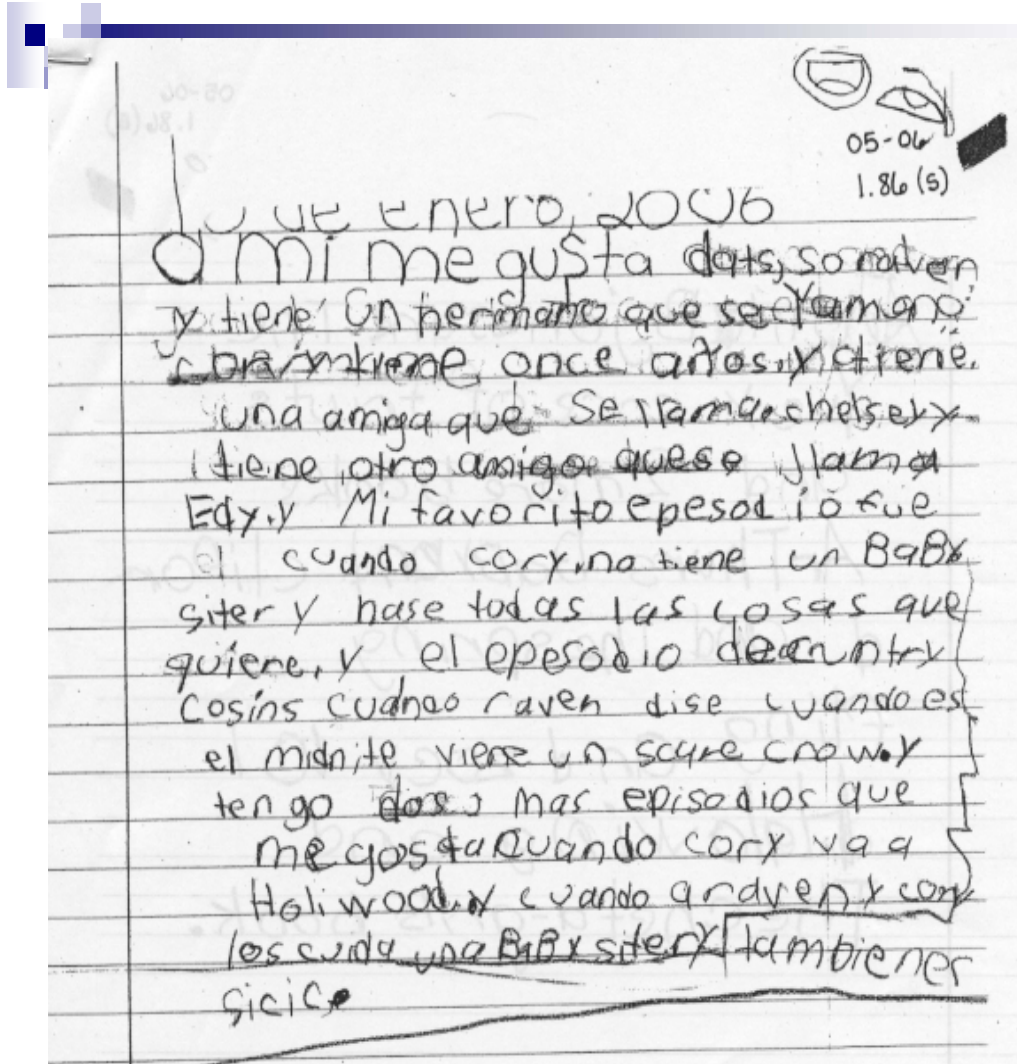qué me a paso en todo éste
año.

Writing Sample # 6

Maria's English Writing Sample, Grade 3

The best thing that has ever happend to me is wen I han-astand by my self for 30 se-conds. First, thats the best thi-ng that happend to me becus That's the longest time I coud hold my self. It is very hord. Next, thats the best thing becus I love handstanding. I halways look the door to hold me. Thed, becus wen I grow up, I want to be a Circus acter. Thos are the risens of the best thing thing ever happend.

Writing Sample #7

Alicia's Spanish Writing Sample, Grade 2

05-06
1.86 (s)

10 de enero, 2006

a mi me gusta dats, so matven
y tiene un herimano que se llamano
bra/mtiene once años y atiene.
una amiga que se llama chelsey
tiene otro amigo que se llama
Edy y Mi favorito epesodio fue
el cuando cory no tiene un Baby
siter y hase todas las cosas que
quiere, y el epesodio de countr
cosins cuando raven dise cuando es
el midnite viene un scare crow y
tengo dos mas episodios que
me gosta cuando cory va a
Holiwood y cuando andyen y con
los cuda una Baby siter y tambiener
sicico

Writing Sample #8

Alicia's English Writing Sample, Grade 2

Junie B jones and The
Yucy cace of friuts
and 2 more books
ArThurs BaBy and cliPor
d and The spring
fling and zocy 101
Halowing and
The cheta-grils book.

Writing Sample #9

Lorenso's Spanish Writing Sample, Grade 3

Lo mejor que me a pasado en la
escuela este año fue ccuando fui a
Moody Gardens. Primero fuimos a ver
diferentes tipos de peces. Vimos Guppys
y clown fish. Tambien habian cumarones.
y jaibas.
  Luego fuimos a ver estrella de
mar. Despues un señor nos dejo
tocar a unas estrellas de mar. Una
era azul una anaranjada y una morada.
El agua estaba bien fria.
  Despues fuimos a ver a las tor
tugas. Vimos muchas tortugas. Vimos
una tortuga que al lado del tanque
tenia un papel que desia que estaba
en peligro de extincion porque la
gente que va al mar tira mucha
basura y contamina el agua ti tam-
bien porque la comida favorita de la
tortuga eran los "jellyfish" y ellos se
confunden con las bolsas y los "jellyfish".