Section 4 Executive Summary: Student Outcomes Studies

Center for Equity for English Learners, Loyola Marymount University

Wexford Institute

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As part of the four-year research and evaluation effort conducted by Loyola Marymount University’s Center for Equity for English Learners and the Wexford Institute, Wexford conducted four studies to determine the outcomes and growth of English Learners (EL) enrolled in schools participating in the implementation of the Sobrato Early Academic Language (SEAL) Model from 2015–2019.

Overall findings for each of the student outcomes studies reveal:

- **Study 1 – SEAL Students’ English Language Development and Academic Outcomes (Brief 9):**
  
  *English Learners (ELs) and reclassified (RFEP) students in SEAL schools made comparable or better progress than other ELs and RFEPs in the state, despite SEAL schools having higher levels of poverty than the California rate overall.*
  
  - SEAL English Learners (EL) in this study in grades 2, 3 and 4 ELs performed comparably or better than California ELs in developing English proficiency.
  - The overwhelming majority of SEAL ELs at grades 3 and 4 scored at the two highest levels of proficiency on the annual EL assessment or were reclassified as fluent English proficient (RFEP), steps toward preventing them from becoming long-term English Learners (LTEL), and
  - By grade 4, on academic assessments of English language arts and math, SEAL RFEPs scored higher than the combined group of English Only (EO) and Initially Fluent English Proficient (IFEP) students in SEAL schools, and better than California RFEPs.

- **Study 2 – Comparison of English Language Development and Academic Outcomes of SEAL Students in Bilingual versus Structured English Immersion Programs (Brief 10):**
  
  *SEAL ELs in bilingual programs progressed at a greater rate than SEAL ELs in structured English immersion.*
  
  - By grade 4, English Learners in bilingual /dual language (BIL) programs progressed at a greater rate than ELs in Structured English Immersion (SEI) programs, even though at kindergarten SEAL ELs in bilingual programs performed at significantly lower English proficiency levels than those in SEI programs.

- **Study 3 – Comparison of Spanish Language Development Outcomes of SEAL Students in Bilingual and Structured English Immersion Programs (Brief 11):**
  
  *Almost all SEAL ELs in BIL programs maintained or developed their proficiency in Spanish, while SEAL ELs in SEI programs did not.*
  
  - Spanish-speaking ELs in grades 2, 3 and 4 BIL programs scored significantly above SEI students, and continued to maintain or develop their Spanish language proficiency, while those in SEI suffered language loss in Spanish.

- **Study 4 – SEAL Students’ PreK and TK Spanish and English Language Development Outcomes (Brief 12):**
  
  *Spanish-speaking SEAL PreK and TK children significantly improved Spanish and English Language Skills.*
  
  - PreK and TK children in SEEAL classrooms showed growth in oral language fluency and pre-literacy in both English and Spanish with significant differences in almost all areas, from annual pre and post assessment.
Introduction to Student Outcomes and Growth Studies

In 2017, the California State Board of Education unanimously approved a new policy for English learners, the California English Learner Roadmap: Educational Programs and Services for English Learners. Its vision is: “English learners fully and meaningfully access and participate in a twenty-first century education from early childhood through grade twelve that results in their attaining high levels of English proficiency, mastery of grade level standards, and opportunities to develop proficiency in multiple languages.”

To that end it is critical for schools to: provide evidence-based programs; measure student outcomes in learning English, academic achievement, and development of their home language; and, take steps to improve those outcomes.

Research over the years has emerged to support this vision, and was described in a study in 2018 by the National Academies of Sciences. The study came to four conclusions especially relevant to student outcomes:

1. Related to bilingualism, scientific evidence points to a universal, capacity to learn two languages as easily as one, and that there is evidence of cognitive advantages, such as the ability to plan, regulate behavior, and think flexibly, for children and adults who are competent in two languages. Syntheses of studies comparing outcomes for ELs in English-only programs with outcomes of ELs instructed bilingually, showed either no difference in outcomes measured in English or that ELs in bilingual programs outperform ELs instructed only in English.

2. It can take from 5 to 7 years for students to learn the English necessary for participation in a school’s curriculum without further linguistic support. Students may need help with English in upper elementary and middle school grades in acquiring proficiency in the academic uses of English.

3. To conduct an accurate assessment of the developmental status and instructional needs of dual language learners (DLL) in PreK and ELs, their skills should be examined in both English and their home language.

4. DLLs and ELs LLs/ELs are less likely than their non-DLL/EL peers to be referred to early intervention and early special education programs, with potentially serious consequences, for needs such as autism spectrum disorder and language impairment.

Research Focus

Loyola Marymount University’s Center for Equity for English Learners and the Wexford Institute conducted an external evaluation of the Sobrato Early Academic Language (SEAL) PreK–Grade 3 Replication Model from fall 2015–fall 2019. This research and evaluation study focused on (1) Teacher Development, (2) Student Outcomes, and (3) Leader Perspectives and Depth of Implementation. The research briefs in Section 4 report on findings from four student outcomes studies conducted by Wexford Institute that investigate the outcomes and growth of (1) student oral language and literacy in English with simultaneous primary language support or primary language instruction for bilingual/dual language program students, (2) student achievement in content areas in English and mathematics, and (3) bilingual/dual language program student outcomes in development of their home language.

Studies 1 and 2 focused on student outcomes and growth in English language development and academic outcomes in English language arts and mathematics. The study sample was comprised of three groups of students (n = 5,175) who were in BIL and SEI programs, and who began in SEAL classrooms in Kindergarten in 2014-15, 2015-16 and 2016-17, and continued through 2018-19. Outcomes were measured using the CELDT and ELPAC, California’s statewide English language proficiency assessments (for grades K-4), and the CASSPP.
SBAC, California’s statewide English language arts and mathematics assessments (for grades 3 and 4). Study 3 focused on Spanish language development of ELs with a home language of Spanish. It was comprised of a sample of three groups of students in BIL and SEI programs \( (n = 117) \). Students began in SEAL classrooms in grades K and 1 in 2015-16 and K in 2016-17, and continued in SEAL classrooms until 2018-19. Outcomes were measured using the LAS Links© Español. Study 4 focused on Spanish and English language development of dual language learners in SEAL Pre-Kindergarten (PreK) and Transitional Kindergarten (TK) classroom \( (n = 139) \). This was a one-time study, with pre and post assessment in the same year, using the preLAS© assessment.

The evaluation team, in consultation with the SEAL Leadership team\(^3\), developed a logic model that visibly ties all program goals to seven program components and desired short- and long-term outcomes. The research briefs in this section are aligned with student outcomes related to Components 1 through 5 of the SEAL Logic Model. (See Section 1 - Narrative) The SEAL Depth of Implementation (DOI)\(^4\) tool is reflective of the SEAL Logic Model components and was developed as part of this research and evaluation effort. Additionally, the DOI Tool is reflective of EL research-based practices. The Student Outcomes Studies are connected to all of the DOI Areas, since all influence Ever-EL outcomes. See Figure 1 for an overview of that alignment.

**Figure 1**
*Student Outcomes Studies and Alignment to the SEAL DOI Tool*

<table>
<thead>
<tr>
<th>Student Outcomes Briefs:</th>
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<tbody>
<tr>
<td><strong>Study 1</strong> - SEAL Students' English Language Development and Academic Outcomes (Brief 9)</td>
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<tr>
<td><strong>Study 2</strong> - Comparison of English Language Development and Academic Outcomes of SEAL Students in Bilingual versus Structured English Immersion Programs (Brief 10)</td>
</tr>
<tr>
<td><strong>Study 3</strong> - Spanish Language Development Outcomes of SEAL Students in Bilingual and Structured English Immersion Programs (Brief 11)</td>
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<tr>
<td><strong>Study 4</strong> - SEAL Students’ PreK and TK Spanish and English Language Development Outcomes (Brief 12)</td>
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<table>
<thead>
<tr>
<th>SEAL Depth of Implementation (DOI) Alignment</th>
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<tbody>
<tr>
<td>Leadership (DOI Area 1)</td>
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<tr>
<td>Professional Learning (DOI Area 2)</td>
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<tr>
<td>Curriculum (DOI Area 3)</td>
</tr>
<tr>
<td>Instruction (DOI Area 4)</td>
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<tr>
<td>Environment (DOI Area 5)</td>
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<tr>
<td>Family Partnerships (DOI Area 6)</td>
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</tbody>
</table>

Note. SEAL DOI Focus Areas: (1) Leadership, (2) Professional Learning, (3) Curriculum, (4) Instruction, (5) Environment, and (6) Family Partnerships. Figure 1 shows the alignment to three SEAL DOI focus areas related to the student outcomes studies.

**Overview of the Research Briefs**

The four research and evaluation briefs that follow present quantitative findings on the English and Spanish language development and academic outcomes of SEAL students enrolled in SEAL schools implementing the SEAL Model between 2015—2019. While each study has a research brief of its own, this executive summary highlights key findings from each.

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\(^3\) The SEAL Leadership Team was comprised of the SEAL Founding Director, Executive Director, Director of Programs and Partnerships, Director of Innovation and Strategy, Director of Trainings, and Director of Research and Evaluation.

\(^4\) The SEAL DOI tool was developed to capture data on the levels of implementation of the SEAL Model and can be used at the project, district, and site level. The tool is comprised of six focus areas that are measured on a four-point scale ranging from “No Implementation” to “Sustainable Implementation.”
Student Outcomes Study 1, SEAL Students’ English Language Development and Academic Outcomes (Brief 9) was designed to answer the following research question: What are the 2018-19 outcomes in English language development, English language arts and mathematics of SEAL students, who began K in 2014-15, 2015-16 and 2016-17 and have remained in a SEAL school in the same district? Student scores for state English language proficiency assessments (CELDT, ELPAC) and English language arts and mathematics performance assessments (CASSPP-SBAC) were analyzed for three sample groups. Student records from eleven SEAL Districts were collected to evaluate the student outcomes of students taught by SEAL teachers from 2014-15 through 2018-19. The student data is longitudinally matched for these students as they began Kindergarten in SEAL classrooms and continued in SEAL schools through their final grade. These students have been in SEAL classrooms with teachers who may have completed up to 83% or 100% of SEAL professional development over a two-year period. Figure 2 provides an overview of key findings.

**Figure 2**

*SEAL English Language Development and Academic Outcomes*

- **English Language Development**
  - By 2018-19, between 58% to 68% of students in all three groups were RFEP or scored at the top two proficiency levels on ELPAC
  - SEAL ELs in grades 2, 3 and 4 performed comparably or better than California ELs

- **English Language Arts**
  - SEAL RFEP students outperformed their English Only/Initially Fluent English Proficient peers at SEAL schools in grades 3 and 4 on SBAC ELA
  - Compared to their grade 3 ad 4 RFEP peers in California, a larger percentage of SEAL RFEP students met and exceeded ELA standards, and a smaller percentage scored at the nearly met and not met levels.

- **Mathematics**
  - SEAL RFEP students outperformed their English Only/Initially Fluent English Proficient peers at SEAL schools in grades 3 and 4 on SBAC Mathematics
  - Compared to their grade 3 ad 4 RFEP peers in California, a larger percentage of SEAL RFEP students met and exceeded math standards, and a smaller percentage scored at the nearly met and not met levels.

For more information about this study and a more detailed description of findings, read the Student Outcomes Study 1: SEAL Students’ English Language Development and Academic Outcomes (Brief 9).
The Comparison of English Language Development and Academic Outcomes of SEAL Students in Bilingual (BIL) versus Structured English Immersion (SEI) Programs study (Brief 10) was designed to answer the following research question: **What is the difference, if any, between students in Structured English Immersion and Bilingual (including bilingual and dual-language) programs in the sample groups identified in Student Outcomes Study 1 (Brief 9)?**

Student assessment scores for state English language proficiency (CELDT, ELPAC) and state English language arts and mathematics performance (CASSPP-SBAC) were analyzed for three sample groups of students, representative of eleven SEAL districts and 65 SEAL schools, who had matched scores from pre- and post-assessment. Student scores were disaggregated by program of instruction to determine English Language Development, English language arts and mathematics outcomes for each student sample group. Figure 3 displays key findings for this study.

**Figure 3**
*English Language Development and Academic Outcomes of SEAL Students in BIL versus SEI Programs*

<table>
<thead>
<tr>
<th>English Language Development</th>
<th>English Lang Arts</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Overall performance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For students beginning in SEAL in 2013-14 and 2014-15, SEI students significantly outperformed BIL students</td>
<td>Pre to Post Performance</td>
<td>Pre to Post Performance</td>
</tr>
<tr>
<td><strong>Post-Overall performance</strong></td>
<td>By grade 4, BIL students progressed at a greater rate than SEI students.</td>
<td>By grades 3 and 4, each group, BIL and SEI made significant progress with with moderate to large effect sizes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post-Overall Performance</th>
<th>Post-Overall Performance</th>
<th>Post-Overall Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>By grade 4, BIL group had a larger percentage of students at the met and exceeded levels (39% compared to SEI at 36%) and a smaller percentage of students (36%) at the beginning level than the SEI (41%)</td>
<td>By grade 4, BIL had a larger percentage of students at the met and exceeded levels (37% compared to SEI at 34%), and a smaller percentage of students (31% compared to SEI at 34%) at the not met level.</td>
<td></td>
</tr>
</tbody>
</table>

For more information about this study and a more detailed description of findings, read the Student Outcomes Study 2: Comparison of English Language Development and Academic Outcomes of SEAL Students in Bilingual versus Structured English Immersion Programs (Brief 10).
The Spanish Language Development Outcomes of SEAL Ever-EL Students in Bilingual (BIL) and Sheltered English Instruction Programs (SEI) (Brief 11) was designed to answer the following research question: **What is the difference, if any, in growth in Spanish language development for students in bilingual compared to structured English Immersion programs, based on the pre and post assessment for three sample groups with annual data from 2016-2019?** Students were assessed annually on the LAS Links® Español from 2016 to 2019. Data were analyzed for three matched sample groups of students from four SEAL districts and six SEAL schools. Student scores were disaggregated by program of instruction (BIL and SEI) to determine Spanish Language Development outcomes for each student sample group. Overall, Spanish-speaking ELs in grades 2, 3 and 4 BIL programs scored significantly above SEI students, and continued to maintain or develop their Spanish language proficiency, while those in SEI suffered language loss in Spanish. Key findings are highlighted in Figure 4 below.

Figure 4

*Differences in Spanish Language Development between SEAL Ever-EL Students in BIL and SEI Programs*

- **Bilingual**
  - Statistically significant differences on their overall performance from pre- to post-assessment
  - Developed or maintained their Spanish (home language)
  - Outperformed their SEI counterparts

- **Structured English Immersion**
  - No significant differences on their overall performance
  - Students did not maintain or develop their Spanish language skills

For more information about this study and a more detailed description of findings, read the Student Outcomes Study 3: Spanish Language Development Outcomes of SEAL Ever-EL Students in Bilingual and Structured English Immersion Programs (Brief 11).
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The SEAL Students’ PreK and TK Spanish and English Language Development Outcomes (Brief 12) was designed to answer the following research questions: **What growth from pre to post assessments in Spanish and English Language development was made by samples of PreK and TK children in 2016-17?** The research and evaluation study measures language development of a sample of students who have Spanish as their home language, and who participated in SEAL PreK or TK classrooms in six districts during 2016-17. Using the Language Proficiency Assessment for Early Learners (preLAS®), in Spanish and English, for annual pre- and post-assessment data, the study focused on children’s Spanish language development and English language development. This study began in 2015-16, with a year of iterative planning and initial implementation to create the assessment process that would be conducted by Wexford, in collaboration with SEAL, and the participating SEAL districts and schools in 2016-17.

Overall, children showed significant changes from pre- to post-assessment in both English and Spanish. Results from the study indicate significant growth in Spanish and English oral language for PreK and TK children and significant growth in Spanish pre-literacy for TK children and English pre-literacy for PreK and TK children. Although there was not a significant difference in Spanish pre-literacy for PreK children (due to a small analysis group), they did make some growth from pre to post. Figure 5 provides an overview of key findings.

Figure 5
**preLAS® Summary of Significance Test Results**

<table>
<thead>
<tr>
<th></th>
<th>PreK Spanish</th>
<th>PreK English</th>
<th>TK Spanish</th>
<th>TK English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Language Fluency</td>
<td>Significant pre to post differences and moderate effect size</td>
<td>Significant pre to post differences and moderate effect size</td>
<td>Significant pre to post differences and small effect size</td>
<td>Significant pre to post differences and moderate effect size</td>
</tr>
<tr>
<td>Pre-Literacy</td>
<td>No Significant pre to post differences</td>
<td>Significant pre to post differences and large effect size</td>
<td>Significant pre to post differences and large effect size</td>
<td>Significant pre to post differences and large effect size</td>
</tr>
</tbody>
</table>

For more information about this study and a more detailed description of findings, read the Student Outcomes Study 4: SEAL Students’ PreK and TK English Language Development Outcomes (Brief 12).

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Conclusion

Section 4 of this report presents findings from four inter-related studies on student outcomes that support the proposition that the implementation of the SEAL Replication Model leads to: (1) improved outcomes in student oral language in English, and (2) improved student outcomes and achievement in English language arts and mathematics. For students in bilingual programs, it also improves student outcomes in their home language, Spanish, while students in structured English immersion programs suffer language loss in Spanish.

The full student outcomes studies are presented in the four research briefs that follow (Briefs 9, 10, 11, and 12). Section 4 appendices provide additional information about the student samples, results of student longitudinal assessment data, as well as full results of all statistical analyses.

References


This Section is based on the 4-Year External Research and Evaluation Study conducted by the Center for Equity for English Learners at Loyola Marymount University and Wexford Institute for the Sobrato Family Foundation


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