

Just Right Reader

Pilot Study in Texas, Spring 2024



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September 17, 2024





PROMISING EVIDENCE

LXD Research Recognition for Just Right Reader



This product has been rigorously evaluated and is hereby acknowledged for meeting the educational impact criteria of the Every Student Succeeds Act (ESSA), warranting a **Level 3** for "**Promising Evidence**." This recognition is based on its proven effectiveness in enhancing grade-level learning outcomes.

REVIEWED BY THE LXD RESEARCH EXPERT REVIEW PANEL

Rachel Schechter, Ph.D.

Founder of LXD Research

September 17, 2024

DATE

Understanding ESSA Evidence



Educators search for high-quality research and evidence-based interventions to strengthen grant applications, to support comprehensive and targeted schools, or to implement new programming in their schools. Evidence requirements under the Every Student Succeeds Act (ESSA) are designed to ensure that states, districts, and schools can identify programs, practices, products, and policies that work across various populations.

Educational programs document their evidence of design, effectiveness, and impact in order to be eligible for federal funding. While there is no singular authority that determine's a program's tier, the Department of Education's Office of Educational Technology provides standards to assess the varying levels of strength of research for education products.

The categories for ESSA Evidence are: strong (Tier 1), moderate (Tier 2), and promising (Tier 3) evidence of effectiveness, or demonstrates a rationale to be effective (Tier 4).

This product meets the requirements for Tier 3:

- In correlational design, students who used the program are compared to normed referenced samples or other group averages for comparison.
- The study has a proper design and implementation with at least two teachers and 30 students who showed meaningful, positive growth.
- The study uses a program implementation that could be replicated.
 - A third-party research organization has reviewed the documentation for ESSA validation.



When product designers leverage learning sciences to design and evaluate their programs, educators can better target instruction, and students' skills soar. Through a correlational study design, a statistical evaluation shows that student growth is associated with student product use. This product meets the criteria for LXD Research's ESSA Tier 3 Evidence.

- Rachel Schechter, Ph.D., Founder of LXD Research



Just Right Reader Pilot Impact Report

Prepared by Rachel Schechter, Ph.D. & Laura Janakiefski, Ph.D. Published on September 17, 2024

Abstract

High-quality decodable books enhance literacy by providing children with focused practice opportunities to break down sounds they have learned and apply their decoding skills. Just Right Reader (JRR) hired LXD Research to measure its impact during a pilot study in the Spring of 2024 to determine the effect of their decodable books on literacy outcomes. Conducted in four schools in an urban Texas school district, the six-week study included 93 JRR and 111 non-JRR students, with 69 students submitting implementation logs that were used to track dosage.

Key findings reveal meaningful progress for JRR students from the mid-year to end-of-year assessments, outperforming Non-JRR students. JRR students showed a MAP Growth Percentile improvement of 33 points (34 to 67), compared to 23 points in Non-JRR students (31 to 54). Additionally, JRR students excelled in DIBELS ORF accuracy, with the median percentile rising from 46 to 62, while Non-JRR improved from 42 to 44. Due to the small sample, these changes were not statistically significant.

Notably, the 45% of JRR students who read for 3+ hours at home (i.e., High Dosage implementation) demonstrated remarkable growth, improving from below the 14th percentile to above the 72nd percentile. Overall, the JRR program meaningfully boosted literacy development.



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Introduction

For a six-week period between April and May 2024, 100 second-grade students in a school district in Texas were each given 50 Just Right Reader (JRR) decodable books and asked to practice reading them at home for 15 minutes at least three times per week.

100 students from four elementary schools were selected to participate in the JRR pilot program, with one classroom chosen to participate from each school (ranging from 22-29 students per site). Teachers were not mandated to practice reading decodables with students during class instructional time. The schools included were:

- School A (NES)
- School B (NES)¹
- School C (Not NES)
- School D (Not NES)

The goal of the JRR Pilot was to examine the impact of providing students with access to personalized high-quality decodable books on their MAP growth scores compared to second-grade students in the same schools who did not receive access to JRR Take-Home Packs.

Literature Review

Providing books that students can successfully read not only has the potential to improve family engagement with student reading practices but also improve student literacy achievement. Extensive studies indicate that greater access to high-quality books, particularly at home, correlates with higher academic performance, boosts reading motivation, and fosters positive attitudes toward reading (Allington, 2014; Gambrell, 2011). The American Institutes for Research for the Reading Is Fundamental Community Foundation conducted a meta-analysis of 108 studies on the impacts of providing free books to students to read at home. The findings suggest there are numerous advantages to this method (McGill-Franzen, Ward, & Cahill, 2016):

- Acceleration of development of emergent reading skills
- Increase in reading proficiency
- Improved attitudes toward reading
- Increase reading time due to the increased volume of books available

Just Right Reader aims to assist students in advancing from the partial alphabetic stage to the consolidated alphabetic phase by offering them abundant opportunities to practice analyzing

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¹ NES as of 2024-2025



and reading words both in isolation and in context, critical for reading development (Ehri. 2005; 2014; 2020). The Just Right Reader Take-Home Packs students receive are tailored to each student's needs based on district assessment data, allowing the reader to practice and apply the decoding skills they have learned in a manageable and authentic context that fits within their zone of proximal development. This provides a flexible and adaptable approach that allows educators to customize their instruction to meet the needs of individual students. Research has shown that a "direct connection between phonics instruction and what students read is essential" (Blevins, 2017, p. 157).

Because the books are aligned with a student's reading skills, they focus on building automaticity and demonstrating their new skills with family members. This combination of feeling autonomous, competent, and connected during reading practice helps students stay motivated to continue building their literacy skills (Ryan & Deci, 2000). Each set of books is also gift-wrapped and labeled with the student's name, bringing a level of personalization and a sense of belonging to support motivation (Yonezawa et al., 2012).

Effective decodable text should be engaging to encourage students to read it (Blevins, 2017, p. 158). Many decodable books fail to captivate young readers, making it challenging for children to stay interested and motivated (<u>Castles et al., 2018</u>).

Just Right Reader's decodables feature relevant stories and diverse characters that reflect students' interests and experiences. Stories that are authentic to students' lives motivate and engage them to read (Guthrie & Davis, 2010; Lindsey, 2022). Additionally, when books have diverse characters and storylines, children are more likely to see themselves in the books (Bishop, 1990; Heineke et al., 2022).

Parents want to ensure that their children are learning to read and are using tools that align with proven best practices in literacy instruction (Mervosh, 2023). Providing materials that can be sent home, such as the Just Right Reader Take-Home Packs, is an effective strategy for fostering home-to-school connections and building trust that students are making reading progress. Family involvement in learning to read facilitates the transfer of learning from school to home, leading to enhanced learning benefits and improved literacy achievement (Anderson, 2000; Galindo & Sheldon, 2012; Zeece et al., 2009).

WWC-Informed Program Components

Engaging families to support students struggling to learn to read is a critical component of JRR. When students receive targeted instruction, they can engage in deliberate practice, a practice that focuses attention and awareness of the specific components of a skill that needs improvement (Allington, 2014). Receiving this practice in an intensive way, usually individually or in small groups, supports reading development acceleration according to Tier 1/Strong



evidence review standards by What Works Clearinghouse (WWC; <u>RTI Reading Practice Guide</u>).

A key component of Just Right Reader is providing books for at-home literacy skill building, which has been shown as an effective practice to help students have access to books and develop a home library according to Tier 3 evidence review standards by What Works Clearinghouse (https://ies.ed.gov/ncee/WWC/Study/90325). In addition, Just Right Reader designed the books and their accompanying resources to facilitate interactive reading between parents and children or teachers and students, aligning with the What Works Clearinghouse study.

Another key component of the Just Right Reader books is the use of thematic topics familiar to children. They are written with high-frequency words and simple phrases and sentences and have strong links between illustrations and text. What Works Clearinghouse has shown that these practices are effective according to Tier 3 evidence review standards (https://ies.ed.gov/ncee/WWC/InterventionReport/290).

For schools with emerging bilingual students, a key component of Just Right Reader is the phonics videos, accessible via a QR code on the back of each book and available in Spanish and English, that allow families to support and strengthen classroom instruction. These video lessons also help families understand how to help their child learn to read and how to identify the target sounds their child should be practicing. These features help provide emerging bilingual students and their families with books to help with their transition to school, by reading together and keeping records of their reading, an effective practice according to Tier evidence review standards defined by What Works Clearinghouse (https://ies.ed.gov/ncee/WWC/Study/65033).

The academic research in the literature review as well as these three program components strongly support the research base for Just Right Reader to be an effective intervention in the Texas school district.



Methodology

Implementation Description

Each participating second-grade student received 50 Science of Reading decodables in total, personalized to their specific reading level by the JRR team based on their mid-year MAP assessment scores. Students were given these books in sets of 10 at a time (approximately 1 set distributed per week) via brightly wrapped Take-Home Packs, along with a backpack for each student to transport books easily from school to home. Books were provided for each student to keep as their own.

Implementation Monitoring

Using these Take-Home decodables, students and parents were asked to practice reading at least three times per week for 15 minutes per day. For each day that students practiced reading, parents were asked to scan a unique QR code assigned to each student on their JRR backpack, linked to a Microsoft form.

In order to increase the likelihood of student participation, students who completed at least four reading logs per week were given access to a special treasure chest with prizes. Classroom participation was also incentivized as a whole through the reward of a pizza party for any classroom with 80%+ student goal completion at the conclusion of the six-week JRR pilot.

Implementation Analysis & Results

Just Right Reader books went home with all students in the pilot classrooms. Scans ultimately reported for students ranged from 0-12 each week, indicating that some parents scanned multiple times within a day and others did not scan at all. Given limited information about the context for these additional scans, Just Right Reader did not set a cap on the total possible number of scans per week but rather counted each one as an additional log completion. It is possible, even likely, that students read the books independently or with family members who did not scan the form.

Although the initial goal for students was to read for 15 minutes for at least 18 days across the 6-week study period (3x per week), it appeared that getting parents to scan students' logs was more challenging than expected. Furthermore, some schools reported a short delay in receiving their Take-Home Packs.

The implementation analysis will therefore consider 16 as the estimate of 3x a week for 6 weeks, excluding the delivery week to account for potential delays in the distribution of Take-Home Packs. The closest approximation to 80% of that implementation would be 12 out



of 16 logs scanned, which equates to reading for a total of 3 hours at home over the 6-week pilot (technically a 75%+ threshold, rounding up to 80%). The first set of results will include all JRR Pilot students, regardless of dosage, and then the second set will present the results of the High Implementation Dosage group who read for 3+ hours at home over the course of the study period.

Assessment Sample Creation

MAP Growth Reading (English) MOY and EOY data for all second-graders in the four participating schools was provided to the JRR team. All students in the classrooms who received Take-Home Packs are considered the treatment group, and students in other classrooms at the same school who did not receive decodables are considered the comparison group.

JRR Sample

Out of the 100 students in the JRR Pilot Classrooms:

- 93 students had both MOY and EOY data points provided
- 1 student had MOY but not EOY data provided
- 3 students had EOY but not MOY data provided
- 4 students had neither EOY nor MOY data provided
- 1 student changed schools and entered the study late

Given the data limitations above, only the 93 students who had both MOY and EOY MAP data provided were included in the analysis, and the other 9 were excluded.

Non-JRR Sample

Students in the control group classrooms had both MAP Growth Spanish Reading and English Reading assessments. Since the JRR group only took the English assessment and the JRR books delivered to the schools were all in English, only students in the control group with English assessments were considered for inclusion. The uneven distribution of Spanish assessments led us to investigate the proportion of students who were emergent bilingual (EB) in each of the samples.

The proportion of emergent bilingual students in the control group classrooms was higher than in the JRR classrooms (51% versus 35%). Too much of the sample would need to be removed to better match the groups. Fortunately, the MOY RIT Scores and other metrics provided about MOY were quite similar (Figures 1-3). Therefore, EB is included, along with other demographics, as part of the analysis described later. The final analytic sample is described below.



Sample Description & Baseline Equivalence

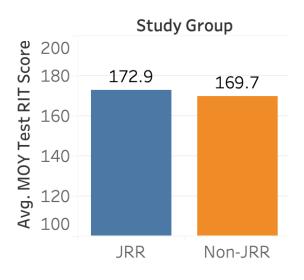
The demographics of the two groups were fairly similar, except for the EB status. In NES schools, there were more treatment students than comparison students.

Table 1. Demographic sample sizes for study groups

| | Treatment (%) | Comparison (%) |
|-----------------------------------|---------------|----------------|
| Gender (Female) | 42 (45%) | 55 (50%) |
| Hispanic | 80 (86%) | 104 (93%) |
| SPED | 7 (8%) | 11 (10%) |
| EB Status (Emergent Bilingual) | 33 (35%) | 57 (51%) |
| EcoDis | 91 (98%) | 105 (95%) |
| NES | 50 (54%) | 31 (28%) |
| Total | 93 | 111 |

To ensure that the two groups had similar reading scores at the start of the pilot, an ANOVA (analysis of variance) was conducted. The results showed no significant differences between the MOY starting point of the control and treatment samples: F(1, 202) = 2.161, p = 0.143. The mean MOY RIT score for the treatment group was 172.892, and the mean MOY RIT score for the control group was 169.748.

Figure 1. MOY RIT Scores were similar between groups





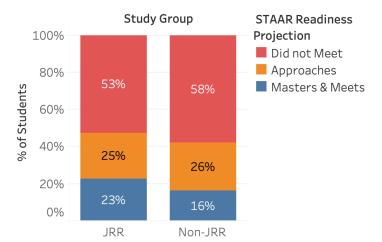
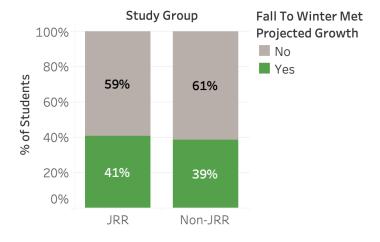


Figure 2. MOY STAAR Readiness Projection was similar between groups

Figure 3. MOY (Fall to Winter) Met Projected Growth was similar between groups



Analytic Modeling Overview

First, the proportion of students who Met Expected Growth Percentile, based on the MAP calculation of meeting expected growth, was compared across JRR and Comparison groups using a 2x2 Chi-squared test. Chi-squared tests were used because the outcome variable was count data (number of students who Met Expected Growth vs. not). Phi coefficients are included as measures of effect size, with 0 meaning no association and 1 meaning perfect association between variables. For interpretation, a value of Phi coefficient = 0.1 is considered to be a small effect, 0.3 a medium effect, and 0.5 a large effect (Cohen, 1988).



Second, students' Conditional Growth Index was compared across JRR and Comparison groups using an ANCOVA model. Demographic variables, including Race/ethnicity, SPED status, ELL status, Economic Disadvantage status, and gender were included as covariates to control for any effects these variables may have had on student growth. The analysis focuses on 2nd grade only, so the grade was not included as a covariate, and since the program was a 6-week pilot, absences were not included as a covariate.

DIBELS

DIBELS scores were provided for a portion of students, and the data analysis for MAP was already in progress. For the JRR students, 39 had data from MOY and EOY DIBELS, and for the non-JRR students, 66 students had data from MOY and EOY DIBELS.



MAP Results – All Students

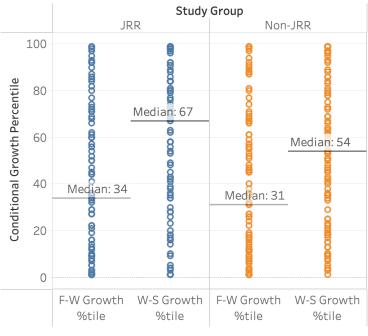
Just Right Reader examined the differences between treatment and control student samples as a whole in terms of their MAP growth percentile scores, with a focus on the median scores for each subset of students. All of the comments related to comparing groups of students reflect descriptive differences and are not statistically significant differences.

Conditional Growth Percentile – All Students

The Growth Percentiles measure and evaluate a student's growth in RIT score between the Winter and Spring assessment periods compared to a normed sample of typical peers in the same grade. For example, a student with a growth percentile of 60 grew as much as or more than 60% of comparable students in the norm group.

The overall treatment group had a higher change than the control group, with an improvement of 33 in JRR and only 23 in Non-JRR (Figure 4 and Table 2)². The most noteworthy difference was between non-NES control and treatment samples, particularly the median conditional growth percentile improvement of 32 to 63 (treatment) versus 32 to 51 (control). Notably, the NES Non-JRR growth was a significant outlier for the data set as a whole, indicating that something special may have occurred within those particular classrooms.

Figure 4. Conditional Growth Percentiles from MOY and EOY show more improvement for JRR Group



² JRR: Wilcoxon z = 3.03, effect size: 0.364; non-JRR: Wilcoxon z = 3.34, effect size: 0.374

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Table 2. Conditional Growth Percentiles from MOY and EOY: Meaningful improvements for JRR classrooms. For Not NES schools, the JRR gains were 12 percentile points higher than the non-JRR gains.

| Group | N | MOY Median Percentile Fall - Winter Growth | EOY Median Percentile Winter - Spring Growth |
|-------------------|-----|---|---|
| JRR (overall) | 93 | 34 | 67 |
| Non-JRR (overall) | 111 | 31 | 54 |
| NES JRR | 50 | 38 | 68 |
| NES Non-JRR | 31 | 31 | 80 |
| Not NES JRR | 43 | 32 | 63 |
| Not NES Non-JRR | 80 | 32 | 51 |

As seen in the NES-level table above, the one class's EOY growth in the NES Non-JRR group was a significant outlier for the data set as a whole, indicating that something special may have occurred within that particular classroom. Nonetheless, when compiling all treatment and control students together within Not NES sample or the entire second-grade sample as a whole, the treatment intervention (access to and practice with JRR decodable Take-Home Packs) was consistently seen to produce higher growth percentile scores at EOY.

Conditional Growth Index – All Students

The Conditional Growth Index is the statistic that underlies the Growth Percentile. Median scores below 0 indicate that at least half of the students did not reach their growth target for the assessment period.

The overall treatment group outperformed the control group, with an improvement of 0.8 in JRR and only 0.5 in Non-JRR (Figure 5 and Table 3). Similar to the percentiles, the most noteworthy difference was between non-NES control and treatment samples.



Figure 5. Conditional Growth Index from MOY and EOY show more improvement for JRR Group

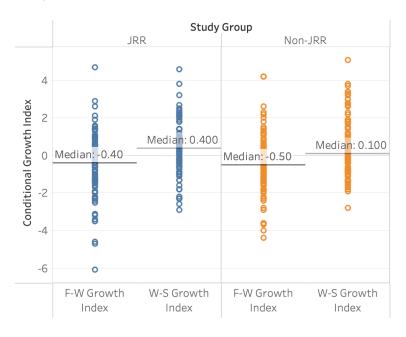


Table 3. Conditional Growth Index from MOY and EOY: Meaningful improvements for JRR classrooms. For Not NES schools, the JRR gains were 0.3 higher than the non-JRR gains.

| Group | N | MOY Median Fall - Winter Growth Index | EOY Median Winter - Spring Growth Index |
|-------------------|-----|---|--|
| JRR (overall) | 93 | -0.40 | 0.40 |
| Non-JRR (overall) | 111 | -0.50 | 0.10 |
| NES JRR | 50 | -0.30 | 0.45 |
| NES Non-JRR | 31 | -0.50 | 0.90 |
| Not NES JRR | 43 | -0.50 | 0.30 |
| Not NES Non-JRR | 80 | -0.50 | 0.00 |



STAAR Projection and Meeting Projected Growth

Figure 6. The proportion of JRR that Did Not Meet STAAR Projected Proficiency was reduced by 15 percentage points (53% to 38%), while the Non-JRR proportion was only reduced by 9 percentage points (58% to 49%).

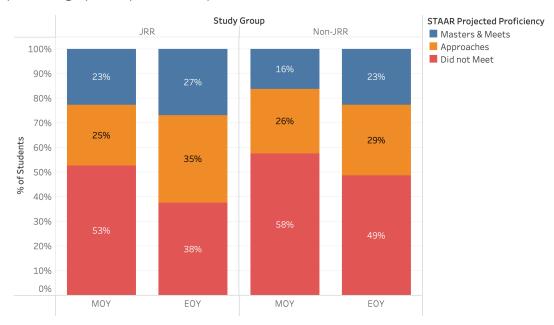
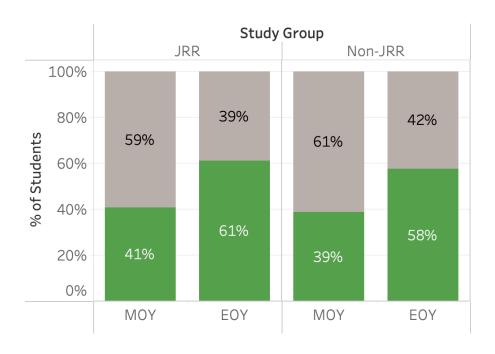


Figure 7. The proportion of JRR that met growth targets increased at a rate similar to that of the non-JRR group (+20 percentage points vs. +19 percentage points).





MAP Results – High Dosage Implementation Students

Of the JRR students, 42 completed at least 12 of the 16 implementation log reps. These high-dose students were isolated and compared to the non-JRR students to understand what the impact would have been if all JRR students had met this threshold. All of the comments related to comparing groups of students reflect descriptive differences and are not statistically significant differences.

Conditional Growth Percentile – High Dosage

Students with High Dosage in the treatment group transformed their literacy growth trajectories. These students went from far below the expected growth to far above it in a very short time. The High Dosage group outperformed the control group, with an improvement of 58 in JRR and only 23 in Non-JRR (Figure 8 and Table 4).

Figure 8. For JRR High Dosage, Conditional Growth Percentiles from MOY and EOY show large improvements

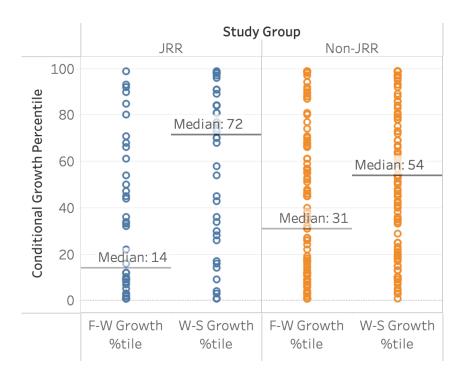




Table 4. High Dosage more than doubled the improvements on Conditional Growth Percentiles from MOY and EOY

| Group | N | MOY Median Percentile Fall - Winter Growth | EOY Median Percentile Winter - Spring Growth |
|-----------------|-----|---|---|
| JRR High Dosage | 42 | 14 | 72 |
| Non-JRR | 111 | 31 | 54 |

Conditional Growth Index – High Dosage

The High Dosage treatment group outperformed the control group, with an improvement of 1.65 in JRR and only 0.6 in Non-JRR (Figure 9 and Table 5). The increase is also visible in the percentage of students who reached their projected growth at MOY compared to EOY (Figure 11) and the reduction in those projected not to be proficient on STAAR (Figure 10). For the High Dosage group, the proportion of students who met projected growth doubled, increasing from 31% at MOY to 62% at EOY.

Figure 9. High dosage nearly tripled the improvement on the Conditional Growth Index from MOY and EOY compared to non-JRR.

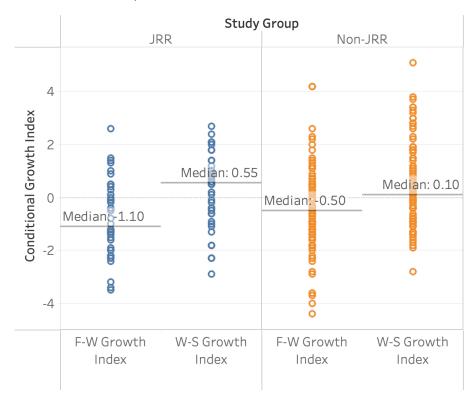
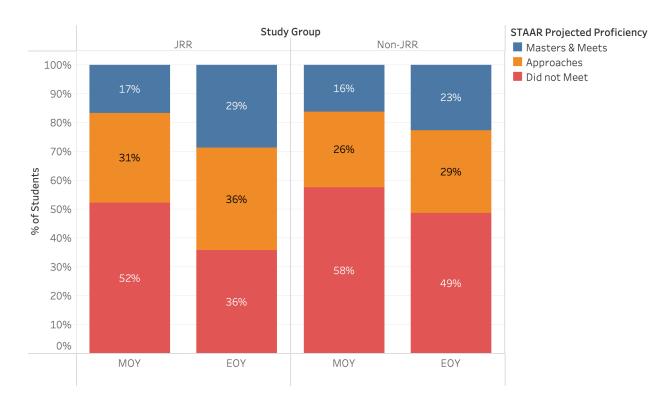




Table 5. JRR High Dosage more than tripled the improvement on the Conditional Growth Index from MOY and EOY than Non-JRR

| Group | N | MOY Median Fall - Winter Growth Index | EOY Median Winter - Spring Growth Index |
|-----------------|-----|---|---|
| JRR High Dosage | 42 | -1.3 | 0.60 |
| Non-JRR | 111 | -0.50 | 0.10 |

Figure 10. The proportion of the JRR High Dosage group that Did Not Meet STAAR Projected Proficiency was reduced by 16 percentage points (52% to 36%), while the Non-JRR proportion was only reduced by 9 percentage points (58% to 49%)—more than double the improvement.





Study Group Met Projected Growth **JRR** Non-JRR No 100% Yes 38% % of Students 42% 61% 69% 50% 62% 58% 39% 31% 0% MOY EOY MOY EOY

Figure 11. The JRR High Dosage group doubled the proportion of students who meet projected growth from MOY to EOY

DIBELS Results

DIBELS has a norm-referenced growth percentile for its overall composite score as well as each of its sub-tests. All of the comments related to comparing groups of students reflect descriptive differences and are not statistically significant differences. JRR (N = 39) and non-JRR students (N = 66) performed relatively similarly in terms of growth rate from MOY to EOY (see appendix). The JRR group, though, had a substantial decrease in the percentage of students with Well Below growth (32% to 18%) while the Non-JRR percentage increased (22% to 30%).



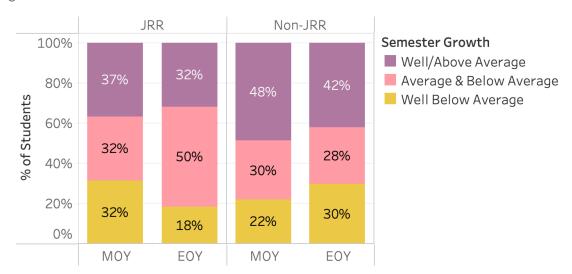
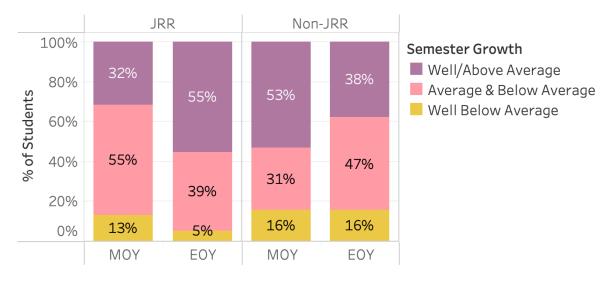


Figure 12. The JRR group decreased the proportion of students who had Well Below Average growth from MOY to EOY.

Upon further exploration, the data showed that improvements in JRR students' oral reading fluency accuracy contributed to their overall growth. On the other hand, the non-JRR group's oral reading fluency rate decreased from the fall to the spring (Figure 13). JRR students made higher gains than the non-JRR students in their ORF performance, with the JRR median percentile increasing from 46 to 62, while the non-JRR median percentile only improved slightly from 42 to 44 (Figure 14).³





³ For JRR, Wilcoxon test z = 0.551, effect size = 0.100, p = .586; For non-JRR, Wilcoxon test z = -1.66, effect size = -0.237, p = .097.

LXD Research: Just Right Reader Pilot Impact Report



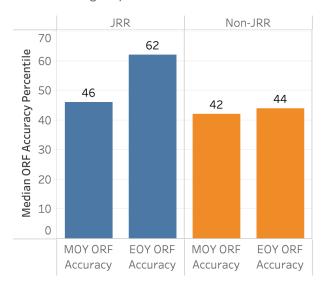


Figure 14. The JRR group median percentile meaningfully increased from MOY to EOY, while the Non-JRR group remained similar.

Discussion

Limitations

A pilot program is a helpful way for schools to understand the components of a product, get teacher and administrator feedback, and learn about the kind of support that may be required if a larger purchase is made. As expected, the very short 6-week timeframe, small sample size, and imbalance of demographic profiles made it difficult to measure the impacts seen in the descriptive scores presented above.

In addition, Just Right Reader typically recommends the implementation of Take-Home Packs be implemented school-wide, rather than only in one classroom out of many. School-wide literacy programming builds community buy-in for the instructional literacy diet, critical for improving early reading skills (Walpole, Justice, & Invernizzi, 2004). Communicating widely to the entire school-family community that their participation is important helps everyone understand why they are being asked to use decodable books, therefore increasing family engagement with the packs. Just Right Reader also recommends that teachers introduce the decodables to students in class within a small group setting before sending books home, in order to ensure the greatest benefit for students.

For the JRR pilot, given the busy time of year and short study period, teachers were not asked to implement decodables in the classroom, and students also progressed from one Pack to the next after just one week. Therefore, it's highly possible that students would have



shown additional growth from a longer implementation period with the same number of Take-Homes Packs, along with additional support within the classroom to practice key phonics skills. That being said, each decodable book does include a QR link to a short video lesson, available in both English and Spanish, to introduce the target phonics skill to support parents and students practicing at home.

Conclusion

This impact study sought to examine the effectiveness of Just Right Reader on students' literacy growth on a standardized reading measure. Despite the limitations of the study, the students in the JRR classrooms made strong and meaningful progress between the mid-year and end-of-year assessments. They made more than typical growth on the assessments during the spring term and increased their rate of growth from the fall to the spring. These improvements were descriptively larger than those of the non-JRR students.

Extra practice is more beneficial when it deliberately aligns practice, which would be more beneficial for students who are farther behind and is recommended to be provided in small groups or 1:1 for students struggling to read (WWC, 2009). The MAP STAAR projection results demonstrated that JRR meaningfully supported struggling readers. The proportion of JRR students that Did Not Meet STAAR Projected Proficiency was reduced by 15 percentage points MOY to EOY (53% to 38%), while the Non-JRR proportion was only reduced by 9 percentage points (58% to 49%). This subgroup is a very small sample, so leveraging JRR for students who are behind and measuring that impact is recommended for future studies.

Just Right Reader decodables have a strong research backing in the foundation and structure of the Take-Home Packs, and provide students with crucial opportunities for phonics practice through authentic and engaging stories. Given the short pilot, it is encouraging that for the 45% of students who read for at least three hours at home over the course of the six-week pilot (approximately twice per week for 15 minutes), their literacy trajectory transformed. These students had a growth rate that improved from below the 14th percentile to above the 72nd percentile. In this group, double the number of students met their spring projected growth compared to their winter projected growth.

Overall, the results of this pilot are quite encouraging and demonstrate that students who needed an extra boost of practice time – and got it – were able to meaningfully change their literacy development trajectory.



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Appendix

Table A1. Met Expected Growth Results

| | EOY Met Project Growth | | | |
|-------------|------------------------|-----|-------|--|
| Study Group | No | Yes | Total | |
| Comparison | 47 | 64 | 111 | |
| JRR | 36 | 57 | 93 | |
| Total | 83 | 121 | 204 | |

Chi-squared test: χ^2 (1, 204) = 0.277, p = .599

Chi-Squared Tests

| | Value | df | р |
|----|-------|----|-------|
| X² | 0.277 | 1 | 0.599 |
| N | 204 | | |

Nominal

| | Value |
|-----------------|-------|
| Phi-coefficient | 0.037 |
| Cramer's V | 0.037 |

Table A2. Winter-Spring Conditional Growth Index Model Results

| | F | р | Partial eta squared | Cohen's d |
|--------------------------------|-------|------|---------------------|-----------|
| Group (JRR vs. Comparison) | 0.285 | .594 | .001 | .081 |
| SPED | 1.755 | .187 | .009 | _ |
| EcoDis | 0.416 | .520 | .002 | _ |
| Hispanic | 0.143 | .705 | .0001 | _ |
| Gender (Female) | 0.150 | .699 | .0001 | - |
| EB Status (Emergent Bilingual) | 0.924 | .338 | .005 | _ |
| NES | 4.259 | .040 | .021 | - |
| MOY RIT Score | 9.607 | .002 | .047 | _ |



ANCOVA: CGI

ANCOVA - W_SprCondGrowthIndex

| Cases | Sum of Squares | df | Mean Square | F | р | η² | η² |
|--------------------|----------------|-----|-------------|-------|-------|------------------------|------------------------|
| Study Group | 0.570 | 1 | 0.570 | 0.285 | 0.594 | 0.001 | 0.001 |
| Sped | 3.512 | 1 | 3.512 | 1.755 | 0.187 | 0.008 | 0.009 |
| Eco Dis (group) | 0.832 | 1 | 0.832 | 0.416 | 0.520 | 0.002 | 0.002 |
| Hispanic01 | 0.287 | 1 | 0.287 | 0.143 | 0.705 | 6.681×10 ⁻⁴ | 7.384×10 ⁻⁴ |
| Gender01 | 0.301 | 1 | 0.301 | 0.150 | 0.699 | 7.000×10 ⁻⁴ | 7.736×10 ⁻⁴ |
| EB=1 | 1.850 | 1 | 1.850 | 0.924 | 0.338 | 0.004 | 0.005 |
| NES01 | 8.525 | 1 | 8.525 | 4.259 | 0.040 | 0.020 | 0.021 |
| MOY Test RIT Score | 19.232 | 1 | 19.232 | 9.607 | 0.002 | 0.045 | 0.047 |
| Residuals | 388.341 | 194 | 2.002 | | | | |

Note. Type III Sum of Squares

Descriptives

Descriptives - W_SprCondGrowthIndex

| Study Group | N | Mean | SD | SE | Coefficient of variation | |
|-------------|-----|-------|-------|-------|--------------------------|--|
| Comp | 110 | 0.410 | 1.487 | 0.142 | 3.628 | |
| JRR | 93 | 0.341 | 1.430 | 0.148 | 4.196 | |

Post Hoc Tests

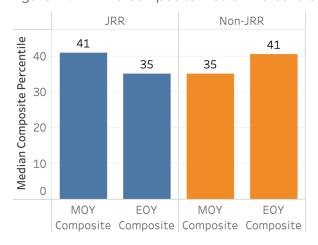
Standard

Post Hoc Comparisons - Study Group

| | | Mean Difference | SE | t | Cohen's d | P _{tukey} |
|------|-----|-----------------|-------|-------|-----------|--------------------|
| Comp | JRR | 0.114 | 0.214 | 0.534 | 0.081 | 0.594 |

Note. Results are averaged over the levels of: Sped, Eco Dis (group), Hispanic01, Gender01, EB=1, NES01

Figure A1. DIBELs Composite Median Percentiles





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