Differences Among Instructional Models in English Learners’ Academic and English Proficiency Trajectories

Findings from the SFUSD/Stanford Research Partnership

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The SFUSD EL Pathways Study

- Goal: compare EL student outcomes across EL instructional pathways.
  - The sample includes roughly **18,000 EL students who entered kindergarten in SFUSD from 2002-2010**.
    - ~9,000 in English Plus (English Immersion)
    - ~4,000 in Bilingual Maintenance (Developmental Bilingual)
    - ~3,000 in Bilingual Early Exit (Transitional Bilingual)
    - ~2,000 in Dual Immersion
- Sub-analyses for Chinese and Latino ELs.
Research Context

- Relatively little high-quality evidence regarding relative effectiveness of different EL instructional models
  - English Immersion Programs
  - Bilingual Instruction Programs
  - Dual Immersion Programs

- Competing theoretical perspectives regarding relative effectiveness
  - English Immersion $\rightarrow$ faster English proficiency $\rightarrow$ faster access to core curricular content
  - Two-language programs $\rightarrow$ better second language development (transfer) and no loss of academic content while learning new language.
SFUSD Context

- **Lau Consent Decree** requiring English Learners have access to the core curriculum through language pathways (*Lau v. Nichols*, decided on January 21, 1974).

- **Proposition 227** requiring parents/guardians to sign annual waivers for students to participate in language pathways (*English in Public Schools Initiative*, passed on June 2, 1998).
SFUSD Context

• SFUSD has a large and diverse EL student population:
  ▫ 37% EL
    • ~40% Spanish-speaking
    • ~40% Chinese-speaking
    • ~20% Other language backgrounds

• The district offers currently four distinct & well-articulated instructional Pathways for EL students:
  ▫ English Plus
  ▫ Biliteracy
  ▫ Dual Immersion
  ▫ Newcomer
<table>
<thead>
<tr>
<th>Pathway</th>
<th>English Plus</th>
<th>Biliteracy</th>
<th>Dual Immersion</th>
<th>Newcomer</th>
<th>Bilingual Maintenance</th>
<th>Bilingual Early Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Intention</strong></td>
<td>To support language &amp; academic development with English instruction for low-incidence ELL groups or for students whose parents want their children to be in English Immersion</td>
<td>To help native speakers students become fluent in both languages</td>
<td>To help native speakers, bilingual students, and English only students become fluent in both languages</td>
<td>To help transition recently arrived EL students adjust to their new language and culture</td>
<td>To develop competency in English while maintaining native language proficiency (i.e. bilingualism) and academic competency</td>
<td>To develop English proficiency and academic mastery with primary language support to access the core curriculum as needed</td>
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<tr>
<td><strong>Population Served</strong></td>
<td>EL students with Initial Fluent English Proficient (IFEP), Reclassified Fluent English Proficient (RFEP), and English Only (EO) students</td>
<td>EL students with Initial Fluent English Proficient (IFEP) or Reclassified Fluent English Proficient (RFEP)</td>
<td>1/3 – 1/2 not proficient in the target language 2/3 – 1/2 proficient in the target language</td>
<td>Recently arrived ELs with CELDT level 1 or 2</td>
<td>100% EL, IFEP or RFEP</td>
<td>100% EL, IFEP or RFEP</td>
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<tr>
<td><strong>Instructional Time</strong></td>
<td>-100% English - 30 min/day of English Language Development (ELD) - Coursework and Specially Designed Academic Instruction in English (SDAIE)</td>
<td><strong>K-1</strong>&lt;sub&gt;st&lt;/sub&gt;: 80-90% in native language <strong>By 5</strong>&lt;sup&gt;th&lt;/sup&gt;: 50% in English &amp; 50% in native language. Slight variations by language</td>
<td><strong>K-1</strong>&lt;sub&gt;st&lt;/sub&gt;: 80-90% in native language <strong>By 5</strong>&lt;sup&gt;th&lt;/sup&gt;: 50% in English &amp; 50% in native language. Slight variations by language</td>
<td>2 periods of intensive English Language Development; primary language support when available</td>
<td><strong>K</strong>: 50-90% native language depending on students’ proficiency. - Proportion English increases depending on students</td>
<td><strong>K</strong>: 50-90% native language depending on students’ proficiency. - Proportion English increases at quick pace.</td>
</tr>
</tbody>
</table>
Number of Latino EL Kindergarteners, 2000-2010
Percentage of ELs with Each First Choice Pathway, by Ethnicity

- **All Chinese Latino**:
  - Bilingual
  - Dual Immersion
  - English Plus
  - No Preference

- **Latino**:
  - Bilingual
  - Dual Immersion
  - English Plus
  - No Preference
Study design

• Regression analyses (event history and growth modeling) of associations between pathways and student outcomes.
  ▫ Kindergarteners classified as EL at start of K
  ▫ Controls for demographics, initial English proficiency (CELDT speaking and listening test scores), parental school and pathway preferences
Student Outcomes

• Reclassification Criteria
  ▫ **English Proficiency** - California English Language Development Test (CELDT)
  ▫ **ELA Achievement** – California Standards Test (CST)
  ▫ **Eligibility** for Reclassification as Fluent English Proficient

• Reclassification as Fluent English Proficient

• Math and ELA (CST) Achievement Trajectories
Key outcome patterns to attend to

• Differences in shape of outcome trajectories
• Distinction between progress toward English and academic proficiency and progress toward reclassification
• Latino/Chinese EL differences in outcomes (our study design does not address why)
English Proficiency
Cumulative Proportion of Latino EL Kindergarten Entrants Reaching English Proficiency (as Measured by the CELDT) by Grade & Program, 2002-2012

Parental Choice Model

Cumulative Proportion Proficient

Grade

2nd 3rd 4th 5th 6th 7th

0% 25% 50% 75% 100%

English Immersion
Early Exit Bilingual
Maintenance Bilingual
Dual Immersion
ELA Achievement Criterion
Cumulative Proportion of EL Kindergarten Entrants Reaching Mid-Basic on CST-ELA, by Grade & Program, 2002-2012

Parental Choice Model

Cumulative Proportion Mid-Basic

Grade

2nd 3rd 4th 5th 6th 7th

0% 25% 50% 75% 100%

English Immersion
Early Exit Bilingual
Maintenance Bilingual
Dual Immersion
Cumulative Proportion of Latino EL Kindergarten Entrants Reaching Mid-Basic on CST-ELA, by Grade & Program, 2002-2012

Parental Choice Model

Cumulative Proportion Mid-Basic

Grade

2nd
3rd
4th
5th
6th
7th

0%
25%
50%
75%
100%
Eligibility for Reclassification
Cumulative Proportion of EL Kindergarten Entrants Eligible for Reclassification (CELDT + CST), by Grade & Instructional Program, 2002-2012

Parental Choice Model

Cumulative Proportion Eligible

Grade

2nd 3rd 4th 5th 6th 7th

English Immersion
Early Exit Bilingual
Maintenance Bilingual
Dual Immersion
Cumulative Proportion of Chinese EL KindergartenEntrants Eligible for Reclassification (CELDT + CST), by Grade & Instructional Program, 2002-2012

Parental Choice Model

Cumulative Proportion Eligible

Grade

2nd 3rd 4th 5th 6th 7th

English Immersion
Early Exit Bilingual
Maintenance Bilingual
Dual Immersion
Reclassification
Cumulative Proportion of EL Kindergarten Entrants Reclassified as English Proficient, by Grade & Instructional Program, 2002-2012

Parental Choice Model

Cumulative Proportion Reclassified

Grade

2 3 4 5 6 7

English Immersion
Early Exit Bilingual
Maintenance Bilingual
Dual Immersion
Cumulative Proportion of Latino EL Kindergarten Entrants Reclassified as English Proficient, by Grade & Instructional Program, 2002-2012

Parental Choice Model

Cumulative Proportion Reclassified vs. Grade

- English Immersion
- Early Exit Bilingual
- Maintenance Bilingual
- Dual Immersion
Cumulative Proportion of Chinese EL Kindergarten Entrants Reclassified as English Proficient, by Grade & Instructional Program, 2002-2012
Parental Choice Model

Cumulative Proportion Reclassified

Grade

English Immersion
Early Exit Bilingual
Maintenance Bilingual
Dual Immersion
ELA and Math Achievement Trajectories
Estimated average ELA achievement trajectory, relative to the state average, EL kindergarten entrants, by instructional program, 2006-2012

**Initial EL Pathway**

- Early Exit
- English Plus
- Bilingual Maintenance
- Dual Immersion
- State Average

**Graph Details**

- **Y-axis**: Standardized ELA Score (State Average = 0)
- **X-axis**: Grade (2nd, 3rd, 4th, 5th)

The graph shows the estimated average ELA achievement trajectory for EL kindergarten entrants across grades 2nd to 5th, comparing different instructional programs to the state average.
Estimated average math achievement trajectory, relative to the state average, EL kindergarten entrants, by instructional program, 2006-2012

Initial EL Pathway

- Early Exit
- English Plus
- Bilingual Maintenance
- Dual Immersion
- State Average

Estimated average math achievement trajectory, relative to the state average, EL kindergarten entrants, by instructional program, 2006-2012.
Estimated average ELA trajectory, relative to state average: EL kindergarten entrants, by instructional program and ethnicity, 2006-2012, controlling for preferences.
Estimated average math trajectory, relative to state average: EL kindergarten entrants, by instructional program and ethnicity, 2006-2012, controlling for preferences

Latino

Initial EL Pathway
- Transitional Bilingual
- English Immersion
- Developmental Bilingual
- Dual Immersion
- State Average

Chinese

Estimated average math trajectory, relative to state average: EL kindergarten entrants, by instructional program and ethnicity, 2006-2012, controlling for preferences.
Policy/practice implications in SFUSD

• District has created school-level EL report cards
• Broad within-district dissemination of findings
  ▫ Superintendent
  ▫ Board
  ▫ EL Staff
  ▫ Community Forum
  ▫ Information for parents
• Policy and practice implications
An example of the research informing school evaluation of EL instructional programs

The process of cleaning the district’s data for English Learners has helped the district to be able to generate its own analysis of the achievement trends to share with key stakeholders and school sites.
## EL Pathway Data Impact on School Action Plans

<table>
<thead>
<tr>
<th>School Level Sample of Strategic Actions</th>
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<tr>
<td><strong>Pre EL Pathways</strong></td>
</tr>
<tr>
<td><strong>School A</strong></td>
</tr>
<tr>
<td>Implement school-wide pull out program for English Language Learners.</td>
</tr>
<tr>
<td><strong>School B</strong></td>
</tr>
<tr>
<td>School-wide ELD instruction: All teachers are receiving professional development in Results for English Language Learners. In the spring of 2010, we tested and placed our students in leveled groups. Each day, students begin with their ELD teacher for targeted and systematic English classes. Teachers meet in grade level teams once per week with our Instructional Reform Facilitator to look at student data and design lessons.</td>
</tr>
<tr>
<td><strong>Summary</strong></td>
</tr>
<tr>
<td>Tend to be generalized across the school.</td>
</tr>
</tbody>
</table>
Moving Forward

Continue to enhance and expand EL pathways PreK-12:

• Proactively recruit and hire bilingual and biliterate teachers to appropriately staff pathway expansions.

• Provide adequate professional development opportunities to effectively support language pathway teachers.

• Identify and/or develop target language instructional materials and assessments aligned to the core curriculum.

• Transition to the new English Language Development (ELD) Standards that will increase the rigor of dedicated and integrated ELD for English Learners.