

BILINGUALS IN AMERICA:  
STRENGTHS AND CHALLENGES

by

Alexandra Gouirand

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Alexandra Gouirand

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Terry Ford, Ph.D., Member of the Faculty

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A different language is a different vision of life.  
--Federico Fellini

Language is the blood of the soul into which thoughts run  
and out of which they grow.  
--Oliver Wendell Holmes

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## ABSTRACT

This paper examines the challenges that bilingual students face as they make their way through the American public school system. An examination of the history of the treatment of immigrants in public schools shows that deculturalization was the primary aim of education during the 19<sup>th</sup> century, and continued until Nixon signed the Elementary and Secondary Education Act, thus providing bilingual students with education better tailored to their needs. Currently, as part of the No Child Left Behind Act, bilingual programs are being replaced with English-only instruction. Next, this paper examined the relationship between cognitive development and bilingualism, establishing that such a relationship exists, albeit under specific circumstances. Finally, questions of identity, culture and language choice were examined; even English-dominant bilingual students prefer to receive some instruction in their home language, language choice is more a result of language status than of proficiency, and bilingual students do better when they receive culturally relevant instruction.

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## CHAPTER ONE: INTRODUCTION

### Rationale

America is a land of immigrants. Even before it became a nation, people from all over the world were coming here. The reasons people chose to come here were myriad: some were mercenary, others religious (Zinn, 2005). Finally, some people were brought here against their will or under false pretenses, to be enslaved or indentured. Most people, however, came to the New World because they felt that this land offered opportunities that were lacking in their birth countries.

The United States continues to attract many immigrants, although the main reason people choose to come here today is more economic in nature (Cohen & Kennedy, 2000). In 2003 (the last year for which data are available), 33 million people—over 11 percent of the U.S. population—were foreign born (Larsen, 2004). While less than nine percent of foreign-born residents were under 18 years at the time of the study, Larsen noted that “the small proportion of foreign-born in the youngest age group occurred because most of the children of foreign-born parents were born in the United State and thus are natives” (p. 3).

Because of the circumstances of its foundation, the United States does not have an official language. The fact that English is the *de facto* official language is an accident of fate, a result of the fact that British immigrants tended to be wealthier, and thus more powerful, than the rest; I could just as easily have been writing this in German or French.

In 2003 (the last year for which data are available), over 48 million people living in the U.S.—sixteen percent of the U.S. population—spoke a language other than English at home (U.S. Census Bureau, 2006). It is not unreasonable to infer that some of these people also speak English, and are therefore bilingual.

Bilingual students come with needs as varied as their backgrounds. Students who come from immigrant communities are much more likely than their native-born peers to live under the poverty line; they are more likely to drop out of high school; and their families' earnings tend to be lower (Larsen, 2004).

Many American public schools are ill-equipped to address the specific needs of bilingual and limited English proficient (LEP) students. As a result, the latter receive a haphazard education: some skip grades and others repeat them; some receive ESL instruction while others are placed directly into mainstream classrooms; others yet receive instruction in both English and their home language. To further complicate matters, LEP and bilingual students are the first victims of budget cuts, English-only proponents have successfully eviscerated many bilingual education programs, and the No Child Left Behind Act (NCLB) cuts the funding of schools that need it most.

### Statement of Purpose

Based on the premises above—namely, that the American population is increasingly non-English speaking while the American school system continues to struggle with meeting the changing population—this paper's aim is to examine the strengths, needs and challenges of bilingual and LEP students who attend

American public schools. In order to achieve this, it will address the following topics: first, this paper will make the argument that there is a positive correlation between cognitive development and bilingualism, but only when there is a high level of proficiency in both languages as demonstrated through productive skill; second, it will survey common existing systems to teach bilingual and LEP students, and argue that methods that encourage language maintenance are more beneficial to them than deficit models. Third, it will explore the complex and multilayered relationships between academic achievement, language choice, identity and learner status in order to highlight the importance of a culturally relevant education for LEP and bilingual students.

#### Definition of Terms

For the purposes of this paper, I shall define the following terms:

*Bilingual:* an individual who is conversant both in English and another language or dialect, spoken primarily at home. While this definition traditionally includes local dialects of Standard American English and American Sign Language, this paper specifically addresses the needs of bilinguals whose other language is neither a dialect of English nor American Sign Language. It is important to note that degrees of proficiency may vary widely from one bilingual individual to the other and that bilinguals are often dominant in one language.

*Limited English proficient (LEP):* students whose ability to understand and use English in an academic setting is limited.

*Achievement:* achievement is measured using a wide range of factors including, but not limited to: dropout rates, grade point average (GPA), standardized test scoring, and enrollment in college after graduation.

*Native- and foreign-born:* The U.S. Census Bureau defines these terms as follows: “The foreign born are those who were not U.S. citizens at birth. Natives are those who were born [in the U.S. and U.S. territories]—or were born abroad of at least one parent who was a U.S. citizen (Larsen, 2004, p.1).

*Cultural and national identity:* the extent to which an individual identifies with, and believes s/he is part of, a culture or country.

### Limitations

It is outside this paper’s scope to exhaustively review bilingualism in schools as it is experienced by each individual ethnic and/or linguistic group. Furthermore, this paper’s intent is not to examine the specific developmental issues surrounding deafness.

### Summary

Over 16 percent of people living in the United States speak a language other than Standard English at home; yet based on the achievement rates of bilingual students, the American school system is not prepared to address the needs of bilingual students. This paper examines the issue as follows: chapter two will provide a brief history of American educational policies as pertains to bilingual learners; chapter three will provide an overview of existing research on the relationship between bilingualism and cognitive development, a survey of

existing systems for educating bilingual and LEP students, and factors that affect achievement and language choice, such as learner status, cultural identity, and socio-economic status. Finally, chapter four will summarize and synthesize the findings presented in chapter three and, based on those findings, make suggestions for further research, especially regarding the relationships between language proficiency, identity, and cognitive development.

## CHAPTER TWO: HISTORICAL BACKGROUND

### Introduction

There was a time when immigration was not only the lifeblood of the United States' economy; it was also part of its philosophy, symbolized by the Statue of Liberty. Dedicated in 1886, the poem on the statue, by Emma Lazarus, speaks directly to this philosophy:

Give me your tired, your poor,  
Your huddled masses yearning to breathe free,  
The wretched refuse of your teeming shore.  
Send these, the homeless, tempest-tost to me,  
I lift my lamp beside the golden door! (National Park Service, 2005).

There have been several periods in American history when anti-immigrant sentiment (nativism) or xenophobia toward a specific people reached a fever pitch; these times usually occur in times of war and economic slowdown (Zinn, 2005). Perhaps the most notable examples are the internment of Japanese-Americans and German-Americans during World War II; the current incarceration of people of Middle Eastern descent at the U.S. Navy Base in Guantànamo Bay, Cuba; and several states' recent passing of draconian anti-illegal immigration laws (Associated Press, 2008; Estrada & Oppenheim, 2007; Tilden, 2008).

The nativist sentiment that prevails in today's United States has an effect on schools. Perhaps the most mediatized instance of this phenomenon is the Supreme Court's decision to reverse, in part, the University of Michigan's policy

of awarding points to racial minorities when considering their application for admission (Legal Information Institute, 2007). While it is important to draw a distinction between racial minorities and immigrants, decisions such as this one will undoubtedly affect some members of the latter group.

Another, more insidious instance of the effect of nativism on education policy is visible in the U.S. Department of Education. While the department's mission clearly commits to education all individuals, its new slogan, "Promoting educational excellence for all Americans," significantly limits that commitment by tacitly leaving out more marginalized segments of the population, i.e. resident aliens and illegal immigrants (United States Department of Education, 1980).

### Immigration and Education Policy

The concept of the high school has its origins in the common schools at the beginning of the 19<sup>th</sup> century, when the U.S. population was growing exponentially, mostly because of immigrants from Europe and Asia (Spring, 2008). The fact that the two phenomena were concurrent is no accident: schools were the ideal location to educate the newly minted Americans to their new traditions and ways of life, a process called deculturalization. Spring (2001) defines deculturalization as "...the educational process of destroying a people's culture and replacing it with a new culture" (p. 4). In this instance, schools set up to educate Native Americans, African Americans, Mexican Americans, Puerto Ricans, recent European and Asian immigrants were specifically designed to

eradicate these peoples' cultures and languages and replace it with the ostensibly superior Anglo-American culture (Spring, 2008).

The nativist sentiment that prevailed in the mid-19<sup>th</sup> century resulted in several states—most notably Texas and California—passing laws requiring instruction to be in English only; the California Legislature went so far as to suspend publication of the state's laws in Spanish (Spring, 2001). Similar policies were applied to other ethnic and linguistic minorities; interestingly, some policies, such as those concerning African Americans, were segregationist, while others—usually those concerning European immigrants—were inherently integrationist, as if to groom immigrants for eventual participation in the dominant culture (Spring 2008).

### Bilingualism and Civil Rights

It wasn't until the 1960s, and the passage of the Elementary and Secondary Education Act (ESEA) under President Richard Nixon, that educational policies regarding ethnic and linguistic minorities were significantly overhauled. Title VII of the Act, also known as the Bilingual Education Act, provided funds to establish education programs designed to meet the needs of students not proficient in English (Spring, 2001). While the Bilingual Education Act was originally written to meet the needs of Spanish-speaking students, it was subsequently amended to include any student whose primary language was not English (Stewner-Manzanares, 1988).

In 1974, 1,800 Chinese students sued the San Francisco School District, claiming that the school's lack of policy on limited English proficiency (LEP)

students resulted in unequal access to education. The school district lost; as a result, the *Lau v. Nichols* ruling changed the face of public education as deeply as had *Brown v. Board of Education* in 1954. According to the ruling in *Lau v. Nichols*, equal access to facilities, curricula, and books did not constitute equal education: it was therefore the responsibility of the school district to meet the students' educational needs regardless of language ability (Stewner-Manzanares, 1988). From this point forward, bilingual education was the de facto policy in the United States.

#### English-only policies

The backlash against bilingual education programs did not begin until 1980, when English-only organizations demanded that English become the official language of the United States and that English be the only language of instruction in schools (Spring, 2001). English-only proponents argued that while cultural diversity is an asset to the United States, the English language is “the social glue that holds this country together, making all of us, regardless of national origin, Americans” (Sundberg, 1988, p. 16).

In a twisted, post-politically correct revival of Americanization and deculturalization, English-only proponents claim to celebrate a variety of cultures but want uniformity of language, never considering that language and culture are inextricably linked. Their argument is tantamount to being pro-chicken, but anti-egg. Furthermore, they do not take into account the legacy of forced monolingualism in the United States, and its past use as a means to destroy other cultures (Spring, 2001). Another issue with English-only education is that

research suggests that young children who had little schooling in their primary language and were placed in English immersive settings upon their arrival to the United States lost the ability to communicate effectively in their native tongue but never became fully proficient in English if placed in an immersion program. As a result, their relationships with their family and community was superficial at best, and they struggled with identity issues (Wright, 2004).

Ron Unz, a California businessman, introduced Proposition 227 to the state of California in 1998. The proposition, which passed by a wide margin, replaced the state's previous bilingual education policy with one year of ESL followed by English-only immersion. Unz and his supporters claimed that such a policy would result in drops in ELL enrollments, improved test scores, and higher levels of proficiency in English. Unz subsequently introduced similar laws— Proposition 203 in Arizona and Question 2 in Massachusetts—which passed, and one—Question 31 in Colorado—which was voted down (English for the Children, 1997).

#### Consequences of English-only policies

The level of success that the English-only policies have had in California, Arizona, and Massachusetts depends on one's definition of success. Shortly after Proposition 227 was passed in California, proponents of English-only claimed it a huge success because it had raised the test scores of LEP students (English for the Children, 2000). However, a closer examination revealed that while the test scores of LEP students rose, they did not rise as much as the test scores of their English-speaking counterparts; furthermore, math scores showed

that the achievement gap had widened, not closed, since the passage of 227 (Gàndara, 2000). In addition, research found that the level of implementation of the policies outlined in Proposition 227 depended most strongly on what types of policies were in place prior to its passage and each teacher's stance on English-only (Stritikus & Garcia, 2000). Finally, and perhaps most troubling, Gàndara (2000) found that teachers were under so much pressure to ensure that their LEP students perform well on the English-language, mandatory test that they skipped literacy instruction altogether and focused on English word recognition and phonics.

#### No Child Left Behind

President George Bush's belief that "the primary objective of U.S. schools should be the teaching of English without any major support for the preservation of minority languages" (Spring 2008, p. 489) was embodied in his implementation of the No Child Left Behind Act (NCLB). Under NCLB, the focus shifted from bilingual education to English language acquisition, and monolingualism and monoculturalism were favored over multilingualism and multiculturalism (Spring, 2008). Furthermore, Bush's Secretary of Education, Margaret Spellings, has changed the slogan of the U.S. Department of Education. While the department's Congress-mandated mission is to "strengthen the Federal commitment to assuring access to equal educational opportunity for every individual, the slogan, "Promoting educational excellence for all Americans", limits the scope of the mission to U.S. citizens (United States Department of Education, 2008).

The NCLB Act, while it covers a wide range of education-related issues, intends to reform public education through the following measures:

- Tying government funding of schools to improvement in key areas, or Adequate Yearly Progress (AYP), measured exclusively through standardized test scores;
- Providing students with the opportunity to opt out of the public school system through vouchers and charter schools;
- Implementing the Reading First program in Kindergarten through third grade;
- Shifting the focus from bilingual education to English language acquisition (U.S. Department of Education, 2008).

Much ink has been spilled to chronicle the shortcomings of NCLB; in terms of the Act's impact on bilingual learners, the main issues are as follows:

#### Adequate Yearly Progress

The levels of progress (AYP) the NCLB demands, if followed through, would result in 70 percent of schools failing and consequently losing federal funding. The standard is impossible to meet; furthermore, schools with more diverse student bodies are at a higher risk of failure than their more homogeneous counterparts (Guisbond & Neill, 2004).

In addition, the NCLB disaggregates data for some populations, including for LEP learners, and requires AYP in those groups, independent of the school's progress otherwise. Problematically, LEP students, once they improve, test out of the subgroup and are reclassified as Fluent English Proficient (FEP); thus their

progress is no longer counted. Add to those factors the fact that there is a constant influx of LEP students, and schools are doomed to fail (Abedi, 2004).

#### Over-emphasis on high-stakes standardized tests

NCLB uses standardized tests as the single measurement for student proficiency; consequently, rather than a complete picture, achievement is measured through tests that seldom measure higher-order thinking skills. To compound the problem, some states use norm-referenced tests to measure progress, meaning that 100% proficiency is an unattainable goal (Guisbond & Neill, 2004). For LEP students who do not have the option of taking standardized tests in a language other than English, this means that all tests, regardless of content matter, become de facto English proficiency tests (Abedi, 2004).

#### Reading First

The Office of the Inspector General (2006) has uncovered a host of issues in the ways in which the program was implemented. Review panels were stacked with individuals who were hand-picked by the Department of Education because of their stance on certain reading programs; major conflicts of interest went unaddressed; the program director unilaterally included requirements not in the NCLB; and the Department of Education influenced some states' selection of reading programs. Perhaps most egregiously, phonics-based, sequential reading programs were strongly favored over whole-language approaches; the director of Reading First obscured those ESEA statutes with which he did not agree; some states were forced to abandon successful programs for fear of losing federal

funding (Cummins, 2007), while some districts who refused to comply with Reading First directives eventually lost their funding.

### Choice schools

Students have the option to attend private school using federal monies. However, the schools those students attend are not held to the same standards as the public schools that lose those students' portion of the funding (Stritikus & Garcia, 2000).

Six years after the passage of the NCLB, there is no evidence to suggest that student achievement has improved in any way. The assumptions on which the NCLB bases its policies are in large part erroneous: that schools are currently receiving adequate funding and are not spending those funds wisely; that standardized tests are an adequate tool to measure student performance; and that threats such as loss of federal funding are effective in bolstering achievement rates (Guisbond & Neill, 2004).

### Summary

Chapter two briefly outlined the history of public education in the United States and policies toward ethnic and linguistic minorities, from deculturalization and segregationist legislation of the 19<sup>th</sup> century, to the civil rights movement of the 1960s, and finally to the shortcomings of English-only policies and NCLB, especially as they pertain to ELL students and bilingual education.

Chapter three provides an overview of existing research regarding the role that bilingualism plays in shaping students' cultural identity and how it affects achievement rates and metacognitive skills.

## CHAPTER THREE: CRITICAL REVIEW OF THE LITERATURE

### Introduction

The strengths and challenges of LEP students and bilinguals are multifaceted and complex. This chapter discusses them in several aspects.

First, this chapter examines whether bilingualism has an impact on cognitive skills; specifically, it outlines arguments for and against. Second, it presents a brief overview of the most common methods for instructing bilingual and LEP students and highlights the strengths and weaknesses of those methods. This chapter then addresses the complex issue of culture, literacy, and language choice, and attempt to determine how identity affects academic achievement in bilingual and LEP students. Finally, it examines the relationship between expectations of success and their relation to actual achievement.

### The effect of bilingualism on cognitive skills

Researchers continue to debate what effect, if any, bilingualism has on cognitive skills. Some argue that bilingualism has deleterious effects on cognitive development (Darcy, 1953; Rodriguez, 1981), while others contend that bilinguals have a cognitive advantage over their monolingual peers (Cataldi, 1994; Cummins, 1976; Romaine, 1995). This following section presents yet a third, more tempered stance: that to understand the effect of bilingualism on cognitive skills, one must take a more comprehensive view. Other factors, such as proficiency in both languages and the sequence of linguistic acquisition (i.e.,

whether the languages were acquired simultaneously or sequentially), could strongly impact cognitive development. This section presents the experience of an expert language learner (i.e., one whose strongly developed cognitive skills allow for optimized and self-directed acquisition of language), offer differing viewpoints on the cognitive aspects of bilingualism, and present two perspectives on the cognitive aspects of foreign language acquisition.

### Metacognition

Metacognitive skills, or awareness of one's own cognitive skills, allow learners to optimize the process by which they learn. In terms of foreign language acquisition, a person with strong metacognitive skills is referred to as an expert language learner. The following study presents the experience of such a learner as she participates in an immersion program, and the linguistic and identity struggles that result from her experience.

In her diary case study, Stakhnevich (2005) studied the impact acquiring a third language in an immersion setting might have on a subject's previously acquired bilingualism, as well as the construction of a socially situated identity. The subject was the author, who spent ten weeks in Mexico learning Spanish as a L3. During that time she kept a diary where she wrote about classes she took, charted her progress as a language learner, described her interactions with native speakers and fellow students and recorded general impressions of living in a new cultural environment. The diary is the main source of data analysis. The subject is a native Russian speaker who began learning English at five; in her early twenties she moved to the United States, and this study was conducted six

years after her move – presumably when she was 26-28. The subject's inner speech is in Russian when dealing with matters related to Russia and in English when dealing with matters related to the English-speaking milieu. The subject has also had some basic exposure to French and German in a formal foreign language environment.

The subject wrote in her diary on a daily basis and as consistently as possible. The diary entries were three to five pages in length, and were typed on a laptop with multilingual capacities; the subject was thus able to type in English, Russian, and Spanish. The diary was subsequently revised and edited so as to be suitable for research purposes. Elaborations were added only when necessary; personal sections were removed. Stretches of coherent discourse were used as units of analysis, with each unit contextually separate from the next. Diary entries were loosely arranged in several general thematic categories using the constant comparative method. Categories were: proficiency evaluation, language interference, classroom learning strategies, instructions evaluation, peer interaction, learning from the immersion environment, interactions with native speakers, and self-positioning in the new environment. An applied linguist experienced in qualitative research (who also has a L1 other than English and whose L2 is English and L3 Spanish) conducted an independent coding of the data. Adjustments were subsequently made.

The diarist conducted self-assessments, the earliest of which reported her feeling frustrated because of her inability to communicate basic needs. As a result she reported feeling invisible, mute, and deaf. Levels of anxiety and stress

increased over the next two to three weeks. During weeks five and six, the learner traveled around Mexico and applied the skills she had learned over the last weeks; she reported finding her conversation skills improving, thereby feeling more free. In weeks six and seven, the learner acknowledged her own progress for the first time and felt more independent. In week eight, the diarist reported that her Spanish, as well as her English and her Russian, were slipping. In week nine the learner regressed, claiming that she felt tired; she then turned to peer support. As her stay in Mexico came to an end, the learner positively evaluated her performance as a learner based on her understanding in the environment.

The learner performed self-directed learning activities in and out of the classroom. She also re-interpreted classroom assignment to fit her self-assessed instructional needs, making teacher-initiated tasks more context dependent. The diarist became more aware that having a real purpose increased her confidence to engage in interactions in Spanish; she also mentally rehearsed interactions ahead of time. The learner began employing strategies to maximize her understanding in interactions: selective attention coupled with cognitive strategies such as deduction, grouping, and inferencing to recognize, observe, and use newly acquired language skills outside of the classroom. The learner's learning activities and strategies were characteristically bi- or trilingual: she compared and contrasted grammatical structures, lexical items, sound systems and cultural assumptions, using all her previously acquired languages as a resource. The learner engaged in code-switching, combining Spanish and English for language practice but switching to English when communicating more

sophisticated ideas. The learner used all three languages to decode and encode the texts she read for content classes.

The diarist reflected on issues surrounding language learning competency, language choice, cultural border crossing, national identity, group affiliation and professional status. While in the early weeks, the learner drew on her identity of expert language-learner to become more autonomous, take more risks, and redefine teacher-initiated tasks. In this instance highlighting her cultural difference was beneficial to her. The learner became more aware of the different ways in which she connected to English and Russian, and the emotional nature of her connection to Russian. Thus, her identity as a Russian came to the forefront as a way to maintain her wellbeing while in Mexico. She also felt her Russianness added another cultural perspective to her classroom interactions, and that it was recognized as a benefit rather than a handicap in the classroom. However, when confronted with aspects of Mexican and Russian culture that she disliked (such as machismo), the learner had to reposition herself, claiming only those alliances that fit her own personal values. Furthermore, the learner was aware of the inconsistency of her representation of herself as predominantly Russian since she had undergone significant cultural transformation in her six years as a U.S. resident. Finally, the learner began to recognize her identity as complex, often conflicting, in the balance between two languages and two cultures. What resulted was a hybrid identity that allowed her to position herself favorably both among American (as a fellow American) and Mexican (as a Russian) friends, stabilizing her sense of self.

The learner found herself using more English with those fellow students who were also college teachers, for fear of sounding ridiculous. On the other hand, she was not afraid to use her imperfect Spanish with other fellow students.

Stakhnevich's (2005) study is a valuable account of an expert language learner's experience. Her tendency to re-interpret homework assignments to suit her own purpose, make tasks more context-dependent, and constant use of both her first and second languages in creating a structure for acquiring a third language, are tools that demonstrate advanced metacognitive skill in learning foreign language.

The findings in Stakhnevich (2005) strongly suggest the existence of a link between language acquisition, identity (specifically, language learners' perceived membership within a linguistic or cultural group), and cultural background; and that the process of acquiring a language, especially in an immersive setting, is inseparable from the process of negotiating one's own identity. Nonetheless, the study, by its very nature, is impossible to reproduce, especially in light of the fact that the author's own linguistic history is highly unusual. Thus the findings presented in the article cannot be applied to all language learners. Furthermore, the researcher does not report on what the differences were between her own coding and that of her colleague, and does not specify what the subsequent "necessary adjustments" were.

A study exploring the usefulness of explicitly teaching the metacognitive skills listed above could prove valuable, especially in an immersion context.

Also of value is the author's identity shifts especially the fact that she felt her Russianness—i.e. her culture of origin—provided her with a unique, and thus valuable, perspective. This suggests that cultural differences, if they are highlighted as an asset rather than a handicap, could help non-native speakers of English negotiate an identity composed of those elements that fit their personal values without subtracting important elements of their home culture.

### Cognitive skills

The following studies discuss the relationship between bilingualism and cognitive skill. Garcia-Vazquez, Vazquez, Lopez, and Ward (1997) attempted to determine what relationship, if any, existed between proficiency in English and Spanish and proficiency as measured through standardized tests and GPA. They found significant correlations between English proficiency and GPA and standardized test scores, and a somewhat less significant correlation between proficiency in Spanish and GPA. Mouw & Xie (1999) studied the effect bilingualism had on academic achievement in first- and second-generation Asian Americans using data from the National Educational Longitudinal Study (NELS), and found a positive correlation between bilingualism and achievement only when the students' parents were not proficient in English; they concluded that there was no cognitive advantage to bilingualism. In contrast, Clarkson (1992), who examined the effect of bilingualism on the math scores of sixth-graders living in Papua New Guinea, found that bilingual students who were highly proficient in both languages did better than their monolingual peers, thus establishing a correlation between bilingualism and cognitive ability, provided that there is

proficiency in both languages. Finally, Padilla & Gonzales (2001), who compared the GPAs of U.S.-born and Mexico-born students at three high schools (one urban, one rural, and one border), found that college-track, Mexican American students who had had some schooling in Mexico and those who had received some ESL or bilingual instruction significantly outperformed those who had not.

In a quantitative, correlational study, Garcia-Vazquez et al. (1997) examined the relationship between proficiency in English and Spanish and academic success among Mexican American students. The authors determined the relationship by randomly selecting 100 Hispanic students in grades six through 12. All subjects attended school in the same school district in the Midwest and were between 12 and 18 years old. Fifty-four percent of subjects were female and 46 percent were male.

The authors collected data on the subjects from various sources: they assessed academic achievement by looking at the participants' school folders and administering the Iowa Test of Basic Skills (ITBS) in English, and they assessed language proficiency by administering the Woodcock Language Proficiency Battery (WLPB) in English and Spanish. Three second-year doctoral students in psychology conducted the assessments of proficiency in English and Spanish. Participants in the study who did not speak English were given the test by a bilingual school psychologist or took a translated version of the test. The students' bilingual and ESL teachers provided the translation.

The authors tabulated GPAs using students' grades in language, math, and non-language subjects such as art, physical education, and drama. They

found a significant correlation between English proficiency and higher test results:  $r = .84$  ( $p = .0001$ ), suggesting that as proficiency in English increased, achievement as measured through standardized tests increased as well. They also found a significant relationship between Spanish proficiency, especially in reading and writing, and achievement as measured in standardized tests:  $r = .21$  and  $.30$ , and  $p = .04$  and  $.004$ , respectively. This suggests that literacy in one's native language has a positive impact on standardized achievement tests.

The authors found a significant correlation between English proficiency and GPA, although that correlation is somewhat less significant as the correlation between English proficiency and standardized test scores overall:  $r = .43$  and  $p = .0001$ .

Garcia-Vazquez et al.'s findings suggest that standardized tests, especially when conducted in English only, fail to measure achievement in ELL students since their limited knowledge of English is a potential barrier to comprehension of the test question. Standardized tests become a de facto test of English proficiency and cultural literacy for LEP and recently arrived students.

This study's findings are in line with other studies of its kind; nonetheless, they did not account for the fact that not all non-English speakers were assessed in the same way (some took a test that an ESL teacher had translated, while others were given the test orally) in their tabulations. Furthermore, the authors failed to consider the amount of time each subject had been living in the United States in their calculations. Finally, some  $r$  values were considered non-

significant were paired with high p values; and r values as low as .21 were considered significant.

The relationship between achievement and language proficiency is one that deserves more attention, especially in a setting where there is a high percentage of LEP students. However, such a study might benefit from a more in-depth definition of achievement, as well as different tools for measuring achievement. A norm-referenced test such as the ITBS only measures a student's achievement in relation to others, rather than measuring that student's progress over time.

Furthermore, it would be interesting to include data such as time spent in the United States and age at which the subjects moved to the United States when measuring the correlation between achievement and language proficiency; having this data available would allow for an examination of the relationship between levels of acculturation, language proficiency in English and Spanish, and academic achievement.

Finally, in the same way that the ITBS provides a snapshot of a student's achievement in relation to other students, a one-shot case study can only provide a very superficial picture of a student's academic achievement. A longitudinal study could provide a more nuanced picture of the relationship between the two, since it would provide the authors with data on the relationship between *improvement* rates in language proficiency and academic achievement rather than an arbitrary, one-time snapshot.

Mouw & Xie (1999) studied the effect of bilingualism on academic achievement in first- and second-generation Asian-Americans. Their data source was the 1988 National Educational Longitudinal Study (NELS); 24,000 first- and second-generation Asian-American eighth graders completed the study. Ninety-five percent of respondents spoke a language other than English at home. The participants were ethnically diverse: first- and second-generation immigrants from China, the Philippines, Japan, South Korea, among others, participated in the study.

The authors used standardized test scores in math (which measures deductive reasoning and cognitive ability) and students' GPA to measure academic achievement and found that bilingualism has a positive effect on achievement only if the students' parents are not proficient in English; there is no cognitive advantage to bilingualism. The authors hypothesized that fluent bilinguals (students who were fluent in English as well as in their native language) did better academically than their English-dominant peers. In addition, bilingualism provides access to the parents' social capital because it increases ethnic identity awareness, thus compounding the positive impact on academic success. In order to test these hypotheses, the authors performed regression analyses to determine the effects of bilingualism on cognitive ability. Controlling for socioeconomic status, demographic characteristics, and ethnic differences, the analyses focused on the students' native language use and parents' English proficiency using math scores as an indicator of academic achievement.

The coefficient for native-language use by parents and students is positive (5.32,  $p < .05$ ) while the interaction term between native-language use and parents' English proficiency is negative (-3.97,  $p < .05$ ). This indicates that native-language use has a positive effect on achievement if parents are not proficient in English.

While the size of the sample is compelling, the research design has several major flaws. First, the authors never specified which standardized test was used to measure academic achievement, or even whether all participants took the same test; perhaps most egregiously, the authors did not specify whether the standardized test(s) was/were norm-referenced or criterion-based. Thus the validity of the academic achievement indicator is highly questionable.

Furthermore, the use of math scores as an indicator of academic success presents several challenges. Math and math education have been the subject of numerous studies (e.g., Casey, Nuttall, & Pezaris, 2001) suggesting a strong positive correlation between gender and achievement in math, either because of a difference in spatial-mechanical reasoning skills between boys and girls or because of issues of self-confidence. Perhaps most tellingly, the gender gap is most visible in the eighth grade, which also happens to be the grade level of the students in Mouw and Xie's study. Unfortunately, Mouw and Xie did not use gender as a variable in their study.

Second, the language proficiency of students and parents was self-reported; no objective measure was used to determine actual, rather than perceived, proficiency. While the authors contend that self-reported proficiency is

a fairly accurate reflection of actual proficiency, Hakuta & D'Andrea (1992) found that language attitudes affected self-reports: for example, speakers of Spanish who had a negative attitude toward Spanish were likely to under-report their own level of proficiency.

In his quantitative study, Clarkson asked whether bilingualism affected math scores; more specifically, he asked if the level of proficiency had an effect on math scores. The participants were divided into two groups. The first group was made of 232 sixth-grade students living in the city of Lae, in Papua New Guinea. All students had Melanesian Pidgin as their original language and used English as the language of communication in school. A few knew other vernaculars as well, but did not use them outside the home. All used Pidgin at home. The students attended a mixture of government- and mission-run schools in the inner, suburban, and fringe areas of Lae. Principals and teachers at the schools all reported a lack of proper resources for teaching math. The second group included 69 monolingual students, also in sixth grade, all of whom attended one of the two international schools in Lae. Both schools had adequate resources for teaching math; one of the schools had computers.

Monolingual students were divided into three subgroups (high, middle, and low) based on their English language test results.

Bilingual students took two tests measuring their competence in each of their languages. The language competency tests were Cloze tests, one in English and one in Pidgin. The English language test had a reliability of .73, and the Pidgin language test had a reliability of .84. Bilingual students were first

partitioned into three equal subgroups (high, middle, and low) based on their Pidgin language test scores; cut-off scores from the monolingual group were then applied to the ranked sequence of marks scored by the bilingual group, thus producing three more overlapping subgroups (high, middle, and low). High/High students were deemed competent in both languages, and low/low students were deemed to have low competence in both languages. Bilingual students categorized as high for just one language were classified as One Dominant; students categorized as middle/middle, middle/low or low/middle were not included in the analysis. Thus three subgroups of bilingual students remained: high/high, one dominant, and low/low.

The participants were then tested using two different mathematical instruments: one general test drawing on a broad range of content, and a test of mathematical word problems. All tests were administered in English, with the exception of the Pidgin Language test.

The General Mathematics Test (GMT) consisted of 20 items drawn from a wide range of mathematical areas which both groups of students would have covered, including basic operations with whole numbers, fractions, measurement, knowledge of shapes, bar graphs, and number patterns. Questions were both extended and multiple-choice, as well as symbolic, worded, and some containing diagrams. The test was similar to that which Papua New Guinea students complete at the end of the school year. The reliability for the test was .78.

The Mathematical Word Problem Test (MWPT) consisted of 20 items in which students answered word items, all of which could be solved with one step in the solution process. Items included common fractions, the four basic operations on whole numbers, and one number-recognition item. The material was typical of classroom material, thus highly familiar to students. Reliability for the test was .87.

The participants were given the Mathematics Profile Series' Operations Test to measure cognitive levels. Total scores were converted to a MAPS scale to give an indication of students' progress with operational thinking. Reliability for this test was .76.

The father's occupation and quality of housing were scored based on a scale devised in Papua New Guinea by Jim Cummins.

Two ANCOVAs were computed using the GMT and the MWPT as dependent variables and using cognitive development, father's occupation, and quality of housing as covariables, followed by language competence.

Two separate analyses were computed for each dependent variable:

1. Language competence with 4 categories defined: high/high, one dominant, monolingual, and low/low.
2. Language competence with six categories: high/high, monoHigh, MonoMiddle, One Dominant, MonoLow, and Low/Low.

The author found that both cognitive development and quality of housing were significant covariables:  $F(1, 240) = 101.57, p < .001$  and  $F(1, 240) = 4.01, p < .05$ , respectively. There was a correlation between bilingual competence and

test scores; the highest scoring students were proficient bilinguals (GMT=13.94; MWPT=15.38) and monoHighs (GMT=12.17; MWPT= 14.51), and the lowest scoring students were the low/low (GMT=8.68; MWPT=9.47). The father's occupation was also significant:  $F(1, 240)=0.43$ ,  $p$  not provided). This suggests that proficient bilinguals are more cognitively advanced than their monolingual peers.

The author accounted for the father's occupation, quality of housing, and socio-economic status, and in fact found that quality of housing is a significant variable in math scores. Unfortunately, the author failed to include the mother's educational attainment (which tends to be universally significant in terms of achievement) as a variable.

A disadvantage of this study was that the authors assumed that students would have covered certain mathematical concepts; there was no evidence that they verified whether the material was in fact covered, or even whether the students understood the material.

Testing did not account for any learning disability in forming subgroups; thus low/low students and discarded students might have been miscategorized.

With the exception of the weaknesses listed above, the results of this study clearly demonstrate that proficient bilinguals do better at math than their non-proficient and monolingual peers, regardless of socio-economic status. Perhaps more importantly, non-proficient bilinguals fare poorly, suggesting that forced monolingualism can hinder the cognitive development and academic achievement of bilingual students.

In a correlational study, Padilla & Gonzalez (2001) examined the impact that place of birth, immigrant status, schooling outside the U.S., tracking, and second language instruction had on the academic achievement of Latino students. The study was a secondary analysis of an existing data set of 7,140 students, in which students completed a questionnaire. Student participation was voluntary and took place during one class period. The participants were 2,167 students who self-identified as being of Mexican descent on the questionnaire and who were enrolled in either the general or college preparatory track. Participants included 1,024 males (47.3 percent), and attended one of three high schools: border, rural or urban. Of the U.S.-born participants, 72.4 percent were second generation, and the rest were third-generation.

While the questionnaire did not request information on income, information on parental educational attainment and migrant-type labor were valid indicators of SES. A total of 19.3 percent of participants had parents who were or had been migrant farm workers. 21.2 percent of mothers and 26.2 percent of fathers had had some college education. For those parents who had not had any college education, the mean educational level was 7.6 years for mothers and 7.4 years for fathers. Interestingly, the parents' place of birth significantly affected the amount of schooling they received: U.S.-born parents had considerably more education than Mexico-born parents.

An overwhelming majority of students (1,926) reported that Spanish was the primary language at home and 47.5 percent of respondents reported having

received some form of ESL or bilingual instruction. Those who received ESL or bilingual instruction received an average of 2.7 years ( $SD=1.9$ ).

The participants were divided into three subgroups: Mexican born ( $N=756$ ), U.S. born ( $N=1329$ ), and U.S. born/Mexican reared ( $N=82$ ). The latter group was born in the U.S., reared in Mexico, and subsequently re-immigrated to the U.S.

Respondents were given a choice of language in which to complete the questionnaire; only six percent chose to complete it in Spanish. The authors conducted separate analyses for general- and college-track students by place of birth. Then they examined GPA differences based on students' generational status as well as the age of immigration of Mexican-born students. The authors then conducted a three-way ANOVA on GPA, place of birth, ESL/bilingual education, and schooling in Mexico.

Finally, the authors conducted a stepwise regression on GPA, using academic track, place of birth, years of ESL/bilingual instruction, years of schooling in Mexico, gender, high school attended, parents' educational attainment, and Spanish proficiency as independent variables.

The authors found that t-tests showed that Mexican-born students in the general track had a significantly higher mean GPA than their U.S.-born counterparts: ( $M= 2.57$  and  $M=2.26$ , respectively, with  $t[591] = -4.66$ ,  $p<.0001$ ).

Mexican-born and U.S. born students in the college track did not have significantly different GPAs: ( $M=2.87$  and  $M=2.8$ , respectively).

Conducting a two-way ANOVA among general track students, the authors found a significant difference between generations:  $F[2, 582] = 11.49, p < .00001$ . First-generation students had significantly higher GPAs than their second- and third-generation peers. A significant difference was also found in the college track population:  $F[2, 853] = 3.48, p < .031$ , with first generation students having higher GPAs.

The authors examined differences in GPA according to age of immigration. Students who were in the general track and immigrated before the age of five had significantly lower GPAs ( $M = 2.37, p < .05$ ) than students who immigrated at 11 years or later ( $M = 2.85$ ). No such difference was noted in the college-track, first-generation population.

For college-track students, an ANOVA test revealed that ESL/bilingual instruction had a strong effect ( $F[1, 725] = 4.09, p < .043$ ): students who had received ESL/bilingual instruction had a 2.92 mean GPA, compared to a 2.77 GPA for those who had not. In addition, college-track students who had had some schooling in Mexico outperformed those who had not: 3.09 and 2.77, respectively,  $F[1, 725] = 6.94, p < .009$ .

The study is comprehensive with data and provides new insights. However, as a correlational study, the paper does not address maturation. A look at the differences in achievement between students who received ESL instruction and those who received bilingual instruction would be very valuable. Nonetheless, the authors adequately demonstrated that while there is a link between generational status and academic achievement, it is tempered by other

factors, including track, age of immigration, amount of ESL/bilingual instruction received, and amount of schooling in Mexico. While the results appear to contradict commonly held beliefs—i.e., that students have less trouble reaching bilingual proficiency if they start learning both languages early—they suggest that proficiency in a native language, paired with ESL/bilingual instruction, optimize a students' chance of academic success. These findings confirm those of Clarkson (1992) in suggesting that bilingual students who are highly proficient in both languages have better cognitive skills.

### Discussion

Garcia-Vazquez et al. (1997) found a slight correlation between proficiency in Spanish productive skills and overall achievement. These findings are in line with those of Clarkson (1992), who noted a relationship between level of proficiency in both languages and math scores, as well as those of Padilla and Gonzalez (2001), who found that the highest achieving students had had some schooling in Mexico as well as ESL/bilingual instruction. Based on the findings of these three articles, there is evidence that suggests a positive relationship between bilingualism and cognitive skills. Granted, Mouw and Xie (1999) found a relationship between bilingualism and cognitive skill only when the subjects' parents were LEP. I contend that these findings confirm, rather than contradict, the findings of Garcia-Vazquez et al. (1997), Clarkson (1992), and Padilla and Gonzalez (2001): it is very likely that the subjects in Mouw and Xie (1999) with LEP parents had no choice but to develop strong productive skills in their home

language in order to communicate with their parents. Garcia-Vazquez et al. (1997) found a correlation specifically between productive skills in Spanish and achievement, and Padilla and Gonzalez's (2001) participants who had had some schooling as well as ESL/bilingual instruction—i.e., opportunities to work on their productive language skills—were more successful academically. The key, then, is in productive language skills in both languages: the research analyzed above, when examined as a body, suggests that bilingual students whose productive skills in both languages are strong are more cognitively developed than with bilinguals with less developed productive skills and with monolinguals.

Other factors deserving of attention, which only Padilla and Gonzalez (2001) included in their research, are age at immigration and number of years spent in the U.S. Contrary to common belief, the authors found that students who were 11 or older when they immigrated to the U.S. did better than those who were younger when they arrived. The explanation for this phenomenon might not be related to cognitive development, but to identity development; this paper will address this question later in this chapter.

Another interesting finding, and one that Garcia-Vazquez et al. (1997) and Clarkson (1992) explicitly address, is the effect that socio-economic status plays on cognitive development: higher SES students tend to perform better (and improve at a greater rate) than their less affluent peers. This finding is especially compelling in that it appears to be applicable worldwide. Garcia-Vazquez et al. (1997) and Clarkson (1992) conducted their research in the American Midwest and Papua New Guinea, respectively; this paper will subsequently review articles

that address this phenomenon in California (Sung, Padilla & Silva, 2006) and the Netherlands (Droop & Verhoeven, 2003).

This section compared the findings of four papers that analyzed the relationship between cognitive development and bilingualism. The next section briefly examines the effect, if any, that second language acquisition (as opposed to bilingualism) has on cognitive development.

#### Acquiring a second language and cognitive development

Some researchers have attempted to establish a correlation between academic achievement and proficiency in a second language, with the ostensible goal of demonstrating that second language acquisition strengthens cognitive skills. Kozulin & Garb (2004) examined the effect a dynamic assessment procedure would have on the performance of students learning a third language and found that participants' comprehension of text improved, albeit in an erratic fashion. Droop & Verhoeven (2003) compared the reading comprehension, word-decoding, and oral-language skills of third and fourth graders in the Netherlands; the participants included Dutch, Turkish-descent, and Moroccan-descent students. The authors found that socio-economic status was a significant factor in ability; differences based on ethnicity were also noted. Sung, Padilla and Silva (2006) sought to establish a link between successful foreign-language programs in California schools and school-wide achievement as measured through the Academic Performance Index (API). They concluded that while there is a strong correlation between API and foreign language programs, they noted that the

correlation might be spurious, since there was also a strong correlation between income and API.

In an experimental, correlational quantitative study, Kozulin & Garb (2004) examined the effect that a dynamic assessment procedure would have on the performance of students who were learning a third language (L3). The participants were 13 female students, all of whom had immigrated to Israel from Ethiopia. They were between the ages of 20 and 22 and had arrived in Israel when they were as young as five and as old as 14. All but one of the participants had received no schooling prior to coming to Israel; all were fluent in oral Amharic, but there was a wide range of ability in written Amharic. Finally, all participants had studied English as part of their regular school curriculum upon arriving to Israel.

The authors tested all participants using a standard reading-comprehension placement exam. Then half the participants underwent a two-hour mediated session in which the authors explained the required knowledge and strategies necessary to take the test. All participants were then tested again; instructions were the same as that for the pre-test, but no mediation was provided.

There was a strong correlation between pre- and post-test results ( $r=.78$ ), but the authors found that the treatment significantly, albeit unequally, improved students' text comprehension.

While the study suggests that mediation may help some students, the wide variation in test results suggests that the mediation may not have been the

main factor in students' improved scores. Furthermore, it is difficult to draw conclusions based on the study's findings due to the small sample size.

Unfortunately, Kozulin and Garb (2004) failed to consider age at which the participants immigrated when establishing correlations. It would have been helpful to know how much of a correlation, if any, existed between the age at which participants immigrated (hence their proficiency in their native language as well as the level at which their cultural identity is grounded in their culture of origin) and their level of proficiency in foreign-language acquisition. Furthermore, the possibility of a relationship between productive skills in a native language and cognitive skill remains unaddressed.

Sung et al. (2006) studied the correlation between the Academic Performance Index (API) and foreign language offerings of California schools. They also examined whether the number of English Language Learners (ELL) and free or reduced-lunch-eligible students had an effect on API scores. In order to determine this, the author mailed a questionnaire to every public high school in the state; 220 schools (or 25 percent of California schools), located in 161 school districts in 51 counties, responded. The participating schools were randomly distributed in API scores:  $t(182) = 16.28, p < .0001$ .

A questionnaire was given to the schools, seeking information on: total student enrollment in foreign language classes; the number of foreign language classes offered and levels; study abroad and foreign exchange programs; technology facilities and usage in foreign language teaching; the number of students who took the Golden State Spanish Examination, AP tests, and SAT II

Foreign Language Subjects tests; and questions regarding various aspects of foreign language offerings.

API scores for 2002-03, the percentage of ELL students, and the percentage of students who qualified for free or reduced lunch were collected from the California Department of Education's website.

The questionnaire was available in paper form and online. A letter from the California Foreign Language Project was mailed twice, along with the paper version of the survey, to all public high school foreign language department chairs in California. Foreign language department chairs had a choice between filling out the paper version or the online version.

There was a strong correlation ( $r=.60$ ,  $p<.0001$ ) between the percentage of students on free or reduced lunch and the percentage of ELL learners. There was a very strong negative correlation ( $r= -.71$ ,  $p<.0001$ ) between the percentage of students with free or reduced lunch and API scores. The negative correlation between ELL learners and API scores was  $r= -.60$ ,  $p<.0001$ . There was no significant correlation between school size and API scores. Researchers found a somewhat significant correlation between API scores and percentage of students enrolled in foreign language classes ( $r=.43$ ,  $p<.0001$ ). Fewer students on free or reduced lunch were enrolled in foreign language classes:  $r= -.36$ ,  $p<.0001$ .

The strongest predictor of a school's API score was the percentage of students on free or reduced lunch ( $t= -7.55$ ;  $p<.0001$ ), and the second strongest was the percentage of students enrolled in foreign language classes ( $t= 4.00$ ;  $p<.0001$ ).

Interestingly, there was a significant positive correlation between the number of students who took an AP Spanish test and the percentage of students who received free or reduced lunch ( $r=.22$ ,  $p<.01$ ). There was also a significant positive correlation between the number of students who took an AP Spanish test and the percentage of ELL students ( $r=.27$ ,  $p<.001$ ).

Forty-seven percent of schools surveyed had a foreign language graduation requirement; there was no relationship between foreign language requirements and API scores. This data suggests that students take foreign language classes regardless of whether or not they are required for graduation.

Schools that sponsored study-abroad programs had significantly higher API scores, as did schools that hosted foreign-exchange students. Conversely, these schools had fewer free or reduced lunch students and ELL students.

The data suggests that schools that offer more foreign language classes have higher API scores than those that do not. This points to funding: schools that can fund such departments appear to be more affluent than those that do not, meaning that median income of families in a school affects API scores. The correlation is therefore spurious.

In their quasi-experimental study, the authors investigated the development and interrelation between the language proficiency and reading ability of children learning to read in either a first or a second language. Droop and Verhoeven (2003) conducted a comparison of reading-comprehension, word-decoding, and oral-language skills among third- and fourth-graders living in the Netherlands. The participants included 163 Dutch students, 60 of whom were

considered high socio-economic status (SES), the rest being low; 72 Turkish students, and 67 Moroccan students. The Turkish and Moroccan students were either born or had attended kindergarten in the Netherlands. All Turkish and Moroccan students were considered of low SES.

Most Turkish and Moroccan children used their L1 to communicate with their parents; a small minority chose their L2 to communicate with their parents, while about ten percent used a combination of both their L1 and their L2. To communicate with siblings and friends, slightly more than half of the Turkish children reported using their L2, about 30 percent used their L1, with the rest (12 percent) using a combination of both. To communicate with siblings and friends, a large majority of Moroccan children (between 78 and 91 percent) choose their L2, and less than ten percent used their L1. This difference between language choice for Turkish and Moroccan children could be a result of the fact that Moroccan is a low-status language in the Netherlands, while Turkish is a high-status language.

The authors used standardized tests to measure reading comprehension, decoding skills, and oral language proficiency. Two or more tests were used whenever possible. All tests were administered at the beginning of third grade, the end of third grade, and the end of fourth grade. Tests used included the TAK-Onderbouw (for minority children in lower elementary grades), the TAK-Bovenbouw (for minority children in upper-elementary grades), both of which have been carefully controlled for cultural content. The TAK tests measure oral proficiency.

To measure reading comprehension, the participants took the Text Coherence Test (TCT) and the Reading Vocabulary Test (RVT), in which the students are given a sentence with an underlined word and asked to select the correct definition from four alternatives. The Text Cohesion Test is a Cloze-like test where students are asked to fill in words like “because” and “while” using a multiple-choice format. To measure decoding skills, students must read words written on cards. Words vary in complexity from monosyllabic, to monosyllabic with consonant clusters, to polysyllabic.

To measure oral language proficiency, students took an oral receptive vocabulary test, wherein a word is spoken while the child is shown four pictures, and the child must point to the picture that represents the meaning of the word.

The authors conducted a series of MANOVA tests, with group as the between-subjects variable and time of measurement as a within-subjects variable.

Both group and time were significant for all three reading comprehension tests, meaning that there were significant differences between groups and significant changes over time: TCT:  $F(3, 236)=28.29$ ,  $p<.001$ ; RVT:  $F(3, 239) = 51.79$ ,  $p<.001$ ; Text Cohesion Test:  $F(3, 253) = 33.77$ ,  $p<.001$ . The strongest differences noted were in Dutch low-SES children and minority children: TCT,  $F(1,236) = 30.26$ ,  $p<.001$ ; RVT,  $F(1, 239) = 57.03$ ,  $p<.001$ ; Text Cohesion Test,  $F(1, 253) = 191.11$ ,  $p<.001$ . Thus differences between groups increased over time for the RVT: between the Dutch and minority groups,  $\Lambda = .95$ ,  $F = 6.57$ ,

$p < .01$ ; between the low- and high-SES groups,  $\Lambda = .96$ ,  $F = 5.01$ ,  $p < .01$ , and between the two minority groups,  $\Lambda = .95$ ,  $F = 6.57$ ,  $p < .01$ .

Minority children performed at the same level as high-SES Dutch student in decoding simple (Consonant-Vowel-Consonant, or CVC) words; in decoding words with clusters (such as CCVCC words) and polysyllabic words, minority students scored close to low-SES Dutch children at the beginning of third grade, and close to high-SES Dutch children by the end of fourth grade. MANOVA tests were conducted to determine the relationship between group and type of word being decoded (i.e., CVC words, CCVCC words, or polysyllabic words) over time. For the group as a whole, scores for CVC words were higher than scores for the CCVCC, with scores on polysyllabic words being the lowest. Furthermore, there was a significant relationship between time and orthographic complexity:  $\Lambda = .84$ ,  $F = 12.51$ ,  $p < .001$ .

In comparing low-SES Dutch children and minority children,  $F(1, 261) = 5.58$ ,  $p < .05$ , results showed that minority children were significantly faster decoders than low-SES Dutch children. In comparing Dutch children by SES:  $F(1, 261) = 28.29$ ,  $p < .0012$ , socio-economic status was an indicator of the speed at which children decoded words. Interestingly, Dutch children did not show variation across word types, and were able to decode polysyllabic and CCVCC words with as much ease as CVC words, something the minority children were not able to do.

For both receptive vocabulary and productive vocabulary, test results showed a decrease in difference over time:  $F(1, 291) = 34.07$ ,  $p < .001$

(receptive);  $F(1, 261) = 160.82, p < .001$  (productive). There was a significant difference between high- and low-SES Dutch children: RVT,  $F(1, 291) = 7.36, p < .01$ ; PVT,  $F(1, 261) = 17.16, p < .001$ . Comparing the Moroccan and Turkish groups also revealed a significant difference:  $F(1, 291) = 30/38, p < .001$  for the RVT; and  $F(1, 261) = 8.45, p < .001$  for the PVT, with differences increasing over time: RVT,  $F(1, 291) = 9.72, p < .01, \Lambda = .97, F = 3.48, p < .05$ . Thus Moroccan children showed greater progress than Turkish children over time.

While all groups improved over time, there were no significant differences between Dutch and minority children,  $F(1, 229) = 111.65, p < .001$ ; between Dutch high- and low-SES children,  $F(1, 229) = 8.20, p < .01$ ; and between Moroccan and Turkish children,  $F(1, 229) = 14.96, p < .001$ .

Droop & Verhoeven's research is based on several assumptions that could be challenged. The first is the way in which the authors defined second language. Gass & Selinker (2008) defined a second language as a language that is acquired *after* the native language has been learned; yet Droop & Verhoeven's (2003) participants were either born in the Netherlands, or attended kindergarten there. The children of Turkish and Moroccan descent who participated in their study were therefore bilingual, rather than in the process of acquiring a second language. As Gass & Selinker (2008) pointed out, the simultaneous acquisition of two languages, especially in early childhood, is a distinct process from that of acquiring a language after the first one has been acquired. Thus the validity of the entire study is put into question.

In addition, Droop & Verhoeven's reliance on decoding as an indicator of reading proficiency is cause for concern, as is the fact that the vocabulary tests comprise a series of decontextualized words. A similar study, using comprehension—rather than decoding skill—as an indicator of reading ability and with a contextualized vocabulary test might show a more layered picture of the differences between bilingual children and monolingual children.

Finally, one of the authors' basic premises is that children gradually shift from accessing word representations via their phonic components to accessing their representations directly. This premise has been repeatedly challenged, and over-reliance on phonics and correctness on the part of the authors might skew the findings in this article.

### Discussion

Kozulin and Garb (2004) found that explicit teaching of cognitive skills led to positive, if erratic, results; Sung et al. (2003) found a significant correlation between foreign language programs and overall school achievement, as well as a significant positive correlation between the number of students who took an AP Spanish test and the percentage of students who received free or reduced lunch. Droop & Verhoeven (2003) found that high-SES students fared better than their low-SES counterparts in decoding a second language.

The three studies, if considered together, suggest that the explicit teaching of metacognitive skills may be beneficial to students acquiring a foreign language. Droop & Verhoeven (2003) and Sung et al. (2006), suggested that language status played a large part in acquisition. The former pointed out that

differences in the achievement of Moroccan-descent children and Turkish-descent children may be the result of language status: Moroccan Arabic is not highly valued in the Netherlands, while Turkish is. Thus Turkish-speaking parents are more likely to transfer their knowledge of their native language to their children, and Turkish-speaking children are more likely to view their knowledge of Turkish as an asset rather than a hindrance. On the flip side, Moroccan children may be hesitant to speak Arabic with their parents and peers, since as a low-status language it may not be considered valuable. In the U.S. public-school system, there is a de facto segregation between the (low status) ESL and other immersion programs and the high status foreign-language programs. Ironically, in many public schools the same language that some educators consider a hindrance to learning English—Spanish—is taught in a foreign-language setting because without it, there is no getting into college. Thus the languages of immigrants are low-status, but the languages of travelers are high-status, even when they are the same language. This dichotomized attitude toward foreign languages translates into the mainstream as a distrust of non-English speaking people coupled with an excessive admiration and high esteem of people who speak languages other than English.

### Teaching LEP students

Since the *Lau v. Nichols* ruling of 1974, American public schools have had a constitutional mandate to teach children in a meaningful and comprehensible manner, regardless of the students' linguistic and ethnic background. Schools,

districts, and states implemented programs as diverse as the population they were meant to serve, with varying degrees of success. This section provides a brief overview of studies designed to evaluate the effectiveness of the most widely-spread LEP education programs. ESL and sheltered instruction, dual-language immersion, and bilingual education are the three broad categories of LEP instructional approaches to discuss. Following the overview, this section will briefly discuss factors that affect language acquisition, including the educational functions of codeswitching and the part that parents and the home culture play in shaping the educational experiences of children and young people.

#### ESL and sheltered instruction

English as a Second Language (ESL) instruction and sheltered English classes are designed so as to allow LEP students to integrate the mainstream—i.e., English monolingual—as quickly and effectively as possible. English-only proponents maintain that ESL is the single most effective way to teaching LEP students. The two following articles are case studies. First, Valdés (1988) followed two LEP children as they made their way through a Bay Area public school, and found that the ESL and mainstream programs were completely segregated, and that some teachers used ESL classes as a punitive measure for students with behavioral problems. Wright (2004) interviewed ten Cambodian-Americans, all of whom had attended public schools in California in the eighties and nineties. He compiled their experiences and found that the system was so erratic and disorganized that some of his participants received insufficient

instruction in ESL, while others received too much. He further found the participants who were younger at the time of immigration and those who had received the least ESL instruction had lost much of their ability to communicate in Khmer but did not feel they could communicate effectively in English.

In her case-study, Valdés (1998) examined how children who arrive in the U.S. with zero English acquire English in schools; she attempted to answer the question why many non-English background students fail to learn English well enough to succeed in schools. The study started in 1991 and lasted two years, during which time the author interviewed school personnel, students, and parents.

The participants were Lilian and Elisa, two middle-school students who arrived in the U.S. during the summer of 1991 and enrolled in a greater Bay Area public school. They were originally two of four focal children in a study. The middle school was undergoing rapid population shifts: many Latino immigrants, largely Mexican, were moving into the community.

Valdés found that the school was structured in such a way that there were two schools in one, with LEP students enrolled in ESL and sheltered classes, the other with native English speakers enrolled in mainstream classes. Because of reluctance or lack of training on the part of some teachers, non-native English speakers were rarely mainstreamed. As a result LEP students could rarely interact with English-speaking peers. Some students were kept in the beginning ESL course because of behavioral problems; they were essentially being

punished. Beginning ESL students took sheltered subject classes. The amount of learning students did rested entirely on their degree of investment.

While Valdés is vague in describing her methods and design, this case-study presents a useful picture of the challenges newcomers to U.S. face in public schools, as well as the inadequacy many schools in providing LEP students with a meaningful education. While these shortcomings are not always willful—this particular school was experiencing a strong shift in demographics—they are an indicator of the strong need for schools and school districts to be proactive in their treatment of LEP students.

Wright (2004) conducted interviews with ten former Cambodian American students, all of whom had been schooled in California between 1980 and 1997, to determine the impact that various education policies concerning recent immigrants have had on the populations at stake. All participants were born in Cambodia, experienced disruptions in their education, began schooling late in the U.S., and were LEP. While all participants were schooled between 1980 and 1997, the interviews—which lasted between 60 and 90 minutes and took place in either Khmer or English, depending on the participant's preference—took place after 2000. The interviews were held in the participant's home, or another location of his/her choice. Half the participants were male; all the participants were close friends of the author.

At the time of the participants' schooling, California's policy for LEP children was to place them in transitional bilingual programs and provide them with ESL and sheltered content instruction, as well as primary language support.

However, most of the participants received little or no assistance. All participants received between one and three years of ESL instruction—most were pulled out of mainstream classes to receive it—but reported that instruction was sometimes insufficient and sometimes excessive, sporadic, and inappropriate. Only three of the ten participants had a Khmer-speaking aide in the classroom.

While some of the participants had the opportunity to study Khmer-for-Khmer-speakers at their high school, four of the ten participants reported lacking the necessary vocabulary in Khmer to hold anything but basic conversations. The other six participants reported having continued to practice reading and speaking Khmer, but only one participant wrote in Khmer regularly. Half of the participants reported that English was their dominant language. Of the remaining five, two felt stronger in Khmer, and three were split between the two languages or unsure. Interestingly, none of the participants felt they had truly mastered English.

Wright contended that the school district's failure to implement state policy for LEP students resulted in a de facto English-only program. Consequently, LEP students found their primary language skills weakened, yet never became fully proficient in English.

Wright found that those students who were younger when they left their country of origin, and those who received an English-only education with limited exposure to their native language, had limited ability in both Khmer and English. His findings suggest that as a result, adults who have lost the ability to speak and understand their native tongue without ever mastering English may suffer from

self-identity and self-esteem issues. While all participants reported being proud of their Cambodian heritage, some of them felt they had to choose between their Cambodian culture and fitting in to American culture. Some participants overtly rejected their Cambodian community for a time, but made subsequent efforts to reconnect with their roots. Wright also found that parents spoke Khmer to each other and to their children, and children spoke a mixture of Khmer and English with one another and their parents; older children tended to use more Khmer, and younger children used more English. One participant's younger siblings, who were in elementary school, had lost so much Khmer that they could not communicate with their parents; however their English was also rather poor. Other participants reported an inability to express deep feeling in Khmer; thus their conversations with their parents tended to revolve around daily basic living topics. Therefore, English-only instruction, because it results in the loss of the primary language, limits communication in the home of immigrant families.

English-only instruction does not necessarily mean that LEP students become proficient in English. Participants in Wright's study have had to resign from teaching positions, failed to ask for promotions, and lost jobs because of their limited English abilities. Those participants who enrolled in community college were placed in ESL courses, even though they had completed the ESL program at their high school. The reading and writing required in college courses proved challenging for the participants, who often received assistance from friends or a writing or tutoring center at their college. Consequently, participants

often dropped classes that were too linguistically demanding; one participant dropped out entirely.

Wright suggested that English-only instruction was inadequate in that it did not meet the linguistic and educational needs of LEP students, and could have negative consequences for students at school, at home, and in the job market.

### Discussion

The findings outlined in Valdés (1998) and Wright (2004) are a rather harsh condemnation of ESL and English-only programs. Valdés (1998) found that the ESL and mainstream programs were set up in such a fashion that there was no interaction between ESL students and English proficient students. Furthermore, the fact that some students were kept in ESL classrooms because of behavioral issues indicates that their status within the schools was low. Wright (2004) found that implementation of state policy toward LEP students was sporadic and inconsistent; as a result, some participants lost their ability to communicate effectively in Khmer, but never gained the ability to fully use English. Further, he noted that his subjects sometimes felt that they had to choose between their Cambodian identity and their American one. The findings in Valdés (1998) and Wright (2004) suggest that ESL programs as they are currently implemented result in subtractive, rather than additive, schooling for LEP children, whose native language is neither seen as an asset nor utilized in their education. In fact, ESL programs almost appear to be a dumping ground for students who are unable to effectively function within the rigid confines of the

mainstream American public-school system. LEP children are therefore problematized, and their ability to speak a language other than English as a hindrance rather than an asset. As a result, LEP children face a decision: maintain their identity as being in line with that of their parents and home culture but continue to be ostracized from mainstream public-school life, or adapt to American mainstream culture at the expense of their home culture. Such a subtractive model of education can lead to serious identity issues, which this paper addresses later in this chapter.

#### Dual-language immersion and bilingual education

Dual-language immersion and bilingual education, wherein students learn two languages—usually English and another language—in an immersive setting, have the notable advantage of providing an environment where every learner has something to contribute and everyone can be a teacher. Lee, Hill-Bonnet, and Gillispie (2008) conducted an extensive survey of a dual-immersion school in southern California. They found that the strict segregation of the two languages proved to be a hindrance, and that the students' declaring of a dominant language risked labeling. Gersten & Woodward examined the effect of transitional bilingual education and bilingual immersion on the achievement rates of LEP students and found that bilingual immersion students performed better in the fourth grade, but the differences between the two groups decreased over time. In the qualitative part of their study, they interviewed sixty of the participants and found that most had had positive experiences, but that they would have

preferred to continue learning in Spanish. Calderon, Hertz-Lazarowitz, and Slavin (1998) conducted a comparison between the achievement of students who used the bilingual cooperative integrated reading and composition program (BCIRC) and those who did not. They found that BCIRC students scored better on standardized tests than did their peers. Unfortunately, there are a number of flaws in the study that render its results debatable. Winsler, Diaz, Espinosa, and Rodriguez (1999) performed a longitudinal comparison between students who attended a bilingual preschool and those who did not and found that the overall skills of the preschool group grew stronger, but they did not lose any proficiency in Spanish.

Lee et al. (2008) conducted a qualitative survey to determine how the separation of two languages organized the everyday life of students at one dual-language immersion school. The participants were students from two 50/50 Spanish-English dual immersion kindergarten classrooms at a charter school in Southern California. The school attracted students from the neighborhood (mixed White and Latino, mostly working class) and from neighboring cities. The school was founded post-227\*\* by educators committed to dual immersion. Parental involvement was high and educators were committed to the philosophy of dual-language immersion. The school's Academic Performance Index (API) was one of the lowest in the county, but rising.

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\*\* California Proposition 227, passed in XXXX by a wide margin, replaced the state's previous bilingual education policy with one year of ESL followed by English-only immersion. Ron Unz, the English-only movement's leader, and his supporters claimed that such a policy would result in drops in ELL enrollments, improved test scores, and higher levels of proficiency in English (English for the Children, 1997).

The student body was 90 percent Latino and ten percent White; 56 percent female and 44 percent male; 78 percent of students participated in the free or reduced lunch program. Latino students were mixed: some were recent immigrants, some were second-plus generation. White students were predominantly upper middle class.

Students were placed in one of two kindergarten homerooms based on gender and language ability. The authors did not specify whether administrators wanted to create a more homogeneous or a more heterogeneous environment. Students had to declare a “dominant” language. The two kindergarten classes switched from English classroom to Spanish classroom on alternate weeks. The school placed equal emphasis on English and Spanish.

Lee et al. collected data over a 12-month period via video recordings in the classroom and on the playground; field notes; and informal interviews with parents, teachers and students. The researchers’ role in the classroom was passive, unless the teacher or students specifically asked them to participate.

Language restrictions in the English classroom increased as the year progressed (no Spanish allowed). Language choice was not random, but a purposeful and rational choice depending on space and interlocutor. The school’s strict language segregation policy had them caught in a dilemma: they were “caught between rules for language use that the other children are expected to follow and practical accommodations they must make given the linguistic circumstances of this dual-language school.” Students who could not speak English could not participate in the English segment of the classroom under the

strict “No Spanish during English” rule. Thus the teacher ignored non-English speaking students’ use of English, or she used the instance of Spanish use to remind the class of the English-only policy. Outside of spaces where language choice was explicitly mandated, language choice was based on the assumed proficiency of the interlocutor.

One possible consequence of this school’s dual immersion setup was to label speakers as either English or Spanish, thereby hindering the development of their other language.

The researchers did not look at the content of the communication to determine if it was a factor in language choice. Furthermore, the paper did not address codeswitching, the extent to which students engaged in codeswitching (especially in light of the segregation of language in the classroom), and where codeswitching may have occurred.

This paper adequately pointed out the shortcomings of a dual-immersion system wherein languages are segregated. Such a system turns teachers into enforcers, discourages students from using their language of choice, and prevents authentic linguistic exchanges from happening. In addition, codeswitching is recognized as an important communication tool for bilingual students and students learning a second language; preventing codeswitching from occurring by fostering a monolingual twice over setting could hinder, not aid, linguistic development.

In their quasi-experimental study, Gersten & Woodward (1997) examined the effect of transitional bilingual education and bilingual immersion on the achievement rates of LEP students.

The participants were 228 students from ten schools in the El Paso school district. Subjects had been assessed as having virtually no knowledge of English when they started first grade—as measured by the Oral Language Dominance Measure (OLDM), between 94 and 97.5 percent of participants were classified as extremely LEP—and all participants had participated in one of the district's two programs for language minority students for at least four years and taken the Iowa Test of Basic Skills (ITBS). Ninety-two percent of bilingual immersion students and 94 percent of transitional bilingual students received free or reduced lunch.

In the transitional bilingual program, classes were initially taught in Spanish and English was gradually introduced over then next five years; the goal of the bilingual immersion program was to provide meaningful and comprehensible instruction: thus English was introduced at an accelerated rate, but Spanish was maintained as a basis for conceptual development, clarification, and cultural identity. The authors used the ITBS, which participants took in fourth, fifth, sixth and seventh grades, as the primary measuring instruments; they also used teacher questionnaires, student interviews, and the rate of entry into mainstream classes as supplementary data sources.

Interestingly, the authors noted a significant difference in teacher attitudes toward the bilingual immersion program and the transitional bilingual program: 79

percent of the former said their program motivated students to learn English, while only 36 percent of the latter felt the same about their program. Such a large difference in attitudes could potentially skew the achievement rates of students.

The authors performed an analysis of covariance and found significant differences between the two programs for grades four:  $F(1, 255)=27.37, p<.001$ ; five:  $F(1, 225)=8.03, p<.005$ ; and six:  $F(1, 225)=3.96, p<.05$ , favoring the bilingual immersion approach.

A Tukey post hoc test revealed that students in the transitional bilingual program showed significant improvement over the four years, especially between grades 4 and 6. Bilingual immersion students, who had moved to English instruction four years earlier, showed no such improvement.

There was a significant difference ( $X^2=46.3, p<.001$ ) between the percentage of transitional bilingual students and bilingual immersion students who had entered mainstream classes by sixth grade (65 percent and 99 percent, respectively).

The major trend in the data revealed that bilingual immersion students performed better in the fourth grade, but the differences between the two groups decreased over time.

In addition to working with quantitative data, the authors interviewed 60 participants—thirty from each program—to gather their recollections of their first few years in a bilingual program. Very few participants reported having negative early experiences in a bilingual program: six transitional bilingual students said

they found learning in two languages confusing, and three bilingual immersion students would have liked to continue Spanish-language instruction longer. Almost a third of all interviewees reported feeling more comfortable in Spanish than in English. The similarities between groups were as significant as the differences. More than half of all participants reported having the most difficulty in language arts or social studies, and that the reading material was too hard. About half the participants liked math best because they could understand instruction.

The authors controlled for every possible external variable, including attrition, teacher profiles, student makeup in each group. They also recognized the limitations of using the ITBS as a tool to measure achievement in LEP students, especially in vocabulary, where there are no context cues. Mean scores on the OLDM were 1.24 for the immersion sample and 1.08 for the transitional bilingual education sample; standard deviations were .63 and .42, respectively. Because of the slight difference favoring the immersion group, analysis of covariance was utilized in all subsequent analyses to control for the initial disparity.

The strong difference in teachers' confidence in the method they were teaching could have affected students' achievement rates. However the authors address this and suggest that further research focus not on the method but on its application.

A weakness of the study was that the authors did not examine the content of instruction, i.e. whether content was culturally relevant.

Gersten & Woodward's findings suggest that regardless of program,

students continue to prefer Spanish as the language of instruction after they have become proficient in English.

In their quantitative, experimental study, Calderon, Hertz-Lazarowitz & Slavin (1998) explored the effects of a bilingual cooperative integrated reading and composition program (BCIRC) on the language proficiency of LEP students. The participants were 222 students in the Ysleta Independent School District in El Paso, Texas. In this district, 79 percent of students were Hispanic, 27 percent were LEP, and 33 percent qualified for Title I. All 222 students were in bilingual programs in three experimental and four comparison schools; all seven schools were among the poorest in the district. The seven schools were selected because they were the lowest-achieving schools in the district with the highest percentage of Spanish-dominant LEP students. All participants were Spanish-dominant.

Students in BCIRC used MacMillan's *Campanitas de Ojo* Spanish basal readers, but were taught using BCIRC methods. Halfway through second grade students started alternating every two weeks between the *Transitional Reading Program* basals and the Spanish basal. BCIRC classes also received 30-minutes of ESL instruction each day. BCIRC is an adaptation of CIRC, an approach designed to develop social, academic, and communication skills through a variety of instructional practices: direct instruction in reading comprehension, treasure hunts (worksheets with comprehension questions, prediction guidelines, vocabulary activities, story retell, and story-related writing prompts), and

integrated language arts and writing. All activities were done in heterogeneous groups of four.

Teachers in the comparison group used traditional textbooks and methods, including round-robin oral reading and independent workbook practice activities. They also used *Campanitas de Ojo* Spanish basal readers, and MacMillan's *Transitional Reading Program*, alternating daily between the two texts. While the teachers in the comparison group had been trained in cooperative learning methods, they did not use those methods on a regular basis. Students in the comparison group received 1.5 hour of reading and language instruction a day, as well as a 30-minute ESL class every day.

All participants were administered the Bilingual Syntax Measure (BSM) at the end of kindergarten and first grade, a test used in the state of Texas to determine whether students will be placed in a bilingual or a monolingual classroom. BSM scores range from 1 to 5. All participants took the state-mandated Texas Assessment of Academic Skills (TAAS) at the beginning of third grade. The text is criterion-referenced and assesses reading, writing, and mathematics. Spanish-dominant students took the TAAS in Spanish. All participants took the Norm-Referenced Assessment Program for Texas (NAPT) at the end of third grade. The NAPT test includes sections in reading, writing, math, science, and social studies. All students took the test in English.

Performance of BCIRC and comparison second-graders in reading and writing was measured through an ANCOVA test, with kindergarten English and Spanish BSM scores and the English TAAS scores as covariates.

Another ANCOVA test measured reading and language using the third-grade NAPT, with the kindergarten BSM scores as covariates.

Comparison students in the third-grade cohort scored significantly higher than BCIRC students on the Spanish BSM at the end of kindergarten ( $M=4.39$  and  $M=3.95$ , respectively), whereas BCIRC students did not score significantly higher on the English BSM. However the  $p$  in this case is greater than .02, suggesting that these results might not be valid.

On the Spanish TAAS, BCIRC students scored marginally but not significantly higher ( $p < .06$ ) than comparison students on the reading scale ( $M=1,522$  and  $M=1,434$ , respectively). However, BCIRC students scored significantly higher in writing (BCIRC  $M=1,512$  and comparison  $M=1,441$ ,  $p < .02$ ).

On the NAPT reading scale, BCIRC third-grade students scored higher ( $M=33.16$ ,  $p < .01$ ) than comparison students ( $M=23.54$ ,  $p < .01$ ), with an effect size of + 0.63. However, differences on the NAPT language test were not significant.

Students who had been in the CIRC program longer experienced higher scores in reading than those who had joined the program more recently; the latter experienced higher scores than students in comparison schools.

This study presents a number of flaws, not the least of which is the fact that its authors designed the CIRC and BCIRC programs; there is therefore a chance that they could not be objective. Second, the authors' over-reliance on standardized test measures as indicators of success means that their analysis relies on a snapshot of student success; a longitudinal study that specifically

analyzes progress, rather than results, would provide a more complete picture of the differences between BCIRC and “traditional” programs.

Furthermore, while the authors go into great detail about the type of activities BCIRC students engaged in, they did not specify what type of activities the comparison group engaged in beyond mentioning round-robin reading. In addition, the BCIRC program’s reliance on basal readers suggests that the program is not truly social constructivist in nature.

Finally, the  $p$  values in the study are consistently above .02, sometimes going as high as .06; the validity of the study is therefore questionable.

In their experimental quantitative study, Winsler et al. (1999) tested two hypotheses: first, that low-income Spanish-speaking children who attended bilingual preschool would show parallel development of Spanish competency and accelerated English compared to preschoolers who did not attend bilingual preschool; second, that children who attended bilingual preschool for a second year would continue to show greater gains in English language development compared to those who remained at home; the preschool group would continue to demonstrate no delay in development in Spanish proficiency compared to the control group. In order to test their hypotheses, the authors designed two different studies.

The first study, Study 1, consisted of classroom observations; in addition, children and their parents met with an experimenter in a separate room on the preschool site on four occasions, with each meeting lasting about one hour.

Meetings occurred as follows: Time 1 (pretest) English assessment, T1 Spanish assessment, T2 (post-test) English assessment, and T2 Spanish assessment. T1 occurred within the first two months after the start of the preschool program, and T2 sessions occurred approximately six months later. The time interval between English and Spanish assessments ranged from one to seven days. To the extent that it was possible, the experimenters spoke the language being assessed that day. The experimenters were three bilingual women (one for each preschool site) from the same community who were hired and trained to administer the language assessments according to strict protocols. Each session was audiotaped. The parent was in a corner of the room working on paperwork while the test was administered.

Winsler et al. administered the following tests: English receptive language skills were measured using the Peabody Picture Vocabulary Test-Revised (PPVT-R) and the Language Assessment Scales (LAS). Spanish receptive skills were measured using the Spanish version of the PPVT (TVIP) and the Spanish sentence comprehension subtest of the LAS. Productive language ability was measured using the lexical subtests of the LAS (in which participants have to say the word for a series of pictures of simple nouns) and the number of words in the target language produced that the child produced in a story-retelling task. English and Spanish language complexity was measured by calculating the number of verbs in the target language produced by the child during the story-retelling task and by calculating the average number of words per verb-phrase used in these narrative productions.

The participants in Study 1 were 46 preschool children of Mexican descent from the same school district and community. Twenty-six of these children (age  $M=44.3$  months  $SD=4.9m$ ; 54% female) were randomly selected as a subsample. All children attended a full-day, five day a week, subsidized preschool program being implemented in three elementary school sites. Enrollment in the program required poverty-level income or below to qualify, as well as demonstrated need for child care. The preschool programs were modeled after the High Scope curriculum, and teachers spoke English and Spanish at a 50/50 ratio.

The control group included 20 children (age  $M=40.6$  months,  $SD=5.0$ , 45% female) equivalent to the preschool group in terms of Mexican origin, SES, and neighborhood/ school zone residence. All control-group children had older siblings attending the elementary school affiliated with one of the participating preschools. A majority of children in the school district were Hispanic; 80% of those were relatively recent arrivals from Mexico.

Because the average age of the control group was slightly higher than that of the preschool group, age was used as a covariate in the analyses. A series of mixed ANCOVAs were conducted, with group as the between-participants variable, time as the repeated measure, age as the covariate, and each language measure serving as the dependent variable. An identical set of ANOVAs was included without including age as a covariate.

In Study 1, ANOVA results were the same as ANCOVA results. English PPVT scores revealed significant group  $F(1, 43)=4.68$ ,  $p<.05$  and time  $F(1, 44)=17.11$ ,  $p <.001$  interactions. A significant group effect was noted:  $F(1,$

43)=3.8,  $p < .05$ . Children from both groups understood significantly more English words and sentences as they got older, with the preschool group showing more receptive English ability at both pretest and post-test. Gains in receptive skills were not significantly greater than those made by children in the control group.

There was a significant group effect,  $F(1, 43)=6.66$ ,  $p < .01$ , a significant time effect,  $F(1, 44)=57.11$ ,  $p < .001$ , and a significant group by time interaction,  $F(1, 44)=6.78$ ,  $p < .01$ . Preschoolers showed greater ability in producing English words for pictures at both pretest and post-test. All children improved over time, and children in preschool made greater gains over time in lexical production. English language complexity increased for both groups:  $F(1, 44)=18.05$ ,  $p < .001$ .

There were no group differences nor group by time interactions in Spanish receptive language, though both groups showed significant improvement over time: PPVT,  $F(1, 44)=31.23$ ,  $p < .001$ , sentence comprehension  $F(1, 44)=11.57$ ,  $p < .001$

There was a significant increase over time in both groups in Spanish production: LAS,  $F(1,44)=38.56$ ,  $p < .001$ , and a marginally significant time effect for the number of Spanish words produced. No group differences emerged.

Both groups' Spanish language use became more complex over time,  $F(1,44)=4.48$ ,  $p < .05$ .

The second study, Study 2, was a longitudinal follow-up of Study 1. There were no significant differences in children's age, maternal age, or maternal education between groups. A series of mixed ANOVAS with group as the between-participants variable, time as the repeated measure, and each language

measure in turn serving as the dependent variable. The participants were 41 low-income, Spanish-speaking preschool children of Mexican descent, all of whom had previously participated in a study measuring the impact of bilingual preschool education on the language development of Spanish-speaking children, which study 1 in this article replicated. Twenty-six of these children formed the preschool group (50% female) as they attended one of the three subsidized preschool programs for a second year. The remaining 15 children from the same community (66% female) continued to not attend any formal preschool or childcare program. The same six measures of receptive and expressive ability in English and Spanish were used as in Study 1. T1 and T2 (ages +/- 3.5 years and +/- 4 years, respectively) were administered in Rodriguez et al. (1995); T3 and T4 (ages +/- 4.5 years and +/- 5 years, respectively) were administered in this study.

Time was the only significant variant in the PPVT and sentence comprehension,  $F(3, 108)=38.57, p<.001$  and  $F(3, 108)=11.7, p<.001$ , respectively. Both groups made significant improvements over time in lexical production,  $F(3, 111)=30.23, p<.001$  and the number of words produced,  $F(3, 102)=14.08, p<.001$ . The preschool group showed greater English expressive ability.

Both groups' English language complexity improved over time as indicated by number of words per verb phrase,  $F(3, 105)=6.77, p<.001$  and number of verbs,  $F(3, 105)=11.93, p<.001$ . Both groups made parallel and significant gains in Spanish reception as measured by the PPVT,  $F(3, 117)=65.62, p<.001$ . Both groups made parallel and significant gains in Spanish production as measured by

the lexical subtest,  $F(3,111)=12.88$ ,  $p<.001$  and number of words,  $F(3,93)=11.77$ ,  $p<.001$ .

Spanish language complexity also increased for both groups,  $F(3,99)=12.76$ ,  $p<.001$  for number of verbs produced. Interestingly, the control group's T1 scores were higher than the preschool group, but performance peaked at T2 and had dropped below T1 levels by T4, while the preschool group steadily increased their performance.

The findings in Study 1 suggest that children enrolled in bilingual preschools make significant progress in both English and Spanish reception and production; in comparison, children who stay at home progress in English at a lower rate. Spanish proficiency is in no way compromised by exposure to English in the bilingual preschool classroom.

The results in Study 2 sustain the findings in Study 1, and continue to strengthen over time. The preschool group continued to make greater gains in English, with both groups increasing in Spanish and English. Again, there was no detrimental effect on Spanish proficiency.

Several of the English proficiency measures showed statistically or marginally significant group differences favoring preschool children across all periods, including at pretest. This could be related to an unmeasured variable such as maternal attitudes toward preschool attendance or English language learning. Nonetheless, as the pre-test was administered one to two months after the start of the school year, the difference in proficiency might be due to the fact that the preschool group had already had some schooling in English. Again,

there was no detrimental effect of preschool attendance on development of Spanish proficiency.

Because of the strong design of the study, the findings in Winsler et al. (1999) are perhaps the best indication that it is possible to provide children with high-quality instruction in English and Spanish without deleterious effects; what is more, the children who received a bilingual instruction did better overall than those who did not attend preschool. As a follow-up study, a comparison between these same subjects and monolinguals of comparable SES could prove enlightening.

### Discussion

The findings in Lee et al. (2008), Gersten and Woodward (1995), Calderon et al. (1998) and Winsler et al. (1999), when viewed as a whole, do not present a homogeneous picture of dual-immersion and bilingual education; rather, they illustrate the fact that dual-immersion and bilingual education methods and programs are as varied as they are many, and it is therefore difficult to critique the philosophies by looking at just four studies. Nevertheless, it is possible to draw some conclusions about the approaches to dual-immersion and bilingual education.

Lee et al. (2008), in their description of a dual-immersion program, outlined the issues that many such programs face. Namely, the artificial segregation of languages—only Spanish in one setting and only English in another—is detrimental to the development of bilingualism. A growing body of

research (some of which is presented later in this chapter: Conteh, 2007; Moodley, 2007; Liang, 2006) suggests that codeswitching—i.e., switching from one language to the other in mid-conversation or mid-sentence—is not only a phenomenon that bilinguals naturally engage in, but it has specific educational and communicative uses for bilinguals. Thus creating separate linguistic spaces guarantees that dual-immersion students will be unable to have authentic linguistic exchanges in either setting.

The findings in Lee et al. (2008) also suggest that over-adherence to programs or methods can prove to have deleterious effects. For instance, even when it became evident that linguistic segregation was not an effective instructional method, the teachers felt compelled to continue implementing it. Perhaps less obviously, Calderon et al. (1998) were so invested in demonstrating the superiority of their program that they neglected to outline exactly what differences existed between BCIRC and the methods applied in the control group; thus while the reader knew that BCIRC participants did better than their non-BCIRC peers, the authors did not address the specific differences between both programs.

A compelling finding is in Gersten & Woodward (1995), wherein participants reported that they would have preferred to continue receiving instruction in Spanish, even after they had become English proficient. This finding reflects those in Gutierrez (2002; analysis of this paper is later in this chapter), who found that Latino students found instruction in Spanish to help their comprehension in math even when they were English dominant.

Finally, the findings in Winsler et al. (1999) provide a strong indication that early bilingual education need not be a subtractive experience for students, much the opposite. Tracking the participants in this study and seeing how they fare compared to their peers in the control group could provide invaluable data on the effectiveness of early bilingual education.

### Summary

This section provided a brief overview of ESL instruction, dual-immersion, and bilingual education, and the strengths and weaknesses of each method. From the papers presented above, it appears that ESL instruction alone results in a subtractive schooling experience for LEP students. They tend to become less proficient in their home language without ever become fully proficient in English. Furthermore, some ESL programs, such as the one described in Valdes (1998) have the effect of ostracizing LEP students, who are segregated from the mainstream and have little contact with English-speaking peers, thus no opportunity to use English in an authentic setting. Perhaps most egregiously, the fact that students with behavioral problems are kept in ESL classes as a form of punishment indicates that LEP students are little valued within the school's organizational system.

Dual immersion is a model that has a great deal of potential, since it could foster a culture of cooperation and mutual support within a school. Unfortunately, the dual-immersion program described in Lee et al. (2008) was unsuccessful in this. There are two factors that could explain this failure: first, the strict

segregation of languages meant that students and teachers could not use codeswitching as a teaching and learning tool, thus creating an artificial learning environment. Second, the fact that students had to declare a dominant language meant that they would be labeled as not proficient in the other language for the rest of their stay in the school. The school failed to account for the fact that some students are equally proficient (or equally non-proficient) in two languages and that dominance in one language does not automatically mean that comprehension is not aided by instruction in another language.

Bilingual education has the advantage of providing the opportunity for additive learning, preserving and valuing the students' home culture while learning the English language. The program described in Winsler et al. (1999) is exemplary in that it successfully serves a high-risk, low-SES population. Another advantage of bilingual education is that learners' home language are valued as an asset rather than seen as a hindrance to learning; and while there is no indication that language status and cognitive skills are related, a non-deficit model toward education cannot but be preferable to the alternative.

The next section of this chapter addresses issues of culture, identity and language choice that LEP students face in the American schooling system. First, it examines the relationship between culture and literacy, and how the two interact; second, it discusses challenges that LEP students face in terms of their identity, both cultural and personal, in the context of U.S. schools; examinations of learner status, language choice and the educational and social functions of codeswitching conclude the chapter.

### Culture, identity and language choice

The way people learn is inextricably linked with their culture (Rogoff, 2003); it thus follows that recent and not-so-recent arrivals to the U.S. face challenges beyond language barriers. This section addresses the interactions between culture and learning, first by examining the relationship between literacy and culture; second, by surveying the ways in which identity—or rather, identities—and learning expectations interplay; third, by examining the role of learner status in establishing self-expectations; fourth, by determining the factors that affect language choice; and finally, by analyzing the social and educational functions of codeswitching.

#### Literacy/culture

This section analyzes two journal articles that focus on the relationship between literacy and culture. Herrero (2006) worked with low-achieving Dominican students living in New York on collecting and producing narratives and folk stories, and found that the students were more engaged and held higher-level discussions when engaged in culturally relevant activities, i.e. activities with culturally familiar patterns and structures. Jimenez worked with five low-literacy Latina/o students on reading activities and developing cognitive skills. He found that students reacted strongly to reading materials with content

they related to, and that explicit teaching of cognitive methods was effective in helping the participants develop cognitive skills.

In her case study, Herrero (2006) examined the relationship between literacy instruction for second-language learners and culturally relevant activities, materials and interactions. Twenty-two low-achieving Dominican students in a New York high school collected narratives from family members and committed them to memory; they then presented, critiqued, drafted, edited and redrafted narratives in Spanish and translated them into English. The stories were to be subsequently published.

Students collected four types of narratives: students' cultural folklore; *historias de misterio* and *historias de calumnia* generated by the community; stories students wrote themselves; and children's fables and legends.

Herrero found that students were more engaged in literary discussion when that discussion was culturally relevant. For example, while studying *cuentos hablados*—an oral narrative tradition common in the Hispanic Caribbean—students explored themes of authenticity in folklore, suspension of disbelief and the role of symbolism in fiction, in addition to a study of the genre's formal aspects. Furthermore, students' writing and discourse were richer and more elaborate when they were allowed to use patterns present in everyday interactions; these skills developed primarily as a result of the activities and discussions surrounding folklore and *historias*. Children's fables and other written source materials generated less interest than oral folk stories and *historias*.

Herrero's case study strongly suggests that when they are engaged in activities they find culturally relevant, low-achieving students are more likely to do well. Because it is a case study, however, there is no indication of how much improvement was made, whether the students improved in other disciplines, and whether the improvement was sustained over time. Consequently, a parallel quantitative study, ideally using the same subjects, would be helpful in answering these questions.

In his qualitative study, Jimenez (1997) asked the following questions: What do low-literacy Latina/o students (regardless of how long they've been in the U.S.) know about reading? What strengths do they possess that might facilitate their literacy learning? How do they respond to instruction that employs culturally relevant text, emphasizes strategic processing, and acknowledges their dual-language abilities or their second-language learning needs?

In order to answer these questions, the author performed a study of the literacy knowledge, abilities, and learning potential of low-performing or low-literacy Latina/o students. The study included classroom observations, think-alouds (presenting a text to a participant, asking the participant to read each line of the text silently, and asking the participant to describe and explain in as much detail as possible what s/he is thinking about during and after reading each line of text), and cognitive strategy instruction (a series of cognitive strategy lessons, intended to document the potential of low-literacy Latina/o students to benefit from comprehension-based instruction by systematically recording their

responses to the lessons). Responses were then used to shape and modify the experiment so as to best promote students' comprehension of the text.

The subjects were five Latina/o middle school students who read up to four grade levels below their current seventh-grade placement at the time the study began. The students were drawn from two classrooms, a self-contained special education (SPED) classroom (populated entirely by Latina/os) and a self-contained at-risk bilingual education classroom. Participants attended a school that was about 50 percent Latina/o, 40 percent White, and the rest other. They all received free or reduced-price lunch.

Three of the participants were identified as having a learning disability and received instruction exclusively in English. All three students had experienced multiple disruptions in their schooling (at least five different schools between kindergarten and grade seven). The SPED teacher, who was monolingual, believed that because the students had been raised in the U.S., they did not need instruction in Spanish. Instruction in the SPED classroom was traditional, whole-group instruction.

Two of the participants came from the at-risk bilingual classroom. Both came from rural, low-SES backgrounds in Mexico. Both struggled the most with Spanish literacy. Both students received their instruction exclusively in Spanish, in addition to 45 minutes of ESL instruction daily. There were some indications that the students missed two or three grades of primary schooling. The bilingual teacher included literacy lessons that featured story grammar and some cognitive

strategy instruction. Students worked cooperatively to come up with answers to questions about the text they were reading.

The author collected and transcribed data using Glaser and Strauss's constant comparative method. Data included school records and background information, classroom observations, teacher comments, initial think-alouds and student interviews, and data from the instructional component of the study. From studying student files, the following student-generated themes emerged: reading is something special; it is a complete mystery; and reading is hard.

The author found that students had strong reactions to materials that they could connect to, such as the ritual of making tamales or a young girls' ambiguity about her Spanish-sounding name. This suggests that a supportive environment with culturally familiar text would enable reluctant readers to discuss printed materials in a meaningful way.

The participants also responded positively to cognitive strategy instruction. They were willing to try out different cognitive strategies; students also showed some improvement in their ability to use relevant prior knowledge rather than related, but unhelpful, information.

The author also found that Spanish played a large role in literacy instruction. The Spanish-dominant students appreciated the instructional use of Spanish; more surprisingly, the SPED participants, who had been raised in the Midwestern U.S. almost from birth, also stated that Spanish instruction facilitated their comprehension and learning.

Students also developed metacognitive skills. The author noted that while participants' comments of a metacognitive nature were relatively few, they indicated some important shifts in their thinking about reading and literacy; some of the students even labeled their strategy use.

While some aspects of this study are questionable—the author does not specify how he collected his data—the results strongly suggest that Latina/o students with low reading ability may improve if the materials provided are culturally relevant, if they have prior knowledge about what is being read, and if they are taught metacognitive skills to improve their comprehension of written text. Even for English-dominant bilingual students, the use of Spanish for instruction was helpful. While this was not its intent, the study also showcases the serious consequences of assumptions on the part of teachers, and their tendency to translate into low self-expectations.

### Discussion

Both Herrero (2006) and Jimenez (1997) explored the relationship between achievement, specifically as measured through literacy skills, and culturally relevant content. Their findings are consistent with one another: students have powerful reactions to materials with which they can identify, not just as individuals, but as cultural beings. Such findings indicate that the use of culturally relevant materials—materials with content the students can relate to on a cultural level—greatly improve the chances of bicultural students to improve. Another finding, and one that confirms the findings of Gersten and Woodward

(1995), is that regardless of language dominance, students appreciate instruction in Spanish. This suggests that students whose home language is spoken in a classroom setting may be more likely to excel academically than those in a monolingual setting.

### Identity

This section addresses the various identities of LEP and immigrant students, and how they affect self-expectations, parental expectations, and teacher expectations. Norton Peirce (1995) conducted a longitudinal study in which she recorded the experiences of five women who had recently immigrated to Canada, and the ways in which their LEP status drove their self-perceptions as well as the perceptions of those around them. She found a link between social identity, language proficiency and motivation to learn. Smith-Hefner studied a Khmer community's perceptions of their home language, and how those perceptions affected the educational choices parents made for their children. She found that seemingly contradictory beliefs and decisions were culture-based. Reyes, Andrade and Orbanosky (1993) focused on a language arts classroom wherein the teacher and students had successfully fostered an atmosphere of cross-cultural sensitivity.

In her longitudinal case study, Norton Peirce (1995) explored the theory that language is not a neutral means of communication but an expression of the speaker's social identity through the experiences of her former ESL students.

There were five participants in the study, all of whom had taken an ESL class with the author. The participants (all women) had immigrated to Canada from Vietnam, Poland (2), pre-Velvet Revolution Czechoslovakia, and Peru.

The author divided the research into two parts. First, she determined how the opportunities for immigrant women to practice ESL were structured outside the classroom, how immigrant women responded and reacted to these structures (i.e. whether they used or resisted opportunities to practice English), and to what extent immigrant women's actions were related to their investment in English and to their changing social identities. Second, the author determined how an understanding of natural language learning and social identity could inform second language acquisition theory, as well a ESL pedagogy for immigrant women.

The study lasted from January to December 1991. From January to June, the participants kept records of their interactions with Anglophone Canadians and used diaries to reflect on their language learning experiences in the home, workplace, and community. Participants and the author met regularly to share entries and discuss insights and concerns. Participants also filled out two detailed questionnaires—one before and one after the study—and the author conducted personal and group interviews as well as home visits.

The author found that language learners' social identity largely structured their investment. Social identities were not ahistorical and unidimensional, but rather complex and sometimes contradictory, changing across time and space.

Motivation to learn must be understood in context of the social relations of power that create the possibilities for language learners to speak.

The author did not address language status as a possible factor in social relations. It would have been interesting to find out whether low-status language speakers felt more powerless when interacting with native Canadians, especially when compared with high-status speakers. In addition, there was not enough detail about the methods and subjects.

In her ethnography, Smith-Hefner (1990) examined how the Khmer community perceived the role of their native language in the education of their children and how native-language attitudes affected Khmer parents' educational aspirations for their children. The participants were 35 of the 71 Khmer families with children enrolled at Alexander Hamilton Elementary School in Boston, and some families who had recently moved to another town. Alexander Hamilton has Boston's largest Cambodian bilingual program. All but one participant were part of the third wave of Southeast Asian immigrants: they had arrived as early as the early 1980s. The parents were from rural, uneducated backgrounds: only one third of interviewees were from urban areas. Most parents had come from families of farmers, unskilled laborers, or small merchants. Only 25 percent were from the Khmer middle class. Most parents had little formal education—six years for fathers and three years for mothers on average. Eighty-one percent of fathers said they could write in Khmer; less than half the mothers said they could. Thirty percent of parents said they could read, but not write in Khmer, or had learned

and forgotten. Parents in the study were still struggling to learn English. Fifty-six percent of families were on welfare because of their inability to speak English made them unable to secure a job.

The author gave participants in-depth questionnaires combined with open-ended interviews and observations. A number of Khmer teachers, ethnic association officials, and religious leaders, were interviewed as well. The interviews included standardized questions as well as open-ended discussions. Observations in homes and at various school and community events were conducted to assess actual patterns of language use and behavior. The interviews were conducted in the child's home; both parents took part in most cases. The child was present for at least part of the interviews, which took place in English or Khmer, depending on the interviewee's preference.

The author found that Khmer adults' limited education strongly affected their attitudes and actions supporting their children's education. Furthermore, the Khmer language makes social distinctions which are not found in English; thus not knowing Khmer was equivalent to being disrespectful toward one's elders.

Parents consistently agreed that bilingualism was important. Most parents wanted their children to read and write, as well as speak, Khmer. Khmer was considered critical for establishing and maintaining membership in the community. As many as 90 percent of parents expressed a wish to eventually return to Cambodia, at least to visit, another reason why they felt it was critical for their children to learn Khmer. Parents saw bilingual programs as a way for children to learn Khmer; they hardly mentioned learning English and skill transfer.

Nonetheless, Cambodians with strong aspirations for social mobility, including bilingual teachers, did not place their children in bilingual programs, or only kept them in such programs for one year. As a result children got no instruction in Khmer.

In spite of parents' desire for their children to learn Khmer, there was ambivalence toward enrolling children in the program. While teachers are held in high regard, the responsibility for learning falls on the children. Parents listen to children's complaints that something is too hard or boring, and generally do not push them to learn.

Khmer notions of personhood—that the child's character and inclinations emerged on its own, and that parental intervention had minimal impact—may have been the reason why Cambodian parents hesitated to push their children in academic endeavors the latter found unpleasant or boring.

Khmer culture explains why Khmer parents make educational choices for their children—or allow their children to make major decisions—that Americans find baffling and incomprehensible, since the latter see them as counter-productive. In reality, the cultural difference stems from the fact that in the Khmer culture, children are responsible for their own choices much earlier than in Western cultures. This insight could enable teachers, who are highly regarded within Khmer communities, to provide guidance and advice to both the parents and children.

This article illustrates the importance of knowing students' home cultures, and making judgment and choices based on an in-depth understanding rather

than a culturally biased perception. While it only deals with the Khmer community, every ethnic group and sub-group comes with its own set of mores and values, which teachers would do well to pay attention to in order to maximize students' chances.

Reyes, Andrade & Orbanosky (1993) sought to determine the effect of language arts instruction on oral and written English for LEP students; the acquisition of Spanish for native English speakers; as well as cultural awareness and ethnic group relations. In order to do so, the authors engaged in bi-weekly, non-participant observations of the language arts block, occasionally observed content-area instruction (science, math, and social studies), playground time, and the opening and closing activities of a fourth-grade classroom in a primarily (55% percent) Mexican and Chicano school district. The classroom, which had 27 students in all, included 14 students of Mexican descent and 13 monolingual English speakers; ten students were LEP and four were bilingual. The class's achievement rates fell within normal ranges according to achievement measures. The teacher used social constructivist methods and chose to include all students (including those not required to participate because of pull-out ESL instruction) into the English Language Arts program. She designed group work, with groups of four or five students. Each group had Spanish, English, and bilingual speakers, boys and girls, and varying abilities, thereby creating an environment where students were challenged, but not pressured, to learn the other language. Group work also allowed the teacher to work with students in distinct language

groups. The activities were holistic and challenging and were designed to create a cooperative learning setting. Since students from different language groups were in constant contact with one another, they were all expected to use scaffolding and go to expert peers for assistance.

Reyes et al. collected and analyzed data using field notes, audiotapes of language arts lessons, writing conferences, writing samples, and interviews of the teacher and students. They also videotaped some activities, including whole-class instruction, special writing projects, sharing time, and peer writing conferences. Once collected, the data were divided into three categories: use of L2; awareness, sensitivity and valuing of cultural or linguistic diversity; and engagement in cross-cultural relations.

Nineteen percent of students—all Anglo—showed minimal engagement in the three categories (engagement was only in-class, and only for specific assignments); 37 percent (mixed Anglo, Chicano and Mexican) showed moderate engagement (words and phrases were spoken in L2 and cultural activities were correctly matched to cultural groups), and 44 percent (mixed Anglo, Chicano and Mexican) showed high engagement (increased interest in hearing L2 stories, translating of stories into the L2, increased use of L2 at home, explicit valuing of bilingualism in oral and written discourse, inclusion of cross-cultural perspectives in writing, and extended cross-cultural interaction out of school). The ten LEP students used English more spontaneously by the end of the year; three wrote stories in English. The status of Spanish grew, as evidenced by the unabashed use of Spanish by LEP students even in lessons

where English was the target language. LEP students replied in Spanish to questions that had been asked in English; there was none of the hesitancy that usually signifies a belief that LEP students' contributions might be less important than their English speaking counterparts'.

While social and academic interactions were primarily intra-group at the beginning of the year, by the end of the year 80 percent of students showed positive inter- and intra-group relations. Circles of friends become more ethnically mixed both inside and outside the classroom. Students became more helpful toward members of the other group.

While the results are positive, more data manipulation might have been helpful in determining correlations between spontaneous use of L2 and cross-cultural relations, and whether the correlation changed based on the subject's ethnic background. In addition, the fact that all minimally engaged students were Anglo suggests that parental attitudes, as expressed through language status, may have affected students' willingness to learn that language. Further exploration of this question could produce interesting findings. More specifics on the types of activities the students engaged in, and whether some activities were more successful in producing a cooperative environment, would also have been enlightening.

### Discussion

The findings in Reyes et al. (1993) are in stark contrast with those in Lee et al. (2008), where exchanges in Spanish were contrived and teacher-driven.

The key difference, of course, is in the teaching methods: rather than creating two separate and mutually exclusive linguistic spaces, the classroom in Reyes was a single space where both languages were explicitly valued and where students' contributions as teachers as well as learners found equal purchase, regardless of what language those contributions came in. Group work allowed for authentic linguistic exchanges between students, and the cooperative learning environment ensured that the status of Spanish progressively rose as the year went on. In terms of developing identities, LEP students were not only included in the classroom's proceedings, but their membership in the class was as valued as that of their monolingual peers. There is evidence that language status affects language choice (Potowski, 2004; Hakuta & D'Andrea, 1992. This chapter examines both these articles in a later section).

Norton Peirce (1995) and Smith-Hefner (1990) highlighted other aspects of language and identity: first, that identities are not static, but fluid phenomena that have an impact on and are impacted by context; furthermore, status can change depending on linguistic and cultural fluency. Second, issues of identity are extrinsic as well as intrinsic in nature: native speakers might attribute characteristics to LEP and immigrant individuals that are the product of cultural interpretation rather than the truth. For example, an American who sees Khmer parents not enrolling their children in bilingual programs might believe that the Khmer care little if their children learn the home language, when in fact Khmer children have much more responsibility than their American peers, and are thus allowed to make their own decisions.

The issue of identity is thus a complex and layered one, and deserves much more discussion than there is room for here. That said, it is important that teachers know the tremendous impact their actions and inactions have in shaping the identities of their LEP students.

### Learner status

Not unrelated to identity is learner status, or the notion that students' self-expectations, as well as the expectations of their teachers, greatly affect achievement rates. The next two articles discuss the ways in which learner status affects achievement. Harklau (2000) followed LEP students as they went from high school to community college, and found that the participants' achievement rates dropped dramatically when their status as immigrants went from noble (in the deserving, hardworking, Ellis-Island vein) to other (somewhat infantilized, treated as non-members of American society). Gutierrez (2002) conducted observations in an inner-city public school with an outstanding math program, and found that Latina/o students responded to teaching methods that they found culturally relevant, as well as to teacher mediation.

In her paper, Harklau explored the process by which students recreate and resist representations of learner status, and outlined the different archetypes of ESOL prevalent in various institutions and their effect on non-native English speakers as they went from one institution to the other.

There were three participants—Aeyfer, Claudia, and Penny—all of whom were enrolled in a magnet science and technology program considered to be one of the district’s best and most competitive. The school itself was urban and ethnically diverse (60 percent Black, 30 percent White, and 10 percent Latino and Asian American). The ESOL teacher had identified the three participants.

The author conducted loosely structured interviews, which were tape recorded, lasted 30 to 50 minutes in length, and took place at two- to four-week intervals from January through June of the students’ senior year in high school. During the interviews, the students recounted recent class activities and assignments in each of their classes, observations, and written documents. The author also conducted interviews with the students’ teachers, lasting ten to 50 minutes, during which the teachers reported on the students’ performance and their experience with ESOL students more generally. The ESOL teacher was interviewed twice for over one hour each time about the case-study students’ and other ESOL students’ experience at school.

The ESOL students in the case study were considered a select group because they were enrolled in a magnet program. There were relatively few ESOL students at the school, and the ESOL teacher was popular with the student body as a mentor-teacher and advocate. Her attitudes contributed to ESOL students regarding themselves as a pan-ethnic group in spite of their relative heterogeneity. The school had a Bilingual Club, which contributed to the group identity of the ESOL students; furthermore ESOL students were considered to “belong” to the ESOL teacher, whom the other teachers often

asked to step in when an issue involving one of her students came up. ESOL students spent most of their time in mainstream content-area courses.

The “Ellis Island” immigrant identity prevailed at the school, thus ESOL students were regarded as having overcome great hardships and being determined and hardworking. ESOL students were frequently asked to write about their own experiences as immigrants. While these assignments were highly motivating to students and provided a strong link between home and school, they raised issues of personal disclosure and student-teacher power relationships. “Immigrant stories,” which ESOL write because they get so much sympathy from teachers, have the potential to essentialize ESOL students as a cultural ‘other’ in order to secure teachers’ sympathy and support. Thus, while immigrant narratives seemed to contribute for the most part to a favorable representation of ESOL students at the school, the representation by its very nature also tended to homogenize student identity within the institution. The hardworking and dedicated immigrant identity showed in students’ classroom behavior; ESOL students’ attendance was exemplary, and students were more likely to show their affection for teachers. On-task behavior and perseverance were the norm, to the extent that teachers expressed surprise when students did not conform to the representation.

The perseverance may have been regarded as admirable, but it was simultaneously construed as a possible indication of a lack of innate ability. Further, many of the teachers had a deficit model of bilingualism, believing that students’ ability to communicate in two languages was a disability, emphasizing

what immigrant students could not do relative to monolingual, standard English speakers. Some educators appeared to conflate English proficiency with cognitive ability. Regardless, students spoke of their bilingualism as a talent.

In community college, all three case study students were directed to the ESOL program; ESOL students became the primary determinant of their program of study. The ESOL program was geared toward students who had had most of their schooling abroad; thus the institutional and programmatic representations of ESOL students were as needing significant need for cultural orientation, and about students' cultural capital. Thus, case study students were viewed in ways discontinuous with the high school representations. Furthermore the new representations cast their experiences with U.S. schooling and society in an unfavorable light. Because of the highly-structured nature of ESL class and the teachers' policing of behavior, case-study students became ambivalent about ESL instruction, especially since they were taking classes in which instructors no longer policed behavior and granted students much more autonomy.

Because of the prevalent institutional representation of ESOL students and the behavior of many of the newcomers led ESOL instructors to expect compliance with and even gratitude for the social orientation they provided in classes, the independence of U.S.-educated students often struck teachers as lack of cooperation and rudeness. Curricula and teacher talk tended to position students as outsiders through discourses presuming a mutually exclusive "United States" and "your country." Case study students also felt a separation from, and a certain superiority to, the newcomers in their classes. Immigrants were

systematically and subtly denied ownership of English, leading the case study students to counter with classroom displays of self-assured expertise and boredom.

This case study is a powerful example of the ways in which institutionalized representations of non-native English speakers can shape a person's own identity and likelihood of success. Furthermore, it highlights the fact that an individual's identity is inextricably linked to the socio-economic and geographical contexts within which the identity exists. Because it is a case study, however, this paper could not experiment with different variables. For example, it would have been interesting to see whether achievement rates for this study's subjects varied from those whose schooling had been entirely subtractive. In short, while this paper casts some light on the complex and multilayered relationship between identity and academic achievement, it does not establish a direct link between the two.

In an ethnography, Gutiérrez (2002) analyzed the practices that best supported bilingual (but English-dominant) Latina/o students. The participants were three high-school math teachers who had advanced large numbers of Latina/o students through the curriculum and who had succeeded in getting historically marginalized students to take calculus. Two were Anglo, one was Puerto Rican. The high school was a non-selective, comprehensive public high school in Chicago that served a diverse student population. The student body was primarily Latina/o (67 percent); other students were African American (15

percent), Anglo (13 percent), and Asian (five percent). More than 42 languages were spoken at the school, and 87 percent of students qualified for free or reduced lunch. The dropout rate was about 40 percent, there were four known gangs in the school, and incoming students were often below grade level. Nonetheless, teachers reported that the school had a workable environment.

Latina/o students were a diverse group, with Mexicanos/Chicanos, Puertorriquenos, Guatemaltecos, and Dominicanos represented. English proficiency levels and immigrant status varied widely, though most students were second-generation immigrants. Most Latina/o students were bilingual or English dominant; few were Spanish dominant and had trouble expressing ideas in English. Most Latina/o students reported speaking Spanish at home.

The author conducted interviews with most math teachers in the school, and further, more in-depth interviews with three of the four math teachers identified as “core”—i.e., who were central to the success of Latina/o students in the school. The interviews were semi-structured and open-ended, and took place before or after school or during prep periods.

The author also conducted observations and took field notes: the three participating teachers were observed as they taught college algebra and AP calculus. The core teachers were also contacted by phone and email to get updates on classroom practices, school and city politics and policies, changes in the curriculum, etc. The principal and 22 of the 60 calculus students were interviewed in a semi-structured, open-ended format. All interviews were audiotaped and transcribed. Calculus students also took a survey asking them

about their experiences in calculus, their future plans (long and short term), their future aspirations, etc. Interviews and field notes were coded for major concepts such as language, culture, instructional strategies, and communication in mathematics.

The author found that teachers of successful Latina/o students encouraged the latter to work in their primary language and frequently engaged in codeswitching. They also brought food to share with the class, talked about their personal lives with students, and showed interest in students' personal lives. There was a lot of group work, and teachers were careful about their groupings—making sure they were heterogeneous—and that everyone in the group was a participant. Teachers were also skilled at building on students' prior knowledge and stressing the language of mathematics. They frequently restated questions in a number of different ways, and had students do the same so as to make concepts explicit and accessible. Interestingly, the teachers rarely used the textbook, claiming the wording was too difficult for the students; they preferred to make their own worksheets that drew on students' prior knowledge, whether in or out of class. The textbooks were used to familiarize students with the kinds of language and representations that students might encounter in college-level math classes or on standardized tests. The teachers were thus effective mediators between the textbook and the students.

Gutierrez (2002) adequately described a successful math program within an inner-city public school. She was thorough in her attempts to establish exactly what factors contributed to the high rates of success the students experienced in

that environment. A concurrent, quantitative analysis would allow for an in-depth look at what factors or sets of factors are most effective when teaching at-risk youth, as well as whether different factors are more or less effective depending on age, ethnicity, and gender.

Juxtaposing the findings of Harklau (2000) and Gutierrez (2002) is a further argument in favor of the idea that identity is not an ahistorical and context-free concept. Rather, factors such as the physical and social environment have a significant impact on the way in which an individual views him or herself. For LEP students and recent immigrants, issues of culture, power and linguistic ability further complicate identity formation; thus the role of the teacher of LEP students and recent immigrants becomes one of mediator, as exemplified by Gutierrez's (2002) participants, who made explicit the dichotomies between home culture and the host culture (in this case, middle-class America) and provided translations from one to the other. On the other hand, the type of mediation that the teachers in Harklau (2000) provided was less explicit and the power dynamics were different. The participants' identities, as the teachers saw them, were more a product of the host culture than of the home culture: the worthy immigrant or the permanent foreigner. They had little to do with how the students viewed themselves and the actual differences that existed between their home and host cultures.

The nature of the student-teacher relationships that Harklau (2000) and Gutierrez (2002) presented is also worthy of note. Relationships in Harklau

(2000) appeared based exclusively on an archetype—the immigrant as either worthy or hapless—while those in Gutierrez (2002) seemed to be grounded in the students' home cultures and to highlight the differences between cultures, and thus were more authentic. This suggests once again that authentic learning environments foster student engagement and achievement.

### Language choice

The decision of which language to use in various contexts is one that takes into account myriad factors, including language status, geography, and linguistic ability of the interlocutor. This seemingly benign choice is in reality socially and culturally charged; for this reason, it deserves further attention. Potowski (2004) studied fourth- and fifth-graders in a dual immersion magnet school to determine which factors drove language choice. She found that the speaker's gender and the power status of the interlocutor (teacher or student) were the two factors which had the greatest impact on the speaker's language choice. Lamarre, Paquette, Kahn and Ambrosi (2002) performed in situ observations of young people living in Montreal. They found that the speaker's ethnicity and geography were the two greatest factors in language choice. Hakuta and D'Andrea (1992) analyzed properties of language maintenance and loss in Mexican-American populations. They found that attitude toward language, rather than proficiency in a language, had the greatest impact on language choice; furthermore, language attitude affected self-reported proficiency.

In her study, Potowski (2004) performed an ethnographic investigation of dual immersion students' identity investments—which may have promoted or hindered their use of Spanish—and quantified classroom language production. Her goal was to determine how much Spanish dual-immersion fourth and fifth graders used, and what variables appeared related to language choice.

The subject of the study was the Inter-American Magnet School (IAMS) in Chicago, IL. School makeup at the time of the study was 65 percent Hispanic, 19 percent European, and 14 percent African American; 60 percent of students were eligible for free or reduced-price lunch. School-wide test scores regularly exceeded state, city, and district averages. The curriculum was 80 percent Spanish and 20 percent English through third grade, 60/40 in fourth through sixth grades, and 50/50 for seventh and eighth grades. Languages were divided by subject. Thirty-five percent of students were LEP.

From January to October 1999, the author conducted 20 day-long classroom observations of 15 different classrooms from pre-school to eighth grade; she also conducted participant observations of Ms. Torres's classrooms several mornings a week during classes taught in Spanish. The author took fieldnotes about behaviors that seemed to reflect students' attitudes about Spanish, the teacher, and one another. Students were also observed in gym, lunch, recess, computers, music, and academic classes taught in English.

The author selected four focal students: two girls and two boys, two of whom were Spanish L1 and two English L1. The Spanish L1 students had come to the preschool Spanish dominant, but were English dominant at the time of the

study. All four students had at least average levels of oral Spanish proficiency and academic achievement. All were rated medium to high in their classroom participation during Spanish lessons.

In order to quantify the amount of Spanish and English being used during Spanish lessons, the author placed a tape recorder on the desk of one of the four focal students (students sat in clusters). The recordings included a wide range of interlocutors, since table arrangements changed every month. A total of 53 hours over 22 lessons were recorded between December 1999 and May 2000. A video camera was also trained on the table. English-language lessons were recorded to confirm that Spanish was never used during those times.

Students filled out a written questionnaire to explore their attitudes toward Spanish and their perception of the importance of Spanish in their lives. Students' journal entries were also used.

The author conducted interviews with students, parents, and the teacher. Interviews were semi-structured—there were set questions—but participants could respond freely. Students were interviewed in English. Parent interviews provided information on the child's language background as well as the parents' language attitudes.

The author analyzed data by turn, i.e. when an interlocutor stopped talking or was interrupted by another interlocutor. Each turn was coded using sociolinguistic variables: speaker's L1, gender, language of the turn, interlocutor, topic, and selectedness (how the student gained the floor during teacher-fronted

lessons: were they selected among several bidders, or did they shout out the answer without bidding or selection?)

Out of 2050 turns, students used Spanish 56 percent of the time (they were expected to use Spanish 100 percent of the time). The speaker's L1 was not related to their overall Spanish use. Girls, regardless of L1, used Spanish 17 percent more of the time than boys. This indicated that girls were more likely to conform to teachers' expectations. There was a correlation between students' choice of language and whether the interlocutor was a peer or the teacher. Students used Spanish 82 percent of the time when conversing with the teacher; conversely, 70 percent of Spanish turns were directed at the teacher, while only 19 percent of English turns were directed at the teacher.

Students used English 24 percent of the time during one-on-one conversations with the teacher (while she was circulating around the class during groupwork, for example); they used English 16 percent of the time when addressing the teacher publicly (i.e., in front of the whole class). This may indicate that students believed they were less likely to be reprimanded for their use of English in a one-on-one conversation.

When conversing with peers, 68 percent of turns were in English and 32 percent were in Spanish. This suggests that the presence of L1 Spanish speakers did not increase use of Spanish in dual immersion programs. English was the students' preferred language in non-academic settings. Again, gender differences were striking, with girls more likely to use Spanish with peers than

boys. However, all students used Spanish half the time or less when speaking with peers.

On-task exchanges were in Spanish 68 percent of the time. On-task Spanish turns represented 88 percent of the use of Spanish in the class. Management exchanges were in Spanish 57 percent of the time, and off-task exchanges were in Spanish 17 percent of the time.

The author compared the topics and function of students' off-task English exchanges with those of off-task Spanish exchanges. Students used English to talk about movies, TV shows, and pop culture, to fight and tease and indicate resistance to school. They preferred Spanish to sing to themselves absentmindedly; to stave off teachers reprimands to use Spanish. There were no references to TV, music, movies, fighting, teasing, or slang in Spanish; Spanish was not used to carry out authentic communicative functions.

Students whom the teacher called on used Spanish 96 percent of the time, and students who shouted out answers unbidden used Spanish 81 percent of the time. This suggests either that students felt more pressure to use Spanish when selected to speak, or the teacher was more likely—consciously or unconsciously—to call on students whom she knew would answer in Spanish.

Four dimensions emerged as relevant to students' investments (the theory that the overriding purpose of social interactions is for people to construct and present an image of who they are): home language use and support for Spanish; student attitudes toward the dual immersion school and toward Spanish; the teacher's positioning of the student; and the student's position within her/his peer

group. Mere contact with native speakers did not result in greater use of language by L2 learners.

This study's results debunk two beliefs that many have about dual immersion and learning: that mere contact with native speakers will result in greater use of the L2, and that dual immersion programs automatically create authentic communicative settings. First, mere contact with native speakers did not result in greater use of the language by L2 learners. There are many factors at play, such as language status and attitudes toward language learning, that may affect an individual's desire or motivation to learn the L2. Second, dual immersion programs did not automatically create authentic communicative settings. Mediation on the part of the teacher is necessary, otherwise dual immersion programs run the risk of creating a setting in which one language—in this case, Spanish—is used only when required by an authority figure, but the other is the preferred one for conducting authentic exchanges. This study might have benefited from exploring the content of instruction: was the teacher working with material that was culturally relevant to the Hispanic students in the class? Did the students do any research about the cultures in which Spanish is spoken? Was there any concerted effort to highlight and value the Hispanic cultures represented?

In their qualitative study, Lamarre, et al. (2002) conducted *in situ* observations of young (18 to 35 years old) Montrealers to determine how the latter were using language and whether language practices varied according to

function, geography, neighborhood and social networks. In order to determine this, the authors conducted 190 short (15 to 60 minutes) observations in different parts of Montreal. The authors selected the sites based on their popularity with young Montrealers; they were located in different language communities (English, French, or other), and included cafes, video stores, movie theaters, malls, community centers, employment centers, health-care institutions, and some forms of public transportation.

The observers were graduate students of anthropology who could mix with the target population without attracting attention. Observations took place over 8 months to account for seasonal changes. All observations were recorded in text form, along with participants' social characteristics (approximate age, sex, ethnic origin insofar as apparent, and clothing style). Also recorded were the types of interaction, the function or motive of the interactions, and the wider group physically present. Information on language included languages used, context of use, turn taking, codeswitching, and topics of conversation. Observations also included information on the sites of observation: layout, furnishings and equipment, décor and ambiance.

The authors found that Montreal is still a linguistically segregated city. French dominated in the historically French neighborhood, while English was dominant in the English part of town. Ethnically diverse neighborhoods had the highest linguistic diversity: one could hear English, French, Arabic, Spanish, etc. in those neighborhoods. The authors recorded the highest frequency of codeswitching in ethnically diverse neighborhoods, usually between English and

a minority language. Ethnic minorities were more likely to use French in the French part of town and English in the English part of town.

The authors recorded most instances of bilingual and multilingual interactions in informal and commercial settings, where use of a language not associated with a neighborhood was most likely to occur. Downtown was a linguistic no man's land, in that the researchers did not hear any one language more frequently than any other.

Young people appeared comfortable navigating between cultural worlds and living at the intersection of several languages and cultures. However, they seemed less likely to engage in codeswitching in high-stakes situations, preferring to present themselves as monolinguals twice over rather than bilingual; this may be due to the negative view of codeswitching, which some people believe shows a lack of language skills. In language choice, functionality and efficiency appeared more important than politics.

The authors pointed out the study's shortcomings in their paper. Those shortcomings included a lack of interviews, meaning that observers had to guess at participants' ages and ethnicities; volume levels at some sites hindered the observer's ability to hear what language was in use; and the nature of the study presented a static view of how Montrealers experience the city, since it did not record movement and the observations were fixed in time and space.

The study's findings suggest that young Montrealers are adept at navigating the many cultural realms of their city, exemplified through their use of

codeswitching and their multilingualism. Ethnically diverse Montrealers seemed to engage in more frequent codeswitching than their English and French peers.

The authors' findings raise more questions than answers. Montreal's unique characteristics (acceptance of different languages and ethnicities and historically bilingual) mean that it might be hasty to extrapolate the authors' findings to other cities, especially American cities where monolingualism, not bilingualism, is the norm and where ethnic and social segregation results in few inter-ethnic and inter-social interactions (except for commercial transactions, which are conducted in English).

Nonetheless, such a study, if conducted in a highly diverse American city, would provide valuable insights into the ways in which members of ethnic and linguistic minorities engage in codeswitching in their day-to-day lives, as well as what power dynamics are embedded in language choice.

In a quantitative, one-shot case study, Hakuta & D'Andrea (1992) explored the properties that affected language shift in the Mexican-American population; more specifically, they analyzed the impact of language proficiency, language behavior, and language attitude on proficiency in two languages as well as consequences for bilinguals of the language attitudes of individuals.

The subjects were students at a high school in a predominantly agricultural community in California's central coast. There were approximately 2,300 students attending the high school, 65 percent (1,500) of whom were of Mexican descent. Participants were all the Mexican-descent students enrolled in

either Spanish as a Foreign Language (SFL) or Spanish for Spanish Speakers (SS). About two-thirds of Mexican-descent students took either one of these electives at some point in their high-school career; the authors thus assumed that this sample roughly represents the middle range of academic achievement. After initial screening to make sure participants met the criteria, 308 subjects remained. The mean age of participants was 16 years and four months ( $SD= 1$  year, 1 month); represented were 105 freshmen, 106 sophomores, 75 juniors, and 22 seniors; 159 participants—slightly more than half—were female. One hundred participants were enrolled in SFL, 208 in SS.

Language proficiency was measured in one class session through group-administered tests on productive vocabulary, the ability to detect grammatical errors, and a Cloze test. Each participant only received one type of test, with 102 taking the productive vocabulary test, 123 taking the grammatical knowledge, and 123 taking the Cloze test; all participants had to take their test in English and Spanish.

In order to create a single measure of language proficiency across all subgroups, the authors standardized each subject's test score with his/her subgroup and added ten to eliminate negative numbers. The underlying assumptions of this practice were that the same source of variation accounted for the variation in each of the tests, and that there were no overall differences between the three subgroups.

In addition to tests, the participants took a questionnaire asking about their background, their self-reported language proficiency, their language choice and

behavior in a variety of settings, and their attitude toward Spanish. This questionnaire was in English, but the authors walked through the questionnaire item by item, explaining the questions in Spanish to the participants. Based on the information participants provided on their questionnaires, the authors divided the population into five subgroups, by depth (age at immigration and time in the U.S.). Group makeup was as follows:

Depth 1: Born in Mexico, arrival to U.S. after 10 years (N=20)

Depth 2: Born in Mexico, arrival to U.S. between 6 and 10 years inclusive (N=31)

Depth 3: Born in Mexico, arrival to U.S. at 5 years or younger (N=60)

Depth 4: Born in the U.S., parents born in Mexico (N=123).

Depth 5: Born in the U.S., at least one parent born in U.S. (N=55)

Depth 6: Born in the U.S., at least one parent and set of grandparents born in the U.S. (N=19).

The authors measured the participants' language choice in various settings, including at church, with parents, with siblings, at school, alone, on the media, and with peers. To measure language attitude, the participants filled in a Likert scale after reading statements about language and bilingualism. Overall results were categorized: Spanish maintenance, subtractive orientation to bilingualism, and pragmatic attitudes to language.

The authors found that the largest gap in English proficiency fell between Depths 1 and 2, and the largest gap in Spanish proficiency fell between Depths 4 and 5. The means varied significantly by Depth (English:  $F(5,302)=21.71$ ,

$p < .001$ , or .264 of the variance; Spanish:  $F(5, 302) = 43.51$ ,  $p < .001$ , or .419 of the variance). Among the first-generation and immigrant participants, Spanish proficiency was related to the age at which they started speaking English ( $b = .049$ ,  $t = 2.775$ ,  $p < .006$ ). This factor only accounted for 0.076 of the variance. There was no one explanation for this phenomenon, but a number of possible reasons: the participants may have been exposed to English at the expense of Spanish proficiency; or earlier acquisition of English may have reduced participants' likelihood of participating in bilingual programs.

Parents' use of Spanish at home had more of an effect on Spanish proficiency than did language attitude and language choice outside the home. Depth 4 parents used significantly more English than Depths 1, 2, and 3 parents:  $F(5, 302) = 108.104$ ,  $p < .001$ , accounting for .642 of the variance. Adult language choice was affected by demographic variables associated with immigration.

Outside the home domain, language choice consistently shifted toward English across depths. With siblings,  $F(5, 298) = 33.966$ , with peers,  $F(5, 302) = 33.770$ , at school,  $F(5, 302) = 37.594$  and alone,  $F(5, 301) = 25.579$ .

Language attitude was not related to Spanish proficiency, but it was related to language choice. Language attitude affected self-reported proficiency, with participants with subtractive or pragmatic attitudes to language more likely to under-report their level of Spanish proficiency and participants with a maintenance attitude more likely to over-report it.

This paper provides a more comprehensive view of the complexities that underlie individuals' language choice and language attitude. Unfortunately, the

authors' decision to administer different tests to different subgroups weakens their design. The study is one-shot; a longitudinal look at the same population would provide much more in-depth information, especially for those subjects who were Depths 1 and 2 at the time of the study.

The findings outlined in Potowski (2004), Lamarre et al. (2002) and Hakuta and D'Andrea (1992) point to several trends. First, language choice appears to be less a matter of proficiency—of the interlocutor and of the speaker—and more a matter of language attitude. For example, in Potowski (2004) and Hakuta and D'Andrea (1992), students who had a low opinion of Spanish tended to avoid using it, regardless of proficiency. Furthermore, the situations in which they used Spanish were those in which they did not have a choice: in the classroom or at home. Finally, they socialized or engaged in authentic exchanges almost exclusively in English. The data in Lamarre et al. (2002) is somewhat different, if only because Montreal is linguistically unique: there are two dominant languages as well as a high rate of immigration. Nevertheless, they found that geography affected language choice: people in the French neighborhoods tended to speak French, and people in the English neighborhoods tended to speak English. This finding suggests that again, language choice is the linguistic facet of the power dynamics in which people constantly engage.

Another trend the findings point to is the functional segregation of linguistic exchanges: in Potowski (2004), Spanish was the language of choice only when

the authority figure (i.e. the teacher) deemed it so. However, authentic exchanges—spontaneous outbursts, conversations about pop culture and the media, and other non-academic exchanges—took place almost entirely in English. This suggests that biliteracy and bilingualism are two separate fields, and that bilingual students require explicit instruction in the former in order to value their bilingualism.

The next section explores the phenomenon of codeswitching and its social and educational functions.

### Codeswitching

Codeswitching is a phenomenon in which bilingual speakers switch from one language to another. Codeswitching may occur mid-conversation, mid-utterance, mid-sentence, or even mid-word. Conteh (2007) interviewed bilingual teachers and observed their classrooms. She found that the teachers felt they received little support from their environment; further, she concluded that codeswitching occurs in bilingual teachers' classrooms when the communicative speech functions change: i.e., when switching from explaining a concept to giving praise. Moodley (2007) wanted to determine what relationship, if any, existed between codeswitching and skills acquisition. He found that specific patterns emerged, and that codeswitching occurred when students sought to clarify or reiterate a concept; interestingly, he found that codeswitching did not occur as frequently when one of the interlocutors was monolingual. Finally, Liang (2006) observed recent Chinese immigrants in a Canadian high school and classified

their interactions by language and by function; she found that codeswitching had specific social and academic functions.

Conteh (2007) explored the role of bilingual teachers in raising student achievement. She and four bilingual elementary teachers carried out 17 interviews and a small action-research project in two classrooms in the United Kingdom. The subjects were bilingual schoolteachers, some of whom were teaching in multilingual schools, i.e. schools with a large population of bilingual students, and some of whom taught in mostly White schools.

The researcher conducted 17 interviews, in which she asked the subjects what it meant to be a bilingual teacher and their opinion on using different languages in teaching. The action-research project consisted of an extended observation of a teacher interacting with 12 children between the ages of nine and 11; the children as well as the teacher were bilingual in Mirpuri Punjabi and English.

From the interviews, Conteh found that bilingual teachers held a wide range of views on the usefulness of using Punjabi or Urdu in the classroom. Teachers tended to view their own bilingualism positively and to believe that using different languages in the classroom would benefit their students. They also expressed frustration at the lack of support from the schools. Nonetheless, some teachers felt that it was preferable to use English; others yet adopted a transitional model, using the home language with younger children and English with older children. Some teachers, even if they did not speak their students'

home language, experienced positive results when including culturally relevant materials in their curricula. However, teachers sometimes experienced opposition from parents, especially White parents who thought their children would be learning Urdu or Punjabi. Teachers reported that parents of White and bilingual children believed that English should be spoken at school; consequently the teachers felt pressured not to use their other language.

From her observation of the bilingual classroom, Conteh found that the teacher engaged in codeswitching between English and Punjabi three or four times in longer utterances. The latter subsequently reported that her codeswitching was partially deliberate—she switched to Punjabi when using mathematical terms—but she tended to use whichever language felt more appropriate at that moment. While both languages served a pedagogic purpose, the teacher tended to give instructions and praise in Punjabi.

Conteh's findings are in line with other research done on codeswitching, i.e. that explanations and clarifications tend to occur in the native language and other activities occur in either the native language or English. Nonetheless the paper did not indicate what specific questions Conteh asked her subjects or even whether the questions were the same for every subject. Thus, while there is some indication that teachers' attitudes toward bilingual education may affect their students' achievement rates, further research with more control over variables such as parental attitudes and district-wide applications of policy would be helpful.

In his ethnography, Moodley (2007) studied the specific functions of codeswitching by learners during group work in a language, literacy and communication: English (LLCE) classroom. The author also explored whether codeswitching during group work promoted the acquisition of skills and knowledge, and if so, how.

The participants were English medium school students in Port Shepstone, KwaZulu Natal province, South Africa. The school was an “Indian” school during apartheid, but is now an English L1 school. There had been an influx of students whose L1 was an indigenous African language. Fifty-four percent of students were “African” learners and 46 percent were “Indian” or “Colored” learners\*. The subjects were Grade nine learners whose L1 was either Zulu or English. The average age was 14 years. The facilitator was an English monolingual person who audio-recorded interactions in groups comprised of: only Zulu-English bilingual learners (four participants); and both Zulu-English bilingual learners and English monolingual learners (four participants)

In order to determine whether Zulu-English bilingual learners used codeswitching in EL1 classes and whether there were differences in language approaches between bilingual groups and mixed mono- and bilingual groups, the facilitator audio-recorded sessions on literature (*Animal Farm* by George Orwell) and discussion (should HIV+ students be allowed in mainstream schools?). As

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\* In South Africa during the apartheid era, the population was classified into four groups: Black, White, Asian (mostly Indian), and Coloured. The Coloured group included people of mixed Bantu, Khoisan, and European descent (with some Malay ancestry, especially in the Western Cape). The Coloured definition occupied an intermediary position between the Black and White definitions in South Africa.

preparation, participants were given historical background and context on *Animal Farm* and were asked to read Chapter One. The teacher spoke English throughout.

Codeswitching rarely occurred in the mixed group, and then only as asides or for phatic reasons. The author posited that this was because the bilingual learners did not wish to exclude their monolingual peers from the discussion. Therefore, codeswitching was strategic. In the bilingual group, codeswitching had multiple functions: seeking clarification and providing explanations; elaboration; reiteration; management and influencing peer behavior; for expressing sophisticated ideas; and for “claiming the floor.”

This study’s main weakness is the smallness of the sample size. In addition, the author provided no information on the participants’ socio-economic backgrounds. Furthermore, and perhaps more egregiously, the author drew conclusions based on his own interpretations rather than on empirical evidence. For example, his claim that students in the mixed group did not engage in codeswitching because they did not wish to exclude their monolingual peers from discussion was not based on any evidence that he provided within this paper. The paper’s final conclusion—that codeswitching is strategic—was based on this speculation, and was therefore not substantiated. Including significantly more background information on the students and the teachers, and observing group interactions over time, would have been beneficial to the study.

In her article, Liang (2006) explored the purpose of codeswitching by ESL students in a Canadian high school. The author conducted in-class observations and face-to-face interviews with the students over two years. There were 49 participants, all of whom were Chinese immigrant students in content-based, multi-level ESL classrooms at one high school in urban British Columbia, Canada. The participants were selected because they had been in Canada less than three years; they were beginning English speakers; and they were enrolled in at least one ESL course. Participants had different family backgrounds, grew up in different societies, and had gone to different schools. Fifty-seven percent were male; the average age of the students was 15, with a range of 13-18 years.

The author conducted 120 hours of observations. The number of students being observed from stage to stage varied, with more students being observed in the early stage (including students from places other than China) and the focus narrowing to the 120 Chinese students (including the 49 interviewees) in the later stage. Thirty hours of audiotapes were used to record class sessions; of these, recordings that contained Chinese immigrant students' spontaneous interactions during group activities were analyzed for this article. Data gathered was coded into the following categories:

Interpersonal:

- Social needs: asserting personal rights and/or needs; asserting negative expressions (criticizing, arguing, threatening, giving negative opinions); asserting positive expressions; requesting an opinion; incidental expressions.

- Controlling: controlling actions of self and others; requesting directions; requesting another's attention

Ideational:

- Informing: Commenting on past or present events; making generalizations based on specific events and details; requesting information
- Reasoning: Explaining a process; recognizing causal and dependent relationships; recognizing problems and their solutions; justifying judgments and actions; drawing conclusions; recognizing principles; requesting a reason; anticipating/forecasting.

Participants' utterances were coded as either social needs, controlling, informing, or reasoning, and were counted in terms of words. The categories were then examined for L1 or L2 use, in order to determine the roles of English and Chinese.

The author also conducted face-to-face interviews with participants. The interviews were made of pre-established questions; each interview lasted about 30 minutes. Interviewees could respond in Mandarin, English, or Cantonese. Audiotapes of interviews were transcribed, then grouped together by circumstance under which the interviewees used their L1 in English class.

From the observations, Liang found differences in the uses of L1 and L2. Participants used their L2 for ideational functions, and their L1 for interpersonal functions; L1 was also preferred for reasoning; nevertheless, there were differences in L1 and L2 discourse in reasoning: the L2 was used when the

participants were working on immediate and concrete tasks to be completed in class, and when there was no prior knowledge about the subject matter in L1.

From the interviews, Liang found that the participants had multiple and contradictory feelings about L1 and L2 use during group work. Students used L1 to discuss class assignments, and to ask about words or concepts they could not express in English. L1 was also the socializing language. Students reported speaking little L2 in class because of peer pressure, because they were worried that they would be perceived as showing off, or because they were afraid of making mistakes and getting laughed at. In addition, students' peers told them to use Chinese, and the students feared exclusion from their peer group. Most students expressed a desire to speak more L2 in class.

While Liang's (2006) research is interesting, it explored language choice rather than codeswitching. That said, the interviews reveal the important role that peer pressure plays in language choice. Further research on the effect social and societal pressures on language choice would be revealing.

Conteh (2007), Moodley (2007), and Liang (2006) explored the social and academic functions of codeswitching. Examining the three papers together presents interesting findings: first, regardless of context—the articles study schools in South Africa, England, and Canada—there are common threads to codeswitching. In the classroom, students and teachers engage in codeswitching for specific communicative reasons, primarily to explain, clarify, and reiterate information. Furthermore, there are strong language preferences based on the

nature of the communication: social interactions tend to take place in speakers' L1 and academics are mixed, although the L2 is preferred in situations where the students have no prior knowledge of the topic in their L1.

Unfortunately, none of the articles above examined the relationship between codeswitching and language status. Such an examination could be enlightening.

### Achievement and expectations of success

The two following articles show that expectations of success on the part of the students, their teachers, and the school district can have a tremendous impact on students' actual likelihood of succeeding. Matute-Bianchi (1986) interviewed Japanese-American and Mexican-American students in a rural California high school to determine whether expectations of success and specificity of goals had an impact on academic achievement. Carbonaro and Gamoran (2002) used data from the NELS study to determine whether there was a difference in the types of activities that took place in English language arts class, what type of thinking skills those activities required, and whether the differences were in any way correlated to achievement and tracking. They found all of the above to be the case.

In her ethnography, Matute-Bianchi (1986) compared the future aspirations and perceptions for the future of Mexican-descent and Japanese

American students in a high school on California's Central Coast. The participating high school served a predominantly agricultural community, in itself highly depending on migrant farm labor; 57 percent of students were Hispanic, 33 percent were White, seven percent were Pacific Islander, and the rest were American Indian and African American. Thirty-five Mexican-descent students and 14 Japanese-American students participated in the study. In spite of her efforts, the author was unable to find Japanese-American students who were not succeeding academically. Participants were interviewed over a period of two years.

The author divided the Mexican-descent students into five categories:

1. Recent Mexican immigrants were Spanish-speaking and tended to be LEP; the other students thought them unstylish. The author found that within this subgroup, there was a correlation between proficiency in Spanish and academic achievement.
2. Mexican-oriented students were mostly bilingual, with varying degrees of proficiency in English; they used English and Spanish with their peers, but only English with school personnel. Mexican-oriented students tended to take general or remedial classes, but not ESL; some were enrolled in college prep courses. While they had ties in both the U.S. and Mexico, students in this subgroup tended to claim a Mexicano identity.
3. Mexican-American students were U.S. born and identified either as Mexican-American or American of Mexican descent. School staff

felt these students were totally assimilated. They often spoke little Spanish, or preferred English even if they knew Spanish. They often participated in mainstream school clubs and students government, but rarely in “Mexican” clubs.

4. Chicanos made up as much as 50 percent of the Hispanic segment of the school. They did not strongly value academic success, and were strongly alienated from the school. They rarely participated in clubs or activities. Chicanos were more likely to be enrolled in general or remedial courses than in college-prep courses.

5. Cholos were the smallest group. Other students in the school perceived them as gang oriented or gang sympathizers. They did not participate in school activities.

During the interviews, the author asked the participants about their aspirations and perceptions of their future as adults, their knowledge of adult occupations, their understanding of strategies to achieve adult success, their definition of success and failure, and their perceptions of the value of schooling in achieving these goals. She found that Japanese-American students were very achievement oriented and more likely to have specific career and education goals. All were planning on going to college to become engineers, dentists, lawyers, doctors, pharmacists, or teachers. All students in this group were enrolled in college-prep courses. The students were mostly third generation or the children of a U.S. born Japanese American educated in Japan. Their parents

spoke Japanese, but they did not. Japanese American students had a more detailed knowledge of adult occupations and opportunities, with better knowledge of the school curriculum and its link to postsecondary education, than their Mexican-descent peers. Most also had a family member who had been to college. Japanese American students reported that they were expected to be good in math by their teachers and peers. They reported relying on diligence and hard work, rather than innate ability, to do well.

Successful Mexican-descent students were achievement- and goal-oriented. They tended to be from the Mexican-oriented and Mexican-American subgroups. These students defined success as having things: a car, a house, and a job, as well as money. They believed there is a link between doing well in school and doing well in life. Many said that they received support and interest from their parents. They were non-specific in terms of career choice, and were not aware of the hierarchy that distinguishes U.C. Berkeley from community college. Their role models tended to be counselors or teachers at school.

Unsuccessful Mexican-descent students belonged to the Chicano or Cholo groups. They were more likely to be enrolled in the school's alternative program, which had shorter periods and optional afternoon classes. Some of these students expressed wanting to become lawyers, engineers, or architects. However most did not think they would be able to graduate. Unsuccessful students expressed a desire to do better than members of their family, but did not know how to go about it; they lacked specific information or were misinformed about how to secure a job in a specific field. They reported that they had not

discussed career options with their families; furthermore they felt their families would not object to their dropping out of high school.

This study had several shortcomings: first, the author used the word “success” in many different contexts, and with many different definitions. In her interviews, each participant defined success on his or her own terms; and Matute-Bianchi drew a divide between successful and unsuccessful students, yet never defined the term herself. This is problematic in that the measure is extrinsic, rather than intrinsic: for example, a low-achieving student might be categorized as unsuccessful regardless of any past improvement s/he has made. Furthermore, while the division of the Mexican-descent participants into subgroups presented a unique and interesting perspective, the author did not specify how many students from each subgroup participated in her study. This, in addition to the fact that much of the data is missing from the paper, is problematic.

This study suggests a relationship between expectation of success and degree of knowledge about the paths to success—i.e. which courses to take, which colleges to attend, etc. While this does not mean that a student knowledgeable about the postsecondary system is more likely to succeed academically at the secondary level, it does suggest that intimate knowledge of and familiarity with the system allows students to set specific goals and map out how to achieve those goals.

In their correlational study, Carbonaro and Gamoran (2002) considered

whether the differences that existed between advantaged and disadvantaged youth in reading achievement growth in high school were attributable to unequal access to high-quality instruction in English class, and whether differences in instruction accounted for achievement differences among students in different academic tracks.

The authors tested the following hypotheses:

1. High quality instruction, characterized by high levels of quantity, coherence, student voice, and demanding content, are positively related to growth in reading achievement;
2. Controlling for instructional quality in English classes explains a substantial portion of the track effect on growth in reading achievement;
3. Controlling for instructional quality in English classes explains a substantial portion of the socioeconomic and racial/ethnic differences in growth in reading achievement.

The subjects were 8,157 English students who participated in each of the three waves of the National Educational Longitudinal Survey (NELS) of 1988. NELS is a nationally representative sample of 24,599 eighth graders who were surveyed in eighth, tenth, and twelfth grades. Parents' and teachers' surveys provided information on classroom practices and socio-demographic information.

Three main dimensions of English achievement existed in high school: reading skills, writing skills, and understanding of literature (and literary forms and concepts). The authors measured participants' reading skill: students read four or five short passages, then answered three to five multiple-choice questions

on the content of the passages. The questions measured comprehension, analysis, and inference/evaluation. In tenth and twelfth grades, students took tests of varying difficulty based on their eighth-grade tests results so as to avoid the floor-and-ceiling effect. Student-level variables included female, Asian, Black, Latino, and SES, as well as averaged eighth-grade math, history, and science test scores to indicate prior achievement. Teachers labeled their tracks honors (21.4 percent), academic (34.2 percent), and general, vocational, and other (44.4 percent; henceforth described as general). The authors used a multilevel growth model to analyze the data; the model consisted of two levels: level 1 was the time point within students (each student had three test scores making up the dependent variable at this level), and level 2 was student-level characteristics.

The authors found that females, while they had an initial advantage, did not have an advantage in terms of growth over time: 2.424,  $p < .001$ . SES had a positive impact on growth over time as well as initial achievement: .671,  $p < .001$ . Asians scored lower than their White peers in eighth grade, but showed the most growth over time: -1.564,  $p < .001$ . Blacks showed smaller growth than Whites: .113, no p value given. Being in an academic or honors class provided growth: .503 and .882 respectively,  $p < .001$ .

Some instructional practices also appeared to have a statistically significant effect on achievement and growth: students asked to show their understanding = .323,  $p < .05$ . Literature study also had a positive effect on reading scores (.161,  $p < .05$ ), while grammar study had a statistically significant negative effect on reading scores: -.170,  $p < .01$ .

Overall, instruction and content accounted for slightly more than ten percent of the advantage students in the academic track had over students in the general track:  $[\.503-.450]/.503=.105$  and accounted for over 20 percent of the gap between the honors and general tracks:  $[\.882 - .714]/.882 = .190$ .

While controlling for instruction and content hardly changed the effects of gender, race and ethnicity on achievement, the effect of SES on achievement decreased by 30 percent when these variables were controlled:  $[\.170 - .119]/.170 = .30$ .

The authors found that it was not unusual for LEP students to be placed in a low or non-academic track, regardless of ability in their native language. Lower tracks tended to focus on the mechanical aspects of language—decoding and comprehension—rather than the communicative and literary aspects such as analyzing and evaluating. As a result, LEP students' experience in English language arts classrooms tend to be devoid of content, especially of any content that they might find culturally relevant.

Because the NELS survey did not appear to account for learning disability and English proficiency, the authors of this study could not use those factors as variables. Furthermore, it would have been interesting to analyze the data regionally to determine whether scores changed depending on whether the students were in an urban or rural setting. Looking at ethnicity and linguistic ability along those lines would have been especially enlightening.

The authors themselves pointed out that the NELS survey only measured reading ability, which in and of itself is an insufficient measure of proficiency in an English language arts classroom.

The nature of the test (reading a short passage and answering multiple choice questions based on that passage) comes with a host of problems. First, multiple-choice questions allow for a portion of guessed answers to be considered correct. Second, the authors do not specify whether the test-takers had any prior knowledge of the content of the selected passages. Finally, inference and evaluation, which the questions allegedly measure, rarely have a “right” and “wrong” answer; thus it is difficult to imagine a multiple-choice question that would measure such.

The findings in Matute-Bianchi (1986) and Carbonaro and Gamoran (2002) present a narrative picture of one of the mechanisms that leads to lower achievement rates on the part of LEP and immigrant students: because of their limited English, these students take English courses that focus on the mechanics of the language, rather than content; furthermore, these courses contain little that the students can relate to culturally. Because the courses are neither challenging nor engaging, students lose interest and do poorly, which leads them and their teachers to believe that they are unable to achieve academically. Low expectations on the part of the teachers and from the students themselves leads to low achievement; added to it is the fact that these students have little or no concrete knowledge about postsecondary education, and the picture is complete.

## Summary

This chapter examined whether bilingual students' cognitive skills were more developed than those of monolinguals, and found that while there is a strong positive correlation between bilingualism and cognitive skill, it is only present in individuals who are highly proficient in both languages or whose productive skills in both languages are strong. The chapter also surveyed what types of methods exist for educating bilingual students, LEP students, and immigrant children, and found that bilingual education in a culturally respectful environment and linguistically fluid setting was most beneficial to many bilingual and LEP students. Chapter three also examined the impact of culture and identity on language choice, and found that bicultural students experience powerful responses to classroom material with culturally relevant context; furthermore language status affects language choice. Finally, chapter three examined the relationship between expectations of success and actual success, and found a strong positive correlation between the two phenomena. The findings, when examined together, present an interesting picture of the strengths and challenges of bilingual students, LEP students, and immigrant children, which chapter four will discuss at length.

## CHAPTER FOUR: CONCLUSION

### Introduction

Chapter three reviewed literature on the cognitive skills of bilinguals, existing methods and programs for teaching LEP and bilingual students, and the ways in which identity can affect language choice, as well as such phenomena as codeswitching and language perception. This chapter reviews the findings outlined in chapter three, discusses what implications for the classroom the findings raise, and makes suggestions for further research on this complex topic.

As of 2003, 48 million people living in the U.S. (16 percent of the population) spoke a language other than English at home. In addition, 33 million people living in the U.S. (11 percent of the population) were not born here (Larsen, 2004). It is not unlikely that some of the people living in the households mentioned above speak both English and their (or their parents') native language.

Even though the United States has no official language, English is the predominant language for commercial exchanges, government, and all day-to-day civic activities. Naturally, English is also the language taught in schools. Unfortunately, and in spite of the lack of an official language, public schools struggle to address the needs not only of their bilingual students, but also of their non-English speaking students. Those students thus suffer from a haphazard education: they are placed at their age level one year, and their linguistic level the next; the tests don't account for the fact that they may struggle with English,

and become de facto language proficiency tests; generally, schools used subtractive models when teaching their LEP and bilingual students, forcing the children to choose between their identity as Chicano, Vietnamese, Hmong... and their identity as Americans.

This paper argued that there is a positive correlation between cognitive development and bilingualism, but that this correlation only exists when the bilingual is highly proficient in both languages, as measured through productive skills. This paper also surveyed common existing systems that address (or fail to address) the needs of bilinguals and LEP students in U.S. public schools, and argued that even English-dominant students fared better when instruction was partly in their home language and when elements of their home culture were represented in instruction. Finally, it explored the relationships that exist between language choice, identity, academic achievement, and learner status, and highlighted the importance of a culturally and additive education for LEP and bilingual students.

Nativism, a phenomenon that occurs in times of war and economic slowdown, and that is most commonly expressed through anti-immigrant beliefs, has slowly infiltrated the American public school system as part of the anti-Affirmative Action of the last decade.

Historically, American public schools were designed to inculcate American values and ways of life to recently arrived Americans; in other words, schools were where children and their parents lost their home culture and became American (in the broadest sense of the word: while European immigrants learned

to become American citizens, others, such as African Americans, Puerto Ricans, and Native Americans learned American subservience). During the 19<sup>th</sup> century, the nativist movement of the time resulted in laws requiring instruction to be in English only in Texas and California.

In the 1960s, Richard Nixon passed the Elementary and Secondary Education Act (ESEA), thereby overhauling educational policies toward ethnic and linguistic minorities. Specifically, Title IV, or the Bilingual Education Act, funded the establishment of programs designed to meet the needs of LEP students. In 1974, Chinese students sued the San Francisco School District, alleging that the district's lack of a policy for LEP students resulted in a barrier to education. The students won the suit, and the *Lau v. Nichols* made explicit the fact school districts are responsible for accommodating the linguistic needs of all their students. From this point forward, bilingual education was the de facto policy in the United States.

In the 1980s, several organizations demanded that English become the official language of the United States as well as the only language of instruction in schools. English-only proponents do not appear to believe that a link exists between language and culture, since they claim to value one but not the other. In 1998, Proposition 227 passed in the state of California. The Proposition allows only one year of ESL for LEP students, followed by English-only immersion. Similar propositions also passed in Arizona and Massachusetts.

English-only policies have been popular, but not necessarily successful. Tests showed that while LEP students' scores increased, they did not increase

as much as their English-speaking peers; furthermore, math scores showed that English-only policies have widened the gap between LEP and English-speaking students. Perhaps most disquieting is the fact that English-only policies have resulted in increased pressure on teachers, who have resorted to skipping literacy instruction altogether in order to focus on English word recognition and phonics to help their students do well in standardized tests.

Soon after George W. Bush's accession to power in 2000, he passed the No Child Left Behind Act (NCLB), thereby shifting the focus away from bilingual education toward English language acquisition, and favoring monolingualism and monoculturalism over multilingualism and multiculturalism. A key component of NCLB is Adequate Yearly Progress (AYP), under which schools that underperform will be closed, and funding for charter schools will take their place.

The relationship between cognitive skills and bilingualism is one that deserves attention. Not all bilingual students have better cognitive skills than their monolingual peers; in fact, evidence suggests that some bilinguals' cognitive skills are lower (Clarkson, 1992). However, those bilinguals whose cognitive skills are more developed than their monolingual peers' are highly proficient in both languages. More specifically, their productive skills in both languages are strong.

Also worthy of note is the fact that first- and second- generation immigrants perform significantly better than their third-generation and higher peers. Furthermore, children who immigrate later in childhood—around 11 years old—tend to be more academically successful than children who immigrate when

they are under two years old (Hakuta & D'Andrea, 1992). These findings might have their explanation, not in the linguistic realm, but in the cultural one: children who have grown up in a setting where they weren't not the other—as an immigrant, or a minority, or a speaker of a foreign language—tend to be more grounded in terms of identity, while children whose only sense of themselves within a greater society is as outsiders are more likely to develop an identity in opposition to that society.

The factor of socio-economic status was also omnipresent. There is an undeniable and powerful relationship between academic achievement and socio-economic status. Since most bilingual students in America tend to be of low socio-economic status, their chances of success are lower than their high-SES peers.

The findings listed above confirm this paper's findings regarding effective methods for teaching LEP and bilingual students, namely, that ESL instruction and placement in mainstream classroom are not the most beneficial to students. An optimal model for teaching bilingual, LEP, and immigrant children would include bilingual and immersion education, where populations are mixed in terms of linguistic ability and languages spoken; content that is relevant to students in terms of culture as well as difficulty; and an environment wherein all languages and cultures represented are explicitly valued. Furthermore, such a model would not segregate languages, but encourage students to use whatever language they choose; this would help create an authentic environment, since bilinguals do not tend to compartmentalize their use of language.

## Summary of Findings

Chapter three examined the relationship between cognitive development and bilingualism; existing methods for teaching bilingual and LEP students; and the complex mechanisms that drive language choice in bilingual and LEP students. It found a positive correlation between cognitive development and bilingualism, but only when productive skill in both was highly developed; ESL instruction alone was insufficient to meet the needs of most LEP and bilingual students, and while dual language immersion and bilingual education programs were preferable, they needed to explicitly value both languages; and while the factors that drove language choice were layered and complex, authentic settings and culturally relevant materials could profoundly affect student engagement and achievement in bilingual and LEP populations.

Stakhnevich (2005) studied the impact acquiring a third language in an immersion setting might have on a subject's previously acquired bilingualism, as well as the construction of a socially situated identity. The author—who was also the subject—found herself tailoring homework assignments to make them more authentic and constantly renegotiating her identity according to the context in which she found herself. The findings in Stakhnevich (2005) suggest that there is a link between language acquisition and linguistic and cultural identity.

After analyzing four journal articles dealing with the relationship between bilingualism and cognitive skills, it is still not clear that bilingualism—in the broadest sense of the word—has any effect on cognitive skill.

A positive correlation exists between proficiency in Spanish (i.e., the native language) productive skills and overall academic achievement (Garcia-Vazquez et al., 1997); between level of proficiency in both languages and math scores (Clarkson, 1992); and between schooling in one's native country and academic achievement (Padilla & Gonzalez, 2001). Nevertheless, Mouw and Xie (1999) contend that a positive correlation between bilingualism and cognitive skills—as expressed through math standardized test scores—only exists when the subjects' parents are not proficient in English. Even more puzzling, Clarkson (1992) found that bilingual students, if they are proficient in neither language, fare worse than their monolingual peers.

The common thread between all these studies lies in authentic productive skills: individuals who had opportunities to speak and write (i.e. be actively, instead of passively, bilingual) tended to perform better academically and in standardized tests than their monolingual and passive-bilingual peers. Thus bilingualism alone does not appear to be sufficient in order for it to have a positive impact on cognitive skill; speaking and writing in authentic settings must occur.

Another issue, which only Padilla and Gonzalez (2001) included in their research, is the fact that students who were 11 or older when they immigrated to the U.S. did better academically than those who were younger when they arrived. The explanation for this phenomenon might not be related to cognitive development, but to identity development, suggesting, as do Stakhnevich's

(2005) findings, that there is a strong link between identity and cognition, at least in language acquisition.

Finally, the positive correlation between socio-economic status and cognitive development appears to be universal, in that it transcends geography and time. Students with a higher SES perform better and at a greater rate than their less affluent peers in New Guinea, the Netherlands, the American Midwest, and everywhere else.

The previous section explored the possibility of a positive correlation between bilingualism and cognitive skill; this section asks whether acquiring a second language positively affects cognitive development.

There appears to be a positive relationship between explicitly teaching cognitive skills and language acquisition, although the results were too erratic to be conclusive (Kozulin and Garb, 2004). On the flip side, schools with foreign-language programs tend to do better than those with no or limited foreign language offerings (Sung et al., 2003), although this might be a spurious correlation, since schools with good foreign-language programs are also more likely to have higher-SES students, thus would do better regardless of the quality of their foreign-language departments. Interestingly, high-SES students appear to have better decoding skills than their low-SES peers, although this might be related to the status of the low-SES students' native language (Droop & Verhoeven, 2003).

It appears that the explicit teaching of metacognitive skills may be beneficial to students acquiring a foreign language; however, the status of the

learner's native language appears to affect achievement: within low-SES populations, Droop & Verhoeven (2003) noted a difference in performance between (high-status) Turkish speakers and (low-status) Arabic speakers.

In the U.S. public-school system, foreign language acquisition is explicitly segregated between high- and low- status learners. Low-status ESL departments and other immersion programs for newly arrived U.S. residents are often completely divorced from (high-status) foreign-language departments, even when there is a language in common. For example, Spanish is simultaneously a handicap, since the U.S. school system is Anglo-centric, and an asset, since it is required for those students who wish to go to college. As a result of this dichotomy, Americans tend to distrust foreigners yet admire speakers of more than one language.

Regardless of any relationship between cognitive skill, second-language acquisition, and bilingualism, the fact remains that a growing number of students enrolled in American public schools are not native speakers of English and require linguistic accommodations. Because of a lack of national policy toward addressing the needs of limited-English proficiency (LEP) students and their parents, methods, philosophies and approaches vary from state to state and from school district to school district. This section presented a brief overview of existing approaches: ESL and sheltered instruction, which take a subtractive approach to learning English, and dual-language immersion and bilingual education, which attempt to take a more additive approach.

Valdés (1998) performed a case-study of two children who were newly-arrived to the United States and were enrolled in a Bay Area public school. She extrapolated her findings to present a general picture of how recent immigrants experience schooling in the United States.

Wright (2004) interviewed ten Cambodian Americans, all of whom were his former students and had been schooled in California between 1980 and 1997. He wanted to determine the impact that various educational policies had had on immigrant populations.

Both Valdés (1998) and Wright (2004) found serious shortcomings in the ESL and English-only programs. There was a de facto segregation between ESL programs and the rest of the school, leaving ESL students with no chance to have authentic interactions with peers who were native speakers of English. ESL student status was low, and some students were kept in the ESL program as a punitive measure.

Wright (2004) found that because of inconsistencies between schools and poor implementation of state policies toward LEP students, the latter's school experience was erratic: some were kept in ESL programs long after they felt ready to move on, while others were never in an ESL program at all. As a result, some of Wright's subjects reported that they had lost their ability to communicate in Khmer, their native language, but were unable to communicate effectively in English.

Valdés (1998) and Wright (2004) both present a harsh critique of ESL programs in their current implementation. LEP students' experience of English

acquisition is a subtractive one, and their home language and culture are not valued, forcing students to feel that they have to choose between two identities. Furthermore, ESL programs appear to serve as a dumping ground for students who are no longer wanted in mainstream programs; the students within those programs thus become problem children.

Lee et al. (2008), Gersten and Woodward (1995), Calderon et al. (1998) and Winsler et al. (1999) all examined bilingual and dual language immersion programs being implemented; their findings, when taken as a whole, are heterogeneous. There is a wide variety in dual language immersion and bilingual education programs; it is therefore difficult to speak of them as a unified whole. However, some common elements exist.

Lee et al. (2008) provided a good outline of the issues that many dual-immersion confront. Such programs tend to segregate languages, i.e. to have students speak only Spanish, then only English, and to discourage codeswitching, even though this might be detrimental to bilingual development. Because codeswitching is an integral part of bilingualism, creating separate linguistic spaces guarantees that dual-immersion students will be unable to have authentic linguistic exchanges in either setting.

Lee et al. (2008) and Calderon et al. (1998) also presented a compelling argument against over-adherence to a program that clearly has shortcomings (although Calderon et al. (1998) presented this argument unwittingly, as they were an example of the phenomenon).

Perhaps the most compelling finding was in Gersten & Woodward (1995), who reported that their participants would have preferred continued instruction in Spanish even after they had become proficient in English. This finding confirms other studies that report that even English-dominant students prefer to receive some instruction in their home language.

Finally, the findings in Winsler et al. (1999) provide a strong indication that early bilingual education need not be a subtractive experience for students, much the opposite. Tracking the participants in this study and seeing how they fare compared to their peers in the control group could provide invaluable data on the effectiveness of early bilingual education.

The findings in Stakhnevich (2005), Winsler et al. (1999), and Gersten and Woodward (1995) all present strong evidence suggesting that language and identity are inextricably linked. This section explores this question, by discussing literacy and culture, identity (cultural and individual), and learner status.

Herrero (2006) and Jimenez (1997) explored the relationship between achievement, specifically as measured through literacy skills, and culturally relevant content. Their findings are consistent with one another: students have powerful reactions to materials with which they can identify, not just as individuals, but as cultural beings. Such findings indicate that the use of culturally relevant materials—materials with content the students can relate to on a cultural level—greatly improve the chances of bicultural students to improve. Another finding, and one that confirms the findings of Gersten and Woodward (1995), is that regardless of language dominance, students appreciate instruction in

Spanish. This suggests that students whose home language is spoken in a classroom setting may be more likely to excel academically than those in a monolingual setting.

Juxtaposing the findings in Reyes et al. (1993), who found that a teacher's careful engineering of dynamics through the use of social constructivist methods and groupwork could have a profound impact on the status of historically marginalized students, with those of Lee et al. (2008), whose study of a dual-immersion program led to inauthentic, teacher driven exchanges with no changes in student status, speaks to the importance of the teacher's role in fostering a good learning environment. Such an environment impacts not only LEP students, who, by virtue of their situation, are using language as an externalized form of identity negotiation, but also native English speakers, who learn to accept the contributions of LEP peers as they would those of their monolingual peers.

Confirming the findings of Stakhnevich (2005), Norton Peirce (1995) and Smith-Hefner (1990) established that an individual's identity is in constant flux and changes based on context as well as linguistic and cultural fluency. For newly arrived individuals, this means that they are vulnerable to cultural misinterpretation.

The issue of identity is thus a complex and layered one, and deserves much more discussion than there is room for here. That said, it is important that teachers know the tremendous impact their actions and inactions have in shaping the identities of their LEP students.

Harklau (2000) examined the role that learner status played in achievement by conducting a case-study of three students who were transitioning from a high-school ESL program to a community-college ESL class. She found that in the participants' high school, the "Ellis Island" immigrant identity was prevalent, while at the community college ESL students were subtly and systematically denied membership into the American community. The teachers' perceptions of the participants changed, from seeing them as hardworking and dedicated to seeing them as having attitude issues and not wanting to learn.

In her study of three math teachers working in an inner-city school, Gutierrez (2002) analyzed the practices that best supported English-dominant Latino/a students. She found that the most successful teachers (i.e., those whose students did well in the AP Calculus test) were those who encouraged their students to work in Spanish and engaged in frequent codeswitching. They talked about their personal lives with students, brought food to class, and showed interest in the students' lives.

The findings in Harklau (2000) and Gutierrez (2002) further strengthen the idea that identity is not an ahistorical and context-free concept. Physical and social environments have a significant impact on the ways in which an individual views him or herself. For LEP students and recent immigrants, issues of culture, power and linguistic ability further complicate identity formation; thus teachers of LEP students become mediators. For example, Gutierrez's (2002) participants made explicit the dichotomies between home culture and the host culture (in this

case, middle-class America) and provided translations from one to the other. On the other hand, the type of mediation that the teachers in Harklau (2000) provided was less explicit and the power dynamics were different. The participants' identities, as the teachers saw them, were more a product of the host culture than of the home culture: the worthy immigrant or the permanent foreigner. They had little to do with how the students viewed themselves and the actual differences that existed between their home and host cultures.

The nature of the student-teacher relationships that Harklau (2000) and Gutierrez (2002) presented is also worthy of note. Relationships in Harklau (2000) appeared based exclusively on an archetype—the immigrant as either worthy or hapless—while those in Gutierrez (2002) seemed to be grounded in the students' home cultures and to highlight the differences between cultures, and thus were more authentic. This suggests once again that authentic learning environments foster student engagement and achievement.

The findings outlined in Potowski (2004), Lamarre et al. (2002) and Hakuta and D'Andrea (1992) point to several trends. Language attitude appears to have more of an impact on language choice than proficiency does. For example, Potowski (2004) and Hakuta and D'Andrea (1992) found that students with a low opinion of Spanish avoided using it, choosing instead to socialize and engage in authentic exchanges almost exclusively in English.

Lamarre et al. (2002) found that geography affected language choice: people in the French neighborhoods tended to speak French, and people in the English neighborhoods tended to speak English. This finding suggests that

again, language choice is the linguistic facet of the power dynamics in which people constantly engage.

Another trend the findings point to is the functional segregation of linguistic exchanges: in Potowski (2004), Spanish was the language of choice only when the authority figure (i.e. the teacher) deemed it so. However, authentic exchanges—spontaneous outbursts, conversations about pop culture and the media, and other non-academic exchanges—took place almost entirely in English. This suggests that biliteracy and bilingualism are two separate fields, and that bilingual students require explicit instruction in the former in order to value their bilingualism.

Codeswitching is the act of switching from one language to another mid-conversation, mid-sentence, or even mid-word. Bilingual speakers frequently engage in it. Conteh (2007), Moodley (2007), and Liang (2006) explored the social and academic functions of codeswitching, and found that regardless of context—the articles study schools in South Africa, England, and Canada—there are common threads to codeswitching. In the classroom, students and teachers engage in codeswitching for specific communicative reasons, primarily to explain, clarify, and reiterate information. Furthermore, there are strong language preferences based on the nature of the communication: social interactions tend to take place in speakers' L1 and academics are mixed, although the L2 is preferred in situations where the students have no prior knowledge of the topic in their L1. Unfortunately, none of the articles above examined the relationship

between codeswitching and language status. Such an examination could be enlightening.

The findings in Matute-Bianchi (1986) and Carbonaro and Gamoran (2002) demonstrated that by being made to focus on the mechanical aspects of the language rather than content, LEP students are being made to fail. There is little of interest to them, and none of it is culturally relevant, resulting in students failing, leading their teachers to believe that they are unable to achieve academically. Low expectations on the part of the teachers and from the students themselves leads to low achievement; added to it is the fact that these students have little or no concrete knowledge about postsecondary education, and the picture is complete.

### Classroom Implications

In order to meet the needs of the growing population of bilingual students in the U.S., schools and school districts need to overhaul the existing educational system so that it integrates the former into the fabric of the schools rather than creating a separate, distinct system for them. Following are ways to achieve this.

Most schools currently have separate departments for foreign language and LEP/bilingual programs. While this distinction is likely the result of the fact that one program predates the other, it creates a two-tiered system, wherein the languages of immigrants have lower standing than the languages of natives, even when there are common languages between the two, as in Spanish. Integrating the two programs would have several advantages: first, it would

increase the status of the languages of immigrants, such as Vietnamese, Tagalog, etc., thereby increasing the status of the students conversant in those languages; second, it would provide an excellent setting for dual immersion classes and help foster a collaborative environment for LEP and monolingual students to teach one another; third, it would enable English monolingual students and their LEP bilingual peers to compare foreign language structures with that of their own, thereby helping develop the metacognitive skills of all.

Gersten and Woodward (1995) and Gutierrez (2002) both noted that bilingual students, even when they are English dominant, prefer to receive instruction in both English and their home language. In the classroom, this finding implies that students who speak a language other than English, regardless of proficiency in that language, need to be encouraged to make use of that language in their learning. Furthermore, teachers should foster a multilingual and multicultural environment, so that LEP students feel comfortable expressing complex ideas in their home language rather than being forced to speak English and thus silenced.

Since proficient bilinguals tend to have more advanced cognitive skills than their monolingual peers, creating a setting that focuses on productive skills in both languages could have a significant impact on the achievement rates of bilingual and LEP students. However, focusing on language alone is not enough: there must be explicit valuing of the cultures from which each student comes, so that each student may become literate in his/her own culture as well as in the cultures of his/her peers. In addition, teachers must make explicit the hidden

rules that often exist in the classroom, so that all students may understand what is expected of them.

The challenge, of course, is logistical: a classroom setting that includes educators who represent the cultures and languages of every student in class seems impossible to achieve, especially when one considers that the most diverse classrooms tend to be in the poorest, and thus most poorly funded, school districts. Until we can devise a more just system of funding school districts, a solution could be to enroll the help of community members and parents, who are a largely untapped resource in schools. This would have a double advantage: first, it would at least partially resolve the issue of representing diverse cultures in the classroom; and second, it would provide the students with role models in the community as well as authentic exchanges.

The next section briefly presents suggestions for further research.

### Suggestions for Further Research

The previous section addressed the classroom implications that came out of the review of the literature in Chapter Three. The findings presented in the articles in Chapter Three raise as many questions as they provide answers. Following are some of those questions, and the ways in which research on those questions could help educators understand the specific needs and challenges that bilingual and LEP students face.

Many of the conclusions this paper reached on the needs of bilingual and LEP students in U.S. schools is predicated on the hypothesis that the correlation

between cognitive skills and bilingualism is positive only when there is proficiency in both languages, especially in productive skills. This paper reached this hypothesis by amalgamating the findings in several research articles; the next step, then, is to design a study to test the hypothesis.

Another finding—that students' comprehension increases when instruction is at least partially in their home language, even when the students are English dominant—deserves further attention. Specifically, it would be interesting to determine whether this phenomenon is cultural or cognitive (or both). Such a study would have the added advantage of helping further determine the relationship between cognition and culture.

Hakuta and D'Andrea (1992), Reyes et al. (1993), and Potowski (2004) all addressed the relationship between language choice, language status, and academic achievement, and found that lower perception of the home language affected achievement. It would be interesting to examine the effect that bi-literacy has on language choice and language status: finding a classroom (such as the one in Reyes et al.) and determining whether LEP and bilingual students whose culture is explicitly valued in the classroom perform better in both languages and in general would be enlightening.

Conteh (2007) studied the functions of codeswitching in the classroom; based on her research, it would be interesting to determine whether there is a correlation between monolingual and bilingual teachers' perceptions of the usefulness of bilingual education and codeswitching and student perception, student language choice, and student achievement.

## Summary

This paper has presented a history of educational policies toward immigrants and bilinguals, from nativism to the Bilingual Education Act and the English-only movement. It examined the needs and challenges of bilingual and LEP students in the American school system, as well as the strengths they bring with them. It suggested that there could be a positive correlation between cognitive development and bilingualism, but only when productive skills are high in both languages. In addition, it presented snapshots of existing policies toward LEP students and their various degrees of implementation, showing that while it is important to provide instruction in the home language even to dominant students, it is just as important to foster an environment where authentic linguistic exchanges can occur: in short, encouraging codeswitching and not forcing one language over another are key. This paper also explored the links between language and culture, especially for individuals who struggle to maintain their cultural identity in a new country; it found that students respond strongly to material they feel is culturally relevant, and that subtractive methods of instruction have deleterious effects on the intellectual and cognitive development of bilingual students.

This paper showed that cognitively, linguistically and culturally, it benefits bilingual students to have an education that focuses on their whole selves, not just their American persona. By attempting to choke out the multicultural and multilingual aspects of the culture, nativists are unwittingly squandering invaluable resources, leaving problem-cases and failures in their wake. As a

nation of immigrants, it is important that we continue to value the unique contributions that newcomers bring with them, and accept them as what they are: an integral part of what it means to be an American.

## REFERENCES

- Abedi, J. (2004). The No Child Left Behind Act and English language learners: Assessment and accountability issues. *Educational Researcher*, 33 (1), 4.14.
- Associated Press. (2008, February 8). *Immigration law may toughen: State lawmakers propose tougher rules for hiring and benefits*. Retrieved February 18, 2008, from TampaBay.com:  
[http://www.sptimes.com/2008/02/06/State/Immigration\\_law\\_may\\_t.shtml](http://www.sptimes.com/2008/02/06/State/Immigration_law_may_t.shtml)
- Calderon, M.; Hertz-Lazarowitz, R.; & Slavin, R. (1998). Effects of bilingual cooperative integrated reading and compositions on students making the transition from Spanish to English reading. *The Elementary School Journal*, 99 (2), 153-165.
- Carbonaro, W. & Gamoran, A (2002). The production of achievement inequality in high school English. *American Educational Research Journal*, 39 (4), 801-827.
- Casey, M.; Nuttall, R.; & Pezaris, E. (2001). Spatial-mechanical reasoning skills versus mathematics self-confidence as mediators of gender differences on mathematics subtests using cross-national gender-based items. *Journal for Research in Mathematics Education*, 32 (1), 28-57.
- Cataldi, R. (1994). Bilingualism and early language acquisition—Great assets. *National Association of School Principals (NASSP) Bulletin*, 78 (564), 62-65.

- Clarkson, P. (1992). Language and mathematics: A comparison of bilingual and monolingual students of mathematics. *Educational Studies in Mathematics*, 23 (4), 417-429.
- Cohen, R. and Kennedy, P. (2000). *Global sociology*. London: PALGRAVE.
- Conteh, J. (2007). Opening doors to success in multilingual classrooms: Bilingualism, codeswitching, and the professional identities of ethnic minority primary teachers. *Language and Education*, 21 (6), p. 457-472.
- Cummins, J. (1976). The influence of bilingualism on cognitive growth: A synthesis of research findings and explanatory hypotheses. *Working Papers on Bilingualism*, no. 9. Toronto: Bilingual Education Project.
- Cummins, J. (2007). Pedagogies for the poor? Realigning reading instruction for low-income students with scientifically based reading research. *Educational Researcher*, 36 (9), 564-572.
- Darcy, N. (1953). A review of the literature on the effects of bilingualism upon the measure of intelligence. *Journal of Genetic Psychology*, 82, 21-57.
- Droop, M. & Verhoeven, L. (2003). Language proficiency and reading ability in first- and second-language learners. *Reading Research Quarterly*, 38 (1), 78-103.
- English for the Children. (2000, August 14). *English for the Children Enforcement Project*. Retrieved March 26, 2008, from English for the Children: <http://www.onenation.org/0008/pr081400.html>
- English for the Children. (1997). *Ron Unz*. Retrieved March 25, 2008, from onenation.org: <http://www.onenation.org/unz.html>

- Estrada, E., & Oppenheim, K. (2007, November 5). *Oklahoma targets illegal immigrants with tough new law*. Retrieved February 18, 2008, from CNN.com: <http://www.cnn.com/2007/US/11/02/oklahoma.immigration/>
- Gàndara, P. (2000). In the aftermath of the storm: English learners in the post-227 era. *Bilingual Research Journal* , 24 (1/2), 1-13.
- Garcia-Vazquez, E., Vazquez, L. Lopez, I. & Ward, W. (1997). Language proficiency and academic success: Relationships between proficiency in two languages and achievement among Mexican American students. *Bilingual Research Journal*, 21 (4),p. 395-411.
- Gass, S. & Selinker, L. (2008). *Second language acquisition: An introductory course* (3<sup>rd</sup> Ed.). New York: Routledge.
- Gersten, R. & Woodward, J. (1995). A longitudinal study of transitional and immersion bilingual education programs in one district. *The Elementary School Journal*, 95 (3), p.223-239.
- Guisbond, L., & Neill, M. (2004). Failing our children: No Child Left Behind undermines quality and equity in education. *The Clearing House* , 78 (1), 12-16.
- Gutiérrez, R. (2002). Beyond essentialism: The complexity of language in teaching mathematics to Latina/o students. *American Educational Research Journal*, 39 (4), 1047-1088.
- Hakuta, K. & D'Andrea, D. (1992). Some properties of bilingual maintenance and loss in Mexican background high school students. *Applied Linguistics*, 13 (1), 72-99.

- Harklau, L. (2000). From the “good kids” to the “worst”: Representations of English language learners across educational settings. *TESOL Quarterly*, 34 (1), 35-67.
- Herrero, A. (2006). Using Dominican oral literature and discourse to support literacy learning among low-achieving students from the Dominican Republic. *The International Journal of Bilingual Education and Bilingualism*, 9 (2), 219-238.
- Jimenez, R. (1997). The strategic reading abilities and potential of five low-literacy Latina/o readers in middle school. *Reading Research Quarterly*, 32 (3), 224-243.
- Kozulin, A. & Garb, E. (2004). Dynamic assessment of literacy: English as a third language. *European Journal of Psychology of Education*, 19 (1), 65-77.
- Lamarre, P.; Paquette, J.; Kahn, E. & Ambrosi, S. (2002). Multilingual Montreal: Listening in on the language practices of young Montrealers. *Canadian Ethnic Studies*, 34 (3), 47-75.
- Larsen, L. (2004). *The foreign-born population in the United States: 2003*. (USCB Publication No. P20-551). Washington, D.C.: U.S. Census Bureau.
- Lee, J.; Hill-Bonnet, L., & Gillispie, J. (2008). Learning in two languages: Interactional spaces for becoming bilingual speakers. *International Journal of Bilingual Education and Bilingualism*, 11 (1), pp. 75-94.
- Legal Information Institute. (n.d.). *Gratz v. Bollinger*. Retrieved December 6, 2007, from Legal Information Institute: [www.law.cornell.edu/supct/html/02-516.ZS.html](http://www.law.cornell.edu/supct/html/02-516.ZS.html)

- Liang, X. (2006). Identity and language functions: High school Chinese immigrant students' code-switching dilemmas in ESL classes. *Journal of Language, Identity, and Education*, 5 (2), 143-167.
- Matute-Bianchi, M. (1986). Ethnic identities and patterns of school success and failure among Mexican-descent and Japanese-American students in a California high school: An ethnographic analysis. *American Journal of Education*, 95 (1), 233-255
- Moodley, V. (2007). Codeswitching in the multilingual English first language classroom. *The International Journal of Bilingual Education and Bilingualism*, 10 (6), 707-722.
- Mouw, T. & Xie, Y. (1999). Bilingualism and the academic achievement of first- and second generation Asian Americans: Accommodation with or without assimilation? *American Sociological Review*, 64(2), 232-252.
- National Park Service. (2005). *Statue of Liberty National Monument*. Retrieved December 5, 2007, from National Park Service: [www.nps.gov/stli/](http://www.nps.gov/stli/)
- Norton Peirce, B. (1995). Social identity, investment, and language learning. *TESOL Quarterly*, 29 (1), 9-31.
- Office of the Inspector General. (2006). *The Reading First program's grant application process: Final inspection report*. Office of the Inspector General, U.S. Department of Education. Washington, D.C.: U.S. Department of Education.
- Padilla, M. & Gonzalez, R. (2001). Academic performance of immigrant and U.S.-born Mexican heritage students: Effects of schooling in Mexico and

- bilingual/English language instruction. *American Educational Research Journal*, 38 (3), 727-742.
- Potowski, K. (2004). Student Spanish use and investment in a dual immersion classroom: Implications for second language acquisition and heritage language maintenance. *The Modern Language Journal*, 88 (1), 75-101.
- Reyes, M.; Andrade, E.; & Orbanosky, J. (1993). Emerging biliteracy and cross-cultural sensitivity in a language arts classroom. *Language Arts*, 70 (8), 659-668.
- Rodriguez, R. (1981). *Hunger of memory: The education of Richard Rodriguez*. Boston: David R. Godine.
- Rogoff, B. (2003). *The cultural nature of human development*. New York: Oxford University Press.
- Romaine, S. (1995). *Bilingualism* (2<sup>nd</sup>. Ed.). Oxford: Blackwell Publishing.
- Smith-Hefner, N. (1990). Language and identity in the education of Boston-area Khmer. *Anthropology & Education Quarterly*, 21 (3), 250-268.
- Spring, J. (2001). *Deculturalization and the struggle for equality: A brief history of the education of dominated cultures in the United States* (3rd Edition ed.). San Francisco: McGraw Hill.
- Spring, J. (2008). *The American school: From the Puritans to No Child Left Behind* (7th Edition ed.). San Francisco: McGraw Hill.
- Stakhnevich, J. (2005). Third language acquisition in immersion: A case study of a bilingual immigrant learner. *Critical Inquiry in Language Studies: An International Journal*, 2(4), 215-232.

- Stewner-Manzanares, G. (1988, Fall). *New Focus: National Clearinghouse for Bilingual Learners*. Retrieved March 24, 2008, from The Bilingual Education Act: Twenty years later:  
<http://www.ncela.gwu.edu/pubs/classics/focus/06bea.htm>
- Stritikus, T., & Garcia, E. (2000). Education of limited English proficient students in California schools: An assessment of the influence of Proposition 227 on selected teachers and classrooms. *Bilingual Research Journal* , 24 (1/2), 75-85.
- Sundberg, T. (1988). The case against bilingualism. *The English Journal* , 77 (3), 16-17.
- Sung, H.; Padilla, M. & Silva, D. (2006). Foreign language education, academic performance, and socioeconomic status: A study of California schools. *Foreign Language Annals*, 39 (1), 115-130.
- Tilden, M. (2008, February 6). *House proposes legislation to tighten state immigration laws*. Retrieved February 18, 2008, from Columbia Missourian:  
<http://www.columbiamissourian.com/stories/2008/02/06/house-proposes-legislation-tighten-state-immigrati/>
- U.S. Census Bureau. (2006). *Statistical abstract of the United States 2006*. Retrieved December 5, 2007, from U.S. Census Bureau:  
[www.census.gov/prod/www/statistical-abstract.html](http://www.census.gov/prod/www/statistical-abstract.html)

- U.S. Department of Education. (2005, September 2). *How No Child Left Behind benefits African-Americans*. Retrieved February 24, 2008, from www.ed.gov: <http://www.ed.gov/nclb/accountability/achieve/nclb-aa.html>
- United States Department of Education. (1980). *Mission*. Retrieved December 4, 2004, from ed.gov: [www.ed.gov/about/overview/mission/mission.html](http://www.ed.gov/about/overview/mission/mission.html)
- Valdés, G. (1998). The world outside and inside schools: Language and immigrant children. *Educational Researcher*, 27 (6), 4-18.
- Winsler, A.; Diaz, R.; Espinosa, L.; & Rodriguez, J. (1999). When learning a second language does not mean losing the first: Bilingual language development in low-income, Spanish-speaking children attending bilingual preschool. *Child Development*, 70 (2), 349-362.
- Wright, W. (2004). What English-only really means: A study of the implementation of California language policy with Cambodian-American students. *Bilingual Education and Bilingualism*, 7 (1), 1-23.
- Zinn, H. (2005). *A people's history of the United States: 1492 to the present* (5<sup>th</sup> Ed.). New York: Harper Perennial.