A Preliminary Model of Bilingual Writing Development for Spanish-Dominant and English-Dominant Students: Portraits from Dual-Language Classrooms.

This study investigated the writing processes of first grade bilinguals from majority- and minority-language backgrounds who were in a two-way bilingual education (TWBE) program. The program integrated native English and native Spanish speakers for all or most of the day, promoting high academic achievement, dual language and literacy development, and cross-cultural understanding for all. Researchers examined the following: how English- and Spanish-dominant first graders developed as writers in a TWBE program that used a process writing approach; trends and patterns of bilingual writing processes and skills; and the nature of the transfer of writing skills and processes from one language to the other. Researchers observed and videotaped students composing stories in Spanish and English writing workshops, collected artifacts from all stages of the writing process, and conducted interviews at the end of the writing workshops. Results highlighted similarities and differences in students' cross-linguistic skills and patterns of transfer of writing processes and skills. Patterns of bilingual writing related to code switching and literacy transfer for bilingual writers. This led to the creation of a preliminary model of bilingual writing development for such students that presents phenomena unique to bilingual writers, relates them to bilingualism and biliteracy, and proposes anticipated expression of the phenomena for students from linguistic minority and majority backgrounds. (Contains 72 references.) (SM)
A preliminary model of bilingual writing development for Spanish-dominant and English-dominant students: Portraits from dual-language classrooms

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ABSTRACT

This qualitative study investigated the writing processes of young, developing bilinguals from majority- and minority-language backgrounds. The research was situated in two grade 1 classrooms in a Two-Way Bilingual Education (TWBE) program in the Northeastern United States. A TWBE program is an educational model that integrates native English-speakers and speakers of a minority language for all or most of the day and promotes high academic achievement, dual-language and literacy development (i.e., bilingualism and biliteracy), and cross-cultural understanding for all students. The following research questions guided the study:

(a) What are the trends and patterns of bilingual writing processes and skills?
(b) What is the nature of the transfer of writing skills and processes from one language to the other?

Researchers observed and audiotaped 8 focal children as they composed stories in Spanish and English Writing Workshops (WW), collected artifacts from all stages of the writing process, and conducted interviews with focal children at the end of WW sessions. Triangulation of multiple data sources provided a comprehensive view of emergent bilingual writing behaviors, verified themes and patterns, and cross-validated regularities in the data.

Cross-case analyses of students’ individual profiles of bilingual writing processes revealed similarities and differences in their cross-linguistic skills, as well as patterns of transfer of writing processes and skills. Patterns of bilingual writing related to codeswitching and literacy transfer (both positive and negative) for Spanish-dominant and English-dominant young writers led to the development of a preliminary model of bilingual writing development for English-dominant and Spanish-dominant students. This model presents phenomena unique to bilingual writers, relates these to bilingualism and biliteracy, and proposes anticipated expression of the phenomena for students from linguistic minority and linguistic majority backgrounds.

The findings suggest that access to two languages and support for bilingualism affect both the processes of writing and the products children create, leading to the development of biliteracy and metalinguistic awareness of two languages for Spanish-dominant and English-dominant students.
Introduction and Objectives

This qualitative study investigated the writing processes of young, developing bilinguals from majority- and minority-language backgrounds as they composed stories in two languages in a Writing Workshop (WW) context. The research was situated in two grade 1 classrooms in a Two-Way Bilingual Education (TWBE) program in the Northeastern United States. A TWBE program is an educational model that integrates English-speakers and speakers of a minority language for all or most of the day and promotes high academic achievement, dual language and literacy development, and cross-cultural understanding for all students. The following research questions guided the study:

How do first-grade English-dominant and Spanish-dominant students develop as writers in a TWBE program that employs a process writing approach?

(a) What are the trends and patterns of bilingual writing processes and skills?
(b) What is the nature of the transfer of writing skills and processes from one language to the other?

The study’s principal goal, related objectives, and outcome are presented in Figure 1.
Background and Statement of the Problem

It has been shown that a child's understanding of his native language is enhanced by learning a foreign one. The child becomes more conscious and deliberate in using words as tools of his thought and expressive means for his ideas... The child's approach to language becomes more abstract and generalized... In learning a new language, [one] uses the native language as a mediator between the world of objects and the new language. (Vygotsky, 1986, pp. 160-161)

The Relationship Between the Native Language and a Second Language

Vygotsky's understanding of the relationship and interdependency of a bilingual's two languages provides a theoretical basis for investigating the linguistic and literacy processes of bilingual students. Recent research in bilingualism (Munoz-Sandoval, Cummins, Alvarado, & Ruef, 1998) asserts that the bilingual student brings to learning a linguistic repertoire that cannot be measured in a single language. Regardless of the language they are using and their particular proficiency level, bilinguals are influenced by their knowledge of another language and their cross-cultural experience. This view of the bilingual as “an integrated whole which cannot be easily decomposed into two separate parts” adopts what Grosjean (1989) has called the wholistic view of the bilingual (p. 6). Through this view, “the bilingual ... has a unique and specific linguistic configuration. The coexistence and constant interaction of the two languages in the bilingual has produced a different but complete linguistic entity” (p. 6). As such, children who can read and write in two languages or make use of two languages in any modality are exceptional sources of information on language and literacy processes in general.

Importance of Bi/literacy

Literacy is consistently associated with educational success or achievement. It continues to be a part of the cultural capital valued by our society and, thus, serves as a primary gatekeeper of educational institutions and beyond (Gutierrez, 1992). Becoming literate does not consist
merely of being able to decode the written word or language; rather it is “preceded by and intertwined with knowledge of the world” (Freire & Macedo, 1987, p. 29). Literacy, as a sociocultural process, recognizes the importance of validating and incorporating the wealth of knowledge, experiences, and resources all children bring to school. Through a sociocultural approach, the processes of reading and writing are viewed as social, cultural, and linguistic acts that are situated within a particular sociohistorical context (Vygotsky, 1978).

For students who speak minority languages, the development of biliteracy is associated with academic achievement (Collier & Thomas, 1989; Lindholm & Aclan, 1991; Ovando & Collier, 1998). Biliteracy is defined as mastery of the fundamentals of speaking, reading, and writing (e.g., knowing sound/symbol connections, conventions of print, accessing and conveying meaning through oral or print mode, etc.) in two linguistic systems (Reyes, 2001). It also includes constructing meaning by making relevant cultural and linguistic connections with print and the learner’s own lived experiences, as well as the interaction of the two linguistic systems to make meaning (Reyes & Costanzo, 1999). Research has demonstrated the importance of biliteracy for full development of proficiency in academic language, subsequent academic success (Collier & Thomas, 1989; Crawford, 1995; Cummins, 1979, 1981b, 1986, 1991; Thomas & Collier, 1997; Wong Fillmore & Valadez, 1986), as well as high levels of self-confidence for students who speak minority languages (Huang, 1992; Wright & Taylor, 1995). Cummins (1976, 1989, 1991) proposed the phenomenon of transfer, through the “Threshold Hypothesis” and “Linguistic Interdependence Principle,” in which academic skills, literacy development, concept formation, subject knowledge, and learning strategies transfer from the native language (L1) to the second language (L2) as the vocabulary and communicative patterns are developed in L2 to express that academic knowledge. Investigations of the reading process in bilinguals show
certain aspects of that process to be the same regardless of the language in which one is reading (Flores, 1981). If there is a close relation between reading across languages, it seems likely that some connection exists between the development of writing in L1 and L2.

Limitations in Current Research

Although knowledge about children’s use of written language in mainstream contexts has increased dramatically over the past twenty years, the topic of biliteracy has not received a lot of attention. In fact, little research has been conducted on biliteracy development in classroom settings. In the case of students who speak minority languages, most writing research has looked at one language or the other, but not both. The main research focus has been on the development of English (L2) writing (Chelala, 1981; Cumming, 1989; Friedlander, 1990; Halsall, 1986; Holmes & Moulton, 1994; Hudelson, 1989; Jones, 1982; Lay, 1982; Peyton, 1990; Pfingstag, 1984; Raimes, 1985, 1987; Seda & Abramson, 1990; Urzua, 1987; Wald, 1987; Zamel 1982, 1983). Grosjean (1985, 1989) has consistently criticized research that focuses on one language only as supporting a fractional, or monolingual view of the bilingual. In this view, “the bilingual has (or should have) two separate and isolable language competencies; these competencies are (or should be) similar to those of the two corresponding monolinguals; therefore the bilingual is (or should be) two monolinguals in one person” (1989, p. 4). Grosjean argues that the prevalence of this view is due to the “monolingual bias” in the language sciences, where “monolinguals have been the models of the ‘normal’ speaker-hearer, and the methods of investigation developed to study monolingual speech and language have been used with little, if any, modification to study bilinguals” (p. 4).

This monolingual bias has greatly influenced the study of writing process in bilinguals. Many L2 writing studies compare their findings to those suggested by the monolingual writing
literature. Krapels (1990) has recognized this particular limitation of much of the L2 writing research noting that "L2 process writing research does not as yet typically include comparable data on the participants' level of L1 writing. Without such information, any conclusion on L2 composing competence is tentative, at best, because research thus far hints that L1 composing competence affects L2 composing" (p. 53).

Of the few research studies that have examined both L1 and L2 writing of school-age bilinguals, an overwhelming majority are limited to analyzing the products that students write without much regard for the actual processes involved in writing (Canale, Frenette, & Belanger, 1988; Edelsky, 1982, 1986, 1989; Garcia & Colon, 1995; Howard & Christian, 1997; Kuhlman, Bastian, Bartolome, & Barrios, 1993; Reyes, 1991). Although informative, product-based studies fail to provide a complete picture of students' abilities, perceptions, and strategies used in writing. Understanding the processes by which children develop writing in both their first and second languages is critical to the design of instructional and assessment practices that are linguistically, developmentally, and culturally compatible (de Silva, 1998).

A third limitation of the L2 writing research is the focus on older students who either have already developed literacy in their native language or have developed literacy in the second language only. This leaves many unanswered questions about the development of biliteracy in young children for whom language and literacy are still in the developing stages.

Lastly, research in bilingual writing in this country has traditionally ignored native English-speaking children's development and focused instead on the language and literacy learning of students who speak minority languages in Transitional Bilingual Education or English-as-a-Second-Language programs. As a result, we know very little about how native English-speakers or English-dominant children develop writing ability in a bilingual situation. In
the last two decades, academic programs promoting biliteracy and bilingualism for native-English and minority-language speakers have become increasingly popular in the United States. One such program, Two-Way Bilingual Education (TWBE), integrates native-English speakers and students who speak a minority language and offers both groups the opportunity to develop bilingualism, biliteracy, and cross-cultural understanding. Although some researchers have documented TWBE students’ academic success and positive attitudes toward bilingualism, the development and processes of biliteracy among native English-speakers and students who speak minority languages in such programs has not been thoroughly investigated.

Significance

In contrast to much of the existing research, this study adopted a “wholistic” view of the bilingual. By looking at the processes young developing bilinguals employed while writing in both of their languages, this study viewed the developing bilingual wholistically in order to understand how s/he created text as a unique and fully competent speaker-hearer. Further, this study investigated the relationship between bilinguals’ two languages and the relatively unexplored processes of transfer, application, interference, and the relation between oral and written language.

This study addressed several gaps in the current research. First, it addressed the components of the writing process of young bilingual children as they wrote for authentic purposes in a naturalistic classroom setting. These included looking at both languages, looking at the process of writing as well as the products children wrote, and looking at young learners for whom language and literacy were in developing stages. Second, this study employed a broader definition of developing bilinguals, which included students who knew more than one language to different degrees and used these languages for a variety of purposes (Mackey, 1968). Third, a
Two-Way bilingual education program that promoted biliteracy for all students and employed a process writing approach served as the research context.

Methods

Context

The study was conducted in two first grade classrooms in a Spanish/English TWBE program, in an urban, culturally-diverse, K-5 elementary school in the northeastern United States. In particular, the study focused on Writing Workshop (WW) in each of the two classrooms, a 45-60 minute portion of the day in which students wrote in either L1 or L2. The Process Writing Approach, or WW, is an approach to the teaching of writing that was developed by Graves (1983a) and Calkins (1983, 1986) through their work in elementary classrooms. This approach stresses the notion of writing as a craft in which the writer engages in a number of individual and interactive stages as she develops an idea and expresses it in writing. Unlike traditional approaches to writing which tended to focus almost exclusively on the form of the written products, the WW emphasizes the content of writing with a focus on process. The particular classroom in which the activity occurred (i.e., English or Spanish room), determined the language of instruction, and therefore the language of children’s texts. Each story was an original piece developed by the child; topics were never assigned in WW. The focus of the stories was usually personal narratives or recounts of an event the children had experienced and wanted to share with others.

Participants

Participants in the study were four English-dominant and four Spanish-dominant developing bilingual first-grade students, with average to high L1 literacy skills and varying levels of L2 proficiency. Their ages ranged from 6.3 to 7.1 years at the beginning of the study.
Their names, ages at beginning of data collection, and dominant languages are presented in Table 1 below.

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Native language</th>
<th>Dominant language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lucielle</td>
<td>6:3</td>
<td>Spanish</td>
<td>Spanish</td>
</tr>
<tr>
<td>Katherine</td>
<td>6:8</td>
<td>Spanish</td>
<td>Spanish</td>
</tr>
<tr>
<td>Brian</td>
<td>7:0</td>
<td>Spanish</td>
<td>Spanish</td>
</tr>
<tr>
<td>Jennifer</td>
<td>6:10</td>
<td>Spanish</td>
<td>Spanish</td>
</tr>
<tr>
<td>Jeremy</td>
<td>6:11</td>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>Steven</td>
<td>7:1</td>
<td>English/Spanish bilingual</td>
<td>English</td>
</tr>
<tr>
<td>Jahziel</td>
<td>6:11</td>
<td>English/Spanish bilingual</td>
<td>English</td>
</tr>
<tr>
<td>Barbara</td>
<td>6:5</td>
<td>Spanish</td>
<td>English</td>
</tr>
</tbody>
</table>

Data Collection

The Principal Investigator and two Research Assistants collected data systematically three times a week during WW in the two first-grade classrooms over the course of five months. On any given week throughout the duration of the study, researchers collected data on three occasions: either twice in Spanish WW and once in English WW, or vice versa. During classroom visits, researchers observed focal children in all aspects of the act of writing, focusing on what they did and said. Researchers took detailed field notes of participant activities, audiotaped participant, peer, and teacher conversations and discussions, and photocopied artifacts from all writing sessions. In addition, researchers interviewed participants systematically once every two weeks at the end of a WW session in order to have the children further reflect on their writing processes. Interviews with focal children were also audiotaped. Data sources collected throughout the duration of the study included: student writing samples in L1 and L2 from all stages of the writing process; audio tapes of Spanish and English WWs, including: student-to-student talk about the writing process, student-to-teacher talk, student
“think alouds,” student talk during Author’s Circle, teacher instructional talk during mini-lessons and writing conferences, and teacher-led small and large group focused discussion about writing; field notes of observations during above-mentioned activities; audio tapes of formal and informal interviews with focal children; and field notes of observations during student interviews.

Analysis

Coding and in-depth analyses were on-going and continuous. Data sources were initially coded and analyzed with attention to stage of the writing process, behaviors/strategies observed, language of interaction/text, aspects of form and mechanics, meaning, and children’s knowledge about the writing process. Subsequent codes were formulated from the data-in-process and modified according to the constant-comparative method (Glaser & Strauss, 1967; Lincoln & Guba, 1985). Triangulation of data from the multiple data sources provided a comprehensive view of emergent bilingual writing behaviors, verified themes and patterns, and cross-validated the regularities in the data. Within and cross-case analyses were conducted in order to reveal patterns of bilingual writing process and development unique to Spanish-dominant and English-dominant students, as well as patterns of process and development exhibited by both groups.

Findings

Students’ individual profiles of bilingual writing processes revealed similarities and differences in their cross-linguistic skills, as well as patterns of transfer, or application, of writing processes and skills across languages. Patterns of bilingual writing related to codeswitching and literacy transfer (both positive and negative) for young Spanish-dominant and English-dominant writers led to the development of a preliminary model of bilingual writing development (See Appendix). This model presents phenomena unique to young bilingual writers, relates these to
bilingualism and biliteracy, and proposes anticipated expression of the phenomena for students from similar backgrounds.

The following is an overview of the major findings and themes that emerged from the research, focusing on the three phenomena that form the basis of the proposed model of bilingual writing development for Spanish-dominant and English-dominant children. Examples representing each of the phenomena are provided.

**Positive Literacy Transfer**

Developing bilingual writers appropriately applied skills learned/used in one language to the other language. Most processes/skills exhibited by each of these developing bilingual writers were applied cross-linguistically. Two types of processes/skills were observed within this phenomenon, each exhibiting slightly different transfer patterns. First, immature processes/skills were defined as processes and skills that are developmental and temporary. The expected transfer pattern for these literacy processes was complex since these behaviors were temporary scaffolds that either were discarded or eventually developed into parallel mature literacy processes/skills. For Spanish-dominant and English-dominant students, immature literacy processes and skills first appeared in the L1, then in both L1 and L2, then in L2 and then in neither language. Second, mature literacy processes and skills were defined as those that once learned or acquired are maintained. For Spanish-dominant and English-dominant children, the transfer pattern exhibited was from L1 to L2. In both cases, transfer was contingent upon a developing bilingual’s relative strength in L1 and L2 literacy, that is, her biliterate development.

Throughout the study, Brian, a Spanish-dominant student, exhibited literacy scaffolds (i.e., immature literacy processes/skills) first in the Spanish context only, then in both the Spanish and English contexts, then in the English context only, then in neither context. For
example, at the beginning of the study Brian pointed to words while reading his own writing and overgeneralized the use of print conventions while creating Spanish texts. When he began to write English texts, he was observed to apply these immature writing behaviors in that context as well. As his L1 literacy skills developed, these literacy scaffolds were no longer necessary and he stopped applying them in the Spanish context, although he continued to apply them in the English context. Toward the end of the study, Brian no longer applied these literacy scaffolds in either context as his literacy skills in both languages developed and he no longer needed to rely on these scaffolds to create text.

An example of immature and mature literacy processes/skills exhibited by an English-dominant student, Barbara, involved her developing knowledge of print conventions. Before Barbara had command of the basic rules of punctuation, she was observed to overuse linking words such as “and”/“y” to join simple sentences (i.e., an immature process/skill). As her knowledge of print conventions and the rules of punctuations developed, Barbara began to punctuate simple sentences more effectively and consistently, while experimenting with various linking words to connect her ideas (mature process/skill). The examples below highlight Barbara’s use of this strategy in her English writing (linking words underlined for emphasis; student spelling unchanged).

Example of an immature literacy process/skill: “Joins simple sentences (often overusing the same connectors)” – English-dominant student

“*And then when I went to my babys cousin house we went to my house and we Playd a lot of things and we had a lot of fun!*”

Barbara, March 13, English WW
Example of a mature literacy process/skill: “Uses a variety of linking words”
- English-dominant student

“First we went where we had to go with the car. Then we got in one airplane and when we got out we went to another place. Then we went in a car and we got there. The next day we woke up and we took a boat. I put on my Budinsut and we went to the beach. And when we came back we said good night. The next day we went to the pull and they threw fish in the pull. And when we woke up it was time too go home. It was rilliey cool and fun! When we went to the Beck.”

Barbara, May 16, English WW

Interliteracy

Further, developing bilingual writers inappropriately applied language-specific elements of literacy of one language to the other. Interliteracy was defined as the written language parallel to a developing bilingual’s oral interlanguage (Larsen-Freeman & Long, 1992). This phenomenon of developing bilingual writing has two components: the temporary misapplication of linguistic elements of literacy of one language to the other, and the misapplication of print conventions of one language to the other. Several examples, representing each of the components of interliteracy, are presented below. Note that the misapplications are underlined for emphasis in each example.

Example 1. Steven (English-dominant student) misapplied sentence structure from the other language (word order for possessive in English applied to Spanish writing)

Teacher: ¿Que bueno! Estan guardando ideas. ¿Y ese cuento de que va ser?
(Translation: How wonderful! You’re saving your story ideas. And what will that story be about?)

Steven: (Researcher’s Note: Steven had written “casa” on a “Future Story Ideas” sheet)
De cuando yo fui para la casa de ... de mi... mi prima
Preliminary model of bilingual writing development

Teacher: ¿Y solo la palabra “casa” te ayuda acordarte de tu idea para un cuento?
(Trans: And only the word “house” helps you remember your story idea?)

Steven: casa...
(Pause)
Steven: (Researcher’s Note: Steven inserted word “prima” before word “casa”) (rereading:) prima casa

Steven, February 29, Spanish WW

Example 2: Lucielle (Spanish-dominant student) directly translated a phrase from Spanish and misapplied it to her English writing

Lucielle: (rereading what she’d just written on her plan) Twenty one from February I went to sleep over...

Lucielle, February 28, English WW

Example 3. Jennifer’s (Spanish-dominant student) misapplication of sentence structure from Spanish to English

<table>
<thead>
<tr>
<th>Jennifer’s misapplication of sentence structure from Spanish to English</th>
<th>Standard English orthography</th>
<th>Acceptable English version</th>
</tr>
</thead>
<tbody>
<tr>
<td>We whata to the housu of my ands.</td>
<td>We went to the house of my aunt’s.</td>
<td>We went to my aunt’s house.</td>
</tr>
<tr>
<td>We salovoraete the bordae of my mom.</td>
<td>We celebrate the birthday of my mom.</td>
<td>We celebrated my mom’s birthday.</td>
</tr>
<tr>
<td>Thae gefe porasans to the baebey off my ans.</td>
<td>They give presents to the baby of my aunt’s.</td>
<td>They gave my aunt’s baby presents.</td>
</tr>
</tbody>
</table>
Example 4: Brian (Spanish-dominant student) misapplied sound-symbol relationship from Spanish to English

Brian: (rereading:) jugamos...
Brian: (encoding:) un... jue-go... que...
Brian: (rereading:) un juego que
Brian: (encoding:) se... lla-ma...
Brian: (took out spelling sheet to get spelling of "Secret Agent"; writes "Secrt allet")

Brian, April 25, Spanish WW

Example 5. Jennifer’s (Spanish-dominant student) misapplication of sound-symbol relationships from Spanish to English

<table>
<thead>
<tr>
<th>Jennifer’s invented spellings in L2-context</th>
<th>Standard English orthography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frayday</td>
<td>Friday</td>
</tr>
<tr>
<td>Lucat</td>
<td>Look at</td>
</tr>
<tr>
<td>gat autu</td>
<td>got out</td>
</tr>
<tr>
<td>Clous</td>
<td>clothes</td>
</tr>
<tr>
<td>Mines</td>
<td>minutes</td>
</tr>
<tr>
<td>Si</td>
<td>see</td>
</tr>
<tr>
<td>Gou</td>
<td>go</td>
</tr>
<tr>
<td>Pori</td>
<td>party</td>
</tr>
<tr>
<td>Tu</td>
<td>too</td>
</tr>
<tr>
<td>Liro</td>
<td>little</td>
</tr>
</tbody>
</table>

Example 6: Steven (English-dominant student) misapplied an English language convention to Spanish writing (orthographic rule—“silent ‘e’”)

[Researcher’s Note: Steven is in the process of drafting a story. He is not sure how to spell “fuimos” (we went), so he takes out a spelling sheet to learn the word.]

Steven: (encoding on spelling sheet) ¡Fui... mos!
(Researcher’s Note: Steven wrote “fuimos”, then added “e” at end of word; word now spelled “fuimose”)

Steven, February 29, Spanish WW
Example 7. Barbara (English-dominant student) misapplied an English print convention (capitalizing the first person singular, "I") to its Spanish equivalent; also misapplied English sentence structure in her Spanish writing (possessive word order).

"Cuando Yo durmi ande LiLianas casa."

Barbara, March 17, Spanish WW

The two components of interliteracy appeared to have somewhat different patterns of transfer. First, the misapplication of language-specific elements of literacy first occurred in L1-only, then occurred temporarily in both L1 and L2, and then in L1-only for both Spanish- and English-dominant students. Second, the misapplication of print conventions might have a dual pattern of transfer for Spanish-dominant students. Initially, these students applied language-specific print conventions in L1, then in both L1 and L2, and then in L1-only. In addition, some Spanish-dominant students applied language-specific print conventions in English-only, then temporarily in both English and Spanish, and then in English-only. The latter transfer pattern was also the expected one for English-dominant students. Interliteracy was contingent upon both bilingual and biliterate development.

**Strategic Codeswitching**

Developing bilingual writers used their full linguistic repertoire in the process of creating L1 and L2 texts. With few exceptions (e.g., vocabulary that is related to American popular culture, names of places, restaurants, theme parks, etc., that have no equivalent in the other language), the texts developing bilingual children created were monolingual. Table 2 shows examples of an English-dominant child's (Jahziel) written codeswitches and/or use of loan words in his Spanish texts. Table 3 gives examples of Katherine's (Spanish-dominant) written codeswitches.
Table 2. Examples of codeswitches in Jahziel’s (English-dominant student) Spanish writing

<table>
<thead>
<tr>
<th>Jahziel’s original written codeswitch and/or loan word</th>
<th>Standard English Orthography</th>
<th>Possible Spanish version(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disney on ice</td>
<td>Disney on Ice</td>
<td>Disney en el hielo</td>
</tr>
<tr>
<td>snow cone</td>
<td>snow cone</td>
<td>granizado, cono de hielo, cono de nueve</td>
</tr>
<tr>
<td>Jimeny crikcet</td>
<td>Jiminy Cricket</td>
<td>El grillo Jiminy</td>
</tr>
<tr>
<td>Buaty and the Beast</td>
<td>Beauty and the Beast</td>
<td>La bella y la bestia</td>
</tr>
<tr>
<td>Mickey Mouse</td>
<td>Mickey Mouse</td>
<td>el Ratón Mickey</td>
</tr>
<tr>
<td>ronaLD Duck</td>
<td>Donald Duck</td>
<td>el Pato Donald</td>
</tr>
<tr>
<td>toy Story</td>
<td>Toy Story</td>
<td>El cuento de los juguetes</td>
</tr>
</tbody>
</table>

Table 3. Examples of written codeswitches in Katherine’s (Spanish-dominant student) writing.

<table>
<thead>
<tr>
<th>Katherine’s original written codeswitch and/or loan word</th>
<th>Standard English Orthography</th>
<th>Possible Spanish version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disney world</td>
<td>Disney World</td>
<td>El mundo de Disney</td>
</tr>
<tr>
<td>qucau</td>
<td>cookout</td>
<td>Barbacoa</td>
</tr>
<tr>
<td>bresap</td>
<td>dress-up</td>
<td>juego de vestirse</td>
</tr>
<tr>
<td>Storatlaro</td>
<td>Stuart Little</td>
<td>Stuart el pequeno</td>
</tr>
<tr>
<td>pisa</td>
<td>pizza</td>
<td>(no translation)</td>
</tr>
</tbody>
</table>

In contrast, the writing processes of these developing bilingual writers were clearly bilingual to different degrees. Spanish-dominant and English-dominant children exhibited different patterns in their oral use of strategic codeswitching, depending on several different factors. Spanish-dominant children used English and Spanish in the process of creating Spanish texts; some also used both languages in the process of creating English texts. For example, Lucielle, a Spanish-dominant student, sometimes exhibited codeswitching and sometimes did not. Specifically, she talked with others to plan and revise her own writing in English and in Spanish but she also talked with others switching codes to plan and revise her own writing. In other words, regardless of the language context of the classroom and the text she was creating, Lucielle occasionally used the other language during her planning process. It was not just the use
of L1 during L2 writing, Lucielle also used English while writing in L1. This was also the case for voicing thoughts while writing, telling others what had been written, and sharing ideas for writing with peers and teachers.

English-dominant children, however, were only observed to codeswitch between their two languages while creating Spanish texts. For example, the most obvious aspect of Jeremy's (English-dominant student with relatively limited Spanish skills) writing behavior in the Spanish WW context was the bilingual nature of the process he employed to produce a Spanish text. As Jeremy wrote, he used English in all stages of the writing process (i.e., planning, drafting, revising and editing). Like Lucielle, Jeremy participated (with codeswitching) in group brainstorming activities to elicit ideas and information before writing, shared ideas for writing with peers or teacher switching codes, and talked with others switching codes to plan and revise own writing. But unlike Lucielle, he did not participate in these processes \textit{without codeswitching} to English. Jeremy always rehearsed his L2 stories in English and wrote his story ideas on a recount graphic organizer in English. When it came time to produce the Spanish text, Jeremy almost always relied on translation help from peers and/or teachers.

\begin{quote}
\textbf{Jeremy:} I don't know what the title was... 'cause I don't know how to say "it". How do you say "it" in Spanish?
\end{quote}

\begin{quote}
(Pause) ... \textbf{Jeremy:} (rereading his plan) Fleet Center in Boston...
(Pause) ... \textbf{Barbara:} Barbara, Barbara!
\end{quote}

Thus, children’s ability and facility to codeswitch was contingent upon several factors, including the relative strength of L1 and L2 (i.e., language dominance), their bilingual
development, the linguistic context, and the corresponding language proficiencies of their interlocutor(s).

Discussion

The main research question of the study called for an examination of the writing development of English-dominant and Spanish-dominant students in a TWBE program that employs a process writing approach. In particular, the study addressed (1) the trends and patterns of bilingual writing processes and skills, and (2) the nature of the transfer of writing skills and processes from one language to the other. Although theories of second language and literacy acquisition imply the existence of cross-linguistic aspects of language and literacy, they do not provide specific information about what these aspects may be. Cummins' (1981a, 1981b, 1991) interdependence hypothesis and the notion of a common underlying proficiency suggest that literacy-related aspects of bilinguals' proficiency are transferable, or independent, across languages. Subsequent studies establish a connection between L1 and L2 literacy, but neither identify which skills transfer and which do not, nor do they specify how the process of transfer actually occurs. The results from the present study begin to fill some of these gaps in our current understanding of cross-linguistic literacy transfer, and lend support to the proposed model of bilingual writing development. This model presents phenomena unique to bilingual writers, specifying particular types of processes/skills that are applied cross-linguistically, relates these to bilingualism and biliteracy, and proposes anticipated transfer patterns for Spanish-dominant and English-dominant developing bilingual writers.

Positive Literacy Transfer

Bilingual children in the present study developed spontaneous biliteracy, that is, the acquisition of literacy in Spanish and English without formal instruction in both languages.
(Reyes, 2001). Like the children in Homza’s (1995) study, these Spanish-dominant and English-dominant children had been receiving literacy instruction only in their dominant language prior to the current study. Yet, when the children began writing in both languages, they employed the majority of their writing-related behaviors and skills cross-linguistically. They were developing two written language systems by applying what they knew about L1 writing to L2 writing. In sum, they applied specific hypotheses, more general strategies, and abstract knowledge about language and literacy to both languages (Edelsky, 1989).

The current findings suggest that developing bilingual children’s cross-linguistic strategies and behaviors involve immature literacy processes/skills. Immature behaviors are related to the processes of encoding, spelling, monitoring, punctuation, capitalization, editing, and revising. These temporary behaviors have been documented in earlier studies of young monolingual writers. For example, the language of these young bilingual writers during the act of composing, like that of their monolingual counterparts, was characterized by procedural statements and rereading for sense making (Childers, 1981; Clay, 1977; Graves, 1983b; Sipe, 1998). In the current study, both Spanish-dominant and English-dominant developing bilingual writers applied these monitoring strategies cross-linguistically, that is, in the process of creating both L1 and L2 texts. Edelsky (1989) also documented these types of temporary literacy scaffolds that provide children opportunities to construct, revise, and abandon “hypotheses” in her work with young Spanish-dominant writers in a TBE program (p. 87).

Children in this study based much of their encoding on sound-symbol relations and many of their early, unconventional writing segments on the syllable. Other researchers (Clay, 1975; Ferreiro & Teberosky, 1982; Perez, 1994) also found the syllable to be an important unit in young children’s acquisition of written language.
Data from these participants indicated that immature literacy processes disappear or develop into mature literacy processes. Mature processes/skills involve behaviors that once learned are maintained (e.g., correct punctuation, conventional spelling). Similarly, Sipe (1998) found that monolingual children’s outward expression of cognitive processes during writing become internalized as they learn to control the processes of encoding. Once their verbalization and metacognition become internalized, children begin to focus more on the meaning of the text they are creating. The developing bilingual children in this study verbalized less toward the end of first grade as they gained control of immature literacy processes, such as encoding, in the L1.

As indicated in the proposed model of bilingual writing development, young bilingual writers first learn to control these processes in L1 while still outwardly expressing cognitive processes in L2. Eventually, these early writing processes will be mastered in L2 as the child further develops that language and learns the appropriate phonetic system and language-specific conventions of print.

It should be noted that the transfer process of immature and mature literacy skills is not a fixed one and may depend on a bilingual’s general language proficiency and literacy development. For example, not all immature processes/skills that have been developed in the L1 will necessarily transfer to the L2 if the child learns the parallel mature literacy process/skill first. In this case, the mature process is learned in the L1 and then transferred to the L2, bypassing the transfer process for the parallel immature literacy skill. This transfer pattern is consistent with Cummins’ (1981a) Common Underlying Proficiency model.

Some mature literacy processes/skills were observed in the L2-context only for some children, seemingly contradicting the proposed direction of transfer as explained by the model of bilingual writing development. However, particular behaviors documented in one language
context only represent those processes/skills that were observed within the parameters of the study; absence of the behaviors does not necessarily mean that the child had not developed the particular behavior/skill in the other language. Rather, it may very well be the case that limitations related to data collection or analyses prevented the observation of the particular behavior/skill in the L1 context. The assumption is that if a child exhibits a behavior/skill in one language, he/she has access to this behavior/skill in the other language (Cummins, 1981a; 1981b; 1991).

Developing bilingual writers demonstrated an understanding of such literate practices as abstract knowledge of the sound and structure of language and vocabulary in two languages. Although an examination of this type of knowledge is beyond the scope of the current work, it is important to note that metalinguistic awareness, (i.e., the general ability to manipulate language as a formal system) is characteristic of young developing bilinguals (August & Hakuta, 1997; Hoffman, 1993; Lyon, 1996; Reyes, 2001; Romaine, 1995).

Interliteracy

Cummins (1991) suggests that transfer primarily involves conceptual knowledge and not specific linguistic elements. In the current study, young bilingual writers applied several language-specific linguistic elements of literacy and/or print conventions to the other language in the process of developing two written language systems. L1 and/or L2 writing samples of some Spanish-dominant and English-dominant children showed characteristics of transitional writing (Routman, 1994). That is, while much of the writing is standard, there is still use of inventive spelling and inconsistency in use of punctuation as these young writers are still developing their languages and literacy in these languages. Like the children in Reyes’ (2001) study, invented spelling in L2 sometimes relied on L1 phonology (i.e., children wrote words as they pronounced
them based on the sound-symbol correspondence that is related to their L1). Some Spanish-dominant children also misapplied L2-specific sound-symbol correspondence to L1 text.

The phenomenon of interliteracy, or the inappropriate application of language-specific elements of literacy, is contingent upon a student’s bilingual and biliterate development and is parallel to their oral interlanguage. Interliteracy, thus, represents growth of biliteracy and not a backward developmental progression. That is, when children misapply language-specific elements they are exhibiting general literacy knowledge, although they may not know particular elements or conventions of one of their languages. As their languages develop and literacy in those languages advances, the occurrence of interliteracy diminishes and will likely disappear.

It should be noted that not all language-specific print conventions were misapplied across languages. Two, in particular, seemed to be ‘off limits’ to interliteracy. For example, children applied accents only to Spanish text and apostrophes only to English texts. The language-specific nature of these conventions was clear to the children from the beginning of the study. This awareness may have been due to specific instruction, prevalence in available print resources, or a combination of both.

**Strategic Codeswitching During the Writing Process**

All developing bilingual children codeswitched in the process of composing texts. Patterns of codeswitching were related to the classroom or language context, a child’s language dominance, and the interlocutor’s target language proficiency. Some Spanish-dominant children codeswitched in both L1 and L2 contexts, while one child only codeswitched in the L1 context. Homza (1995) found related patterns of codeswitching for Spanish-dominant bilingual writers. That is, regardless of the language of the text, the children’s other language was typically involved in the writing process to some degree.
On the other hand, English-dominant children only codeswitched in the L2 context (with two exceptions noted below). Young bilingual writers used their L1 while writing in L2 to monitor their writing and to ask questions during writing (Halsall, 1986; Hudelson, 1989). The least Spanish-proficient child rehearsed in L1 whether creating text in L1 or L2. Homza (1995) found a similar pattern in Spanish-dominant children of low English-proficiency: children prepared stories in the native language whether the target language of the text was L1 or L2.

In contrast to patterns of oral language use around the creation of text, developing bilingual children understood text to be mostly monolingual. When written codeswitches did occur, they were highly consistent with classroom oral language patterns: students generally did not codeswitch to Spanish in English essays but did codeswitch to English in some of the Spanish essays (Howard & Christian, 1997). Written codeswitches were usually related to American popular culture or proper names of places children had visited for which no equivalent term existed in the other language (e.g., Pokemon, Disney World). Two interesting exceptions of written codeswitches in English texts involving English-dominant children exemplify another strategy used by the children. Both Barbara and Jeremy wrote stories about trips to Latin American countries that included written codeswitches related to their experiences in these countries. Specifically, Barbara wrote about an uncle she visited in the Dominican Republic, “tio Melvin,” and food she ate on this trip, “jamon.” Jeremy visited Cuba during school vacation and wrote about “La Habana,” describing places he visited throughout the city. It should be noted that both children knew the English equivalents of these terms and thus their codeswitches do not represent gaps in L1 or L2 vocabulary, as documented in the corresponding WW transcripts. While these examples are exceptions to the general trends exhibited by students in the English-context, they represent a type of strategic codeswitching that has been documented in older
bilingual writers. Friedlander (1990) found that writers who use the language related to the acquisition of the topic knowledge “write better texts containing more content, and create more effective texts” (p. 112). Perhaps Barbara and Jeremy’s use of topic-related vocabulary brought back vivid memories of their experiences, helping them remember more details to include in their stories. Or maybe the codeswitches represent purposeful stylistic choices the children made while preparing and drafting their texts.

One other type of written codeswitch occurred in Spanish texts only. Some children used Spanish hybrid terms stemming from English words [e.g., Katherine’s use of “cucao” (cookout) and Steven’s use of “deiqueal” (daycare)]. Homza (1995) also found that children frequently used loan words in their Spanish texts that were related to their experiences in English. Children’s use of these types of words illustrate not only the influence of English on the Spanish lexicon, but, more important, that these children have learned common colloquialisms from their Dominican-American community. This suggests at least an early sociolinguistic competence on their part (Reyes, 2001).

Conclusion

The current findings suggest that access to two languages and support for bilingualism and biliteracy affects both the processes of writing and the products developing bilingual children create. The phenomena of positive literacy transfer, interliteracy, and strategic codeswitching were evident through children’s talk and behavior during the writing process. Children’s texts contained further evidence of positive literacy transfer and interliteracy, as well as lexical codeswitches. Dual-language access and support for bilingualism led to the development of writing in two languages, metalinguistic awareness of two languages, and the
creation of meaningful stories in English and Spanish by young developing bilinguals, as evidenced by both English-dominant and Spanish-dominant participants.
## Appendix: Preliminary Model of Bilingual Writing Development for Spanish-dominant and English-dominant Students in a Two-Way Program

<table>
<thead>
<tr>
<th>Phenomenon of Bilingual Writing Development</th>
<th>Definition Relative to this Model</th>
<th>Contingent upon</th>
<th>Expectation for Spanish-dominant Student in a Partial Immersion Two Way Program</th>
<th>Expectation for English-dominant Student in a Partial Immersion Two Way Program</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Positive Literacy Application</strong></td>
<td>developmentally appropriate application of cross-linguistic processes and skills</td>
<td>relative strength in L1 and L2 literacy (biliterate development)</td>
<td>What initially occurs in L1-only, occurs next in both languages, then in English only, then in neither (or)</td>
<td>What initially occurs in English-only, occurs next in both languages, then in neither (or)</td>
</tr>
<tr>
<td>A. Application of developmentally immature literacy processes and skills</td>
<td>processes and skills are developmental and temporary (disappear and/or are replaced by developmentally mature literacy processes and skills)</td>
<td>(same as above and opportunity)</td>
<td>What initially occurs in L1-only, occurs next in both languages, then in neither</td>
<td>What initially occurs in English-only, occurs next in both languages, then in neither</td>
</tr>
<tr>
<td>B. Application of developmentally mature literacy processes and skills</td>
<td>processes and skills once learned/acquired are maintained (eventually in both languages)</td>
<td>(same as above and opportunity)</td>
<td>What initially occurs in L1-only then occurs in both languages</td>
<td>What initially occurs in English-only then occurs in both languages</td>
</tr>
<tr>
<td><strong>II. Interliteracy</strong> (&quot;Negative Literacy Application&quot;)</td>
<td>Temporary inappropriate application of language-specific elements of literacy</td>
<td>bilingual development and biliterate development (i.e., relative strength of L1 and L2 and relative strength of L1 and L2 literacy)</td>
<td>(see below)</td>
<td>(see below)</td>
</tr>
<tr>
<td>A. Application of language-specific linguistic elements of writing</td>
<td>Temporary inappropriate application of linguistic elements of writing (i.e., syntax, phonology, semantics)</td>
<td>bilingual development (i.e., relative strength of L1 and L2)</td>
<td>What initially occurs in L1-only, occurs temporarily in both L1 and L2, and then in L1-only</td>
<td>What initially occurs in English-only occurs temporarily in both L1 and L2 and then in English only</td>
</tr>
<tr>
<td>B. Application of language-specific writing conventions</td>
<td>Temporary inappropriate application of writing conventions (i.e., graphophonemic relationships, orthography, print conventions)</td>
<td>biliterate development (i.e., relative strength of L1 and L2 literacy)</td>
<td>What initially occurs in L1-only occurs temporarily in both L1 and L2, and then in L1-only and (possibly) what initially occurs in English-only, occurs temporarily in both L1 and L2 and then in English-only</td>
<td>What initially occurs in English-only occurs temporarily in both L1 and L2 and then in English only</td>
</tr>
<tr>
<td><strong>III. Strategic Codeswitching</strong></td>
<td>use of one language while engaged in the process of writing the other</td>
<td>relative strength of L1 and L2 (language dominance); bilingual development and linguistic context</td>
<td>use of L1 while composing in English and/or use of English while composing in L1</td>
<td>use of English while composing in the L2</td>
</tr>
<tr>
<td>A. Strategic Oral Codeswitching</td>
<td>oral use of one language while engaged in the process of writing the other</td>
<td>(same as above)</td>
<td>use of oral L1 while composing in English and/or use of oral English while composing in L1</td>
<td>use of oral English while composing in the L2</td>
</tr>
<tr>
<td>B. Written Codeswitches</td>
<td>written use of one language while engaged in the process of writing the other</td>
<td>(same as above)</td>
<td>use of written English while composing in L1</td>
<td>use of written English while composing in the L2</td>
</tr>
</tbody>
</table>
References


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