



## From Lag to Leap: The Success of Ysleta ISD's Dual Language Program

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# Executive Summary

The Ysleta Independent School District's (ISD) dual language program in Texas has demonstrated significant success in fostering bilingualism, biliteracy, and biculturalism among students, especially notable in a predominantly Hispanic/Latino community. This study evaluates the program's performance using Istation's Reading and Spanish Literacy formative assessments, focusing on the dual language model's effectiveness over traditional educational approaches.

## Key Findings

- **Student Performance:** Ysleta ISD students displayed higher Spanish literacy gains across all grade levels compared to state averages, with notable success in foundational grades (kindergarten through third). While initially lagging in English literacy in the earlier grades, in the third through fifth grades, Ysleta students surpassed their peers' gains in Texas, showcasing the delayed but substantial benefits of the dual language approach.
- **Curriculum Usage:** The program's strategic implementation of Spanish literacy in early education (90/10 to 50/50 Spanish-to-English instruction model) is a critical factor in the observed outcomes. The high usage of Spanish literacy resources in the initial schooling years aligns with the program's goals to establish strong bilingual foundations, which is evident from the data showing greater English literacy gains as students advance in grade.
- **Program Design and Execution:** The success of Ysleta's dual language program is attributed to its robust design, including a phased approach to language learning, highly qualified bilingual-certified teachers, and significant stakeholder collaboration. The integration of educational technology, such as Istation's formative assessments and supplemental curriculum, plays a pivotal role in monitoring and improving student progress and adapting teaching strategies to meet diverse learning needs effectively.

- **Implications and Contributions:** This research highlights the transformative potential of dual language programs in improving bilingual literacy and suggests that such educational models can effectively bridge the opportunity gap for English learners, fostering equitable educational outcomes. Ysleta ISD's program serves as a compelling case study for other districts aiming to implement or enhance dual language education, providing a replicable model of success that emphasizes early and continuous exposure to both languages.
- **Challenges and Recommendations:** Despite its success, the program faces challenges such as the scarcity of high-quality bilingual educational resources, particularly in subjects like social studies. The study recommends ongoing adaptation of resources and continuous professional development for teachers to sustain the program's effectiveness.

Ysleta ISD's dual language program exemplifies how well-implemented bilingual education can significantly enhance students' academic achievement and literacy in both English and Spanish, preparing them for a globalized world while respecting and integrating their cultural heritage.

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## Introduction

Dual language education programs have garnered increasing recognition for their ability to promote bilingualism, biliteracy, and biculturalism among students. Significant research has been conducted on these programs, particularly concerning improvements in reading achievement. Findings from studies focusing on Two-Way Bilingual Immersion (TWBI) and dual language programs have consistently shown that, despite an initial lag of 3–5 years, students within these programs eventually match or surpass the performance of their peers not enrolled in these initiatives (Collier & Thomas, 2017; Genesee & Lindholm-Leary, 2013; Lindholm-Leary, 2016). Furthermore, students from diverse backgrounds (e.g., economic, ethnic, special education) in TWBI programs consistently match or surpass their peers' scores in mainstream English classrooms and are more likely to enroll in advanced math courses, pass high school exit exams, exhibit lower dropout rates, and significantly reduce the opportunity gap with native English-speaking peers by the end of high school (Genesee et al., 2006; Lindholm-Leary, 2016; Lindholm-Leary & Genesee, 2010; Soltero, 2016).

In addition to academic benefits, implementing and studying dual language programs have implications for countering educational racial/ethnic injustices. These programs represent a powerful tool to challenge the predominance of English and promote greater respect for cultural diversity, fostering bilingualism, biliteracy, and high academic achievement. Drawing from the sociocultural theory of learning, dual language education emphasizes the role of language in personal identity and societal participation (Vygotsky, 1928). Dual language education inherently connects to social justice, equity, and identity. In the racially and linguistically diverse American education system, these programs help students from varied backgrounds affirm their identities *and* achieve academically (Cummins et al., 2015; Feinauer & Howard, 2014; Shin, 2017).

The success of dual language programs depends on their inherent structure and key factors, such as effective curriculum design. A well-balanced curriculum—often modeled on 90/10 or 50/50 frameworks—enhances K–5 students' literacy skills in both languages (Lindholm-Leary, 2012). Additionally, the qualifications of teachers and the availability of ongoing professional development opportunities significantly influence the outcomes of these programs (Short et al., 2012).

Assessment practices also play a pivotal role in these programs. Formative reading assessments effectively track student progress and address potential challenges in supporting English learners (Heritage, 2008; Heritage & Chang, 2012). These measures should be both valid and reliable in assessing students' proficiency in both languages, and it has been noted that the inclusion of foundational and higher-order reading activities in formative assessments aids students in reaching the demands of Common Core State Standards (Shore et al., 2016).

Educational technology is integral to addressing inequalities in dual language programs. Technological tools like Istation's Reading and Spanish Literacy formative assessments offer an innovative approach to tracking student progress and adapting instruction to meet diverse learning needs. This digital platform has proven to be instrumental in fostering literacy development in both English and Spanish, particularly when program implementation fidelity is high (Locke et al., 2022; Wolf et al., 2022; Wolf & Locke, 2023). Research has shown that technology can enhance students' engagement and learning outcomes (Schindler et al., 2017). Successful implementation of these tools is essential to student success as poor integration can impede learning (Tondeur et al., 2016).

## Ysleta Program Overview

This research aims to evaluate the performance and effectiveness of a dual language program with over 35 years of longevity, which has consistently outperformed similar districts in Texas in both English and Spanish literacy. Ysleta ISD is adjacent to the US–Mexico border and has a predominantly Hispanic/Latino student population (87%),

with approximately 79% of students eligible for free and reduced-price lunch (National Center for Education Statistics, 2023).

Ysleta ISD's dual language program is backed by a leadership team with combined experience of approximately 94 years. This extensive experience, encompassing roles from classroom teaching to administrative positions, has shaped the program's trajectory. The leaders' diverse backgrounds, ranging from the chief academic officer to directors of various academic departments, ensure a holistic approach to the program's implementation and management.

The dual language program in Ysleta ISD is a testament to the transformative potential of inclusive bilingual education. The program's instructional models, shown in Figure 1, implement a gradual 90/10 to 50/50 split between Spanish and English to foster sustained proficiency in both languages while promoting cross-cultural understanding. These models have pre-kindergarten through first-grade students predominately immersed in Spanish with a gradual increase in English Language Arts instruction as they progress, culminating in a balanced 50/50 approach by third grade. By the fourth and fifth grades, the focus shifts predominately to English Language Arts.

**Figure 1.** Ysleta ISD's Dual Language Program Models

One-way Model	PK	KG	1st	2nd	3rd	4th	5th
Spanish Language Arts	120 minutes	120 minutes	120 minutes	90 minutes	60 minutes		
English Language Arts				30 minutes	60 minutes	120 minutes	105 minutes
Math (SP-EN)	90 minutes	90 minutes	90 minutes	90 minutes	90 minutes	90 minutes	90 minutes
Science (EN)	45 minutes	45 minutes	45 minutes	45 minutes	45 minutes	45 minutes	45 minutes
Social Studies (SP)	30 minutes	30 minutes	30 minutes	30 minutes	30 minutes	30 minutes	30 minutes
Two-way Model	PK	KG	1st	2nd	3rd	4th	5th
Spanish Language Arts	120 minutes	120 minutes	120 minutes	90 minutes	60 minutes		
English Language Arts				30 minutes	60 minutes	120 minutes	105 minutes
Math (SP-EN)	90 minutes	90 minutes	90 minutes	90 minutes	90 minutes	90 minutes	90 minutes
Science (EN)	45 minutes	45 minutes	45 minutes	45 minutes	45 minutes	45 minutes	45 minutes
Social Studies (SP)	30 minutes	30 minutes	30 minutes	30 minutes	30 minutes	30 minutes	30 minutes

The dual language program has evolved over its history, adapting to changing demographics and student needs. This adaptability is evident in its curriculum usage data, instructional models, and commitment to continuous bilingual instruction through fifth grade, distinguishing it from early-exit bilingual programs. The program's

dedication to its students is further highlighted by its strategic approach to resource allocation, emphasizing authentic academic language over straightforward translations from English to Spanish, and ensuring that students are provided with genuine linguistic contexts.

Collaboration is a cornerstone of Ysleta ISD's dual language program. The district emphasizes robust stakeholder involvement, with collaboration among district leadership, teachers, parents, and the broader community. This is enhanced by establishing multiple task forces that focus on various aspects of the program, allowing for continuous feedback and improvement. Additionally, the district employs an instructional coaching model, ensuring educators have the necessary tools and training to effectively deliver the program's curriculum.

Professional development and teacher qualifications are paramount in Ysleta's dual language program. The district's commitment to excellence is evident in its highly qualified, bilingual-certified teachers. This dedication ensures that the program meets and often exceeds its educational goals.

Resource strategy and equity are central to the program's ethos. Ysleta ISD believes that every student, irrespective of their background, deserves access to high-quality bilingual education. This commitment is evident in the program's resource strategy, which prioritizes authentic academic language and ensures comprehensive student support.

Monitoring, evaluation, and adaptability are integral to the program's success. Ysleta ISD utilizes Istation, a digital platform offering English and Spanish literacy formative assessments and supplemental curriculum, to monitor and evaluate student progress monthly. This platform provides real-time data analytics, allowing educators to adapt their instruction to meet their students' diverse and evolving needs. Such monitoring has been pivotal in refining instructional strategies and ensuring the program's sustained success. The program's resilience, adaptability, and commitment to continuous improvement set it apart as a model for other districts.

Ysleta ISD's dual language program embodies this well-executed implementation of educational technology. Thus, the primary aim of this mixed methods study is to highlight the success of Ysleta ISD's dual language program, which has demonstrated significantly higher reading outcomes in both English and Spanish compared to state averages in Texas. This investigation is expected to provide valuable insights that could be useful in promoting and refining dual language education programs to improve student outcomes.

## Theoretical Framework

The study on Ysleta ISD's dual language program is rooted in Vygotsky's sociocultural theory of learning (1928), which posits that language serves not merely as a communication medium but as a pivotal element of personal identity and societal participation. This perspective underscores the profound interconnection between bilingualism, biliteracy, and an individual's sense of self within a broader cultural and societal milieu. Beyond the cognitive dimensions of language acquisition, the study situates dual language programs within the larger discourse of educational equity and social justice. By championing bilingualism and biliteracy, such programs inherently challenge the predominance of English, advocating for a more inclusive and diverse educational landscape, thereby countering racial/ethnic injustices prevalent in education (Cummins et al., 2015; Feinauer & Howard, 2014; Shin, 2017). The efficacy of these programs, as highlighted by Lindholm-Leary (2012), centers on their meticulous design and execution, emphasizing the indispensability of a balanced curriculum and the pivotal role of adept educators.

The study also acknowledges the transformative potential of educational technology in bolstering dual language education in today's digital age. Tools like Istation's formative assessments epitomize the synergy of technology and pedagogy, offering modern methodologies to monitor student progress and tailor instruction. Concurrently, the study underscores the salience of robust assessments in gauging bilingual proficiency, pedagogical strategies, and interventions. Serving as a tangible manifestation of the aforementioned theoretical constructs, Ysleta ISD's dual

language program offers invaluable insights, elucidating the broader theoretical nuances of dual language education.

## Methodology

This study uses Istation's Reading and Spanish Literacy formative assessment scores as the outcome measures. Both assessments are computer-adaptive universal screeners in reading for evaluating literacy in English and Spanish. Istation is an integrated learning system that provides assessments, supplemental curriculum, and detailed reports that can be used for progress monitoring or benchmarking. Students are routed into the curriculum based on assessment performance.

This study focuses on students who completed the Istation Reading and Spanish Literacy assessments during the 2021–22 academic year. Istation Reading assesses the critical domains of alphabet knowledge, phonemic awareness, nonsense word decoding, vocabulary, comprehension, spelling, and fluency subtests, and the foundational subtests may be added if their score dips below a preset threshold. In this way, the Istation Reading score can assess students on a broad spectrum of reading skills, from pre-kindergarten through middle school (Mathes et al., 2023). Istation Spanish Literacy is an authentic Spanish language reading assessment based on research regarding how students learn how to read in Spanish, which is somewhat different than in English due to the transparency of the language. Students are assessed in grapheme-phoneme conversion, vocabulary, comprehension, fluency, and written communication (Istation, 2016).

For the analysis, we compared the 2021–22 academic year Istation Reading and Spanish Literacy assessment results of students in Ysleta ISD with those of students across Texas. The Texas sample included districts across the state that use both Istation Reading and Istation Spanish Literacy, and all analyses for the state excluded data from Ysleta ISD. Students had to have overall scores from both assessments during the 2021–22 academic year to be included in the study. Therefore, the students

in the state sample are similar to the Ysleta students in that they are taking reading assessments in both languages.

Istation usage guidelines recommend that students who score at or below the 40th percentile of the normative sample on Istation assessments use the Istation curriculum for 40 minutes per week and that students who score above the 40th percentile use the curriculum for 30 minutes per week for implementation fidelity. Usage quintiles were calculated for the combined sample of Texas students by grade level based on the total usage (minutes), with quintile 1 representing the lowest usage and quintile 5 representing the highest usage.

The study utilized analysis of covariance to assess differences between Ysleta ISD and the Texas state average on Istation Reading (the English product) and Spanish Literacy curriculum usage and gain scores by grade level. The reading gain scores were calculated as the difference between the assessment score from beginning-of-year (BOY) (recorded in September) and the assessment score from end-of-year (EOY) (recorded in May). Each model with gain scores as the outcome controlled for BOY scores from the respective Istation assessment (Reading or Spanish Literacy) to adjust for initial proficiency level in each assessment.

Given that the sample consisted of students nested in schools, a hierarchical linear model (HLM) was employed to explore the research questions further. Within this framework, two nested models were tested. Model 1 is the baseline model that consists of only the random effect for the intercept. Model 2 is an extension of model 1 that includes fixed effects at level 1, which included BOY score, usage quintiles, a dummy coded variable representing students in Ysleta ISD versus those not, and an interaction term between usage quintiles and the district variable. Further models were examined that included random slopes for level 1 (usage) and level 2 fixed effects (socioeconomic status at the school level per the National Center for Education Statistics), but those models resulted in insignificant improvement of model fit and, in many cases, overfitting of the models. Therefore, model 2 was interpreted for each grade level.

This study also employed a qualitative research design to explore the implementation of the dual language program. Data were collected through an in-depth, structured interview with executive stakeholders involved in the program. The interview explored several program dimensions, including curriculum and instruction, teacher qualifications and professional development, assessment and monitoring, parent and community engagement, and sustainability.

## Results

To measure the efficacy of the dual language program, Istation Reading and Spanish Literacy gain scores were analyzed and compared to the respective average scores of Texas. More detailed information (i.e., tables) for the following results can be accessed in the [Appendix](#).

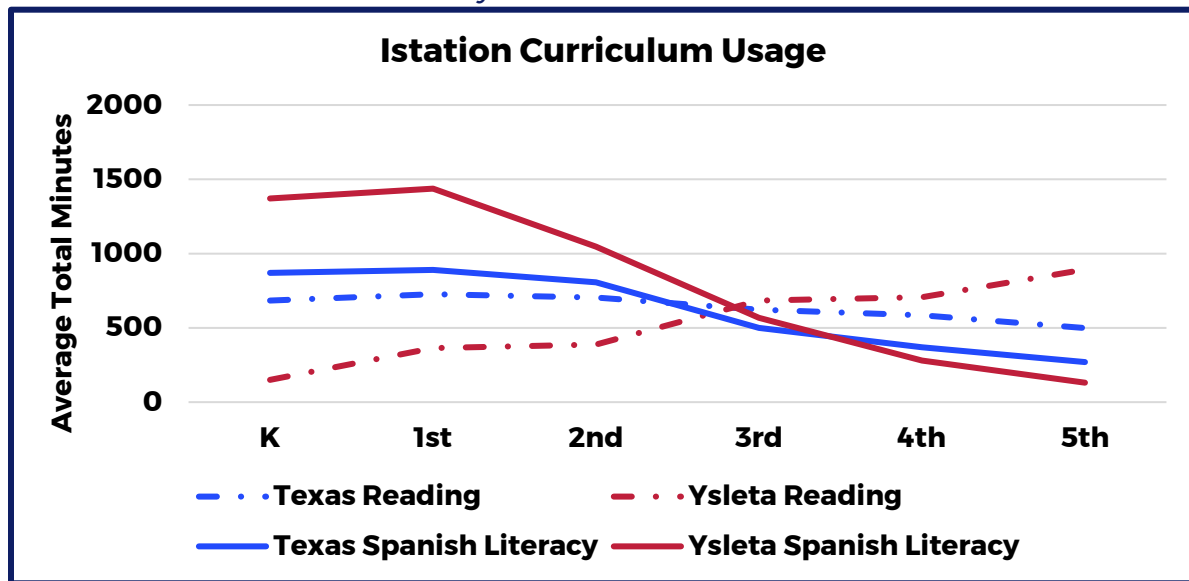
### Istation Reading and Spanish Literacy Usage Comparison

Figure 2 shows varied Istation Reading curriculum usage across grade levels. Ysleta's usage was significantly less than Texas's in kindergarten (150.0 vs. 684.0 minutes,  $p < 0.001$ ) and first grade (364.3 vs. 726.7 minutes,  $p < 0.001$ ). This trend continued in the second grade, with usage of 387.5 minutes in Ysleta and 704.2 minutes in Texas ( $p < 0.001$ ). However, Ysleta showed significantly higher usage from third grade onwards than Texas. Specifically, usage for Ysleta was 683.5, 706.2, and 892.6 minutes for the third, fourth, and fifth grades, respectively, compared to Texas's 622.7, 584.8, and 498.9 minutes, respectively ( $p \leq 0.008$ ).

Istation Spanish Literacy curriculum usage results were primarily consistent across grade levels, as shown in Table 1. Ysleta exceeded Texas's usage in kindergarten through third grade (1370.5 vs. 869.8, 1437.3 vs. 890.2, 1046.4 vs. 807.1, and 568.1 vs. 500.1 minutes, respectively,  $p < 0.001$ ). However, Texas had higher usage than Ysleta in the fourth and fifth grades, with 369.4 vs. 280.4 and 269.8 vs. 131.0 minutes, respectively ( $p < 0.001$ ). These results demonstrate how the Istation program is

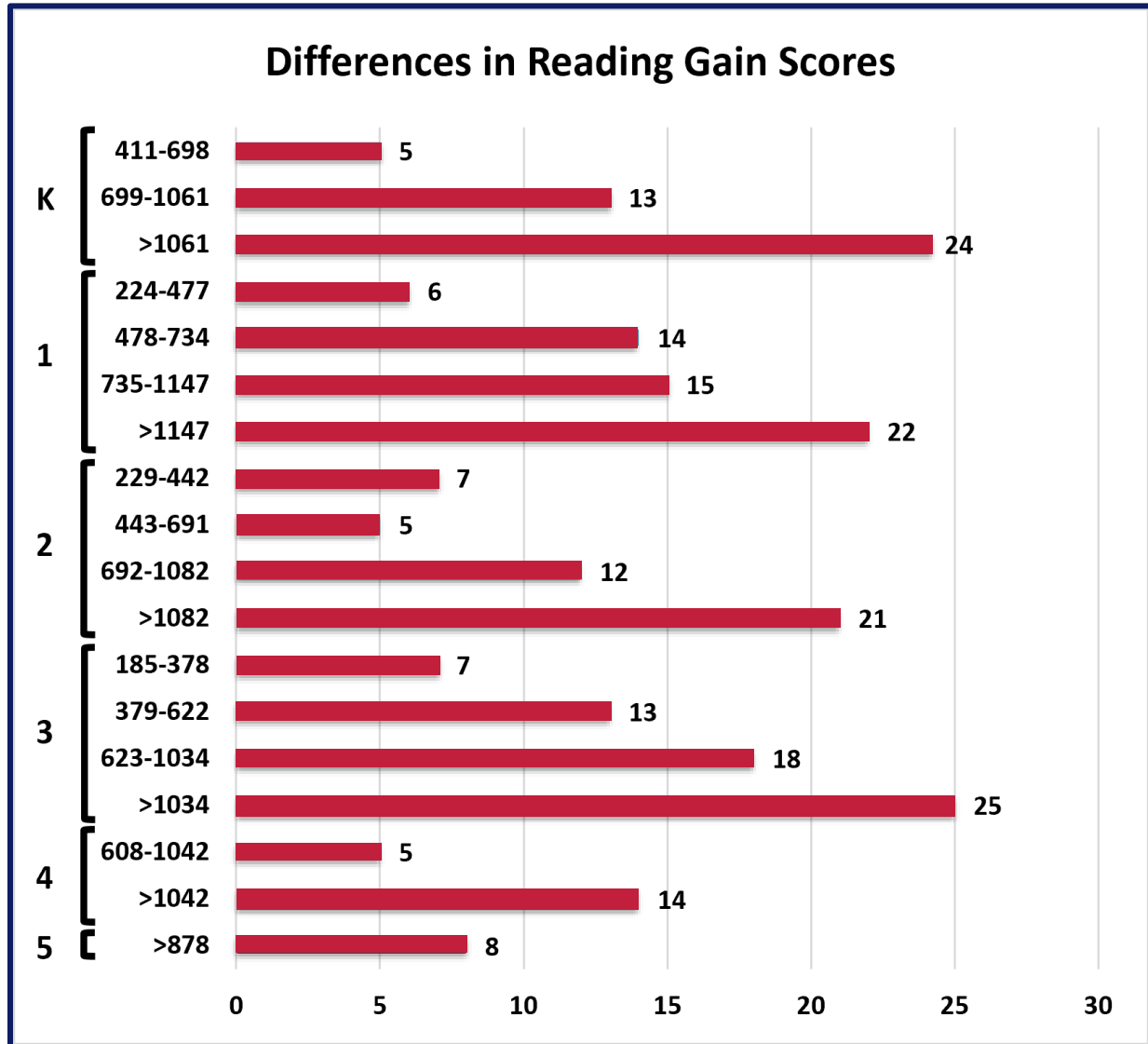
implemented in Ysleta: more focus on Spanish in the earlier grades, with a gradual switch to English instruction in later grades.

**Figure 2.** *Istation Reading and Spanish Literacy Curriculum Usage Comparison Between Ysleta ISD and Texas by Grade Level*



Istation usage varied significantly among schools. Figures 3 and 4 show the graphical representation of increases in Istation Reading and Spanish Literacy gain scores, respectively, by total minutes of usage per school year.

**Figure 3.** Differences in Istation Reading Gain Scores for Grades K to 5 by Istation Total Usage for the Combined Sample of Texas Students



**Figure 4.** Differences in Istation Spanish Literacy Gain Scores for Grades K to 5 by Istation Total Usage for the Combined Sample of Texas Students

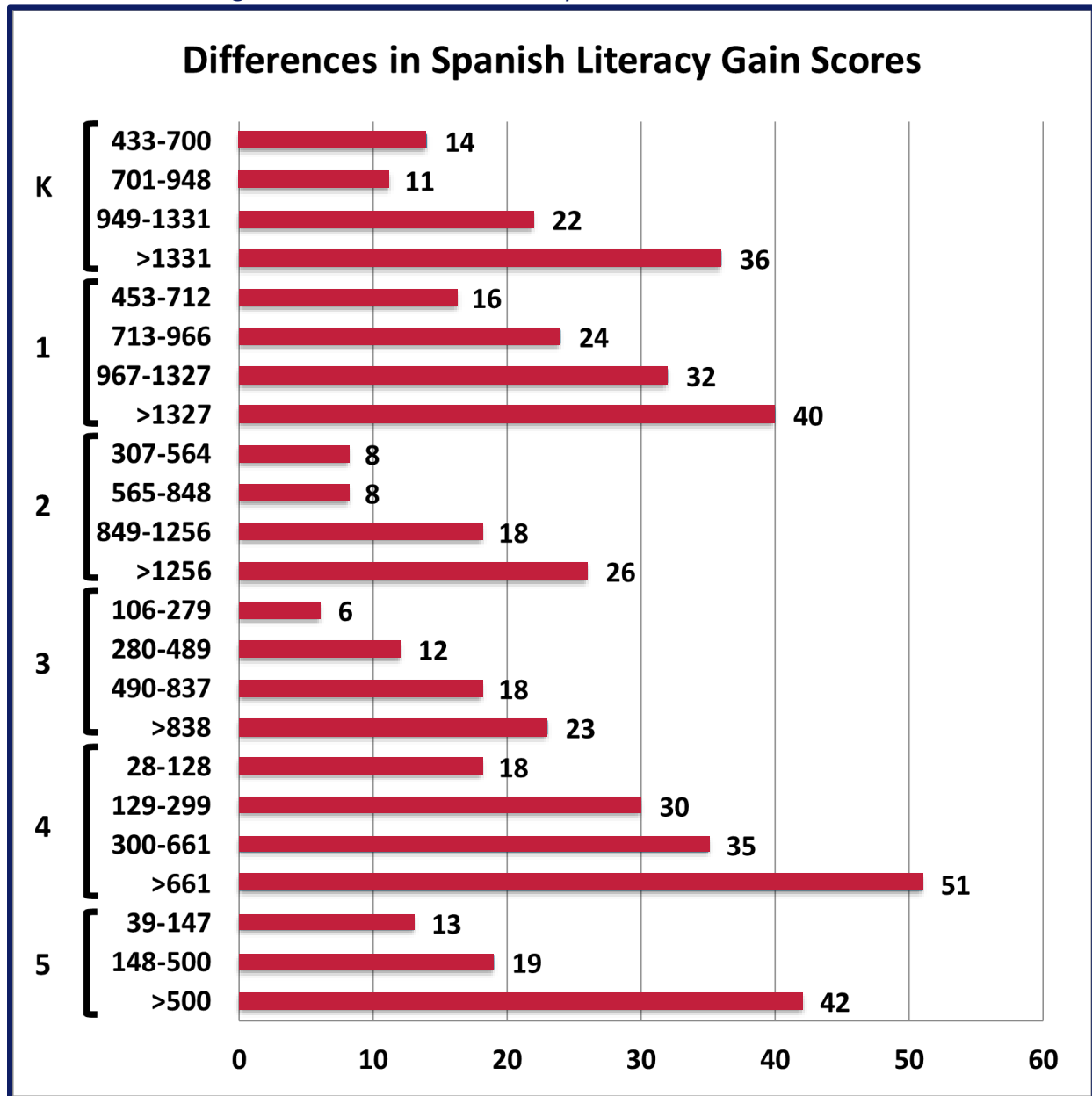


Table 2 shows the Istation Reading and Spanish Literacy HLM model results for kindergarten. For Istation Reading, students who were in quintile 3 and above (>411 total minutes/school year) had an increase of 5 to 24 points in Reading gain scores, with 26% of the variability in scores due to schools (ICC = .26). For Istation Spanish Literacy, students who were in quintile 2 and above (>433 total minutes/school year)

had an increase of 14 to 36 points in Spanish Literacy gain scores, with 20% of the variability in scores due to schools ( $ICC = .20$ ). There was no significance observed for the district main effect nor the interaction between Ysleta/Texas and Istation curriculum usage.

Table 3 shows the Istation Reading and Spanish Literacy HLM model results for first grade. For Istation Reading, students who were in quintile 2 and above (>224 total minutes/school year) had an increase of 6 to 22 points in Reading gain scores, with 17% of the variability in scores due to schools ( $ICC = .17$ ). For Istation Spanish Literacy, students who were in quintile 2 and above (>453 total minutes/school year) had an increase of 16 to 40 points in Spanish Literacy gain scores, with 23% of the variability in scores due to schools ( $ICC = .23$ ). There was no significance observed for the district main effect nor the interaction between Ysleta/Texas and Istation curriculum usage.

Table 4 shows the Istation Reading and Spanish Literacy HLM model results for second grade. For Istation Reading, students who were in quintile 2 and above (>229 total minutes/school year) had an increase of 5 to 21 points in Reading gain scores, with 14% of the variability in scores due to schools ( $ICC = .14$ ). For Istation Spanish Literacy, students who were in quintile 2 and above (>307 total minutes/school year) had an increase of 8 to 26 points in Spanish Literacy gain scores, with 23% of the variability in scores due to schools ( $ICC = .23$ ). In addition, the main effect of the ISD was significant for Spanish Literacy, with Ysleta students exhibiting an average gain score that was 44 points higher than their Texas counterparts. There was no significant interaction between Ysleta/Texas and Istation curriculum usage.

Table 5 shows the Istation Reading and Spanish Literacy HLM model results for third grade. For Istation Reading, students who were in quintile 2 and above (>185 total minutes/school year) had an increase of 7 to 25 points in Reading gain scores, with 14% of the variability in scores due to schools ( $ICC = .14$ ). For Istation Spanish Literacy, students who were in quintile 2 and above (>106 total minutes/school year) had an increase of 6 to 23 points in Spanish Literacy gain scores, with 17% of the variability in scores due to schools ( $ICC = .17$ ). The main effect of the ISD was significant for Spanish

Literacy, with Ysleta students exhibiting an average gain score that was 36 points higher than their Texas counterparts. In addition, there was a significant interaction effect between the ISD and curriculum usage quintiles 2 and 4. Specifically, the interaction coefficients were -19.71 for quintile 2 and -22.29 for quintile 4. These negative coefficients indicate a reduction in the positive effect of being in Ysleta ISD for students in these quintiles. For instance, Ysleta students in quintile 2 had a combined effect of an average gain score that was 16.29 points higher than their Texas counterparts in the same quintile. Similarly, for Ysleta students in quintile 4, there was a combined effect of an average gain score that was 13.71 points higher than their Texas counterparts in the same quintile.

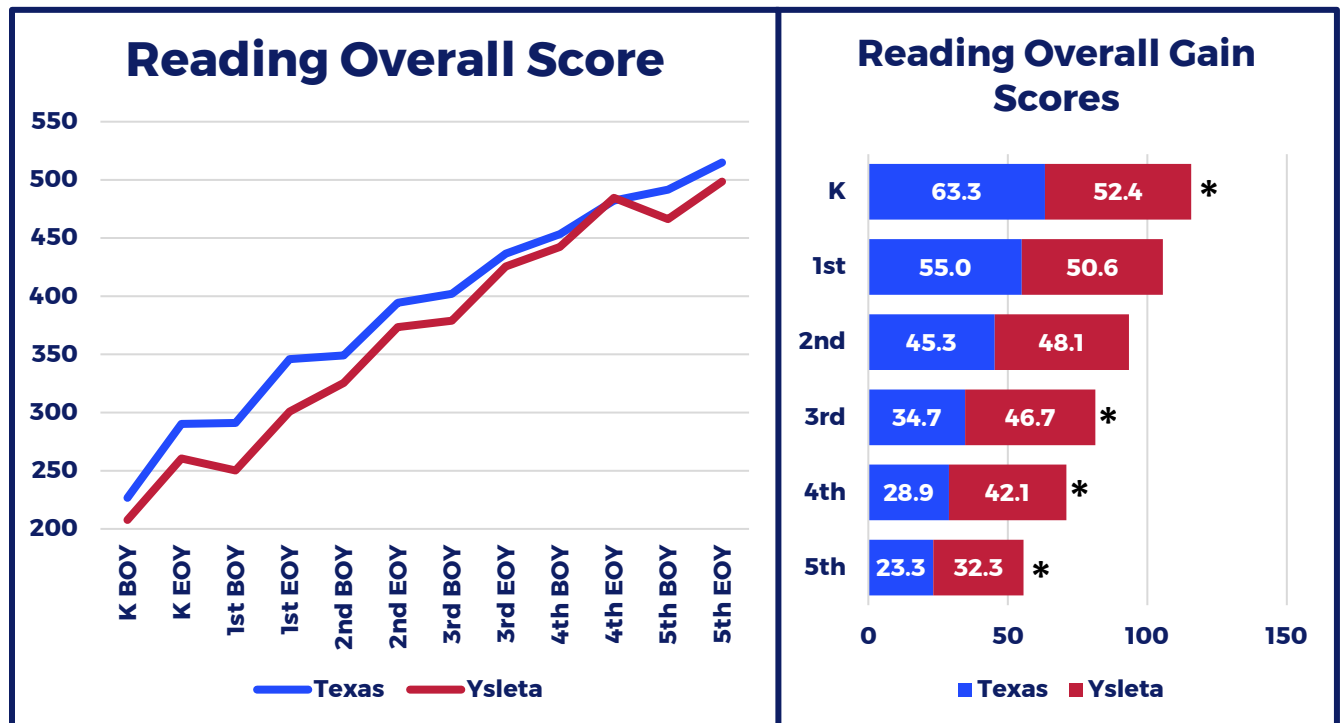
Table 6 shows the Istation Reading and Spanish Literacy HLM model results for fourth grade. For Istation Reading, students who were in quintile 4 and above (>608 total minutes/school year) had an increase of 5 to 14 points in Reading gain scores, with only 8% of the variability in scores due to schools (ICC = .08). For Istation Spanish Literacy, students who were in quintile 2 and above (>28 total minutes/school year) had an increase of 18 to 51 points in Spanish Literacy gain scores, with 12% of the variability in scores due to schools (ICC = .12). In addition, the main effect of the ISD was significant for Spanish Literacy, with Ysleta students exhibiting an average gain score that was 31 points higher than their Texas counterparts. There was no significant interaction between Ysleta/Texas and Istation curriculum usage.

Table 7 shows the results for the Istation Reading and Spanish Literacy HLM models for fifth grade. For Istation Reading, students who were in quintile 5 (>878 total minutes/school year) had an increase of 8 points in Reading gain scores, with 15% of the variability in scores due to schools (ICC = .15). For Istation Spanish Literacy, students who were in quintile 3 and above (>39 total minutes/school year) had an increase of 13 to 42 points in Spanish Literacy gain scores, with 14% of the variability in scores due to schools (ICC = .14). There was no significance observed for the district main effect nor the interaction between Ysleta/Texas and Istation curriculum usage.

## Istation Reading Overall Score Comparison

The results of the Istation Reading overall scores varied between the grade levels and are shown in Figure 5. While the overall Istation Reading score for Ysleta ISD stayed below the state average except for the fourth grade EOY score, BOY-to-EOY growth was significantly higher in Ysleta ISD third- through fifth-grade students than the state's growth, on average. For kindergarten, the Istation Reading gain score for Ysleta ISD was lower than that of Texas (52.4 vs. 63.3,  $p < 0.001$ ). However, starting from the third grade, Ysleta ISD students had higher gains than similar students in Texas (46.7 vs. 34.7,  $p < 0.001$ ), followed by fourth grade (42.1 vs. 28.9,  $p < 0.001$ ) and fifth grade (32.3 vs. 23.3,  $p = 0.02$ ).

**Figure 5.** Istation Reading Overall Score Comparison Between Ysleta ISD and Texas by Grade Level



Note. \* $p < 0.05$ .

## Istation Reading Subtest Score Comparison

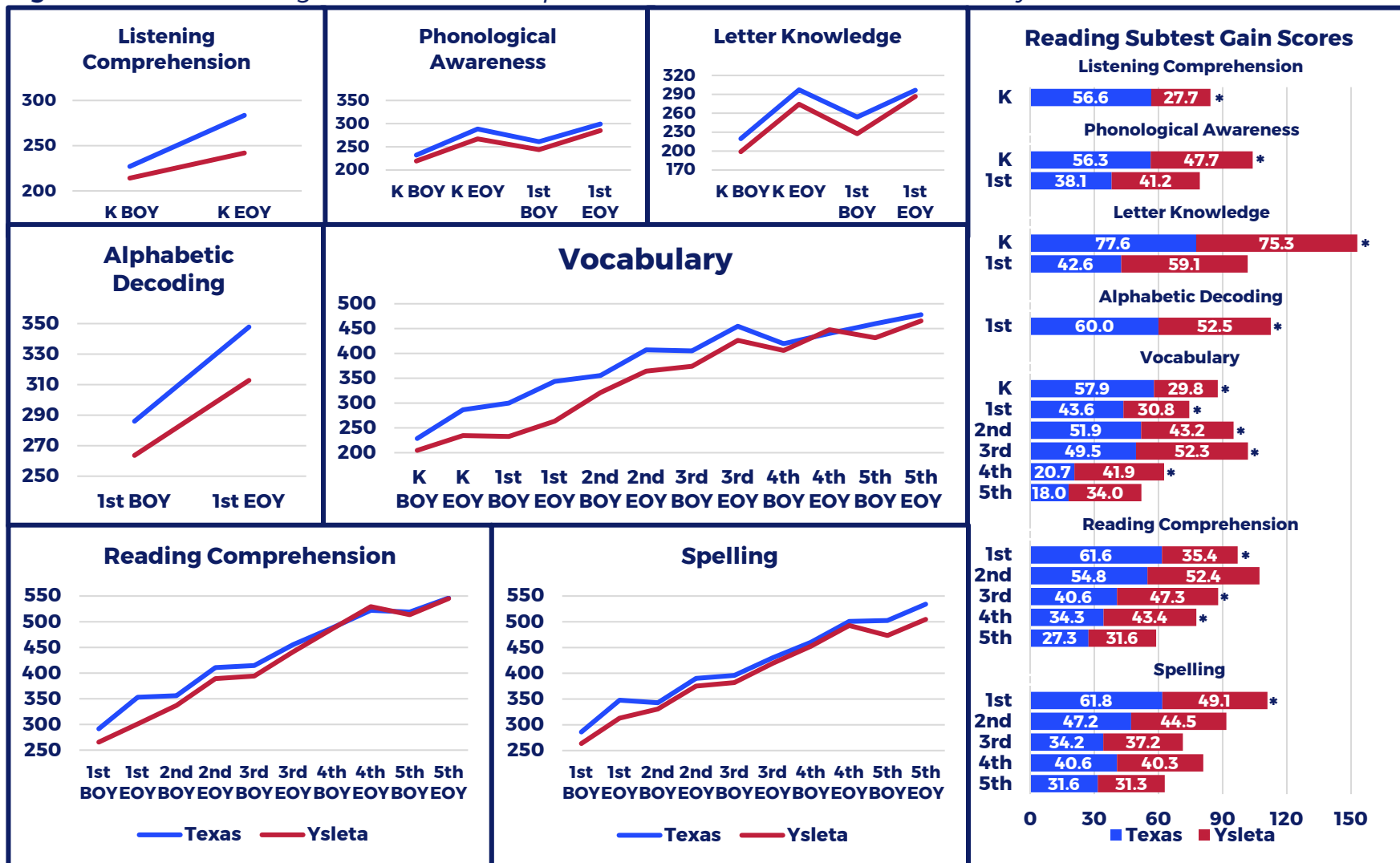
The results of the Istation Reading subtest scores that contributed to the overall score differed between Ysleta ISD and similar students in Texas, as shown in Figure 6. For the listening comprehension subtest, kindergarten students from Ysleta ISD exhibited a gain score notably lower than their Texas counterparts (27.7 vs. 56.6,  $p < 0.001$ ). For phonological awareness, kindergarten students in Ysleta ISD had a gain score slightly lower than those in Texas (47.7 vs. 56.3,  $p < 0.001$ ). However, by first grade, the difference in gain scores between Ysleta ISD and Texas was marginal (41.2 vs. 38.1,  $p = 0.13$ ). Kindergarten students from Ysleta ISD showed a comparable gain to Texas students (75.3 vs. 77.6,  $p = 0.001$ ) on the letter knowledge subtest. By first grade, Ysleta ISD students outperformed their Texas peers in terms of gain, though statistically insignificant (59.1 vs. 42.6,  $p = 0.66$ ). For first-grade students, alphabetic decoding gains in Ysleta ISD were slightly lower than in Texas (52.5 vs. 60.0,  $p < 0.001$ ).

In looking at subtests that covered more grades, kindergarten students in Ysleta ISD had a gain score significantly lower than Texas students (29.8 vs. 57.9,  $p < 0.001$ ) in vocabulary. However, from third to fifth grade, Ysleta ISD consistently outperformed Texas regarding gain, with the most notable difference observed in fourth grade (41.9 vs. 20.7,  $p < 0.001$ ). In reading comprehension, first-grade students from Ysleta ISD had a gain score considerably lower than those from Texas (35.4 vs. 61.6,  $p < 0.001$ ). However, by third grade, Ysleta ISD students' gain score surpassed Texas students (47.3 vs. 40.6,  $p = 0.02$ ), and this trend continued into fourth grade (43.4 vs. 34.3,  $p = 0.008$ ). First-grade students in Ysleta ISD had a gain score slightly lower than their Texas peers in spelling (49.1 vs. 61.8,  $p < 0.001$ ). However, from second to fifth grade, the differences in gain scores between Ysleta ISD and Texas were not statistically significant.

For the Istation Reading subtest scores, kindergarten students from Ysleta ISD generally underperformed compared to their Texas counterparts, especially in listening comprehension and phonological awareness. By the first grade, the performance gap between Ysleta ISD and Texas narrowed, with Ysleta ISD surpassing Texas in some areas like the letter knowledge subtest. Ysleta ISD consistently

outperformed Texas in the later grades, particularly from third to fifth grade in vocabulary and reading comprehension. Although younger Ysleta ISD students trailed Texas students in specific subtests, the trends suggest they often catch up to or surpass Texas students in later grades.

**Figure 6.** Istation Reading Subtest Score Comparison Between Ysleta ISD and Texas by Grade Level

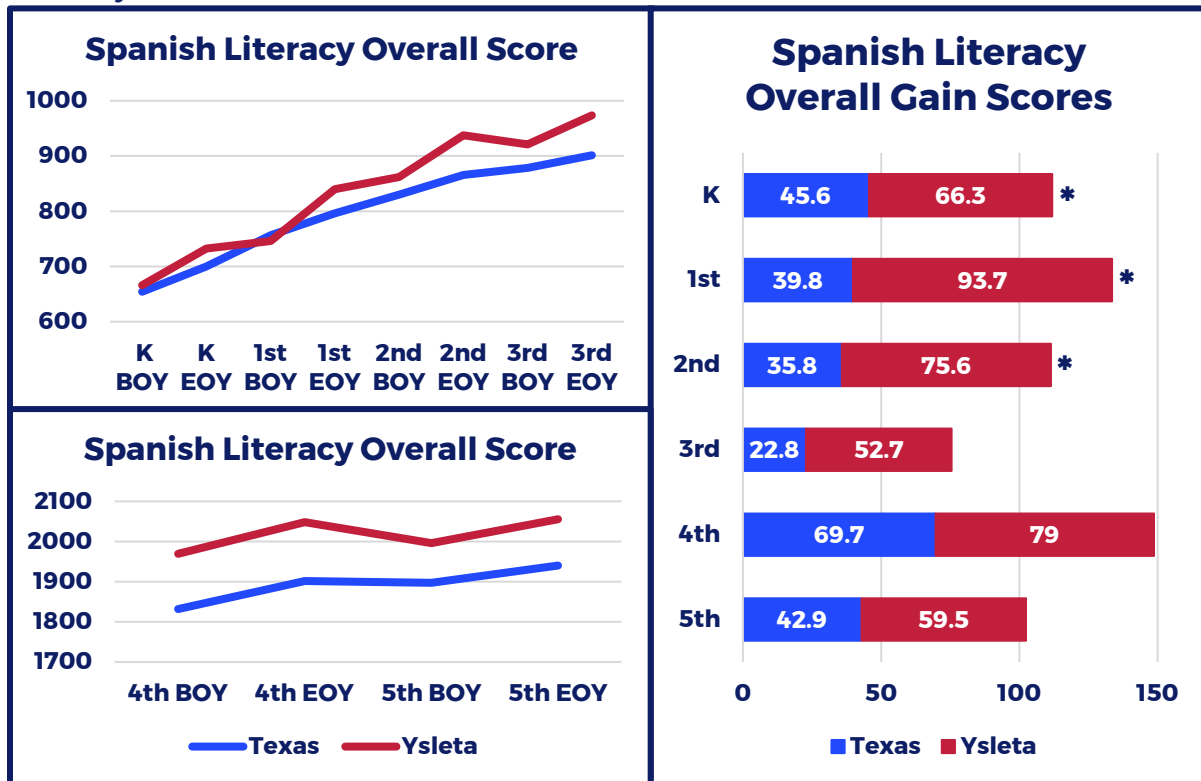


Note. \*p < 0.05.

## Istation Spanish Literacy Overall Score Comparison

The results of the Istation Spanish Literacy overall scores varied between grade levels and are shown in Figure 7. The overall Istation Spanish Literacy score for Ysleta ISD stayed above the Texas state average except for the first-grade BOY score, and BOY-to-EOY growth was significantly higher in Ysleta ISD students than the state's growth, on average, for all grade levels. Specifically, students in Ysleta ISD had Istation Spanish Literacy gain scores that outperformed Texas's in most grade levels, notably with significantly higher scores in kindergarten to third-grade students. Ysleta students scored 66.3, 93.7, 75.6, and 52.7, respectively, compared to 45.6, 39.8, 35.8, and 22.8, respectively, for Texas ( $p < 0.001$ ). The fourth- and fifth-grade scores were higher in Ysleta than Texas but were not statistically significant.

**Figure 7.** Istation Spanish Literacy Overall Score Comparison Between Ysleta ISD and Texas by Grade Level



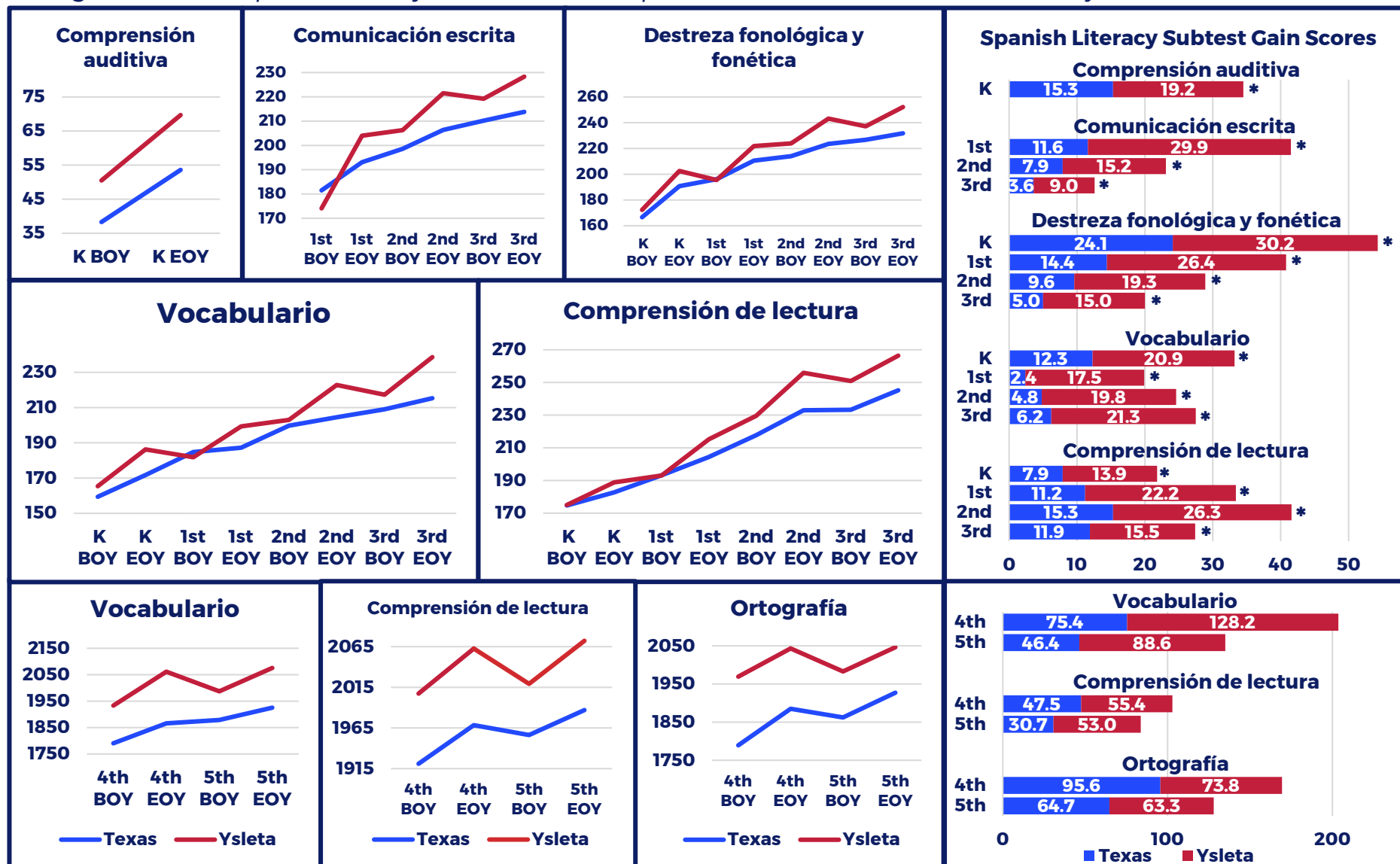
## Istation Spanish Literacy Subtest Comparison

The results of the Istation Spanish Literacy subtest scores that contributed to the overall score differed between students in Ysleta ISD and Texas, as shown in Figure 8. In kindergarten, Ysleta ISD students exhibited a gain score significantly higher than their Texas counterparts (19.2 vs. 15.3,  $p < 0.001$ ) in *comprensión auditiva* (listening comprehension). For *comunicación escrita* (written communication), the difference in gain scores between Ysleta ISD and Texas was substantial, with Ysleta ISD students outperforming Texas students (29.9 vs. 11.6,  $p < 0.001$ ). This trend continued into the second and third grades, with Ysleta ISD students consistently achieving higher gain scores than Texas students ( $p < 0.001$ ). Furthermore, kindergarten students from Ysleta ISD showed a higher gain score than Texas students (30.2 vs. 24.1,  $p < 0.001$ ) in *destreza fonológica y fonética* (phonemic and phonological awareness). This trend of Ysleta ISD students outperforming Texas students on Istation Spanish Literacy persisted across the first, second, and third grades ( $p < 0.001$ ).

In kindergarten, Ysleta ISD students had a gain score notably higher than Texas students (20.9 vs. 12.3,  $p < 0.001$ ) in *vocabulario* (vocabulary). This trend of Ysleta ISD students achieving higher gain scores than Texas students continued across the first to third grades (17.5 to 21.3 vs. 2.4 to 6.2, respectively,  $p < 0.001$ ). By the fourth grade, gain scores for Ysleta ISD students were as much as 53 points higher than those of Texas students (128.2 vs. 75.4,  $p < 0.001$ ). In addition, Ysleta ISD students consistently outperformed their Texas counterparts in *comprensión de lectura* (reading comprehension) across all grades. The most significant difference was observed in the fifth grade, where Ysleta ISD students had a gain score of 53.0 compared to Texas students' gain score of 30.7, on average ( $p < 0.001$ ). For *ortografía* (spelling), Ysleta ISD fourth-grade students had a gain score of 73.8, which was lower than the Texas students' gain score of 95.6. However, the difference was not statistically significant ( $p = 0.09$ ). In the fifth grade, the gain scores between Ysleta ISD and Texas were comparable (63.3 vs. 64.7,  $p = 0.71$ ). However, BOY and EOY scores were higher in Ysleta

compared to Texas, so much so that Ysleta ISD's fifth-grade BOY score (1969.3) was higher than Texas's fifth-grade EOY score (1927.1), on average.

Ysleta ISD students consistently demonstrated a commendable performance in the Istation Spanish Literacy subtests, often surpassing the achievements of their peers in Texas. In kindergarten, Ysleta ISD students set a strong foundation, particularly in listening comprehension, phonemic awareness, and vocabulary, and progressed through the grades; these students maintained their lead, especially in written communication and reading comprehension. One of the most striking observations was in the vocabulary subtest, where the difference in performance between Ysleta ISD and Texas students became even more pronounced by the fourth grade. A testament to the effectiveness of Ysleta ISD's educational program was evident in the fact that their students' scores at BOY often surpassed what Texas students achieved by EOY, indicative of Ysleta ISD's consistent focus in fostering Spanish literacy skills among its students.

**Figure 8.** Istation Spanish Literacy Subtest Score Comparison Between Ysleta ISD and Texas by Grade Level


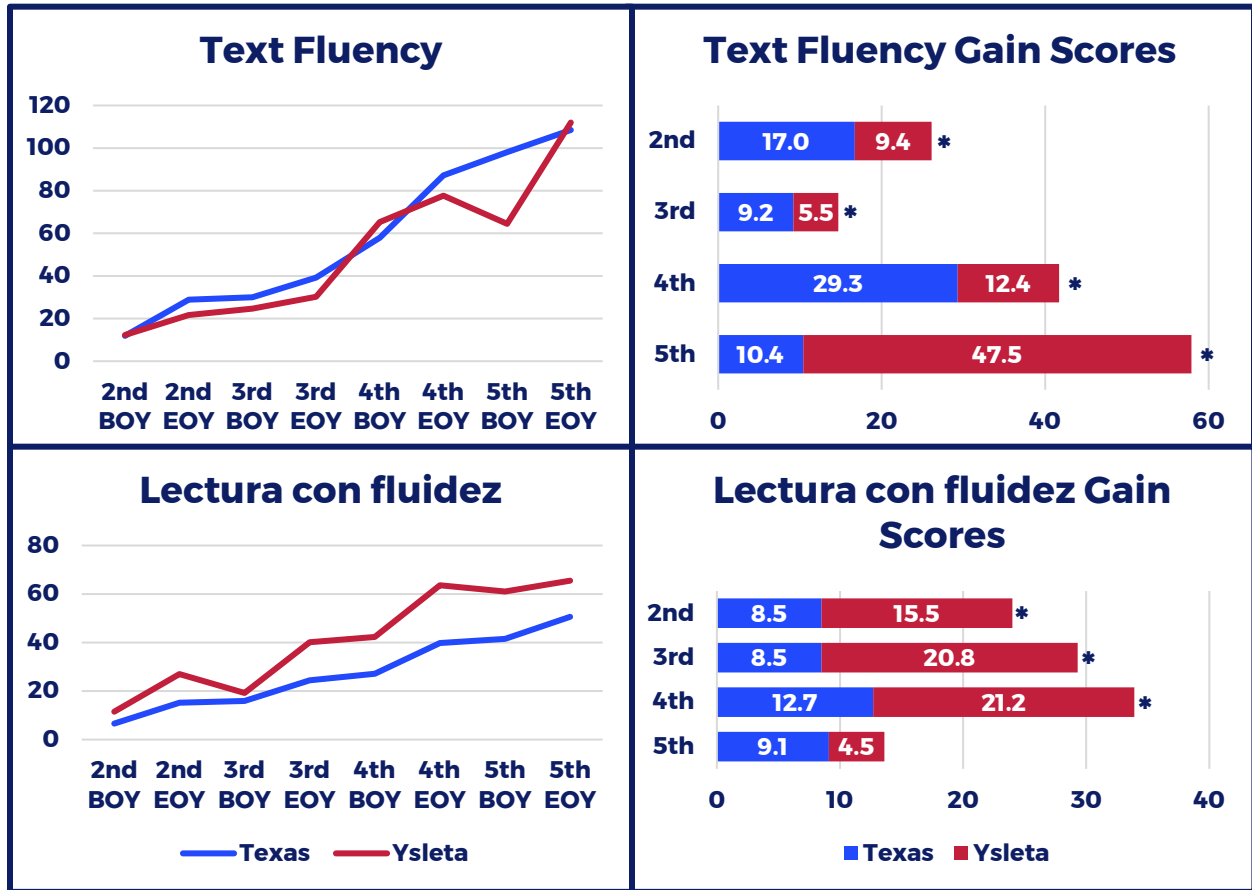
Note. \*p &lt; 0.05.

## Istation Reading and Spanish Literacy Text Fluency Comparison

Text fluency does not contribute to the overall score. Therefore, it was analyzed separately from the other subtests. Text fluency from Istation Reading and Spanish Literacy revealed distinct patterns between Ysleta ISD and Texas students, as shown in Figure 9. For Istation Reading, second-grade students from Ysleta ISD had a gain score of 9.4, which was notably lower than their Texas counterparts, who achieved a gain score of 17.0. This trend of Ysleta ISD students trailing behind Texas students persisted into the third and fourth grades, with gain scores of 5.5 and 12.4, respectively, for Ysleta ISD, compared to Texas students' scores of 9.2 and 29.3, respectively. However, a shift was observed in the fifth grade, where Ysleta ISD students remarkably outperformed Texas students, achieving a gain score of 47.5 against Texas's 10.4 ( $p < 0.001$ ).

Turning to Istation Spanish Literacy's text fluency (*lectura con fluidez*), Ysleta ISD students consistently scored higher than other students in Texas across all grades. In the second grade, they achieved a gain score of 15.5, significantly higher than Texas's 8.5 ( $p < 0.001$ ). This trend of Ysleta ISD's performance continued into the third and fourth grades, with Ysleta ISD students achieving gain scores of 20.8 and 21.2, respectively, compared to Texas students' scores of 8.5 and 12.7, respectively ( $p < 0.001$ ). By the fifth grade, the performance gap narrowed, with Ysleta ISD students achieving a gain score of 4.5, closely followed by Texas students with a score of 9.1, a difference that was not statistically significant.

In essence, while Ysleta ISD students generally lagged in Istation Reading text fluency in the earlier grades, they exhibited a significant leap in the fifth grade. Conversely, in Istation Spanish Literacy's *lectura con fluidez*, Ysleta ISD students consistently outperformed their Texas counterparts across all grades, with the performance difference becoming marginal only in the fifth grade.

**Figure 9.** Istation Reading and Spanish Literacy Text Fluency Score Comparison Between Ysleta ISD and Texas by Grade Level

Note. \*p < 0.05.

## Discussion

The study's primary objective was to evaluate the effectiveness of Ysleta ISD's dual language program by analyzing students' performance in the Istation Reading and Spanish Literacy formative assessments. This evaluation aimed to provide insights into the program's strengths and overall contribution to bilingual literacy development among students.

The main findings reveal a distinct pattern in Ysleta ISD's Istation curriculum usage across grade levels. In the earlier grades, there is a pronounced focus on Spanish initially, which seems to influence literacy outcomes significantly. This is evident as Ysleta ISD students consistently outperform their Texas counterparts in the Istation Spanish Literacy formative assessment across all grades. However, there is a notable

shift in the later grades for Istation Reading. While Ysleta ISD students initially lag, they catch up to and surpass their Texas peers' gain scores in later grades. The subtest analyses further underscore specific areas where Ysleta ISD students excel.

## Istation Curriculum Usage and Performance

The study revealed a distinct pattern in Istation Reading curriculum usage across grade levels. Ysleta ISD's Istation Reading curriculum usage was significantly less in kindergarten through second grade than in Texas. However, a shift occurred from the third grade onwards, where Ysleta ISD demonstrated higher Istation Reading curriculum usage than Texas, with this trend becoming more pronounced in the subsequent grades.

Ysleta ISD's instruction models emphasize the Spanish literacy curriculum during the initial schooling years. This is paralleled with the higher usage of the Istation Spanish Literacy curriculum in kindergarten through third grade observed in Ysleta ISD compared to Texas. The proportion of curriculum usage between Istation Reading and Spanish Literacy in Ysleta ISD kindergarten students was 90% in Istation Spanish Literacy and 10% in Istation Reading, indicative of the implementation fidelity of their instruction models.

The performance metrics across grades highlight the impact of Ysleta ISD's dual language program. Ysleta ISD's focus on Spanish in the early grades is evident in their students consistently outperforming in Istation Spanish Literacy. These students maintain BOY and EOY scores above those of Texas students and exhibit significantly higher BOY-to-EOY growth, especially in the foundational years. For Istation Reading, students in the earlier grades in Ysleta ISD tend to underperform compared to their Texas peers. This could be due to the delayed focus on English literacy skills. However, as the program shifts focus to English instruction in the later grades, Ysleta ISD students begin to close the English literacy gap, consistently outperforming the state's students' average gain scores by the fourth and fifth grades. This suggests that the program's intensive Spanish instruction, taught by experienced teachers, effectively establishes a foundation for bilingual literacy.

Ysleta ISD's instructional models align with the foundational principles of dual language programs, where fostering strong literacy skills in a student's native or dominant language can facilitate acquiring a second language. By building a robust foundation in Spanish literacy in the early years, Ysleta ISD prepares its students for a smoother transition to English literacy in the subsequent grades. The growth observed in Istation Reading, where Ysleta ISD students start to surpass Texas students from third grade onwards, underscores the effectiveness of this approach.

Subtest scores mirrored the same results as overall scores. Ysleta ISD students outperformed Texas students in *comprensión auditiva* (listening comprehension), *destreza fonológica y fonética* (phonemic and phonological awareness), *comprensión de lectura* (reading comprehension), and *vocabulario* (vocabulary). Consistent high performance across these foundational literacy skills suggests that the dual language program's early emphasis on Spanish effectively fosters strong linguistic foundations in students.

While there were evident strengths for Ysleta ISD students in Istation Reading subtests, such as letter knowledge by first grade, challenges emerged in areas like listening comprehension and phonological awareness in kindergarten. However, as students advanced, they caught up and consistently outperformed their Texas peers' gain scores in subtests such as vocabulary and reading comprehension by the third grade. This trajectory underscores the potential for accelerated learning in the second language once a strong linguistic foundation in the native language is established.

## Istation's Real-Time Data Analytics and Adaptability

The program's resilience is evident in its adaptability. Despite bilingual education's challenges, the program remains dedicated to student success. Istation's data-driven insights empower educators to make informed decisions, ensuring that instruction remains relevant and effective. For instance, educators can target areas where students struggle with each language and tailor their instruction accordingly. This level of granularity in feedback ensures that interventions are timely and targeted, maximizing the chances of student success.

Furthermore, the program's ability to refine its practices based on real-time data underscores its innovative approach. In bilingual education, where student needs can be multifaceted, the ability to pivot and adapt is invaluable. Istation plays a pivotal role in offering a blend of assessments, supplemental curriculum, and detailed reports. These resources help educators understand each student's journey and tailor instruction accordingly.

Ysleta ISD's dual language program, complemented by Istation's range of resources, exemplifies the potential of combining traditional teaching methods with educational technology. The result is a program that is both adaptable and effective, ensuring that students thrive in a bilingual environment.

## Implications for Ysleta ISD's Dual Language Program

The results from this study highlight the efficacy of Ysleta ISD's dual language program. The consistent outperformance of Ysleta ISD students, especially in Spanish Literacy, underscores the program's robustness and ability to foster bilingualism and biliteracy in its students.

Several facets of Ysleta ISD's program contribute to these outcomes. First, the program's design showcases its adaptability, emphasizing a strategic focus on Spanish in the earlier grades with a gradual transition to English in the later grades. This phased approach ensures that students build a strong foundation in both languages, allowing them to excel in bilingual environments. In addition, its use of tools like

Istation for progress monitoring clearly indicates the program's commitment to leveraging educational resources. Educators can provide targeted instruction by pinpointing specific domains where students might be struggling, ensuring every student can improve and master literacy skills.

The program's success can also be attributed to the collaborative spirit fostered among educators. With a leadership team having combined experience of approximately 94 years, the diverse backgrounds of its members foster a holistic approach to the program's implementation. Establishing multiple task forces focusing on various aspects of the program serves as a platform for teachers to voice their experiences and provide feedback directly to the program's leadership. This feedback loop ensures that the program remains responsive to the needs of both educators and students. Additionally, instructional coaches and bilingual-certified teachers strengthen this collaborative framework, ensuring that educators are consistently supported and guided in their instructional endeavors. Lastly, the district's investment in continuous professional development, as evidenced by its commitment to instructional coaching and certification for bilingual teaching, equips educators with the latest pedagogical strategies, further enhancing the quality of instruction.

Program leaders are consistently proactive, seeking avenues to enhance and expand the program. Their dedication ensures that, while they embrace innovation and change, they also maintain fidelity to the program's core philosophy. This balance between evolution and adherence to foundational principles is a testament to their vision and commitment.

Situated close to the US-Mexico border and serving a predominantly Hispanic/Latino student population, Ysleta ISD accentuates the importance of a collaborative approach and continuous bilingual instruction for its unique demographic. The consistent performance of Ysleta ISD students in Istation Spanish Literacy, even as they transition to more English instruction in later grades, underscores the lasting impact of early bilingual education and the significance of authentic academic language exposure. This not only aids in academic achievement but also prepares students for real-world bilingual interactions. Furthermore, the program's strategic

approach to resource allocation highlights its dedication to equity. Recognizing the diverse needs of its student body, which includes emergent bilinguals, special education students, and those from economically disadvantaged backgrounds, the program prioritizes providing high-quality resources.

Moreover, Ysleta ISD's program effectively challenges traditional barriers to education. By promoting academic performance while fostering bilingualism, biliteracy, and cultural diversity, the program challenges traditional structures in the education system, creating more equitable opportunities for all students. This benefits the students within the program and serves as a model for other districts aiming to break down barriers and foster an inclusive, equitable educational environment.

## Challenges and Future Directions

Ysleta ISD's dual language program, while demonstrating resilience and adaptability, has encountered challenges, notably in sourcing appropriate resources for subjects such as social studies for specific grade levels. This difficulty is accentuated when considering the dual language program models, where social studies instruction predominantly occurs in Spanish, requiring 30 minutes daily across all grade levels. The availability of high-quality bilingual resources that align with the curriculum's objectives and the district's standards can be scarce. This often necessitates a more intensive search or adapting existing resources to ensure they meet the program's rigorous criteria. In response to these challenges, the program has adopted a proactive approach. Collaborative teams of educators and administrators regularly review and adapt resources to ensure they align with linguistic and academic goals.

Despite these challenges, the program's trajectory is set on continuous evolution and enhancement. Leaders consistently seek avenues to refine and expand the program, ensuring alignment with its foundational philosophy. Their dedication to providing high-quality, equitable resources for students is unwavering. Integrating tools like Istation Reading and Spanish Literacy has been pivotal in bolstering literacy development in both languages, especially in maintaining program implementation fidelity.

The program's commitment to improvement is mirrored in its adaptability to shifts such as demographic transitions or educational policy modifications. This adaptability, commitment to students, and comprehensive educational approach position the program as a significant driver for academic success and social equity.

## Limitations

This study has limitations that should be considered. Primarily, the research focused on the Ysleta ISD, adjacent to the US-Mexico border, which serves a predominantly Hispanic/Latino student population. This demographic context might not be representative of all dual language programs across various regions or countries, potentially limiting the generalizability of the findings. In addition, the analyses only included students who had taken both of Istation's reading formative assessments (Reading and Spanish Literacy) and are representative of neither the entire Ysleta ISD nor the Texas student body. We also lacked information on bilingual education implementation in other districts in the Texas sample and cannot make specific claims regarding the efficacy of one program over another.

The qualitative dimension of the study was informed by an in-depth interview with executive stakeholders integral to the program. However, a broader perspective encompassing views from teachers, students, and parents could have enriched the insights into the program's impact and challenges.

The study did not account for external factors, such as the home environment, parental involvement, or students' exposure to additional educational resources outside the program. These factors might play a significant role in influencing student performance. Additionally, while the study juxtaposed Ysleta ISD's performance with state averages in Texas, a more granular comparison with other districts implementing similar programs might have unveiled specific strengths and weaknesses of Ysleta ISD's approach.

## Conclusion

Investing in dual language programs is a pivotal move in addressing educational inequities. This study demonstrates the transformative potential of educational technology—specifically tools like Istation Reading and Spanish Literacy—contributing to the growth of students learning both English and Spanish. Dual language learners, often from low-income families and families of color, grapple with unique challenges, including language barriers and cultural nuances (National Academies of Sciences, Engineering, and Medicine, 2017).

Ysleta's dual language program demonstrates the benefits of well-implemented bilingual education. The program's dynamic instructional model and the strategic use of digital resources have yielded promising outcomes. Notably, students in the program consistently outperformed their Texas counterparts in both English and Spanish literacy over time.

The findings underscore that properly implementing dual language programs can foster bilingualism, biliteracy, and biculturalism, bridging the opportunity gap for English learners. Such programs are instrumental in ensuring children receive a tailored, high-quality education that resonates with their unique needs and supports their holistic development. By championing equity, these programs can mitigate educational disparities, offering every student the same opportunity for success.

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## Appendix

### Istation Curriculum Usage Tables

**Table 1.** *Istation Reading and Spanish Literacy Curriculum Usage Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)*

Grades	Reading Usage Mean (SD)			Spanish Literacy Usage Mean (SD)		
	Ysleta	Texas	p value	Ysleta	Texas	p value
<b>K</b>	150.0 (332.8)	684.0 (524.0)	<0.001***	1370.5 (614.0)	869.8 (544.0)	<0.001***
<b>Sample Size</b>	321	3761		321	3776	
<b>1st</b>	364.3 (284.4)	726.7 (560.5)	<0.001***	1437.3 (550.5)	890.2 (533.7)	<0.001***
<b>Sample Size</b>	316	5391		316	5448	
<b>2nd</b>	387.5 (413.8)	704.2 (544.7)	<0.001***	1046.4 (598.6)	807.1 (592.6)	<0.001***
<b>Sample Size</b>	449	7255		450	7292	
<b>3rd</b>	683.5 (571.5)	622.7 (520.8)	0.008**	568.1 (434.9)	500.1 (466.9)	<0.001***
<b>Sample Size</b>	571	7459		574	7496	
<b>4th</b>	706.2 (488.9)	584.8 (521.3)	<0.001***	280.4 (405.8)	369.4 (424.3)	<0.001***
<b>Sample Size</b>	396	5919		396	5930	
<b>5th</b>	892.6 (688.1)	498.9 (508.2)	<0.001***	131.0 (290.1)	269.8 (390.5)	<0.001***
<b>Sample Size</b>	167	4834		168	4843	

Note. Values represent total minutes for the school year. \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

**Table 2.** HLM for District Comparison and Istation Reading and Spanish Literacy Gain Scores and Curriculum Usage for Kindergarten Students, Coefficients and Standard Errors (SE)

Fixed Effects	Reading (n = 4082)		Spanish Literacy (n = 4097)	
	Model 1	Model 2	Model 1	Model 2
Intercept	57.58* (1.95)	103.86* (4.21)	48.17* (1.89)	162.17* (17.34)
Baseline Score		-0.24* (0.01)		-0.20* (0.03)
District (Ysleta)		-2.61 (6.98)		15.03 (17.36)
Usage 2 (21-40)		4.50 (2.84)		14.05* (2.38)
Usage 3 (41-60)		5.16* (3.09)		11.14* (2.56)
Usage 4 (61-80)		13.44* (3.19)		21.57* (2.66)
Usage 5 (>80)		24.18* (3.27)		36.22* (2.92)
<b>Usage*District (Ysleta)</b>				
Usage 2 (21-40)		6.43 (7.94)		-15.47 (18.44)
Usage 3 (41-60)		19.86 (17.48)		14.44 (18.10)
Usage 4 (61-80)		-13.04 (30.36)		2.42 (17.95)
Usage 5 (>80)		-25.50 (19.95)		-9.34 (17.71)
<b>Error Variance</b>				
Level-1	1762.52* (40.02)	1616.01* (36.70)	1877.67* (42.43)	1783.34* (40.36)
Level-2 Intercept	498.46* (76.86)	567.18* (82.42)	450.66* (68.43)	455.50* (69.19)
Model Fit: AIC	42384.41	42026.97	42777.69	42545.38
Model Fit: BIC	42403.35	42109.05	42796.65	42627.52

Note. \*Statistically significant,  $p < 0.05$ ; Reading ICC = .26; Spanish Literacy ICC = .20. Values based on Stata 18.0 Mixed. Entries show parameter estimates with standard errors in parentheses. Estimation Method = REML; Satterthwaite degrees of freedom.

**Table 3.** HLM for District Comparison and Istation Reading and Spanish Literacy Gain Scores and Curriculum Usage for First-Grade Students, Coefficients and Standard Errors (SE)

Fixed Effects	Reading (n = 5707)		Spanish Literacy (n = 5764)	
	Model 1	Model 2	Model 1	Model 2
Intercept	50.96* (1.50)	42.67* (3.72)	48.65* (2.53)	66.95* (12.37)
Baseline Score		-0.01 (0.01)		-0.06* (0.02)
District (Ysleta)		-1.70 (6.31)		32.43 (57.00)
Usage 2 (21-40)		5.85* (2.12)		16.40* (2.57)
Usage 3 (41-60)		13.63* (2.27)		23.88* (2.71)
Usage 4 (61-80)		14.68* (2.33)		32.35* (2.85)
Usage 5 (>80)		22.03* (2.49)		40.45* (3.06)
<b>Usage*District (Ysleta)</b>				
Usage 2 (21-40)		7.03 (6.95)		19.70 (57.98)
Usage 3 (41-60)		4.63 (8.08)		5.56 (57.26)
Usage 4 (61-80)		-5.54 (10.89)		2.29 (57.05)
Usage 5 (>80)		14.51 (20.14)		-1.55 (56.60)
<b>Error Variance</b>				
Level-1	1675.60* (32.10)	1656.12* (31.74)	3180.26* (60.52)	3084.00* (58.72)
Level-2 Intercept	375.29* (51.30)	327.45* (45.94)	1214.02* (141.54)	924.16* (112.92)
Model Fit: AIC	58921.62	58809.29	63295.60	63040.95
Model Fit: BIC	58941.57	58895.73	63315.58	63127.52

Note. \*Statistically significant,  $p < 0.05$ ; Reading ICC = .17; Spanish Literacy ICC = .23. Values based on Stata 18.0 Mixed. Entries show parameter estimates with standard errors in parentheses. Estimation Method = REML; Satterthwaite degrees of freedom.

**Table 4.** HLM for District Comparison and Istation Reading and Spanish Literacy Gain Scores and Curriculum Usage for Second-Grade Students, Coefficients and Standard Errors (SE)

Fixed Effects	Reading (n = 7704)		Spanish Literacy (n = 7742)	
	Model 1	Model 2	Model 1	Model 2
Intercept	44.54* (1.19)	46.69* (3.22)	40.64* (2.04)	-22.02* (10.24)
Baseline Score		-0.03* (0.01)		0.06* (0.01)
District (Ysleta)		8.60 (5.29)		43.53* (20.98)
Usage 2 (21-40)		7.20* (1.90)		8.49* (2.25)
Usage 3 (41-60)		5.06* (2.01)		8.32* (2.38)
Usage 4 (61-80)		11.63* (2.07)		18.18* (2.55)
Usage 5 (>80)		21.34* (2.20)		26.44* (2.81)
<b>Usage*District (Ysleta)</b>				
Usage 2 (21-40)		0.83 (6.47)		-12.65 (21.30)
Usage 3 (41-60)		6.00 (7.13)		-9.85 (21.52)
Usage 4 (61-80)		0.44 (9.57)		-7.10 (21.59)
Usage 5 (>80)		-17.50 (9.82)		-11.98 (22.05)
<b>Error Variance</b>				
Level-1	2031.56* (33.50)	1996.35* (32.96)	3161.50* (51.9)	3113.22* (51.13)
Level-2 Intercept	294.54* (37.39)	326.10* (40.74)	1054.85* (105.44)	922.09* (94.46)
Model Fit: AIC	80945.64	80814.53	84960.35	84783.66
Model Fit: BIC	80966.49	80904.88	84981.21	84874.06

Note. \*Statistically significant,  $p < 0.05$ ; Reading ICC = .14; Spanish Literacy ICC = .23. Values based on Stata 18.0 Mixed. Entries show parameter estimates with standard errors in parentheses. Estimation Method = REML; Satterthwaite degrees of freedom.

**Table 5.** HLM for District Comparison and Istation Reading and Spanish Literacy Gain Scores and Curriculum Usage for Third-Grade Students, Coefficients and Standard Errors (SE)

Fixed Effects	Reading (n = 8030)		Spanish Literacy (n = 8070)	
	Model 1	Model 2	Model 1	Model 2
Intercept	34.26* (1.26)	23.42* (3.50)	28.92* (1.64)	-24.86* (9.59)
Baseline Score		-0.01 (0.01)		0.04* (0.01)
District (Ysleta)		12.93 (7.02)		36.00* (8.71)
Usage 2 (21-40)		7.12* (1.96)		6.41* (2.18)
Usage 3 (41-60)		12.89* (2.12)		11.75* (2.38)
Usage 4 (61-80)		17.58* (2.20)		18.11* (2.48)
Usage 5 (>80)		25.43* (2.41)		22.95* (2.69)
<b>Usage*District (Ysleta)</b>				
Usage 2 (21-40)		8.73 (7.44)		-19.71* (9.25)
Usage 3 (41-60)		0.94 (7.75)		-16.18 (9.05)
Usage 4 (61-80)		-4.40 (8.32)		-22.29* (9.36)
Usage 5 (>80)		-7.44 (8.80)		-12.30 (9.97)
<b>Error Variance</b>				
Level-1	2284.89* (36.88)	2246.35* (36.29)	2785.25* (44.71)	2757.29* (44.29)
Level-2 Intercept	355.63* (42.30)	364.89* (43.45)	676.83* (67.16)	573.17* (59.31)
Model Fit: AIC	85335.76	85187.83	87464.11	87320.51
Model Fit: BIC	85356.74	85278.71	87485.09	87411.46

Note. \*Statistically significant,  $p < 0.05$ ; Reading ICC = .14; Spanish Literacy ICC = .17. Values based on Stata 18.0 Mixed. Entries show parameter estimates with standard errors in parentheses. Estimation Method = REML; Satterthwaite degrees of freedom.

**Table 6.** HLM for District Comparison and Istation Reading and Spanish Literacy Gain Scores and Curriculum Usage for Fourth-Grade Students, Coefficients and Standard Errors (SE)

Fixed Effects	Reading (n = 6315)		Spanish Literacy (n = 6326)	
	Model 1	Model 2	Model 1	Model 2
Intercept	31.01* (1.04)	62.10* (4.11)	74.51* (2.94)	159.12* (17.15)
Baseline Score		-0.08* (0.01)		-0.06* (0.01)
District (Ysleta)		8.45 (9.54)		31.44* (15.25)
Usage 2 (21-40)		-0.29 (2.02)		17.84* (4.96)
Usage 3 (41-60)		3.45 (2.20)		30.40* (5.45)
Usage 4 (61-80)		4.77* (2.33)		35.31* (5.63)
Usage 5 (>80)		14.34* (2.51)		50.87* (6.15)
<b>Usage*District (Ysleta)</b>				
Usage 2 (21-40)		2.83 (9.72)		-22.58 (17.42)
Usage 3 (41-60)		3.34 (10.73)		-23.28 (19.36)
Usage 4 (61-80)		3.15 (10.39)		-10.02 (22.75)
Usage 5 (>80)		-2.84 (10.76)		1.64 (24.44)
<b>Error Variance</b>				
Level-1	2053.24* (37.20)	2004.49* (36.39)	11361.94* (205.62)	11169.79* (202.36)
Level-2 Intercept	149.67* (23.08)	168.85* (25.70)	1442.42* (181.85)	1459.33* (185.53)
Model Fit: AIC	66316.95	66163.39	77337.60	77195.74
Model Fit: BIC	66337.20	66251.15	77357.86	77283.52

Note. \*Statistically significant,  $p < 0.05$ ; Reading ICC = .08; Spanish Literacy ICC = .12. Values based on Stata 18.0 Mixed. Entries show parameter estimates with standard errors in parentheses. Estimation Method = REML; Satterthwaite degrees of freedom.

**Table 7.** HLM for District Comparison and Istation Reading and Spanish Literacy Gain Scores and Curriculum Usage for Fifth-Grade Students, Coefficients and Standard Errors (SE)

Fixed Effects	Reading (n = 5001)		Spanish Literacy (n = 5011)	
	Model 1	Model 2	Model 1	Model 2
Intercept	23.73* (1.53)	38.61* (5.02)	48.48* (3.87)	149.83* (19.67)
Baseline Score		-0.04* (0.01)		-0.06* (0.01)
District (Ysleta)		16.69 (22.36)		40.41 (23.57)
Usage 2 (21-40)		1.72 (2.41)		-4.94 (5.60)
Usage 3 (41-60)		1.64 (2.61)		12.70* (6.23)
Usage 4 (61-80)		2.86 (2.76)		19.42* (6.84)
Usage 5 (>80)		8.33* (3.03)		42.35* (7.61)
<b>Usage*District (Ysleta)</b>				
Usage 2 (21-40)		-18.42 (21.60)		-35.95 (23.61)
Usage 3 (41-60)		-10.30 (24.01)		-6.28 (34.34)
Usage 4 (61-80)		-11.25 (23.54)		-0.39 (44.52)
Usage 5 (>80)		-11.35 (23.02)		-22.27 (46.42)
<b>Error Variance</b>				
Level-1	1932.55* (39.45)	1921.55* (39.28)	12921.73* (263.00)	12720.13* (259.18)
Level-2 Intercept	307.91* (47.00)	331.49* (50.55)	1966.22* (288.40)	2115.23* (306.70)
Model Fit: AIC	52300.74	52253.27	61918.76	61805.21
Model Fit: BIC	52320.29	52337.99	61938.32	61889.97

Note. \*Statistically significant,  $p < 0.05$ ; Reading ICC = .15; Spanish Literacy ICC = .14. Values based on Stata 18.0 Mixed. Entries show parameter estimates with standard errors in parentheses. Estimation Method = REML; Satterthwaite degrees of freedom.

## Istation Reading Tables

**Table 8.** Istation Reading Overall BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)

Grades	Ysleta ISIP Reading Overall Scores Mean (SD)				Texas ISIP Reading Overall Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>K</b>	326	208.5 (46.3)	260.9 (49.3)	52.4 (33.0)	3800	226.9 (50.5)	290.3 (62.9)	63.3 (46.9)	<0.001***
<b>1st</b>	323	250.2 (47.6)	300.8 (58.9)	50.6 (39.8)	5494	291.1 (55.3)	346.1 (72.4)	55.0 (44.1)	0.24
<b>2nd</b>	458	325.5 (69.0)	373.5 (78.3)	48.1 (39.7)	7371	349.1 (72.4)	394.4 (86.5)	45.3 (48.2)	0.26
<b>3rd</b>	574	378.9 (76.1)	425.6 (79.1)	46.7 (39.0)	7498	402.0 (77.1)	436.7 (95.1)	34.7 (51.8)	<0.001***
<b>4th</b>	396	442.4 (68.3)	484.5 (72.3)	42.1 (35.4)	5932	453.3 (75.1)	482.2 (85.0)	28.9 (47.6)	<0.001***
<b>5th</b>	168	466.2 (75.2)	498.5 (79.0)	32.3 (34.7)	4847	491.5 (76.0)	514.9 (88.5)	23.3 (47.3)	0.02*

Note. All models adjusted for baseline score. \* $p < 0.05$ , \*\*\* $p < 0.001$ .

**Table 9.** Istation Reading Listening Comprehension BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)

Grades	Ysleta Listening Comprehension Scores Mean (SD)				Texas Listening Comprehension Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>K</b>	326	214.2 (44.2)	241.9 (62.2)	27.7 (48.6)	3792	227.0 (48.9)	283.6 (77.1)	56.6 (64.6)	<0.001***

Note. Model adjusted for baseline score. \*\*\* $p < 0.001$ .

**Table 10.** Istation Reading Phonological Awareness BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)

Grades	Ysleta Phonological Awareness Scores Mean (SD)				Texas Phonological Awareness Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>K</b>	326	219.4 (47.8)	267.1 (49.6)	47.7 (43.9)	3794	232.2 (50.1)	288.5 (62.5)	56.3 (53.8)	<0.001***
<b>1st</b>	296	243.9 (49.9)	285.1 (57.4)	41.2 (58.2)	3886	261.1 (49.9)	299.2 (59.3)	38.1 (57.5)	0.13

Note. All models adjusted for baseline score. \*\*\* $p < 0.001$ .

**Table 11.** Istation Reading Letter Knowledge BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)

Grades	Ysleta Letter Knowledge Scores Mean (SD)				Texas Letter Knowledge Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>K</b>	326	199.0 (60.6)	274.3 (56.4)	75.3 (54.9)	3795	219.7 (65.1)	297.2 (71.1)	77.6 (67.9)	<0.001***
<b>1st</b>	259	227.6 (52.6)	286.7 (53.1)	59.1 (58.2)	2805	253.9 (58.2)	296.5 (63.7)	42.6 (66.9)	0.66

Note. All models adjusted for baseline score. \*\*\* $p < 0.001$ .

**Table 12.** *Istation Reading Alphabetic Decoding BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)*

Grades	Ysleta Alphabetic Decoding Scores Mean (SD)				Texas Alphabetic Decoding Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>1st</b>	321	267.7 (51.6)	320.2 (70.2)	52.5 (61.8)	5490	295.9 (61.9)	355.9 (75.5)	60.0 (60.3)	<0.001***

Note. Model adjusted for baseline score. \*\*\* $p < 0.001$ .

**Table 13.** *Istation Reading Vocabulary BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)*

Grades	Ysleta Vocabulary Scores Mean (SD)				Texas Vocabulary Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>K</b>	326	204.7 (55.1)	234.5 (68.0)	29.8 (48.6)	3797	228.6 (65.3)	286.5 (86.5)	57.9 (66.2)	<0.001***
<b>1st</b>	323	232.8 (69.6)	263.6 (86.9)	30.8 (56.1)	5492	300.0 (75.0)	343.6 (101.6)	43.6 (68.8)	<0.001***
<b>2nd</b>	458	321.2 (85.4)	364.4 (101.7)	43.2 (57.7)	7371	355.4 (79.0)	407.3 (101.1)	51.9 (63.2)	0.004**
<b>3rd</b>	574	374.1 (91.0)	426.4 (106.8)	52.3 (58.8)	7497	405.2 (83.4)	454.8 (115.7)	49.5 (69.0)	0.04*
<b>4th</b>	396	406.0 (59.9)	447.9 (71.8)	41.9 (49.6)	5929	419.7 (57.6)	440.4 (86.9)	20.7 (65.6)	<0.001***
<b>5th</b>	168	431.6 (65.2)	465.5 (75.7)	34.0 (49.3)	4845	460.0 (61.2)	478.0 (97.9)	18.0 (66.3)	<0.001***

Note. All models adjusted for baseline score. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

**Table 14.** *Istation Reading Reading Comprehension BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)*

Grades	Ysleta Reading Comprehension Scores Mean (SD)				Texas Reading Comprehension Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>1st</b>	321	265.6 (48.3)	301.0 (64.4)	35.4 (51.5)	5492	291.5 (66.4)	353.1 (84.8)	61.6 (62.2)	<0.001***
<b>2nd</b>	458	336.9 (76.4)	389.3 (86.3)	52.4 (51.5)	7370	355.9 (85.3)	410.7 (97.6)	54.8 (59.7)	0.15
<b>3rd</b>	574	394.1 (79.7)	441.4 (90.9)	47.3 (50.0)	7496	414.8 (86.6)	455.4 (105.4)	40.6 (63.6)	0.02*
<b>4th</b>	396	486.0 (73.1)	529.4 (78.5)	43.4 (57.7)	5930	487.9 (78.5)	522.2 (88.9)	34.3 (65.9)	0.008**
<b>5th</b>	168	513.5 (81.5)	545.1 (97.7)	31.6 (65.9)	4846	518.8 (85.5)	546.2 (102.2)	27.3 (71.9)	0.52

Note. All models adjusted for baseline score. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

**Table 15.** *Istation Reading Spelling BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)*

Grades	Ysleta Spelling Scores Mean (SD)				Texas Spelling Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>1st</b>	321	263.6 (44.9)	312.8 (52.4)	49.1 (41.7)	5492	286.0 (63.6)	347.8 (66.8)	61.8 (47.7)	<0.001***
<b>2nd</b>	458	330.7 (68.4)	375.2 (71.7)	44.5 (42.7)	7371	342.9 (72.0)	390.1 (78.1)	47.2 (48.5)	0.055
<b>3rd</b>	574	382.0 (68.6)	419.2 (73.0)	37.2 (41.2)	7497	395.9 (76.8)	430.1 (83.5)	34.2 (48.0)	0.45
<b>4th</b>	396	452.4 (87.7)	492.7 (88.8)	40.3 (40.0)	5931	460.2 (96.5)	500.8 (99.6)	40.6 (51.1)	0.67
<b>5th</b>	168	473.3 (97.5)	504.7 (91.9)	31.3 (35.7)	4846	502.6 (89.9)	534.2 (97.1)	31.6 (49.7)	0.54

Note. All models adjusted for baseline score. \*\*\* $p < 0.001$ .

## Istation Spanish Literacy Tables

**Table 16.** Istation Spanish Literacy Overall BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)

Grades	Ysleta Spanish Literacy Overall Scores Mean (SD)				Texas Spanish Literacy Overall Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>K</b>	326	666.1 (25.4)	732.4 (46.0)	66.3 (41.4)	3800	654.3 (27.3)	699.9 (54.1)	45.6 (47.7)	<0.001***
<b>1st</b>	323	746.1 (61.3)	839.8 (77.8)	93.7 (57.3)	5494	756.4 (50.6)	796.2 (83.1)	39.8 (64.6)	<0.001***
<b>2nd</b>	458	861.9 (72.6)	937.5 (70.3)	75.6 (49.7)	7371	829.9 (58.0)	865.8 (93.2)	35.8 (65.3)	<0.001***
<b>3rd</b>	574	920.9 (66.9)	973.5 (61.6)	52.7 (44.5)	7498	878.5 (61.6)	901.3 (94.1)	22.8 (60.4)	<0.001***
<b>4th</b>	396	1969.5 (151.7)	2048.5 (160.6)	79.0 (87.0)	5932	1831.9 (171.6)	1901.6 (210.5)	69.7 (115.3)	0.28
<b>5th</b>	168	1996.0 (156.9)	2055.6 (165.8)	59.5 (87.5)	4847	1897.3 (190.4)	1940.3 (229.1)	42.9 (122.8)	0.11

Note. All models adjusted for baseline score. \*\*\* $p < 0.001$ .

**Table 17.** *Istation Spanish Literacy Comprensión auditiva BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)*

Grades	Ysleta Comprensión auditiva Scores Mean (SD)				Texas Comprensión auditiva Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>K</b>	326	50.5 (26.7)	69.7 (24.0)	19.2 (27.2)	3785	38.3 (25.4)	53.6 (28.1)	15.3 (28.1)	<0.001***

Note. Model adjusted for baseline score. \*\*\* $p < 0.001$ .

**Table 18.** *Istation Spanish Literacy Comunicación escrita BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)*

Grades	Ysleta Comunicación escrita Scores Mean (SD)				Texas Comunicación escrita Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>1st</b>	321	174.1 (24.0)	204.0 (20.6)	29.9 (21.6)	5486	181.5 (20.8)	193.1 (25.7)	11.6 (24.7)	<0.001***
<b>2nd</b>	458	206.3 (19.9)	221.5 (17.3)	15.2 (16.2)	7368	198.6 (17.5)	206.4 (24.2)	7.9 (20.5)	<0.001***
<b>3rd</b>	574	219.2 (15.4)	228.3 (16.2)	9.0 (16.5)	7497	210.2 (16.0)	213.8 (23.2)	3.6 (18.7)	<0.001***

Note. All models adjusted for baseline score. \*\*\* $p < 0.001$ .

**Table 19.** *Istation Spanish Literacy Destreza fonológica y fonética BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)*

Grades	Ysleta <i>Destreza fonológica y fonética</i> Scores Mean (SD)				Texas <i>Destreza fonológica y fonética</i> Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>K</b>	326	172.3 (14.7)	202.5 (18.7)	30.2 (18.1)	3797	166.6 (16.2)	190.7 (24.1)	24.1 (23.3)	<0.001***
<b>1st</b>	323	195.5 (21.4)	221.9 (24.3)	26.4 (21.7)	5490	196.2 (17.4)	210.6 (27.4)	14.4 (23.8)	<0.001***
<b>2nd</b>	458	223.9 (23.6)	243.2 (23.3)	19.3 (23.1)	7368	214.0 (19.3)	223.6 (30.1)	9.6 (25.0)	<0.001***
<b>3rd</b>	574	237.2 (22.3)	252.2 (20.9)	15.0 (21.3)	7496	226.7 (20.3)	231.8 (31.5)	5.0 (26.4)	<0.001***

Note. All models adjusted for baseline score. \*\*\* $p < 0.001$ .

**Table 20.** *Istation Spanish Literacy Vocabulario BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)*

Grades	Ysleta Vocabulario Scores Mean (SD)				Texas Vocabulario Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>K</b>	326	165.4 (14.6)	186.3 (17.9)	20.9 (20.1)	3979	159.4 (15.7)	171.7 (22.3)	12.3 (22.8)	<0.001***
<b>1st</b>	323	181.8 (19.9)	199.3 (22.6)	17.5 (23.8)	5490	184.8 (18.1)	187.2 (25.5)	2.4 (26.3)	<0.001***
<b>2nd</b>	458	203.0 (21.7)	222.8 (26.8)	19.8 (22.2)	7368	199.7 (17.1)	204.5 (30.1)	4.8 (27.9)	<0.001***
<b>3rd</b>	574	217.3 (24.5)	238.6 (28.8)	21.3 (22.9)	7496	209.0 (18.3)	215.3 (33.6)	6.2 (27.4)	<0.001***
<b>4th</b>	396	1933.2 (165.3)	2061.4 (219.4)	128.2 (138.5)	5929	1790.6 (166.9)	1866.0 (246.1)	75.4 (158.6)	<0.001***
<b>5th</b>	168	1987.0 (177.4)	2075.6 (224.5)	88.6 (116.1)	4846	1878.9 (190.3)	1925.3 (283.8)	46.4 (180.5)	0.07

Note. All models adjusted for baseline score. \*\*\* $p < 0.001$ .

**Table 21.** *Istation Spanish Literacy Comprensión de lectura BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)*

Grades	Ysleta <i>Comprensión de lectura</i> Scores Mean (SD)				Texas <i>Comprensión de lectura</i> Scores Mean (SD)				<i>p</i> value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>K</b>	326	175.0 (11.7)	188.8 (12.0)	13.9 (16.7)	3797	174.7 (11.8)	182.7 (13.7)	7.9 (17.3)	<0.001***
<b>1st</b>	323	193.0 (15.8)	215.2 (27.4)	22.2 (24.8)	5493	193.2 (13.8)	204.4 (23.5)	11.2 (21.5)	<0.001***
<b>2nd</b>	458	229.6 (25.9)	255.9 (27.1)	26.3 (22.4)	7371	217.7 (20.9)	233.0 (29.6)	15.3 (23.8)	<0.001***
<b>3rd</b>	574	250.9 (26.5)	266.4 (25.3)	15.5 (19.0)	7497	233.3 (23.7)	245.2 (31.0)	11.9 (21.7)	<0.001***
<b>4th</b>	396	2007.3 (164.9)	2062.7 (185.4)	55.4 (143.1)	5932	1921.0 (137.8)	1968.5 (160.4)	47.5 (134.5)	<0.001***
<b>5th</b>	168	2019.2 (166.0)	2072.2 (204.2)	53.0 (147.7)	4847	1956.3 (161.0)	1987.0 (179.0)	30.7 (143.4)	<0.001***

Note. All models adjusted for baseline score. \*\*\* $p < 0.001$ .

**Table 22.** *Istation Spanish Literacy Ortografía BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)*

Grades	Ysleta Ortografía Scores Mean (SD)				Texas Ortografía Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>4th</b>	396	1969.3 (187.0)	2043.1 (193.8)	73.8 (126.1)	5930	1789.3 (257.6)	1884.9 (302.0)	95.6 (171.1)	0.09
<b>5th</b>	168	1983.0 (224.8)	2046.4 (227.4)	63.3 (145.0)	4845	1862.4 (277.8)	1927.1 (321.4)	64.7 (185.3)	0.71

Note. All models adjusted for baseline score.

## Text Fluency Tables

**Table 23.** Istation Reading Text Fluency BOY, EOY, and Gain Score Comparisons  
Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)

Grades	Ysleta Text Fluency Scores Mean (SD)				Texas Text Fluency Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>2nd</b>	457	12.3 (21.0)	21.7 (28.0)	9.4 (18.3)	7364	11.9 (20.3)	28.9 (31.0)	17.0 (22.9)	<0.001***
<b>3rd</b>	574	24.7 (28.2)	30.2 (28.8)	5.5 (21.9)	7498	30.0 (30.8)	39.2 (34.3)	9.2 (24.7)	<0.001***
<b>4th</b>	396	65.3 (61.2)	77.7 (62.1)	12.4 (39.6)	5931	57.9 (61.1)	87.2 (72.2)	29.3 (49.0)	<0.001***
<b>5th</b>	168	64.5 (62.9)	112.0 (75.7)	47.5 (47.7)	4847	98.1 (78.6)	108.5 (80.0)	10.4 (58.1)	<0.001***

Note. All models adjusted for baseline score. \*\*\* $p < 0.001$ .

**Table 24.** Istation Spanish Literacy Lectura con fluidez BOY, EOY, and Gain Score Comparisons Between Ysleta ISD and Texas by Grade Level, Means and Standard Deviations (SD)

Grades	Ysleta Lectura con fluidez Scores Mean (SD)				Texas Lectura con fluidez Scores Mean (SD)				p value
	Sample Size	BOY	EOY	Gain	Sample Size	BOY	EOY	Gain	
<b>2nd</b>	458	11.5 (15.8)	27.0 (24.6)	15.5 (18.8)	7370	6.6 (11.0)	15.2 (19.1)	8.5 (15.6)	<0.001***
<b>3rd</b>	574	19.2 (20.1)	40.1 (28.9)	20.8 (22.8)	7498	15.9 (19.7)	24.4 (26.0)	8.5 (20.0)	<0.001***
<b>4th</b>	396	42.3 (42.8)	63.6 (49.7)	21.2 (38.3)	5931	27.1 (36.1)	39.8 (45.7)	12.7 (35.2)	<0.001***
<b>5th</b>	168	61.0 (57.0)	65.5 (48.1)	4.5 (45.8)	4847	41.4 (48.8)	50.6 (52.6)	9.1 (41.4)	0.75

Note. All models adjusted for baseline score. \*\*\* $p < 0.001$ .