DUAL LANGUAGE STUDENTS' ACHIEVEMENT

A Thesis Presented to
The Faculty of the School of Education
California State University Channel Islands

In (Partial) Fulfillment
of the Requirements for the Degree
Masters of Arts

by
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Introduction and Review of Literature

Hypothesis and Researchable Question

How do students enrolled in a dual language program at University Preparation School at CSU Channel Islands perform in literacy on the California Standards Tests (CST) in comparison to other Dual Language Programs?

Review of Literature

Background information on Dual Language Programs.

According to Calderón and Minaya-Rowe (2003), “A Two-Way Immersion bilingual program is an equitable educational program that respects and treats all students as equal members of the school community and challenges students and staff to do their best regardless of race, national origin, education, language, and culture. This is a program that integrates second language learners, this means both English Learners and native English speakers, through instruction in two languages (Cabazon, 2001; Lindholm-Leary, 2001). Two-Way Immersion programs are also known as two-way bilingual, bilingual immersion, dual-language immersion, developmental bilingual education, and two-way programs (Baker & Prys Jones, 1998; Brisk 1998).

In a review of different dual language models, Mora, Wink and Wink (2001) concluded that an effective dual language instruction program is pedagogically sound if it shows fidelity to the model in all aspects, and has a means of assessing and addressing differences between the model and the systems in place. The teachers in the program need to believe in the program and they need to value both languages.

The authors define the functions of a dual language model as having: a “road map” for program implementation and evaluation, pedagogical principles that lead to teaching and
learning activities to meet specific goals, and an explicit value on bilingualism, biliteracy, and multiculturalism. Within the “language as a resource” models of dual language instruction, it was found that an “additive versus subtractive” model is often cited as the best manner to provide minority students with equitable education. Their overall findings show that culture and language have to be valued for students to achieve in a bilingual program.

Collier and Thomas (2004) explained their definition of a dual language enrichment program: 1) a minimum of six years of bilingual instruction where English Language Learners (ELLs) were not segregated, 2) focus on the core academic instruction, 3) high quality language arts instruction in both languages, 4) separation of languages without translation, 5) 50:50 model by fifth grade, and 6) use of collaborative and interactive teaching strategies.

Another important concept is the long-term effect of having students in a two-way immersion (TWI) bilingual program. Students, who were in TWI and a comparison group, completed questionnaires (Lindholm-Leary & Borsato, 2002) while they were in high school. The findings from these researchers are fascinating. First, one third of Hispanic English speakers and nearly one half of Hispanic Spanish speakers in the TWI bilingual programs felt that their participation in these programs, when they were younger, had kept them from dropping out of school. Second, all of the students’ attitudes toward the TWI programs were very positive. Most of the students believe that learning in two languages made them smarter and improved their achievement in school. The Hispanic students in TWI felt more valued and would recommend it to others.

The TWI students were more likely than their comparison peers to want to go to college immediately after high school. Equally interesting, there were important differences in
enrollment in math courses. None of the comparison students were taking Algebra II or trigonometry/calculus, whereas 41% of the TWI students were enrolled in those classes.

The TWI students knew what the requirements were for college and they were getting prepared for that next step. A sense of resiliency was developed among the Hispanic TWI students, they appeared to possess high self-esteem, motivation to study hard, a positive feeling toward school, and peer relationships that valued education.

TWB models are meant to promote proficiency in two languages and cannot be superimposed on existing bilingual programs (Calderón & Minaya-Rowe, 2003). They are programs that need to be designed to make time for instruction in both languages. They are not a remedial or an enrichment program, even though TWB does promote enrichment.

Effectiveness of Dual Language Programs

Closing the achievement gap is a huge factor for ELLs. They have to make more than a year’s progress every year to close the gap. This gap usually widens as the students move up in the grades causing many students to drop out and not graduate from high school. Teachers in the dual language enrichment classes create the cognitive challenge to stimulate students to make more than one year’s progress every year, in both languages, thus closing the gap.

Collier and Thomas (2004) used quantitative data collection and analyses for each study. They collected data from each school from long-term databases to build longitudinal studies. They also gathered qualitative data including detailed interviews with administrators, school board members, principals, teachers, and community members. The researchers visited schools and made classroom observations. They found that dual language enrichment programs close the achievement gap for ELL students. They analyzed a variety of services available for ELL students in public education and their resulting academic achievement. Among Collier and
Thomas’ findings were those of the Houston study, in which two-way bilingual immersion students outscored ELLs in transitional bilingual education and developmental bilingual education. Both one-way and two-way bilingual programs lead to grade level and above grade level achievement in second language.

![Figure 1. Reading and math achievement in English NES and NSS students in grade 7 TWBI and California State Average.](image)

Note. "Language Development and Academic Achievement in Two-Way Immersion Programs"


Lindholm-Leary and Howard (2008) suggest that ELLS require four to seven years to close the gap in test scores between them and the Native English Speakers (NES). Students in
Two Way Immersion (TWI) programs have the highest long-term success. In figure 1, Lindholm-Leary (2001) presents data to show that students in TWI programs achieved standardized test scores comparable with their peers in California around the seventh grade. The results of various studies illustrate that having students learn in Spanish had no negative impact upon achievement in English proficiency, and it positively impacted the students’ Spanish proficiency.

There are several supporting ideas that could explain this improvement in student achievement; students are more engaged in the lessons, students are more responsive, there are fewer behavior problems, parents participate more in the school, and the program promotes respect and nurturing of multiple cultural heritages.

Lindholm-Leary (2001) compared two two-way immersion (TWI) models, 50:50 and 90:10 programs, showing that students make significant progress across all grades in both languages and keep up with their peers in the content areas. There were no statistically significant differences between the two TWI models in English proficiency and academic achievement in English. The native English speakers seemed to benefit from improved Spanish language proficiency in the 90:10 model. There was a positive attitude towards the two languages and school by both parents and students.

Lindholm-Leary (2001) placed much more importance on the design of the bilingual program according to student characteristics, and how the school supported the process of bilingual and academic development rather than rigidly focusing on the percentage of language use.

This study of over six thousand students and twenty-one school sites was both quantitative and qualitative. Lindholm-Leary (2001) collected surveys, rating scales, norm-
referenced tests, linguistic, academic, and socio-cultural data. Contextual factors considered included: teacher preparation and attitudes, administrative support, language use patterns, and student background (ethnicity, SES, gender). This study presented data from longitudinal (K-5) and cross-sectional (K-7) data analysis for language proficiency, academic achievement, and contextual factors. Program satisfaction and the positive attitudes that the parents and students displayed towards the two languages and school were important points that supported the TWI models.

Table 1

Comparative performance of two-way immersion students to state and district: Percentage of students passing standardized English reading and math assessments.

<table>
<thead>
<tr>
<th></th>
<th>School A - 3rd Grade</th>
<th>School B - 5th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>87</td>
<td>97</td>
</tr>
<tr>
<td>Math</td>
<td>89</td>
<td>97</td>
</tr>
<tr>
<td>Two-Way School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>District</td>
<td>44</td>
<td>91</td>
</tr>
<tr>
<td>Reading</td>
<td>91</td>
<td>96</td>
</tr>
<tr>
<td>Math</td>
<td>80</td>
<td>92</td>
</tr>
<tr>
<td>State</td>
<td>72</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>92</td>
<td>92</td>
</tr>
</tbody>
</table>


In two separate schools, School A and School B, Christian, Genesee, Lindholm-Leary and Howard (2004) found that students enrolled in TWI programs exceeded district and state testing performance in reading and math. These figures are presented in Table 1. School A, located in the Southwest, has a very diverse population with regards to their socioeconomic
status and racial/ethnic composition. School B, located in the Midwest, had a majority of Latino students with a variety of native languages and socioeconomic backgrounds.

The difficulties inherent to measuring bilingual program success and the need for broader and fairer assessment strategies for bilingual students are of great interest to Guzmán, Abbate, Brisk and Minaya Rowe (2002). The problem of “Who gets tested?” affects the scores of the schools in question. Districts and states have different criteria for determining which bilingual students perform the state assessments. Many researchers believe that the assessments are culturally biased toward the predominant immigrant cultures in the country. Often times, the data from assessments is not disaggregated so that the bilingual students are not examined as a group or as individuals to evaluate their academic progress. In many schools, it is left up to the administrators to review and analyze the data, and it is never discussed with the staff as a group, or with individual teachers.

Assessment of Student Achievement

How can we evaluate student achievement? According to Guzmán, Abbate, Brisk and Minaya Rowe (2002), ongoing assessments that include providing teachers and students with feedback are of vital importance. Fair assessment of bilingual students requires three distinct sources: background knowledge of the students, understanding of the processes students use to perform, and evaluation of the outcomes. There need to be three distinct sections: data availability and accessibility, data in relation to student performance, and different perspectives that justified statements of success on the part of those associated with the programs studied.

The study by Guzmán, Abbate, Brisk and Minaya Rowe (2002) of three schools, two middle schools and one elementary school, was based on qualitative research performed by observation through shadowing, and informal and formal interviews of the different participants.
The researchers also utilized quantitative research by analyzing documents and standardized test scores from each school (Stanford 9, Writing Prompts, and Scholastic Reading Inventory scores). The authors used the Portrait of Success (PoS) application form as the front-end data-gathering frame. They concluded that more staff development is needed for teachers who work with bilingual students to address assessment data and to understand student assessment techniques.

Researchers, Montecel and Cortez (2002), used ten promising and/or exemplary bilingual education programs in schools across the nation to identify twenty-five common characteristics and criteria that are contributing to high academic performance of students served by bilingual educations programs. These characteristics were classified into three sets of school outcome indicators: student outcome indicators, school level indicators, and classroom level indicators.

The student outcome indicators included: retention rate, dropout rate, enrollment in gifted and talented programs, enrollment in advanced placement programs, re-enrollment in special education or remedial programs, test exemptions rates, program exiting standards, oral language proficiency, written language proficiency, content area mastery in English, and content area mastery in their native language.

The school level indicators included: leadership, vision and goals, school climate, linkages between the school and district office, school organization and accountability, professional development, parent involvement, staff accountability and student assessment (multiple assessment measures), staff selection and recognition, and community involvement. At the classroom level, programmatic and instructional practices (program model, classroom climate, curriculum and instruction, teacher expectations, program articulation) were the common indicators noted.
Eleven schools were studied, including high schools, middle schools and elementary schools, with diverse ethnic representation, overall high poverty, low retention rates, low percentage of migrant students, high average attendance, and low annual dropout rates. Quantitative data in the form of student and school outcome data, demographic data, surveys of principals, teachers and administrators, and structured formal classroom observations was gathered. Qualitative data, such as structured interviews with the school principals and administrators and focus group questions for teachers, parents, and students, school profiles, was also gathered. The data was analyzed and synthesized. Patterns and trends across programs were identified.

These schools reflected significant progress for the students served by their bilingual education programs. There was a narrowing of the achievement gap by the majority of students over time. In many cases, these students’ improvement rates exceeded the rates of improvement for the comparison groups. This study enables other programs to assess the effectiveness of their bilingual programs, highlighting areas that need improvement as well as areas that meet or exceed the established standard.

TWB programs need to be evaluated to insure effectiveness. The authors, Calderón and Minaya-Rowe (2003), focused on the evaluation of TWB programs. They provided criteria for evaluation, types of evaluations that need to be performed, the principles of program evaluation, questions that need to be addressed, and the steps to performing the evaluation.

The evaluation needs to include formative and summative evaluations, and ethnographic or case study descriptions. The cycle starts with a needs assessment, followed by a decision on TWB Program goals and objectives, continued by TWB Program design and development and TWB program evaluation, and finishing the cycle with TWB Program refinement and
The five principles include: 1) link TWB program components, 2) include indicators of expected TWB program performance in the goals and objectives, 3) use quantitative and qualitative measures to produce data on TWB program effectiveness, 4) use evaluation data to improve TWB components on a continuous basis, and 5) manage the evaluation with a team.

In *Designing and Implementing Two-Way Bilingual Programs*, Calderón and Minaya-Rowe (2003) reviewed different methods for schools to evaluate their programs and to ensure that they are meeting their goals and objectives. Their goal was to have schools self-assess and improve their TWB programs to make them more effective for bilingual students. They raised questions about the relationship between L2 oral language proficiency and L2 literacy, instructional practices for developing literacy, instructional practices for facilitating transfer, assessment, organization of components, and staff development for TWB programs.

Howard, Sugarman and Christian (2003), reviewed large-scale and small-scale research studies across the country looking for trends in TWB education. The studies showed that both native Spanish speakers and native English speakers in TWB programs performed as well or better than their peers who were not in a TWB program on standardized tests in Spanish and English. They noted that there is some indication of content knowledge transference in curricular areas. The authors also suggested that all findings have to be evaluated carefully because other differences between the students in the studies could be the cause for these findings.

**Conceptual Framework**

English Learners need to close the achievement gap between them and native English speakers. Two-way immersion (TWI) bilingual programs are one way to address the special needs of the English Learner. The TWI bilingual program needs to meet certain criteria to improve English Learner achievement. The students need to be assessed to be certain that student
achievement is actually improving. Since well-designed and implemented TWI bilingual programs give the English Learners extra support to close the achievement gap, they should increase their level of proficiency on the CST in English Language Arts to reach the same level as native English speakers. This is the conceptual framework of this study.

Personal Assumption

I believe that the students at University Preparation School at CSU Channel Islands will perform as well or better than students in other Dual Language Programs. I think that I will find that the students will have slightly lower scores on the CST in the second and third grades in comparison to non-Dual Language students at the same school. Their scores should be similar to non-Dual Language students at the same school in the fourth and fifth grades. I anticipate that the Dual Language students’ CST scores will surpass their non-dual peers in the middle school grades.

Method

This study will be analyzing the English Language Arts (ELA) CST scores for Dual Language students and Language Enrichment students from 2004 through 2007, comparing and looking for trends in the data.

Setting

The University Preparation School (UPS) is a charter school that was started in the fall of 2002. The University Charter Middle School (UCMS) was started in the fall of 2006. Both schools are associated with Cal State University at Channel Islands as lab and professional development schools. UPS admits three year olds into the preschool and the students can continue up through the eighth grade at UCMS. There are approximately 570 students currently enrolled in the University Charter Schools. The teachers and students come from districts all
over Ventura County. There is a mix of neighborhood children, other Pleasant Valley School District children, and children from many districts in the county. The school offers two different language programs for the students: a Dual Language strand and a Language Enrichment strand.

The Dual Language strand is a fifty-fifty model between Spanish and English. The students are taught fifty percent of the time in each language in language arts and mathematics and other curricular areas. The Language Enrichment strand is taught in English with thirty minutes of Spanish language instruction in conversational Spanish three or four days a week. The students whose data will be analyzed in this study were the fourth and fifth graders for the school year 2006-2007. All of the students loop with their teachers for two consecutive years, so most classrooms are multi-age which include two grade levels. The students receive instruction in art, nutrition, technology, and other subjects three days a week from a specialist. During this time the teachers meet by grade level to collaborate. The teachers discuss student data, student achievement, curriculum choices, grade level and benchmark assessments, student needs, and enrichment and intervention models.

Participants

The fourth and fifth grade Dual Language students have been in this program since kindergarten or first grade. There have been a few students added later in the program if they had some previous instruction in Spanish. The Language Enrichment students who will be used as a control or comparison group have been instructed in core curriculum only in English. These students will be matched as closely as possible using CST scores and English Learner or native English speaker status. The data from an equal amount of students from each program will be analyzed.
Instruments

The CST scores will be the means of assessing the students’ achievement. The reliability and validity are explained by George Powell, Ph.D., STAR Executive Director Educational Testing Service, in the following excerpt from a letter to the California Department of Education on January 17, 2003.

Content experts in each subject were also recruited to assure that the new CST test items were developed in accordance with the rationale for establishing a sound content validity foundation as specified in the Standards for Educational and Psychological Testing. The final CSTs meet professionally accepted criteria for content validity.

Reliability evidence for previous CST forms was established in two ways. First, the Kuder-Richardson Formula 20 (KR-20), an index of internal consistency, was calculated for each test. Next, asymptotic conditional standard errors of measurement (CSEM) were calculated via item response theory to supplement the KR-20 reliabilities. The CSEM provides an indication of measurement precision at various levels along the ability continuum. CST forms developed for 2003 have been constructed to similar statistical specifications as forms developed in the past. It is anticipated that CST KR-20 coefficients will range in the high .80s and low .90s, which is a generally acceptable level of reliability for tests of these lengths, and comparable to the values observed for previous CST forms. The CSEMs will be lowest in the intervals of the reported score scale where the majority of the test-takers are located. It is expected that the KR-20s and CSEM for the CSTs will meet the intended statistical specifications, and that the CSTs will set an example for desirable psychometric properties.
Procedure and Description of Data Analysis Methods

The participants who were a part of this study were chosen from the 2003 and 2004 second graders who still attend UPS. The data recorded was the overall ELA CST scores. The data was retrieved from the CST results from the school principal. These were the printouts received from the California State Department of Education.

The data from all of the students who are enrolled in the Dual Language strand was input into an Excel spreadsheet. There were approximately 40 students in this first group. This was divided into two groups according to their grade level. The second set of students were also students who were second graders in either 2002 and 2003, but these students were enrolled in the Language Enrichment strand. These students’ scores were matched as closely as possible to each student in the Dual Language Strand. They were also matched according to the fact that they were either an English Learner or an English Only (EO) student. Due to the inability to match student for student, the group size from Language Enrichment dropped to twenty-four students. Dual Language students who could not be matched with a Language Enrichment student had to be removed from the Excel spreadsheet. Due to the research program design that was chosen there had to be a Language Enrichment student to match with each Dual Language student, this resulted in losing available student data from the Dual Language students for this study.

The rest of the ELA CST scores were then input from the 2004, 2005, 2006 and 2007 school years. The scores were added and divided by the number of students in each strand to give a group mean by each grade level, for each year of the study, and for each language strand of students. Then, using the standard deviation formula, the standard deviation was calculated for each year of the study for each language strand of students. Thus, second graders from the Dual
Language strand were compared to second graders from the Language Enrichment strand from the same school year. This was done to approximate similar school experiences with the language strand being the primary variable.

Results/Summary

Once the data was collected, the means and standard deviations were determined and compared. The 2007 fourth grade students’ mean of the data for the Dual Language students as second graders was 312.3 as compared to the Language Enrichment students with a mean of 314 (see Table 2). As third graders, the Dual Language students’ mean score was 293.8 and the Language Enrichment students’ mean score was 330.6. As fourth graders, the Dual Language students’ mean score was 326.6 and the Language Enrichment students’ mean score was 355.9.

Table 2.

2007 Fourth Grade Student Mean Scores and Standard Deviations (S.D.)

<table>
<thead>
<tr>
<th>Data</th>
<th>CST ELA 2004-2005 2\textsuperscript{nd} graders</th>
<th>CST ELA 2005-2006 3\textsuperscript{rd} graders</th>
<th>CST ELA 2006-2007 4\textsuperscript{th} graders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dual Language</td>
<td>Language Enrichment</td>
<td>Dual Language</td>
</tr>
<tr>
<td>Mean</td>
<td>312.3</td>
<td>314</td>
<td>293.8</td>
</tr>
<tr>
<td>S.D.</td>
<td>67.7</td>
<td>68.2</td>
<td>71.8</td>
</tr>
</tbody>
</table>

The 2007 fifth grade students’ mean of the data for the Dual Language students as second graders was 355.8 (see Table 3), as compared to the Language Enrichment students with a mean of 350.4. As third graders, the Dual Language students’ mean score was 382.9 and the Language Enrichment students’ mean score was 360. As fourth graders, the Dual Language students’ mean
score was 391.2 and the Language Enrichment students’ mean score was 386.9. As fifth graders the Dual Language students’ mean score was 369.7 and the Language Enrichment students’ mean score was 384.2.

Table 3.

2007 Fifth Grade Student Mean Scores and Standard Deviations (S.D.)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dual Language Mean</td>
<td>Language Enrichment Mean</td>
<td>Dual Language Mean</td>
<td>Language Enrichment Mean</td>
</tr>
<tr>
<td>2nd graders</td>
<td>355.8</td>
<td>350.4</td>
<td>382.9</td>
<td>360</td>
</tr>
<tr>
<td>S.D.</td>
<td>65.3</td>
<td>61.0</td>
<td>97.2</td>
<td>59.1</td>
</tr>
<tr>
<td>3rd graders</td>
<td>391.2</td>
<td>386.9</td>
<td>360</td>
<td>52.6</td>
</tr>
<tr>
<td>S.D.</td>
<td>64.6</td>
<td>52.6</td>
<td>50.7</td>
<td>45.9</td>
</tr>
<tr>
<td>4th graders</td>
<td>382.9</td>
<td>360</td>
<td>391.2</td>
<td>52.6</td>
</tr>
<tr>
<td>S.D.</td>
<td>97.2</td>
<td>59.1</td>
<td>64.6</td>
<td>50.7</td>
</tr>
<tr>
<td>5th graders</td>
<td>360</td>
<td>52.6</td>
<td>391.2</td>
<td>45.9</td>
</tr>
<tr>
<td>S.D.</td>
<td>59.1</td>
<td>52.6</td>
<td>64.6</td>
<td>45.9</td>
</tr>
</tbody>
</table>

The Dual Language students seem to follow the general trend of the research with a few exceptions. The 2007 fourth graders’ mean scores start out nearly identical in the second grade, but the third grade scores showed the Dual Language students’ mean scores dipping 18.5 points (Table 4) from the previous year, but 36.8 points below the Language Enrichment. The next year when they were all fourth graders, the Dual Language students’ mean score rose by 32.8 points, narrowing the gap with the Language Enrichment to 29.3 points. This trend follows the research explained earlier in the literature review.
Table 4.

2007 Fourth Grade Student Mean Scores and Mean Score Gains and Losses

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Dual Language</td>
<td>Language Enrichment</td>
<td>Dual Language</td>
</tr>
<tr>
<td>Mean</td>
<td>312.3</td>
<td>314</td>
<td>293.8</td>
</tr>
<tr>
<td>Mean Gain (+)</td>
<td>-18.5</td>
<td>+16.6</td>
<td>+32.8</td>
</tr>
<tr>
<td>Mean Loss (-)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference Between means</td>
<td>-36.8</td>
<td>-29.3</td>
<td></td>
</tr>
</tbody>
</table>

The 2007 Dual Language and Language Enrichment fifth graders increased their scores consistently from second grade through fourth grade, but their scores dropped in the fifth grade. The 2007 fifth graders’ mean scores start out nearly identical in the second grade, but the third grade scores showed the Dual Language students’ mean scores increasing by 27.1 points (see Table 5) from the previous year, and 22.9 points above the Language Enrichment mean scores. The next year when they were all fourth graders, the Dual Language students’ mean score rose by 8.3 points, and the Language Enrichment mean score increased by 26.9 points to within 4.3 points of the Dual Language mean score. Unfortunately, the fifth grade students’ Dual Language mean score dropped by 21.5 points. This is an enigma because overall the classroom assessments did not mirror this drop in student achievement. This could partly be due to the fact that all of the Dual Language students could not be matched with Language Enrichment students. Still, there were several students who had serious decreases in their STAR ELA scores that year. The
Language Enrichment data means also rose between second grade and fourth grade. In the fifth grade, their mean score dropped also, but only by 2.7 points.

Table 5

2007 Fifth Grade Student Mean Scores and Mean Score Gains and Losses

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>2nd graders</td>
<td>355.8</td>
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<td>3rd graders</td>
<td>391.2</td>
<td>369.7</td>
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<td>369.7</td>
</tr>
<tr>
<td>4th graders</td>
<td>386.9</td>
<td>386.9</td>
<td>386.9</td>
<td>384.2</td>
</tr>
<tr>
<td>5th graders</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data</th>
<th>Dual Language Mean</th>
<th>Language Enrichment Mean</th>
<th>Gain(+)</th>
<th>Loss(-)</th>
<th>Difference between +5.4 means</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-2004</td>
<td>355.8</td>
<td>350.4</td>
<td>+27.1</td>
<td>+9.4</td>
<td>+22.9</td>
</tr>
<tr>
<td>2004-2005</td>
<td>382.9</td>
<td>360</td>
<td>+9.4</td>
<td>+8.3</td>
<td>+4.3</td>
</tr>
<tr>
<td>2005-2006</td>
<td>391.2</td>
<td>386.9</td>
<td>+8.3</td>
<td>+26.9</td>
<td>-14.5</td>
</tr>
<tr>
<td>2006-2007</td>
<td>369.7</td>
<td>384.2</td>
<td>-21.5</td>
<td>-2.7</td>
<td></td>
</tr>
</tbody>
</table>

It was very difficult to match up the student scores because there were not enough Language Enrichment students who had stayed at UPS for the time period from 2003-2007 to match all of the Dual Language students. There has been very little attrition from the Dual Language program over the same period of time. There were also five of the Dual Language students with scores above 390 who could not be matched with Language Enrichment students because there were not enough Language Enrichment students with scores in that range.

The ELL students’ data was also disaggregated to see if any trends were apparent. There were few fourth and fifth grade ELL students in either language strand, so there was not a large enough population to be able to draw conclusions from matched student participants thus the data pool was not large enough to be valid. There were twice as many ELLs in the Dual
Language strand in this study than in the Language Enrichment strand. Even though the students were matched very closely by initial STAR ELA scores, I could not match all of the ELLs in Dual Language because there were not enough ELLs in the Language Enrichment strand. The majority of the ELLs are currently enrolled in the Dual Language strand. This could have affected the class mean scores in this study.

In conclusion, this study shows that UPS Dual Language students are following the research trends so far in their elementary grades. The other important outcome was the fact that parents are choosing to put their ELL students into dual programs rather than traditional Structured English Immersion (SEI) classrooms. This study also brought up recurring questions regarding more evidence than just STAR data. As a teacher who has taught in both language strands, I have noticed that the students in the Dual Language strand appear to be more engaged in their learning, they are more willing to challenge themselves in all areas of the curriculum, and there are fewer behavior issues in the classroom. Is this due to the students’ placement in the Dual Language strand? These children have remained in the same cohort during their elementary grades and they have a very strong sense of community and working together to learn. All of the children are learning in a non-native language for fifty percent of the day, this encourages them to be more understanding of each other and to learn collaboratively. Could these also be effects of their language placement? These questions are among many that could be researched further.

Issues for Future Research

The analysis of the data collected in this research shows that the study needs to be continued to determine if the current trends continue. The STAR ELA data for the students in this study would need to be monitored for as long as the students attend UPS and UCMS. Continued research using other younger groups of students will be very difficult because nearly
all of the parents of ELLs have chosen to enroll their children in the Dual Language program, so there is no group to compare them to in the Language Experience program.

The trend by the parents to place their ELLs in Dual Language is very interesting and bears further investigation. That investigation could be accomplished through parent surveys that included questions regarding the reasons for student placement in either Dual Language or Language Enrichment. It would be interesting to see if the reasons included the parents’ ability to communicate in their native language with their children’s teachers as a rationale for choosing the Dual Language strand. Academics, culture, parent expectations, and parent education levels could also be the basis for parents to choose a Dual Language program in which to place their child. It would also be interesting to see if the drop in the mean score for the Dual Language fifth graders was an anomaly or if there is a trend to be investigated further. This study opens the door for continued data analysis and other studies regarding Dual Language programs and their popularity with the parents of ELL and EO students.
References


Multilingual Matters.

