An Examination of Spanish Language Achievement, Use, and Attitudes in a Dual Immersion Setting

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Lynwood Unified School District
Lynwood, CA.
Researcher Background & Positionality

- Bilingual, Mexican & Ecuadorian parents, Chicago
- Recent Ed. D grad, 1st presentation at CABE!
- 19 years of experience in public education in Lynwood, CA
- 2nd year assistant principal, elementary
- Goal: Support EL students & DI program in the LUSD
Introduction

- Over a million EL students (K-12) are enrolled in California schools.
- Dual Immersion is AWESOME for EL students!
- Dual Immersion programs meet linguistic, academic, and socio-cultural needs of EL students and help close the achievement gap (Lindholm-Leary, 2001; Thomas & Collier, 2012)
The Literature Review

Program Effectiveness

- **English Language Proficiency**
  (Lindholm-Leary & Borsato, 2006; Thomas & Collier, 2002)

- **Spanish Language Proficiency**
  (Kaptian, 2010; Young, 2012; Mahrer & Christian, 1993)

- **Academic Achievement**
  (Thomas & Collier, 2012; Lindholm-Leary & Borsato, 2006)

- **Self-esteem & Cross-Cultural Interactions**
The Literature Review

Equity in the DI Classroom (Valdés, 1997; Palmer, 2009; Pimentel, 2011)

• Role of the Teacher
• Language
• Teacher - Student interactions
• Student - Student interactions
The Problem

• Consistently low achievement results for English Learners (Gandara & Hopkins, 2010; CA Dept. of Ed, 2015b)

• DI Potential to: provide an equitable class environment for all students vs. reinforce inequities that exists in US society (Cummins, 1986, 2000; Lindholm-Leary, 2012; Reyes & Vallone, 2007; Valdés, 1997)

• Lack of focus: Spanish language outcomes, qualitative research on Dual Immersion programs
Purpose

This study is an exploration of Spanish language outcomes and classroom interactions using quantitative and qualitative methods to develop a deeper understanding of the cultural and linguistic experiences within a DI program at an urban school district in southern California.
Research Questions

1. What does APREnda assessment data reveal about the Spanish language achievement of 4th and 5th grade DI students across the four elementary school sites in the district?
2. How is the dual immersion program implemented and supported at the school sites?
3. What language interactions are observed in upper grade Dual Immersion classrooms?
4. How do Dual Immersion students and teachers perceive the value of learning and speaking Spanish?
The Conceptual Framework

- Latina/o Critical Race Theory
  (Solorzano & Bernal, 2001; Delgado & Stefancic, 2001)
  - Racism is inherent in US society
  - Expose that racism for transformation
  - Incorporation of participants’ experiences
The Conceptual Framework

“Micro-interactions between educators, students, and communities are never neutral, they either reinforce coercive relations of power or promote collaborative relations of power” (Cummins, 2000, p. 44).
“…the educational failure of minority students is analyzed as a function of the extent to which schools reflect or counteract the power relations that exist within the broader society”

Jim Cummins, 1986, p. 32.
Methodology

A Case Study of Dual Immersion programs using Mixed-Methods:

An in-depth study of a bounded system using multiple data sources (Creswell, 2007)

Quantitative Analysis of APRENDA 3 data
- One Way Analysis of Variance (ANOVA)
- Independent Samples t Test
- Frequency reports

Qualitative Data Collection & Analysis
- Classroom Observations
- Teacher interviews
- Student Focus Group Interviews
APRENDÁ 3

- Standardized measure of academic achievement: K-12th
- Modeled after the Stanford Achievement Test (SAT-10)
- Administered in Spanish
- Reading: phonemic awareness, decoding, vocabulary, and comprehension
- Math: fundamental concepts, processes of problem solving
Quantitative Sample

- N = 321 DI students in 4th & 5th grades
- 4 elementary DI sites
- 2014-15 APRENDÁ data in Reading & Math
  - Scaled Scores
- Student Demographic data
  - English Learner status
  - Economic status
Findings: Quantitative

RQ:

What does APRENSA assessment data reveal about the Spanish language achievement of fourth and fifth grade Dual Immersion students across the four selected school sites in the district?
Predictions

Based on your experience, what are your predictions on APREnda test outcomes?

<table>
<thead>
<tr>
<th>EL Status</th>
<th>Economic Status</th>
<th>School Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL home language advantage?</td>
<td>Is it even a factor?</td>
<td>Consistent outcomes?</td>
</tr>
</tbody>
</table>
## Findings: Quantitative

2014-2015 4th & 5th Grade APRENDÁ Mean Scaled Scores in Reading and Math by School

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Reading Mean SS</th>
<th>SD</th>
<th>Math Mean SS</th>
<th>SD</th>
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<tr>
<td><strong>Fourth Grade</strong></td>
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<tr>
<td>Blackwell</td>
<td>13</td>
<td>576.38</td>
<td>17.947</td>
<td>603.15</td>
<td>25.961</td>
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<tr>
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<td>112</td>
<td>608.56</td>
<td>30.159</td>
<td>627.97</td>
<td>35.275</td>
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<td>Parks</td>
<td>34</td>
<td>592.42</td>
<td>23.65</td>
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<td>N/A</td>
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<tr>
<td>Wells</td>
<td>22</td>
<td>573.68</td>
<td>24.011</td>
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<tr>
<td>Blackwell</td>
<td>12</td>
<td>593.08</td>
<td>36.453</td>
<td>619.08</td>
<td>41.208</td>
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<tr>
<td>Mason</td>
<td>80</td>
<td>617.92</td>
<td>23.833</td>
<td>631.21</td>
<td>32.538</td>
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<tr>
<td>Parks</td>
<td>29</td>
<td>615.31</td>
<td>26.900</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Wells</td>
<td>19</td>
<td>604.63</td>
<td>32.640</td>
<td>610.32</td>
<td>31.150</td>
</tr>
</tbody>
</table>
Findings: Quantitative

2014-2015 4th & 5th Grade APREnda Mean Scaled Scores by Economic Status

<table>
<thead>
<tr>
<th>Grade</th>
<th>Economic Status</th>
<th>N</th>
<th>Reading Mean SS</th>
<th>SD</th>
<th>Math Mean SS</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>4th</td>
<td>Disadvantaged</td>
<td>99</td>
<td>590.11</td>
<td>29.75</td>
<td>603.79</td>
<td>34.52</td>
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<tr>
<td></td>
<td>Advantaged</td>
<td>82</td>
<td>609.63</td>
<td>28.29</td>
<td>634.99</td>
<td>31.65</td>
</tr>
<tr>
<td>5th</td>
<td>Disadvantaged</td>
<td>91</td>
<td>609.77</td>
<td>28.06</td>
<td>623.13</td>
<td>29.42</td>
</tr>
<tr>
<td></td>
<td>Advantaged</td>
<td>49</td>
<td>619.85</td>
<td>26.59</td>
<td>631.17</td>
<td>40.19</td>
</tr>
</tbody>
</table>
2014-2015 4th Grade APRENSA Reading Scaled Scores by Language Status
2014-2015 5th Grade APRENDÁ Reading Scaled Scores by Language Status

Mean Scaled Score

Dual immersion school sites

- Blackwell
- Mason
- Parks
- Wells

- Grade Level
- English Learners
- English Only
- FEP
- IFEP
### 2014-2015 4th Grade APRENSA Math Scaled Scores by Language Status

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>English Learners</th>
<th>English Only</th>
<th>FEP</th>
<th>IFEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Scaled Score</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blackwell</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Mason</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wells</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Reactions from APRENTA results?

- Why did some schools have higher Mean SS in Reading and Math?
- Why did Economically disadvantaged students score so low?
- Why did English Learners score so low compared to non-EL classmates?
- What do the demographics of each school tell us?

What is going on within this DI program?
Quantitative:
Student Achievement
Assessment & Accountability for Spanish Language Development

- Underperformance of English Learners
- Underperformance of Economically Disadvantaged Students
- High performance of Economically Advantaged
- High performance of English Proficient Students

Collaborative Power Relations

Coercive Power Relations

Cummins, 2000
Qualitative Sample

Classroom Observations
- 3 Elementary DI sites
- 4th and/or 5th grade classrooms
- 3 Classrooms (24-30 students est.)

Interviews
- 14 female and 6 male students
  - 12 EL students, 8 non-EL students
- 3 teachers

<table>
<thead>
<tr>
<th>EACH SCHOOL SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CLASSROOM</td>
</tr>
<tr>
<td>EL STUDENT</td>
</tr>
<tr>
<td>FOCUS GROUP</td>
</tr>
<tr>
<td>2-7</td>
</tr>
<tr>
<td>NON-EL STUDENT</td>
</tr>
<tr>
<td>FOCUS GROUP</td>
</tr>
<tr>
<td>2-7</td>
</tr>
<tr>
<td>1 TEACHER</td>
</tr>
</tbody>
</table>
Findings: Qualitative

RQ:
How is the dual immersion program implemented and supported at the school sites?
“…successful language education programs require: **effective and supportive administrative leadership**, a **positive school climate** that promotes achievement and positive performance for all students, **well trained teachers** with **high expectations** for achievement of all students, **faculty cohesion and program planning** …”

*emphasis added (Lindholm-Leary, 2001)*
Elizabeth Blackwell Elementary

“We are learning to read, write, & speak in two languages!
¡Estamos aprendiendo a leer, escribir, y a hablar en dos idiomas!”

- In operation for **about 17 years** w/ 2 classes per gr.
- Grant provided for an initial year of training, observations, and planning.
- When the DI began – high level of **concern** and **hostility** - monolingual teachers fearful jobs were in jeopardy
- **Changed to a 50:50 model** due to pressures from the district leadership - concern with the English language state assessment results.
Elizabeth Blackwell Elementary

- **self-contained** classes
- Spanish instruction from 12:00PM until 3:00PM
- Math & Spanish language arts incorp. with science or social studies
- **textbooks for all subjects in both languages** & large, bilingual classroom library
- district benchmark assessments influenced planning
- **A very supportive school culture**, strong Parent-Teacher Association & relationship with neighborhood orgs.
- **weekly planning meeting with DI teachers**
Bridget Mason Elementary

- **School-wide** DI program and the only **90:10 model** in the district.
- **25 years in existence**, grant funded first 2-3 years of PD & planning
- **AM- dedicated** to Spanish use (**school-wide**)  
- Decorated with colorful posters for “Folklorico” event, Bilingual informational flyers, international flags hang in the hallways
- Website – DI program goals, program design, and instructional design
Bridget Mason Elementary

“…How am I going to integrate collaboration? How am I going to integrate multiculturalism? How am I going to integrate language? It’s part of our pedagogy.”

- **Frequent collaboration** with colleagues for planning
- Effective Parent Teacher Association and the **Bridget Mason Foundation**
- **Partner teaching** in upper grades
- Spanish instruction in mathematics, science, and Spanish language arts
- **Textbooks are available in English and in Spanish for every subject.** Class sets of fiction and non-fiction books, in English and Spanish
Rosa Parks Elementary

- Did not participate in Qualitative data collection
- Did not administer APRENDA Math
- Website is presented in both languages and highlights the DI program’s end of year performance -showcase of multicultural songs and dances performed by students
- Description of the program and a list of program goals, which include, “daily opportunities to practice a new language, and participation in a winter and spring performance.”
- PowerPoint presentation on the 50:50 DI program at Parks
  - program’s mission and vision statements as well as program implementation, goals, benefits, photos, and academic test data from 2007 to 2010.
Ida B. Wells Elementary

“The DI program in existence for about 15 years.

• Began with a federal grant that was awarded to the district
• Changed to a 50:50 model - low achievement scores on state assessments (English)
• Instructional support provided through a student-teacher program in collaboration with the local university

“Wells is like a World War One trench, it’s hand-to-hand combat at Wells . . . It’s a tough place to teach.”
Ida B. Wells Elementary

- **AM dedicated to Spanish** instruction
  - Language Arts, History, Science, PE
- History and Spanish language arts textbooks in Spanish. Spanish library collection, teacher-purchased
- Obstacles affect Spanish instruction.
  - new state standards
  - meeting the district & state’s assessment requirements.

**Hostility towards the DI program on behalf of non-DI teachers**

- competing EXCEL program
- ideological opposition to the teaching of Spanish to EL students
- DI families are more involved in their children’s schooling
- DI students are more studious
- highest population of low-income, Spanish-speaking, EL students.
School-Wide Support

“Our mission is that we want biliterate students that excel. Our vision is … that this will take them further in life…. It’s just the way it is.”

-Ana Flores, Mason Elementary

“… [I]f they announced it in the bulletin that Dual Immersion was dead, everybody would clap.”

-Jorge Carver, Wells Elementary
## 2014-2015 Dual Immersion Program Demographics

<table>
<thead>
<tr>
<th>School</th>
<th>Total N</th>
<th>4&lt;sup&gt;th&lt;/sup&gt; Grade</th>
<th>5&lt;sup&gt;th&lt;/sup&gt; Grade</th>
<th>Latina/o</th>
<th>English Learners</th>
<th>Economically Disadvantaged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackwell</td>
<td>25</td>
<td>13</td>
<td>12</td>
<td>80%</td>
<td>52%</td>
<td>84%</td>
</tr>
<tr>
<td>Mason</td>
<td>192</td>
<td>112</td>
<td>80</td>
<td>65%</td>
<td>20%</td>
<td>41%</td>
</tr>
<tr>
<td>Parks</td>
<td>63</td>
<td>34</td>
<td>29</td>
<td>94%</td>
<td>79%</td>
<td>79%</td>
</tr>
<tr>
<td>Wells</td>
<td>41</td>
<td>22</td>
<td>19</td>
<td>98%</td>
<td>98%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>321</td>
<td>181</td>
<td>140</td>
<td>76%</td>
<td>44%</td>
<td>59%</td>
</tr>
</tbody>
</table>
Findings

RQ 1: How is the dual immersion program implemented and supported at the school sites?

Three DI programs that differ in significant ways

• Design:
  • 90-10 vs. 50-50
  • School-wide vs. Single Track
• Materials
• Support
  • School
  • Community

• Student population
• Planning & Collaboration
• Classroom Interactions
Qualitative:
DI Implementation & Support

- Additive perception of Spanish
- School & Community support
- School-wide use of Spanish

- Dominance of English test demands
- Limited texts available in both languages
- Variability in resources & materials
- Disproportionate student populations

Collaborative Power Relations

Coercive Power Relations

Cummins, 2000
Findings: Qualitative

RQ

What language interactions are observed in upper grade Dual Immersion classrooms?
Findings: Qualitative

RQ 3: What language interactions are observed in upper grade Dual Immersion classrooms?

Teachers-Student

- Maintenance of Spanish
- Diversity in activities & management of interactions

Photo: Faith Cathcart/The Oregonian
Findings: Qualitative
Teacher-Student Interactions

Photo: Aaron Schrank
Findings: Qualitative
Student-Student Interactions

Student-Student

- Findings align with research Potowski, 2002
- English language use
- Language mixing

Photo: Jesse Livezey
Findings: Qualitative

RQ

How do Dual Immersion students and teachers perceive the value of learning and speaking Spanish?
Findings: Qualitative

RQ 4: How do Dual Immersion students and teachers perceive the value of learning and speaking Spanish?

Teacher Attitudes

“I just think it’s fun and it’s exciting . . . and then it makes you think, well what third language could I learn?” - Sra. Valencia

“It is a challenging additive program . . . an enrichment to their education and their language, so just like a kid who studies violin . . . it's going to be important to them if they choose to make it important...” –Sr. Carver

“I say, ‘What you’re doing is amazing. What you’re doing is tremendous, and you have to put in the effort. It takes work!’” –Sra. Flores
Findings: Qualitative

RQ 4: How do Dual Immersion students and teachers perceive the value of learning and speaking Spanish?

Benefits of Bilingualism—Teachers

“I do believe that when you learn language you learn about the person deeper. You know, you have a deeper connection to humanity.”

—Sra. Valencia

“I think [being a] language learner is just fantastic for your brain.... I want to instill in them the hope that one day they’ll go to Spain... Costa Rica, Uruguay, wherever they want to go, and they’re going to be able to communicate.”

—Sra. Flores
Findings: Qualitative

RQ 4: How do Dual Immersion students and teachers perceive the value of learning and speaking Spanish?

Attitude / Benefits of Bilingualism- Students

“I like being [in] DI because I can teach my parents how to speak English and Spanish, and I hope one day, when I have a job, I can get more money because I know two languages.”

–EL student

“[I like] learning a different language and communicating with others all around the world, because I’m gonna be a traveler.”

–EO student

“…when you grow up older you’re going to be more wise and clever.”

–EO Student
Findings: Qualitative

RQ 4: How do Dual Immersion students and teachers perceive the value of learning and speaking Spanish?

Dominance of English

• Student interactions & classroom behaviors
• District emphasis on English assessment outcomes
• Attitudes

“People don’t come over ... here and say, ‘I want to learn French or hey, I need to learn Mandarin or Navajo.’ . . . It’s like, ‘I need to learn English,’ . . . more English means more money.”

-Mr. Carver

• Addressed in the literature as risk for linguistic and cultural inequity
Qualitative:
Interactions & Attitudes

- Teachers maintain Spanish use
- School-wide use of Spanish (Mason)

- Dominance of English
- English activities during Spanish instruction
- Disproportionate student populations
Implications

RQ 3: What language interactions are observed in upper grade Dual Immersion classrooms?

Linguistic, academic, and cognitive development are achieved through meaningful interactions among students and between students and their teachers

(Howard et al., 2007; Thomas & Collier, 2012)

- Significance of Teachers’ Role
- Impact of school environment
- Need for Teacher Support & Training
  - Curriculum & Instructional strategies
  - Interaction/Collaboration strategies
  - Issues of educational equity
Implications

RQ 4: How do Dual Immersion students and teachers perceive the value of learning and speaking Spanish?

<table>
<thead>
<tr>
<th>Benefits of being bilingual:</th>
<th>Dominance of English:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Helping others</td>
<td>• Reinforced in more influential ways than just teacher’s use of Spanish</td>
</tr>
<tr>
<td>• Personal benefits</td>
<td>• district expectations do not require DI students to achieve the same reading expectations in Spanish as they are in English.</td>
</tr>
<tr>
<td>• Cognitive benefits</td>
<td>• Emphasis on English assessments- district &amp; state level</td>
</tr>
<tr>
<td>• Connecting with others</td>
<td></td>
</tr>
</tbody>
</table>
Discussion

What recommendations would you make to this district in regard to its DI programs?
Recommendations: Policy

- State & National policy that supports bilingual pgms - LEARN, 2016!
- Accountability and Assessment of Spanish (or partner language) development
- District policies for on-going training
  - Align with DI goals for linguistic, cognitive, academic, and socio-cultural development
  - School-wide training to support DI – educational & linguistic equity
Recommendations: Practice

- Effective leaders who establish a learning environment where culture and language are equally valued & incorporated in the curriculum (Lindholm-Leary, 2001).
- The goal of educational equity for underserved student populations must be one of the main goals of school and district administrators of DI programs.
- Howard et al. (2007) addressed the importance of school-wide integration of DI goals for effective implementation.
- School-wide model provided more opportunities for teacher collaboration and initiatives that promote the goals and spirit of DI
Recommendations: Practice

Professional Development

• DI Teachers: Align with goals for linguistic, cognitive, academic, and socio-cultural development
  • Curriculum & Instructional strategies (incl. collaboration strategies)
  • School-wide: Educational equity for all students, support of DI pgm.
Recommendations: Practice

Centralized support and coordination

• promote equity among DI sites, a cohesive district program with common goals and practices
• Ensure equity among programs with regard to student population, resources, and professional development
• Provide structures and processes that will allow DI teachers to collaborate more easily, regardless of site.
Recommendations: Practice

School Environment:
“…the environment and culture of the school … may impact teacher and student attitudes, classroom activities and interactions, and ultimately, student achievement.”

• The transformation of an English-dominated system would include equitable use of the partner language in all communications across the entire school.

• School-wide training on the mission and vision of the district’s DI program would benefit the school-wide implementation and support of the DI program.
Recommendations: Further Research

- Spanish language development in DI
- Qualitative research on DI
  - Lacking in the literature
  - Focus on student & teacher experience
- Impact of School culture
  - Student & Teacher experience
  - DI program effectiveness