TEACHING ENGLISH LANGUAGE LEARNERS:
A Comparison of Dual Immersion and English as a Second Language Programs

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Abstract

This paper compares two different programs designed to teach Spanish-speaking English Language Learners (ELLs). The first, English as a Second Language (ESL), utilizes English-only instruction to facilitate English acquisition, while the second, Dual Immersion, provides instruction in both Spanish and English in order to promote comprehension of curriculum. Based on conceptual arguments in the literature regarding ELLs, I hypothesize that Dual Immersion programs are at least as effective, and likely more effective, than ESL programs in promoting the academic and social success of ELLs. To examine this hypothesis, I conduct a formal literature review of the existing research on Dual Immersion programs, as well as a case study of an elementary school with both programs in Siler City, North Carolina. Although the methodology contains limitations, the evidence is consistent with my original hypothesis.
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I. INTRODUCTION

In recent years, increased immigration to the United States from Latin America has resulted in a rapid influx of Spanish-speaking students in the American public school system. These students often have limited proficiency in English and tend to score significantly lower on standardized tests than their English-speaking peers. Approximately 5.1 million public school students in the United States have limited English proficiency, representing more than one-tenth of the total public school population (Jost 2009, 1032). These students’ average standardized test scores are between 0.86 and 1.14 standard deviations lower than the average test scores of native English speaking students, according to data from the National Assessment of Educational Progress (Gándara & Rumberger 2008a, 592). Due to a lack of government funding and resources, school districts are often unable to meet the needs of the growing English Language Learner (ELL) population. When ELLs perform poorly on initial standardized tests, academic tracking into vocational courses limits their access to higher education in the long term (Sox 2009, 314). Because of this significant gap in academic achievement, the effective education of Spanish-speaking ELLs has become an increasingly pertinent and controversial issue in education policy.

Educational programs for ELLs fall into two categories: those that emphasize rapid acquisition of English and those that incorporate substantial instruction in the native language. The first type of program is often referred to as English as a Second Language (ESL), but the terms “English-only instruction” or “Structured English Immersion” also apply. For the remainder of this paper, I will refer to this type of program as ESL. The second type of program, generally known as bilingual education, utilizes both Spanish and English for instruction throughout elementary school, and occasionally into secondary school. Dual Immersion, a
specific type of bilingual education, differs from other programs in both the language of instruction and the make-up of students. While some bilingual programs gradually transition students into English-only classrooms, Dual Immersion devotes a substantial proportion of instruction to Spanish throughout the duration of the program. In addition, Dual Immersion places native English speakers and native Spanish speakers in the same classroom.

The purpose of this study is to compare Dual Immersion and ESL programs for Spanish-speaking ELLs along several dimensions, including academic achievement, oral proficiency, parental involvement, teaching style, student attitudes, and classroom environments. I utilized two separate methodologies to compare the two programs. First, I conducted a formal literature review of existing research on the relative effectiveness of Dual Immersion and ESL. In order to examine additional outcomes not captured by the literature review, I also conducted a case study of the Dual Immersion and ESL programs at Siler City Elementary School in Siler City, North Carolina. I hypothesize that Dual Immersion programs are at least as effective, and likely more effective, than English as a Second Language (ESL) programs in promoting the academic and social success of Spanish-speaking ELLs. The results of my literature review and case study, though somewhat limited in generalizability, are fully consistent with this hypothesis.

II. CONCEPTUAL FRAMEWORK

The relative effectiveness of ESL versus Dual Immersion is a controversial issue in education, with the language of instruction being the fundamental point of contention between the proponents of each program. Advocates of ESL claim that Dual Immersion disadvantages students and prevents their academic success by hindering their English proficiency. As a result, ESL programs focus on promoting rapid gains in proficiency through English-only instruction, supplemented with specialized tutoring by ESL instructors. Different ESL programs deliver this
specialized instruction in distinct manners. In ESL Pullout, teachers remove ELLs from their classrooms for special tutoring. In ESL Inclusion, ESL teachers enter the classrooms and co-teach with regular teachers. Self-contained ESL separates ELLs from mainstream students by creating classrooms solely comprised of non-native speakers. Another English-focused program, Early-Exit Transitional Bilingual Education (TBE), differs from traditional ESL by initially using Spanish as a language of instruction. However, instruction rapidly transitions to English-only in approximately two to three years. Although ESL and other English-only programs vary by state and school district, they share a common primary goal of promoting English proficiency. For the purpose of clarity, all programs with this common goal will be referred to as ESL for the remainder of the paper.

Meanwhile, advocates of Dual Immersion believe that by facilitating proficiency in Spanish as well as English, schools can create a solid foundation for literacy and oral proficiency that results in long-term academic benefits. Although the program title “Dual Immersion” can be used interchangeably with “Two-Way Immersion” or “Dual Language,” this paper will refer to the program as Dual Immersion. Dual Immersion programs usually fall into two different models, but they differ in terms of the actual ratio of Spanish to English instruction. In 90:10 programs, students initially receive 90 percent of their instruction in Spanish. Teachers then gradually increase the amount of English instruction throughout the program until both languages constitute 50 percent of class time. The second common model, 50:50, devotes 50 percent of instructional time to both languages in each grade level. An important feature that distinguishes Dual Immersion from similar programs is the make-up of the students; while other forms of bilingual education only enroll ELLs, Dual Immersion programs enroll both native English speakers and native Spanish speakers. These programs focus on comprehension of
curriculum as well as English proficiency, and thus one might expect the curriculum to be more advanced in Dual Immersion classrooms than in ESL classrooms.

Much of the literature surrounding ELLs suggests that social factors, in addition to standardized test scores, play a large role in predicting academic success. A study of adolescent Spanish-speaking immigrant students in 2008 found that a number of social factors, including opportunities to speak English with native English speakers in informal settings, accounted for 45% of the variation in students’ English proficiency (Carhill, Suárez-Orozco, & Páez 2008, 1174). Certain factors, including demographic characteristics such as socioeconomic status (SES) and parental education, are not controllable. However, schools can target a number of elements that affect the academic success of ELLs. These factors include classroom environments, parental involvement in schools, academic self-confidence of students, instructional styles, and the level of interaction with English-speaking peers.

For example, fostering a welcoming and tolerant environment in schools can facilitate the academic success of immigrant students by contributing to student confidence and promoting parental involvement (Borba 2009, 682). In “Caring Closes the Language-Learning Gap,” Mary Borba recommends translating school materials into Spanish, promoting parental involvement in school activities, and holding multicultural celebrations in order to create an atmosphere of acceptance that facilitates learning. In an assessment of resource needs for linguistic minority students, Gándara and Rumberger assert that, “Communication with parents is critically important,” and thus translation services and bilingual resources are essential (2008b, 141). Because Dual Immersion offers instruction in Spanish, schools that utilize this approach might be more likely to foster welcoming environments that promote parental involvement. Dual Immersion programs must maintain teachers that are fluent in Spanish, and therefore they are
also more likely to print school materials in Spanish and provide translation services. Finally, parents of ELLs in Dual Immersion might feel more comfortable volunteering and participating in school events, as these schools have bilingual personnel who are able to talk to parents in their native language.

Dual Immersion programs are also more likely to promote academic self-confidence among ELLs. ESL programs can limit the academic self-confidence of these students by placing them in mainstream classes before they are adequately proficient in English. Under federal law, ELLs must sometimes take standardized tests in English before they are proficient. Consequently, they are often placed in low academic tracks, which can inhibit a belief in the value of education and one’s potential. Teachers often prohibit ELLs from speaking their native language in classroom settings, which undermines their native culture. In contrast, Dual Immersion allows students with limited English proficiency to use Spanish in the classroom, thus promoting their academic confidence. This program also explicitly values their culture and language by devoting a substantial proportion of class time to Spanish. Instead of forcing students to learn in English when they lack proficiency, Dual Immersion can improve curriculum comprehension and promote a sense of self-efficacy among ELLs.

The literature indicates that teachers should utilize targeted assessment strategies in order to effectively meet the needs of English Language Learners. An article by Audrey Murphy in 2009 recommends weaving assessments into all parts of instruction and creating “language objectives” in order to adequately track the progress of students (30). Gándara and Rumberger found that schools with high levels of achievement for ELLs all focused on assessment as an important feature of their educational approach (2008b, 142). Because Dual Immersion programs strive to facilitate bilingualism among all participants, they are more likely to
incorporate language objectives and assessment strategies that are targeted towards ELLs. Although certified ESL teachers will likely utilize these assessment techniques, regular teachers may not have been trained to teach ELLs. Unfortunately, many ESL programs provide relatively little specialized instruction by ESL teachers, as most students participate in mainstream classes for the majority of the school day.

Specialized instructional techniques represent an additional feature of successful programs for ELLs. For example, teachers can utilize visuals or other contextualizing techniques to facilitate vocabulary development (Borba 2009, 685). In addition, promoting group work increases students’ exposure to their second language and facilitates increased communication between students of different linguistic backgrounds (684). However, teachers often face conflicting school ideologies that limit opportunities for students to practice their second language. According to a traditional view of the relationship between teachers and students, talking and working are oppositional activities. In contrast, new theories regarding education for ELLs confirm that speaking in the second language is essential for proficiency. In a study of the ESL program at a Canadian school, these two conflicting ideologies were shown to limit the students’ access to the English language in school settings (Olivo 2003, 67). The literature suggests that more “active” teaching strategies, which encourage students to speak spontaneously in the classroom, are more effective in instructing students with limited English proficiency (Gándara & Rumberger 2008a, 600). In addition, the most effective conversational practice should occur spontaneously and informally, instead of during formal instruction (Olivo 2003, 67). Because Dual Immersion programs strive to enroll equal numbers of native English speakers and native Spanish speakers, they are likely to provide more opportunities for informal interactions between students of different linguistic backgrounds. Although the ESL Inclusion
model does place ELLs and native English speakers in the same classroom, other forms of ESL segregate students with limited English proficiency from their peers. By segregating ELLs from native English speakers, these ESL programs limit their opportunities to speak English in an informal setting.

Regarding these influential social factors, the conceptual arguments in the literature support Dual Immersion as a means of promoting the academic achievement of ELLs. It appears that certain social factors, including classroom environments, parental involvement in schools, academic self-confidence of students, instructional styles, and the level of interaction with English-speaking peers, affect academic performance and can be targeted by school policies. Due to their goals and characteristics, Dual Immersion programs are more likely to positively influence these factors in ways that facilitate academic and social success.

III. LITERATURE REVIEW

To provide evidence for my hypothesis, I conducted a formal review of the existing research on Spanish-language Dual Immersion programs in the United States. In following sections, I describe my criteria for including studies in the review and methodology, interpret the results of each study, and synthesize the patterns.

Scope of Review

I used a number of strategies to identify studies for the review. First, I searched three databases, Educational Resources Information Center (ERIC), Education Full Text, and Web of Science, with combinations of the following terms and phrases: Spanish, bilingual, preschool, elementary, achievement, two-way, immersion, dual, effects, and language learners. I narrowed my searches by limiting results to “Reports- Research” in Document Types. In addition, I examined the sources cited by studies that met my criteria, in order to identify additional studies.
Finally, I used the Center for Applied Linguistics’ (CAL) “Bibliography of Two-Way Immersion Research Literature” to locate studies for my review.

In order to be included in the review, studies had to meet the following criteria: First, the study must focus on the outcomes of a Spanish Dual Immersion program that enrolls both native English speakers and native Spanish speakers. Second, the study must directly compare the academic or social outcomes of ELLs in the Dual Immersion program with outcomes of ELLs not enrolled in a Dual Immersion program, if comparison is possible for that outcome. The comparison group in each study can consist of a specific control group, students in the same school or district, or statewide average test scores. Regardless of how the study defines the comparison group, it must make some sort of comparison between Dual Immersion participants and ESL students. Third, the subjects of the study must have participated in the Dual Immersion program in elementary school or pre-school. Fourth, the study must have been conducted in the United States school system. Finally, the study must have been conducted in 1990 or later. Although there are a number of studies regarding Dual Immersion education that were published prior to the year 1990, the demographic composition of the United States and the public education system have changed considerably since the 1970s and ‘80s. As a result, this time frame ensures that the study reflects a relatively current educational environment. In total, I identified eleven studies that met the criteria for inclusion in the review.

Interpretation and Synthesis of Results

Due to the small sample of studies and the variety of study designs, the formal meta-analysis approach, in which one pools the statistical results of each study, was not applicable to this review. Instead, I chose to synthesize the results through categorizing findings by outcome. Within each outcome category, I included a summary table of the results. In order to be
considered a “positive finding,” the outcomes of Dual Immersion students must be significantly higher than the outcomes of the comparison group. “Negative findings,” indicate that the ESL group performed significantly higher than the Dual Immersion group. “Inconclusive” findings indicated that there were no significant differences between the performances of the two groups.

For some outcomes, studies were unable to directly compare the Dual Immersion and ESL groups or did not include explicit statistical analyses. In these cases, “positive” findings indicate that the students’ performance improved after participating in the Dual Immersion program or was substantially higher than that of the ESL group. Negative findings suggest that the students’ performance decreased in that outcome or was substantially lower than that of the ESL group. Finally, “inconclusive” findings indicate that the performance of participants remained the same or that the scores of the two groups were similar.

The individual studies in this review differed in the quality of their study designs. Only one study, conducted by Barnett, Yarosz, Thomas, Jung, and Blanco (2007), randomly assigned students to each program group. The remaining studies examined outcomes for children who were already enrolled in either Dual Immersion or ESL. Consequently, the studies included a selection bias that may limit the generalizability of their conclusions. It appears that parents who are more motivated to help their children succeed academically and more knowledgeable about the program models tend to choose Dual Immersion over ESL. As a result, confounding factors and differences in parental motivation may influence the scores of Dual Immersion students.

Before analyzing the results of the studies in the literature review, I outline the important features of each study in Table 1. In order to be designated as “high quality,” a study must include an explicit comparison group of non-Dual Immersion students. The comparison group must be comparable to the Dual Immersion group in demographic variables, and both groups
must have approximately the same number of students. Since the majority of studies did not randomly assign students to Dual Immersion and ESL groups, this feature help ensure that the two groups are comparable. Finally, the study cannot combine scores of different cohorts of students in order to increase the sample size. Studies designated as being of “lower quality” did not meet these criteria. For the duration of this paper, I will italicize the names of high quality studies within the tables. For the purpose of clarity, all comparison groups are labeled as ESL or TBE in Table 1. However, many of the studies also assessed native English speakers enrolled in the Dual Immersion programs. For these studies, the native English speakers in Dual Immersion, representing the treatment group, were compared to native English speakers in mainstream classes, who did not receive specialized tutoring by ESL teachers.

In the section following Table 1, I will discuss results and implications by outcomes categories, including oral proficiency in English and Spanish, academic development in English, academic development in Spanish, and qualitative outcomes.
### Table 1

<table>
<thead>
<tr>
<th>Study</th>
<th>Region</th>
<th>Research Design</th>
<th>Study Objective</th>
<th>Program Characteristics</th>
<th>Number of Study Participants</th>
<th>Quality</th>
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<tbody>
<tr>
<td>Alanís (2000)</td>
<td>South-west (Texas)</td>
<td>Quantitative: Students matched by SES</td>
<td>To examine fidelity to the program model, the effects of Dual Immersion on Spanish and English proficiency, and the effects on academic development in English</td>
<td>Dual Immersion: 50:50 model Comparison: ESL</td>
<td>Dual Immersion sample: 85 fifth-grade students Comparison: 80 fifth-grade students</td>
<td>High</td>
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<td>Barnett, Yarosz, Thomas, Jung, and Blanco (2007)</td>
<td>North-east</td>
<td>Mixed-method: Students randomly assigned to programs</td>
<td>To compare the effects of a Dual Immersion pre-school program and an English-only pre-school on English literacy development and classroom environment</td>
<td>Dual Immersion: 50:50 model Comparison: ESL</td>
<td>Dual Immersion sample: 85 three- and four-year-olds Comparison sample: 62 three- and four-year olds</td>
<td>High</td>
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<tr>
<td>Cazabon, Nicoladis, &amp; Pérez. (1998)</td>
<td>North-east</td>
<td>Mixed-method: Students matched by SES and abstract reasoning ability</td>
<td>To examine the impact of Dual Immersion on student attitudes and academic development in English and Spanish</td>
<td>Dual Immersion: 50:50 model Comparison: TBE and ESL</td>
<td>Questionnaire Sample: 133 Dual Immersion students in grades 4-8 Academic development sample: test scores of students from different years combined</td>
<td>Lower</td>
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<tr>
<td>Collier and Thomas (2002)</td>
<td>South-west (Texas)</td>
<td>Quantitative: Students matched by demographics</td>
<td>To assess the impact of Dual Immersion on academic development in English and Spanish</td>
<td>Dual Immersion: 90:10 model Comparison: TBE</td>
<td>Dual Immersion sample: 1,574 ELLs Comparison group: 939 ELLs</td>
<td>High</td>
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<td>Lindholm-West (2010)</td>
<td>West</td>
<td>Mixed-method: Students not matched explicitly, but demographics are comparable</td>
<td>To assess the impact of Dual Immersion on student attitudes and on academic development in English and Spanish</td>
<td>Dual Immersion: 90:10 model Comparison: ESL</td>
<td>Sub-study 1 Dual Immersion sample: 90 students Sub-study 1 Comparison sample: 103 students Sub-study 2 Dual Immersion sample: 207 students Sub-study 2 Comparison sample: 250 students</td>
<td>High</td>
</tr>
<tr>
<td>Study</td>
<td>Region</td>
<td>Methodology</td>
<td>Research Questions</td>
<td>Model and Comparison</td>
<td>Sample Size</td>
<td></td>
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<td>Leary and Borsato (2001)</td>
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<td>Students matched by SES and background</td>
<td>Immersion on student attitudes towards school, themselves, and peers after the end of the program (in high school)</td>
<td>Model not specified Comparison: ESL students in grades 9-12 Comparison sample: 17 Hispanic students</td>
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<td>López and Tashakkori (2003)</td>
<td>South-east</td>
<td>Quantitative: Students not matched explicitly</td>
<td>To assess the impact of Dual Immersion on English literacy development</td>
<td>Dual Immersion: 30:70 model (Spanish: English) Comparison: ESL Dual Immersion sample: 33 kindergarten students Comparison sample: 33 kindergarten students</td>
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<tr>
<td>López and Tashakkori (2006)</td>
<td>South-east</td>
<td>Mixed-method: matched by SES and demographics</td>
<td>To assess the impact of Dual Immersion on English proficiency, English academic development, Spanish reading skills, and student attitudes</td>
<td>Dual Immersion: 40:60 model (Spanish: English) Comparison: TBE and ESL Dual Immersion sample: 205 fifth grade students Comparison sample: 139 fifth grade students Student attitude sub-sample: 32 students from Dual Immersion and ESL</td>
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<td>Pérez (2004)</td>
<td>South-west (Texas)</td>
<td>Mixed-method: Students compared to state test average scores</td>
<td>To assess various outcomes of a Dual Immersion program, including classroom environment and academic development in English and Spanish</td>
<td>Dual Immersion 90:10 model Comparison: Average state test scores Dual Immersion sample: 216 elementary school students Comparison sample: Average scores on the state standardized test</td>
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<td>Shneyderman and Abella (2009)</td>
<td>South-east</td>
<td>Quantitative: Students matched by demographics and previous test scores</td>
<td>To assess the impact of Dual Immersion on English academic development, Spanish reading skills, and Spanish oral proficiency</td>
<td>Model A Dual Immersion: 1 hour of Spanish instruction per day Model B Dual Immersion: 1.5 hours of Spanish instruction per day Comparison: ESL Dual Immersion sample: 418 second grade students Comparison sample: 418 second grade students Oral proficiency sub-sample: 147 Dual Immersion students (94 in Model A and 53 in Model B)</td>
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**Definitions of Acronyms:**
- ESL: English as a Second Language
- SES: Socioeconomic status
- TBE: Transitional Bilingual Education (a program for ELLs that promotes rapid English acquisition, similar to ESL)
Oral Proficiency in English and Spanish

Three studies in the review, Alanís (2000), López and Tashakkori (2006), and Shneyderman and Abella (2009), assessed oral proficiency, and all three were high quality studies. Together, the results of the studies provide evidence that Dual Immersion programs are effective in promoting English oral proficiency among ELLs. Both of the studies assessing oral proficiency in English found significantly positive results for the Dual Immersion program. However, the studies are less conclusive regarding the effectiveness of Dual Immersion in facilitating the Spanish oral proficiency of English-dominant participants. Of the two studies that assessed Spanish proficiency, one found positive results for the Dual Immersion program, and one found inconclusive results.

The first, Alanís (2000), found that the Dual Immersion program was effective in promoting the English proficiency of ELLs, but not as effective in promoting Spanish proficiency among native English speakers. At the end of the study, 85 percent of ELLs had achieved English proficiency, but only 53 percent of English speakers were proficient in Spanish (236). Unfortunately, the Alanís study did not use a comparison group, so the results cannot indicate how the Dual Immersion students performed relative to ESL students. The second study, López and Tashakkori (2006), assessed only English proficiency. They found that students in Dual Immersion required an average of two school years to learn English, while the comparison group needed two and a half years to achieve the same level of English proficiency (131). Because this study utilized an ESL comparison group, the results provide evidence that Dual Immersion programs are more successful in facilitating English proficiency than ESL.

The third study, Shneyderman and Abella (2009), assessed language proficiency only in Spanish. In contrast to Alanís, the results indicated that the Dual Immersion program was
effective in promoting the Spanish proficiency of native English speakers. The study assessed two different models of Dual Immersion; in Model B, teachers conducted 1.5 hours of instruction in Spanish every day, while in Model A, they conducted 1 hour of instruction in Spanish per day. For all Dual Immersion students in both models, the percentage of students achieving Spanish fluency increased by at least 20 percent during the study (253). In addition, the English-dominant students in Model B scored significantly higher than English-dominant students in Model A. In summary, both Models of the Dual Immersion program resulted in positive growth for oral Spanish proficiency, and native English speakers seemed to benefit from increased exposure to Spanish instruction.

The following table, Table 2, summarizes the results of the three studies assessing oral proficiency in either language.

Table 2

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<th>Positive Finding</th>
<th>Negative Finding</th>
<th>Inconclusive</th>
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On measures of English proficiency, both of the studies found that the Dual Immersion program had positive results. Although proponents of ESL claim that providing instruction in Spanish delays acquisition of English, these findings suggest the opposite conclusion. The two studies assessing oral proficiency in Spanish were inconclusive. Because ESL programs do not provide instruction in Spanish, neither study was able to compare oral Spanish proficiency outcomes between the two programs.
Shneyderman and Abella also found that native English speakers benefited from increased exposure to Spanish. This finding suggests that increased Spanish instruction would enhance the Spanish proficiency of native English speakers. One can also explain the findings by examining the cultural environment within schools. Because English is more valued than Spanish in American society, one would expect that students with limited English proficiency would experience more cultural pressure to become fluent than students with limited proficiency in Spanish. Therefore, the study’s findings regarding the relative strength of students’ English acquisition compared to Spanish acquisition could be a result of social factors outside of the school’s control.

**Academic/Cognitive Development in English**

Ten studies examined the effects of Dual Immersion programs on the academic development of students in English. Seven of the ten studies were high quality, and two of the seven, Barnett et al. (2007) and Shneyderman and Abella (2009), had particularly strong study designs. Despite the variations in quality of study design, all of the studies assessing academic development in English either found positive results for the Dual Immersion program or inconclusive results, meaning that there was no significant difference between the Dual Immersion and ESL groups.

Unlike the other studies in the review, Barnett et al. (2007) utilized random assignment to assign students to the Dual Immersion and ESL groups, which allowed them to control for confounding factors. The authors found that both Dual Immersion and the ESL students made substantial gains in English literacy development, and there were no significant differences between the two groups. The lack of statistically significant differences indicates that instruction
in Spanish did not hinder the English development of participants. Although the sample size in the study is relatively small, the use of random assignment results in statistically strong findings.

The second outstanding study, Shneyderman and Abella (2009), found significantly positive results for the Dual Immersion students in reading and math. In reading, the Dual Immersion students and ESL students initially scored at similar levels, but the Dual Immersion students scored significantly higher than the ESL students by the end of the study (254). In math, the Dual Immersion students also demonstrated significantly higher levels of growth than the ESL students (255). Interestingly, there was no significant difference in achievement growth between the two Models of the program, meaning that the extra half hour of language instruction for Model B made no substantial difference in English academic development (256). This result suggests that providing even a small amount of content instruction in Spanish every day could result in significantly higher levels of academic achievement.

Of the five additional high quality studies that assessed English academic development, two found inconclusive results, two found positive results, and one found both positive and inconclusive results for different samples within the study. The first study in this category, Alanís (2000), found no significant differences between the Dual Immersion and ESL students in reading or math. In addition, all students in the Dual Immersion program scored at or above the state passing level in all three years (240). López and Tashakkori (2006) also had inconclusive results, as the study found no significant differences for math, reading, or science (131). Lindholm-Leary and Block (2010) assessed academic achievement in English for two different samples of students, referred to as Sub-study 1 and Sub-study 2. There were no significant differences between groups in reading or math for Sub-study 1, although the mean scores of the Dual Immersion group were slightly higher than the mean scores of the ESL group (52).
Overall, the lack of significant differences between groups indicates that English speakers in the program did not fall behind students receiving only English instruction, and the ELLs appeared to have closed the achievement gap with their peers.

The remaining high quality studies all found positive results for the Dual Immersion program. In Sub-study 2 of the Lindholm-Leary and Block (2010) study, Dual Immersion students achieved at significantly higher levels than the ESL group in both reading and math (53). Cobb et al (2006) found that Dual Immersion students had significantly higher scores than the comparison students in reading and writing (39). Furthermore, the positive effects of the program appeared to continue in junior high (42). In the Collier and Thomas (2002) study, Dual Immersion students outscored the comparison group by ten to twelve Normal Curve Equivalents (NCEs) in reading measures, seven to sixteen NCEs in math, and nine NCEs in language arts (136). The authors did not include native English speakers in the analysis, simply because there were too few English-dominant students enrolled in the Dual Immersion programs to make any conclusions about their performance. Overall, the results of these five high quality studies lend support to my hypothesis, that Dual Immersion is at least as effective as ESL in promoting the academic achievement of participants in English.

Finally, the results of the three lower quality studies provide additional support for my hypothesis. Cazabon et al. (1998), López and Tashakkori (2003), and Pérez (2004), all found that the Dual Immersion program was equally or more effective than ESL in promoting academic achievement in English. In the Cazabon et al. (1998) study, the Dual Immersion students scored at or above the control group for both reading and math, with the exception of the Spanish-dominant group in one grade (17). López and Tashakkori (2003) found significant group differences favoring the comparison group at the beginning of the study, but no significant
differences by the end of first grade, indicating that the Dual Immersion students had closed the achievement gap (6). In the Pérez (2004) study, which assessed students at two different schools, one school’s scores on the state standardized test increased from the 18.6 percentile to the 80.4 percentile five years after the program’s implementation. At the other school, scores for Dual Immersion participants increased from the 50th percentile to the 84.3 percentile (147).

The following table organizes the results of the ten studies in this section by positive, negative, and inconclusive findings.

**Table 3**

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<th></th>
<th>Positive Finding</th>
<th>Negative Finding</th>
<th>Inconclusive</th>
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</thead>
<tbody>
<tr>
<td><strong>Writing</strong></td>
<td>Cobb et al. (2006)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td></td>
<td></td>
<td>López and Tashakkori (2006)</td>
</tr>
</tbody>
</table>

*In the Lindholm-Leary and Block (2010) study, Sub-study 2 found positive results for Dual Immersion students in reading and math, while Sub-study 1 found inconclusive results.

The studies in this section provide strong evidence for the effectiveness of Dual Immersion programs in promoting academic development in English. In addition, the results did not differ based on quality of study design; both high and lower quality studies came to the same
conclusion. Based on the results, one can conclude that Dual Immersion programs are at least as effective, and possibly more effective, than English-only programs in facilitating academic development in English.

**Academic/Cognitive Development in Spanish**

Seven studies in this review examined academic development on Spanish measures, five of which were high quality. For this outcome, Collier and Thomas (2002) and Barnett et al. (2007) had the strongest study designs, as Collier and Thomas utilized a large sample size of participants, while Barnett et al. randomly assigned students to each program. All five of the high quality studies found significantly positive results for the Dual Immersion program, while the two lower quality studies were inconclusive.

The results of the Collier and Thomas (2002) study indicated that the Dual Immersion programs were more effective than ESL in promoting academic development in Spanish. They found that in reading, ELLs in Dual Immersion scored 8 to 11 NCEs higher than the ESL group. The Dual Immersion ELLs also scored 7 to 8 NCEs higher than the comparison ELLs in language and 3 to 5 NCES higher in math (133). Although the authors were not able to make direct comparisons to native English speakers in a comparison group, the English-speaking Dual Immersion students consistently scored above grade level on Spanish outcomes (134). Similarly, Barnett et al. (2007) found that ELLs in the Dual Immersion program gained significantly more than the ESL students on assessments of literacy skills (286). Although the performance of English-speaking students in Dual Immersion had no direct comparison group, they also made significant gains in Spanish literacy skills (288). The results indicate that for ELLs, the Dual Immersion preschool program was more effective than the ESL program in promoting Spanish academic development.
The remaining high quality studies, though subject to more limitations, also found positive results for the Dual Immersion program. Shneyderman and Abella (2009) found that on average, students in both Models of the program had higher scores in reading comprehension than the national norm group (251). Although Lindholm-Leary and Block (2010) could not conduct direct comparisons with the ESL group, the Dual Immersion students of both linguistic backgrounds scored above grade level in reading and well above grade level in math (54). López and Tashakkori (2006) found that as students received more instructional time in Spanish through Dual Immersion, their scores increased over the comparison students in the TBE program (134). This statistic also supports the structure of Dual Immersion programs; if additional Spanish instruction leads to higher scores, then programs that gradually phase out Spanish instruction, like TBE, will not maximize student achievement.

The two lower quality studies that assessed Spanish academic development found no significant differences between Dual Immersion and ESL. Cazabon et al. (1998) found that the Dual Immersion students of both linguistic backgrounds scored at similar levels to their comparison groups in both reading and math (18). Pérez (2004) found that in all grades, the scores of Dual Immersion students on the Spanish exam were slightly above the mean of all students taking the exam, but within the average range of the test (151). Both of these studies provide evidence that the Dual Immersion programs and ESL programs were equally effective in facilitating Spanish academic development.

The following table organizes the results of the seven studies assessing Spanish academic development by positive, negative, and inconclusive findings.

**Table 4**

<table>
<thead>
<tr>
<th></th>
<th>Positive Finding</th>
<th>Negative Finding</th>
<th>Inconclusive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>Barnett et al.</td>
<td></td>
<td>Cazabon et al.</td>
</tr>
</tbody>
</table>
Many of these studies did not utilize explicit comparison groups of ESL students to compare Spanish academic achievement between the two programs, which somewhat limits their results. However, the results of the studies all support the assertion that Dual Immersion programs are equally, if not more, effective in promoting academic development in Spanish. Interestingly, only the lower quality studies found inconclusive results, while all of the higher quality studies found positive results for the Dual Immersion program.

**Qualitative Outcomes**

Six studies evaluated various qualitative outcomes of Dual Immersion and ESL programs, three of which were high quality. Once again, the results of all the studies provide evidence that Dual Immersion programs are equally, if not more effective, than the ESL programs in positively influencing social factors that enhance academic achievement. Barnett et al. (2007) utilized a particularly strong study design by using random assignment, which allowed them to control for confounding factors. Assessments of classroom environments yielded no significant differences between the Dual Immersion and English-only classes on measures of overall quality and support for literacy development (284). However, teachers of the Dual Immersion classes scored significantly higher than the ESL teachers on use of students’ native
language and incorporation of the cultural background of students within the classroom (285). No significant differences were found in the use of effective strategies to help ELLs acquire English (285). One would expect to find that Spanish Dual Immersion classes score higher on support for the students’ native language, but the significant difference on “incorporation of the cultural background of students” indicates that the program is providing welcoming, tolerant environments that value the culture of ELLs.

The results of the remaining high quality studies, López and Tashakkori (2006) and Lindholm-Leary and Block (2010), suggested that Dual Immersion has positive effects on student attitudes. López and Tashakkori (2006) found that students in Dual Immersion expressed positive attitudes regarding the benefits of bilingualism (137). They spoke of economic and academic benefits, as well as the importance of bilingualism to maintaining their cultural heritage. In contrast, a number of the ESL students expressed frustration that they had lost some command of their native language and emphasized the importance of bilingualism in maintaining one’s cultural heritage. In Sub-study 1 of the Lindholm-Leary and Block (2010) study, Dual Immersion students had very positive scores, and higher scores than comparison students, on measures evaluating the benefits of bilingualism and cross-cultural tolerance (54). In Sub-study 2, Dual Immersion students indicated that they feel approximately equal levels of comfort when interacting with students of a different ethnicity (55). Overall, the results indicate that the Dual Immersion students are forming tolerant attitudes towards multiculturalism and bilingualism.

The three lower quality studies also found positive results for the Dual Immersion program. Pérez (2004) analyzed instructional styles through observations and found that Dual Immersion teachers used specific strategies to enhance students’ bilingualism and encourage interactions among students, as the literature predicted (83). In addition, Pérez noted that parents
of Dual Immersion at the two schools did become involved in leadership roles in the school (2004, 56). Thus, the Pérez study supports the idea that bilingual education facilitates parental involvement. Although Cazabon et al. (1998) did not use an ESL comparison group for qualitative outcomes, they found that Dual Immersion students expressed highly positive attitudes towards the instruction in their program and the amount of instruction spent on both languages (11). In addition, the results suggest that students feel satisfied with the Dual Immersion program’s ability to facilitate English proficiency (14). Lindholm-Leary and Borsato (2001) found that ELLs in Dual Immersion were significantly more likely than the ESL group to respond that they liked school and to engage in preparations for college applications (10, 15). The study also found that a much greater percentage of Dual Immersion students than ESL students enrolled in advanced math classes (17). Overall, the student responses indicate that the Dual Immersion program had positive effects on their academic path, their levels of tolerance, their feelings of acceptance by others, and their school environments.

The following table organizes the results of the six studies by positive, negative, and inconclusive findings.

### Table 5

<table>
<thead>
<tr>
<th>Positive Finding</th>
<th>Negative Finding</th>
<th>Inconclusive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Attitudes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Effective Classroom Environments</strong></td>
<td></td>
<td>Barnett et al. (2007)*</td>
</tr>
<tr>
<td>Barnett et al. (2007)*, Lindholm-Leary and Borsato (2001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parental Involvement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pérez (2004)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Effective Teaching Strategies</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
*The Barnett et al. (2007) study found significantly positive results for “incorporation of the cultural background of students” within the classroom, but no significant differences on overall quality or support for literacy development.

Overall, these six studies suggest that students enrolled in Dual Immersion are receiving positive benefits from the program. The students expressed positive attitudes towards the program, articulated the benefits of bilingualism, demonstrated a desire to prepare for college, and indicated that they were developing tolerant, multicultural attitudes. Data from classroom observations suggest that Dual Immersion teachers are utilizing effective strategies to promote language acquisition in both Spanish and English. Finally, the program seems to facilitate increased levels of parental involvement. However, most of the studies did not assess qualitative outcomes with the same high quality design used for many of the other outcomes. For example, some of the studies did not assess the attitudes of comparison groups, which limits the conclusions.

**Conclusions**

The following table summarizes the number of positive, negative, and inconclusive findings for all four outcomes.

**Table 6**

<table>
<thead>
<tr>
<th></th>
<th>Positive Finding</th>
<th>Negative Finding</th>
<th>Inconclusive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Proficiency in English and Spanish</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Academic/Cognitive Development in English</td>
<td>12</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Academic/Cognitive Development in Spanish</td>
<td>7</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Qualitative Outcomes</td>
<td>8</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total (High Quality)</td>
<td>21</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Total (Lower Quality)</td>
<td>9</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>0</td>
<td>16</td>
</tr>
</tbody>
</table>
Clearly, the number of positive findings for the Dual Immersion programs is much higher than
the number of inconclusive findings in this review. Furthermore, no study found significant
differences that favored ESL over Dual Immersion. This outcome lends support to the
hypothesis that Dual Immersion programs are at least equally effective, and likely more
effective, than ESL programs in promoting the academic and social success of English Language
Learners.

However, some qualifications are necessary. First, selection bias in the studies may
influence the results. Because Dual Immersion programs generally require parents to “opt in” to
the program, Dual Immersion students may be more likely to have parents who are highly
invested in their child’s education and who actively encourage educational attainment. In
addition, some of the studies did not explicitly match students by socioeconomic status. In these
studies, students enrolled in the Dual Immersion program had higher levels of socioeconomic
status, on average, than students enrolled in ESL. The eleven studies also varied in how they
conducted the comparisons; some compared the outcomes of all Dual Immersion students to all
ESL students, while some disaggregated comparisons by linguistic dominance. These
differences indicate that not all of the studies were equally reliable in conducting specific
analyses of comparable groups.

IV. CASE STUDY: SILER CITY ELEMENTARY SCHOOL

Through this case study, I sought to examine social outcomes that could not be
adequately captured through the literature review. The conceptual arguments in the literature
regarding ELLs suggest that social outcomes, including parental involvement, academic self-
confidence, classroom environments, instructional styles, and student interactions, play an
important role in determining academic achievement. The case study allowed me to specifically
examine these social factors through interviews and observations. First, I assessed the academic achievement of Dual Immersion and ESL students at Siler City Elementary School by examining standardized test scores. To gain additional insight into each program, I also interviewed the school’s Dual Immersion Support Teacher, Elizabeth Bonitz, and the Lead ESL Teacher, Nikki Murchison. The interviews allowed me to investigate whether each program was consistent with the conceptual literature on ELLs. Finally, I conducted observations of both Dual Immersion classes and ESL Inclusion classes at Siler City Elementary. In my classroom observations, I examined the use of language in each program, differences in instructional style, participation levels of students, and interactions between ELLs and native English speakers. I also looked for differences in content levels between the Dual Immersion classes and the ESL classes. Because programs for ELLs intend to promote comprehension of curriculum as well as acquisition of English, the observations allowed me to determine whether students in each program are given the opportunity to learn the same subject matter.

**Context and Program Logistics**

I chose to conduct my case study at Siler City Elementary School for two primary reasons. First, the school has both a Spanish-language Dual Immersion program and an ESL program. As a result, my comparisons were not subject to confounding factors like differential school quality and distinct program models. In addition, Siler City has a large Hispanic population that is relatively new to the area, which indicates that the town is also likely to have a large ELL population. Siler City, a town of 8,453 residents, is located in Chatham County in central North Carolina. According to the U.S. Census Bureau, the median household income in 2009 was $30,281. Approximately 50 percent of the population is Hispanic, and the Hispanic population has grown rapidly over the past few decades (U.S. Census Bureau 2009). Siler City
Elementary School is a public school in the Chatham County School District. In total, the District enrolls approximately 8,000 students. In the 2011-2012 school year, Siler City Elementary enrolled 663 students. While demographic percentages for the current school year are not yet available, the school-wide population is usually over 70 percent Hispanic.

Approximately 290 out of the 663 students enrolled at Siler City are Limited English Proficient (LEP), according to federal classifications. All LEP students who did not enroll in the Dual Immersion program receive specialized instruction from ESL teachers. Siler City utilizes the ESL Inclusion model, in which ESL teachers join the regular teacher in the classroom for a specified amount of time each day. While in the classroom, ESL teachers will work with every child in the class, not just ELLs, to ensure that the English language is being taught through the curriculum. There are currently six full-time and one part-time ESL teachers employed at Siler City Elementary.

The Dual Immersion program at Siler City Elementary began in 2005. In its first year, the program consisted of only one kindergarten class. However, the school added another kindergarten class in 2007 and two more classes in 2011. Currently, there are 15 classes in the Dual Immersion program and 30 classes in the entire school, meaning that over 330 students currently participate in the program. At Siler City Elementary School, the Dual Immersion program operates on a 50:50 model, meaning that teachers reserve 50 percent of instructional time for Spanish and 50 percent for English. Students spend their mornings in either “English World” or in “Spanish World” and switch in the afternoons. There is no application process or lottery system to enroll in the Dual Immersion program; instead, parents must simply “opt in.”

There is now a Dual Immersion program at Chatham Middle School, and all students enrolled in the Siler City Program continue to participate in Dual Immersion at the middle school level.
School Data

Chart 1 presents the percentage of students who reached proficient levels on the End-Of-Grade (EOG) test and includes scores for the following groups: Siler City Elementary (SCE) Dual Immersion students, all students at Siler City Elementary, and all students in the Chatham County School District. Table 7 presents the passing rates of Dual Immersion students on the EOG compared to the passing rates of all students at Siler City Elementary School in percentage points. Chart 2 compares the composite scores of the Dual Immersion students to all students at Siler City Elementary on a Cognitive Abilities Test. Finally, Chart 3 compares the current proficiency status of ELLs in Dual Immersion and ESL.
Chart 1: Performance on the EOG Exam

*The school did not provide the number of students in Dual Immersion who took each test, but numbers for the all-SCE group were available. These numbers also apply to Table 7.

2008-09 Third Grade: N=95
2009-10 Third Grade: N=94
2009-10 Fourth Grade: N=90
2010-11 Third Grade: N=113
2010-11 Fourth Grade: N=97
2010-11 Fifth Grade: N=91
Table 7: Comparison of Passing Rates on the EOG

<table>
<thead>
<tr>
<th></th>
<th>Passing Rate for Dual Immersion compared to all-SCE group in Reading (in percentage points)</th>
<th>Passing Rate for Dual Immersion compared to all-SCE group in Math (in percentage points)</th>
<th>Passing Rate for Dual Immersion compared to all-SCE group in Science (in percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-2009 EOG: Third Grade</td>
<td>85 points higher</td>
<td>41 points higher</td>
<td>N/A</td>
</tr>
<tr>
<td>2009-2010 EOG: Third Grade</td>
<td>3.6 points higher</td>
<td>4.1 points higher</td>
<td>N/A</td>
</tr>
<tr>
<td>2009-2010 EOG: Fourth Grade</td>
<td>57 points higher</td>
<td>18 points higher</td>
<td>N/A</td>
</tr>
<tr>
<td>2010-2011 EOG: Third Grade</td>
<td>33.7 points higher</td>
<td>16.7 points higher</td>
<td>N/A</td>
</tr>
<tr>
<td>2010-2011 EOG: Fourth Grade</td>
<td>18.4 points higher</td>
<td>0.4 points lower</td>
<td>N/A</td>
</tr>
<tr>
<td>2010-2011 EOG: Fifth Grade</td>
<td>28.3 points higher</td>
<td>9.1 points higher</td>
<td>12.2 points higher</td>
</tr>
</tbody>
</table>

Chart 2: Performance on Cognitive Abilities Test

*The school did not provide the number of students who took this test, but the total enrollment for third grade was 94 students in 2009 and 113 students in 2010.
Chart 3: LEP Status for ELLs in Dual Immersion and ESL (Fifth Grade Cohort 2010-2011)

*The school did not provide the number of Dual Immersion and ESL students included in this statistic, but in total, there were 91 students enrolled in fifth grade in 2010-11.

The results of Charts 1-3 indicate that, overall, the Dual Immersion students at Siler City Elementary School are performing substantially better on the EOG test than the entire student population at the school. In one instance, the 2010-2011 school year, the Dual Immersion students had slightly lower passing rates than the entire school on their EOG; the passing rate of the fifth grade Dual Immersion students was 0.4 percentage points lower than all students in that grade, which represents only a minuscule difference. The Dual Immersion students also performed at higher levels than their counterparts on the Cognitive Abilities Test, and they reached English proficiency at higher rates than ESL students.

*Interview*

As part of the case study, I interviewed Elizabeth Bonitz, the Dual Immersion Support Teacher at Siler City Elementary School, and Nikki Murchison, the Lead ESL Teacher at the school. During the interviews, I asked them questions regarding their background and experience with English Language Learners, the growth of the Dual Immersion and ESL
programs at Siler City, their views on the education of ELLs, and parental involvement at the school. The full list of interview questions can be found in the Appendix.

**Teacher Background and Preparation**

Ms. Bonitz and Ms. Murchison have extensive experience educating ELLs, both in ESL and Dual Immersion. Both received special ESL teacher certifications, which require 24 extra hours of training in addition to the regular teacher certification. Regarding their proficiency in Spanish, both teachers described themselves as “intermediate,” but not fluent. However, Ms. Bonitz stated that the abundance of bilingual staff members and students at Siler City Elementary prevents language barriers from causing communication issues. Both teachers indicated that the school had provided them with adequate training and resources in order to do their jobs effectively. For example, the school has provided professional development resources on issues of equity and poverty, as well as specific strategies for teaching minority students, both ethnic and linguistic.

**Individual Views**

In general, Ms. Bonitz expressed views that are consistent with the literature supporting Dual Immersion. She emphasized that both English proficiency and curriculum comprehension are essential to the academic success of ELLs, but she also stated that comprehension of curriculum tends to be the focus in the earlier grades. This view is consistent with the arguments in favor of Dual Immersion, which state that content comprehension is just as important as English proficiency. Regarding the strengths of the Dual Immersion program versus ESL Inclusion, Ms. Bonitz repeatedly emphasized social outcomes in addition to improved test scores. She noted that by “building on the students’ individual assets and languages and cultures,” the program is able to foster a sense of community and improve the self-esteem of
individual students. In contrast, ESL Inclusion can be interpreted as discounting what individual students bring to the school with their diverse languages and cultures. She described the ESL approach as, “Forget that. We’re learning this,” which creates a tone that causes students to undervalue their native language.

Interestingly, Ms. Murchison also expressed views that were consistent with the literature supporting Dual Immersion, not ESL. She did state that the most important learning outcome for ELLs is to be fully bilingual, a view that seems consistent with the emphasis on English proficiency in ESL. However, Ms. Murchison also emphasized that promoting students’ self-esteem and the “feeling that their culture is valued” are essential goals in the education of ELLs. Although ESL does not explicitly promote multiculturalism through the program’s structure or goals, Ms. Murchison consistently reaffirmed her belief in the importance of facilitating student self-confidence and cultural tolerance. When discussing the strengths and the weaknesses of each educational approach, Ms. Murchison expressed a strong belief in the effectiveness of the Dual Immersion approach. Specifically, she stated that Dual Immersion “is the only model that is going to close the achievement gap.” She noted that ESL lacks a specific, school-wide curriculum or approach that would guide teachers who work with ELLs. This haphazard approach means that ESL teachers rarely have time to facilitate a classroom community or an environment in which everyone feels explicitly valued for their unique attributes.

**Student Interactions**

Because Ms. Bonitz currently serves in an advisory role instead of in the classroom, I did not ask her specific questions about the behavior of students in the Dual Immersion program. However, Ms. Murchison’s descriptions of student behavior were very consistent with the literature supporting Dual Immersion. For example, she acknowledged that, “Spanish is
definitely second-fiddle to English, throughout the school, from the top to the bottom.”

Although the majority of students are very open and culturally aware, children can pick up on the nuances of the linguistic power play between English and Spanish. As a result, Spanish speakers often feel pressure to speak English, the more socially valued language.

Ms. Murchison noted that in mainstream classes, ELLs are generally less likely than native English speakers to participate during group work. However, ELLs are the first to contribute during Spanish instruction, according to her colleagues in Dual Immersion. This difference in participation indicates that giving ELLs the opportunity to speak in their native language facilitates academic self-confidence, as the literature also suggests. According to Ms. Murchison, instruction in Spanish through the Dual Immersion program is very beneficial for the self-confidence of native Spanish speakers and the tolerance of native English speakers. Because English speakers have to rely on Spanish speakers for help during Spanish instruction, they temporarily experience the perspective of their Spanish-speaking peers. Simultaneously, ELLs feel empowered by their ability to help other students academically.

Parental Involvement

Both teachers demonstrated that the school has made a concerted effort to involve all parents through organized activities. For example, Siler City Elementary organizes PTA nights, Open House nights, parent conferences, a Fall Festival that raises funds for the school, and a Health Fair in which parents and students can have their blood pressure taken and participate in other health-related activities. Some events sponsored by the school specifically target the facilitation of multicultural attitudes. For example, during the “Food Around the World” event, teachers ask parents to come to the school and teach children how to cook a dish from their native culture.
The Dual Immersion program offers additional opportunities for parents to become involved. Ms. Bonitz spoke positively about the impact of the Dual Immersion program in creating a welcoming environment for parents. She noted that all Dual Immersion parents, including parents of ELLs and native English speakers, exhibit greater levels of involvement than parents of children in traditional classes. As an example, she cited one year in which only two parents from the Dual Immersion program were missing at a Parent Night, and they had called ahead with excuses. In contrast, each ESL Inclusion class had no more than eight parents attend Parent Night. Ms. Bonitz also stated that the Executive Board of the PTA mostly consists of Dual Immersion parents. Ms. Bonitz did note that all Dual Immersion parents, both Spanish speakers and English speakers, are more likely to be heavily involved in their child’s education, because the program requires parents to actively “opt in” to the program.

Interestingly, Ms. Bonitz stated that within the Dual Immersion program, there is not a difference in the levels of volunteering between parents of ELLs and parents of native English speakers. The school provides a number of resources to both Dual Immersion and ESL that encourage parents of all linguistic backgrounds to become involved. During meetings, the school provides headsets that translate versions of the discussion in both languages. The fact that parents of ELLs are equally involved is consistent with the literature regarding bilingual programs. Because bilingual programs actively promote cultural tolerance and emphasize the value of native languages, one would expect that parents of ELLs would feel more comfortable volunteering in Dual Immersion classrooms than traditional classrooms.

In contrast, the ESL program does not appear to specifically target parental involvement in the same manner. Ms. Murchison stated that in past years, the school had organized ESL Parent Nights, but she could not think of a time this year when the school had specifically
targeted the parents of ELLs. Instead, the primary means of communication occurs when the school sends the results of English proficiency tests to parents. ESL teachers also participate in general Parent Nights, but these are not specific to the parents of ELLs. Finally, the PTA leadership does not include parents of ESL students, but Ms. Murchison did note that ESL parents are sometimes involved in the Parent Advisory Council, which serves as an alternative parent organization at Siler City Elementary.

**Observations**

I observed one ESL Inclusion class and one Dual Immersion class for first grade, one ESL Inclusion class and one Dual Immersion class for third grade, one ESL Inclusion class for fifth grade, and one Dual Immersion class for fourth grade. The observations took place in September and October of 2011. For each Dual Immersion class that I visited, I observed both the “English World” and the “Spanish World” for that grade. Although the two “Worlds” occur in different classrooms with different teachers, I will refer to them as one class, because each student spends half of the school day in each classroom.

**Language of Instruction**

In the ESL classrooms, both the regular teachers and ESL teachers always used English as the sole language of instruction. For example, ESL specialists clarified words and concepts that the students did not understand by providing them with synonyms in English. In the Dual Immersion “English World” classes, teachers only used English when addressing the students, but occasionally referenced vocabulary or lessons that the students had learned in “Spanish World.” For example, when the teacher introduced a new vocabulary word, she would sometimes ask the students to repeat the Spanish equivalent of that word aloud. Spanish was almost always utilized as the language of instruction in “Spanish World,” with a few minor
exceptions. In the first grade, the teacher would occasionally explain unfamiliar vocabulary words or concepts in English if necessary, but this did not occur in the third and fourth grade Dual Immersion classes. It appeared that the Dual Immersion program was not exactly faithful to the 50:50 program model, as English was sometimes used in “Spanish World.” This observation reflects the dominance of English within the school. In addition, the fact that teachers used English more often than Spanish could help explain why prior studies have found that Dual Immersion programs are less effective in promoting Spanish proficiency than English proficiency.

**Instructional Style**

Overall, both ESL and Dual Immersion teachers used similar teaching strategies in the classroom. In teacher-led reading sessions, teachers in both programs asked comprehension questions during the story, asked the students to summarize the plot, and made connections to students’ daily lives. Other reading strategies included asking students to sound out unfamiliar words, summarize the stories, identify “big ideas” in each story, create alternative chapter titles, and make connections to other events, stories, or people. Interestingly, teachers in both programs also used books with multicultural themes in the classroom. The emphasis on multiculturalism, both in ESL Inclusion and Dual Immersion, reflects Siler City Elementary’s commitment to promoting cultural tolerance and creating a welcoming atmosphere for Hispanic families.

Although the ESL and Dual Immersion teachers relied on many of the same teaching strategies, there were a few notable differences between the two programs. Dual Immersion teachers used visuals to facilitate comprehension much more often than ESL teachers. For example, the third grade Dual Immersion students made models of the human leg as part of an anatomy lesson. Both the English and Spanish teachers demonstrated how muscles and bones
work together by using models made of paper clips and wooden sticks. In a fourth grade Dual Immersion class, the teacher prefaced a science lesson on circuits by showing the students an actual circuit board and then helping them to create their own circuit boards. The popularity of visual techniques among Dual Immersion teachers is consistent with the literature, which suggests that teachers trained to promote language proficiency will be more likely to use effective teaching styles.

The other notable difference was the level and quality of student participation in the Dual Immersion classes versus the ESL classes. Generally, both ELLs and native English speakers in the Dual Immersion classes were more attentive during formal instruction. The Dual Immersion students were usually quiet while the teacher was speaking and only asked questions after raising their hands. Dual Immersion students tended to be more eager to participate and answer questions than students in the ESL Inclusion classes. In comparison, students in ESL classes were more restless, less attentive, and occasionally more disruptive. As a whole, Dual Immersion students were much more diligent about reading quietly to themselves during independent reading periods. In some of the ESL classes, the independent groups talked to one another loudly instead of reading quietly.

**Student Interactions**

During formal instruction, in which the teacher was giving a lesson or leading a reading group, students in both ESL and Dual Immersion always responded in the current language of instruction. During independent work or group work, students would occasionally speak to each other in their native languages, especially when the teacher was not within earshot. This tendency was equally present in both programs. In the Dual Immersion program, Hispanic and non-Hispanic students interacted with one another frequently and did not appear to have any
issues communicating or experience any discomfort with each other. When Hispanic and non-Hispanic student worked together, they always communicated in English during “English World” and often communicated in English during “Spanish World” as well. In ESL Inclusion classes, Hispanic and non-Hispanic students also interacted frequently. However, many of the Hispanic students were sometimes separated from the rest of the class during ESL instruction, which limited interaction between the two groups.

**Curriculum**

For the third grade classrooms, there did not appear to be a significant difference between ESL and Dual Immersion in the complexity or grade appropriateness of their tasks. In contrast, the curriculum in the first grade ESL class did appear to be slightly more basic than the content being taught in the first grade Dual Immersion classes. Students in the first grade ESL Inclusion class were making flashcards of basic words like “the” and “of” or practicing the sounds of letters. In the Dual Immersion English World class, students were writing original stories about what they had done during the weekend. The teacher encouraged students to include as many details as possible in their stories. This task required the students to be creative and incorporate a wide variety of vocabulary, while the ESL first graders were using much more basic vocabulary in their activities. Unfortunately, I cannot make direct comparisons regarding the complexity of curriculum in ESL versus Dual Immersion in fourth and fifth grade, as I was only able to observe one Dual Immersion class for fourth grade and one ESL class for fifth grade.

The literature predicts that Dual Immersion programs will utilize a more advanced curriculum than ESL programs of the same grade level. Because Dual Immersion programs place more of an emphasis on comprehension of curriculum in the early years, while ESL Inclusion focuses on English proficiency, one would expect the content to be somewhat more
complex in Dual Immersion. The observed differences in quality and quantity of student participation could also be a result of the Dual Immersion program characteristics. Because the Dual Immersion program explicitly values every student’s native language and culture, it is possible that overall, the students felt more confident in their academic abilities and self-worth. Therefore, they were more eager to participate and work diligently than students in traditional classes.

**Conclusions**

Overall, the results of the case study indicate that the Dual Immersion program was positively influencing all controllable social outcomes in order to improve the academic achievement of ELLs. Standardized test scores indicate that the Dual Immersion students are performing at consistently higher levels than their peers. Both the Lead ESL Teacher and Dual Immersion Support Teacher expressed views that were consistent with the literature supporting Dual Immersion. Their responses indicated that the Dual Immersion program is effectively promoting the tolerance of native English speakers, the academic self-confidence of ELLs, and the involvement of parents at the school. In the observations, the Dual Immersion teachers appeared to be utilizing effective teaching strategies and creating tolerant environments. ELLs interacted frequently with native English speakers, and teachers never separated students by linguistic background. In addition, the first grade Dual Immersion curriculum did appear to be slightly more advanced than the ESL Inclusion curriculum. Finally, Dual Immersion students generally appeared to be more attentive and more eager to participate in class discussions than ESL students.

However, there are important limitations to the conclusions that can be drawn from the case study. First, the school did not randomly assign students to each program, and therefore
selection bias may still influence academic achievement and social outcomes. The case study is also limited in scope, as it includes only one school, two interviews, and a limited number of observations. Because the observations of each class occurred only once, observed differences between the two programs cannot be generalized to permanent program distinctions.

V. CONCLUSIONS AND POLICY IMPLICATIONS

Together, the results of the literature review and the case study are fully consistent with the hypothesis that Dual Immersion programs are at least as effective, and likely more effective, than ESL in promoting the academic and social success of ELLs. Although limited by selection bias, all of the studies in the literature review found either positive or inconclusive results for all four outcomes. Standardized test scores at Siler City Elementary suggest that the Dual Immersion students were performing at higher levels than their peers. The interviews with the two teachers at Siler City provide additional support for Dual Immersion, indicating that the program has enhanced parental involvement and the social success of participants. The observations, although limited in scope, suggested that there are some important differences between the two programs in curriculum, teaching styles, and student participation.

In sum, the evidence provides support for Dual Immersion as an effective alternative in the education of ELLs. The literature suggests that Dual Immersion programs are not significantly more costly than ESL, as the costs of using bilingual teachers may be less expensive than supplementing monolingual teachers with ESL teachers (Gándara & Rumberger 2008b, 137). Instead, the primary challenge to implementing Dual Immersion programs involves staffing, as certified, bilingual teachers are relatively rare. In order to overcome this challenge, policy changes should focus on reforming teacher pathways to encourage bilingual individuals to teach in Dual Immersion programs. In addition, traditional teacher certification programs should
begin implementing Dual Immersion training programs in addition to special ESL certificates. By reforming teacher preparation pathways, school districts with a large proportion of ELLs will have less difficulty finding qualified teachers to staff Dual Immersion programs. In a similar manner, promoting alternative pathways to teaching, instead of traditional certification, could provide more flexibility in recruiting bilingual teachers. Future research on Dual Immersion programs should strive to utilize random assignment, as this would eliminate the confounding effects of selection bias.
VI. REFERENCES


VII. APPENDIX

List of Interview Questions

Program Logistics

1. How many students are in each program?
2. How many continue on into middle school?
3. Can you tell me about the growth of the program? When did it begin and how many classes were there originally?

Individual Views

1. Which do you think is the more pressing goal in the education of ELLs: proficiency in English, or comprehension of curriculum?
2. What do you think is the most important learning outcome for English Language Learners?
3. What do you think are the strengths and weaknesses of the Dual Immersion approach vs. ESL inclusion in teaching students with limited English proficiency?
4. What types of support are offered to children enrolled in ESL inclusion classes? Which of these services are offered to the students on a regular basis?
5. What kind of training do ESL specialists receive at your school? What kind of training do other teachers receive?

Teacher Background

1. How long have you been in your position at this school? Did you teach before becoming a Dual Immersion Support Teacher?
2. What training do you have regarding students with limited English proficiency?
3. How proficient are you with the Spanish language?
4. Do language barriers ever prevent effective communication between staff and students with limited English proficiency at your school?

Parent Involvement

1. For what reasons do parents come in to the school? How often do they come in?
2. What activities are parents involved in at your school?
3. How often do parents of ELLs volunteer in the Dual Immersion program? Does this differ from the parents of native English speakers? Have you noticed a difference in levels of volunteering between Dual Immersion parents vs. other parents?
4. How active is the PTA at your school? How active are the parents of ELLs in the PTA? Is there a separate organization for Hispanic parents or the parents of ELLs?

Student Involvement

1. How would you describe the interactions of LEP students with other students at this school? With each other?
2. What are the signs that a student is struggling academically? How frequently do you see these signs among ELLs?
3. Do your students ever express concern about their academic performance?
4. How likely are ELLs to contribute to class discussion in comparison to native English speakers?
5. How long do students generally remain in the ESL program before being completely mainstreamed into English-only classrooms?