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## EVIDENCE OF TWO-WAY BILINGUAL IMMERSION ADVANTAGES

The Houston Independent School District (HISD) offers a diversity of language acquisition programs to serve Spanish-dominant English Language Learners (ELLs) in elementary school-this includes bilingual programs in the form of transitional late-exit, one-way developmental, and two-way bilingual immersion. ELLs may also opt out of bilingual education through a parent waiver, which guides them into English-only coursework. This study focuses on the Spanish and English reading benefits associated with these four language acquisition approaches, taking into account differences in student background characteristics (family economic standing, student immigrant status, gender, and age at school entry), students’ initial English instructional rating, bilingual program exposure (in years), and factors associated with school context. This evaluation follows a cohort of ELL kindergarteners from 2007-08 through 2012-13 (approximately grade 5) and examines two student reading outcomes: Spanish-language reading growth on the Aprenda 3 assessment from kindergarten through grade 3, and average English-language reading achievement in grade 5 using the Stanford 10 test. The majority of ELLs in the sample cohort have transitioned to from the Spanish-language Aprenda to the Englishlanguage Stanford test by grade 4. To avoid biased estimates, the Spanish-language reading analysis concludes in grade 3.


## Research Questions

(1) Which bilingual program is associated with the largest Spanish-language reading growth?
(2) Which bilingual program, or English immersion, is associated with the highest English-language reading achievement by grade 5?

## Key Findings

Spanish Reading Growth through Grade 3

- Across all bilingual program types (transitional, one-way, and twoway), ELLs improved in Spanish reading knowledge between kindergarten and grade 3.
- Through grade 3, ELLs in two-way programs demonstrated higher Spanish reading scores and slightly faster growth than ELLs in other bilingual programs.


## English Reading Achievement in Grade 5

- Relatively few ELLs-including those in dual language programs designed to last the duration of elementary school-remain in their original bilingual programs for six years, which is approximately grade 5.
- Regardless of bilingual program, ELL students who participated in their original program for approximately four years (through grade 3) had the highest English

reading achievement.
- Compared to other bilingual program students, ELL students in two-way programs had consistently higher English performance in grade 5. In particular, two-way students with three and four years of program exposure (through grades 2 and 3 ) earned the highest average English reading scores.
- Waiver students (not shown in graph) who were classified as ELLs only in kindergarten had higher grade 5 English reading performance than ELLs who participated in any bilingual program for only one year. However, this advantage disappeared among waiver students who were classified as ELLs for additional years. In contrast, with additional program exposure, two-way students met and surpassed the performance of wavier students.
- ELL students in poverty had significantly lower Spanish- and English-language reading performance.
- Females outperformed males on both Spanish- and English-language reading outcomes.

- ELLs who began kindergarten with the highest English instructional rating performed significantly better on reading outcomes in English and Spanish, compared to students who earned the lowest rating.


## Suggestions

- HISD has prioritized the expansion of two-way programs in recent years. Evidence from this study supports this endeavor, showing that ELL students in two-way bilingual immersion programs have higher Spanish and English reading outcomes on average. This suggests that unique program characteristics (e.g., classroom composition, instructional approach) carry an academic benefit for ELL students.
- Although one-way and two-way are both forms of dual language programs, ELLs in one-way
programs have lower Spanish and English reading outcomes than ELLs in two-way programs. Investigate qualitative factors that lead one-way students to less beneficial outcomes than twoway students.
- Pursue targeted, compensatory interventions that will address particularly strong academic difficulties faced by the most economically-disadvantaged students.
- Examine and implement schoolbased efforts to help ELLs gain a baseline knowledge of English prior to kindergarten. This study shows that ELL students’ kindergarten English skillset has a significant, persistent impact on Spanish and English reading outcomes in later grades.


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