

THIRD GRADE READING GAINS WITH 95 PHONICS CORE PROGRAM, 2022-2023 SUBGROUP FOCUS ELL AND SPED

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LXD RESEARCH
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Third Grade Reading Gains in iReady® with 95 Phonics Core Program®, 2022-2023: Subgroup Focus ELL and SPED

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Executive Summary

This study explored the impact of the 95 Phonics Core Program (PCP) on student literacy achievement across third graders who started the school year at different ability levels. The primary focus of this report was to investigate the relationship between changes in phonics and overall reading scores with the beginning, middle, and end-of-year iReady® assessments. To this end, iReady scores were collected from 4 elementary schools in the Southside Independent School District in San Antonio, Texas, during the 2022-2023 academic school year. Third graders from all schools were aggregated by beginning-of-year (BOY) placement level in terms of grade-level skills (kindergarten, first grade, second grade, third grade). Outcomes were expressed in terms of gains on scale scores for students in each placement level category. The analysis compared the rate of growth over time for each BOY category. The analysis progressed through the following questions, each adding a piece to the overall picture.

Research Questions

- 1. How do third graders' overall reading scores change over time for each BOY category?
- 2. How do third graders' phonics scores change over time for each BOY category?
- 3. What is the relationship between gains in phonics and gains in overall reading for all students? For ELLs? For special education students?

The results of the study show that the 95 Phonics Core Program (95 PCP) is effective in improving the phonics skills of students on or below grade level, subsequently improving overall reading skills by the end of the year, evidenced by a significant increase in iReady scores over time. Almost half of the third graders (43%) started the year with kindergarten-level phonics skills (3+ years below). After one year, 63% advanced at least one grade level. Those phonics gains translated to overall reading score improvements, and 66% of third graders who started with overall reading scores at the K level advanced at least one grade level.

Focus on students who started below grade level:

- Additional analysis revealed that the 3+ years below phonics group made the most phonics
 gains in the fall term (BOY to MOY), which indicates that students quickly filled gaps and
 made accelerated phonics knowledge progress.
- In the spring term, both the 3+ years below and 2 years below grade level groups made strong gains, while the 3+ years below grade level phonics group advanced the most during each term (BOY to MOY and MOY to EOY).
- The phonics "RtI triangle" essentially flipped from the start of the year to the end of the year.
- A student's BOY phonics placement had a .58 effect size on a student's overall reading gains.

Main Takeaway: 95 Phonics Core Program (95 PCP) is effective in improving third graders' phonics and overall reading skills through full class instruction, as evidenced by the decrease in the proportion of students scoring below grade level from fall to spring. The iReady reading assessment captured student progress throughout the school year, showing a decrease in the proportion of students below benchmark levels for ELL and special education students.

Table of Contents

Introduction	3
Research questions	4
Program Description	4
Method	5
Participants	5
Measures	6
Phonics and Overall Reading Scores	6
Criteria for Phonics Grouping Classification	6
Analytic Plan	6
Full Sample Results	8
Characterizing student phonics growth	8
Phonics groupings	9
How did the growth in phonics differ by BOY overall reading groups?	9
How did a student's beginning-of-year phonics skill level impact their phonics growth?	10
How did growth in phonics impact overall iReady EOY scores?	12
Phonics Benchmark Category Changes	13
Results for ELL and Special Education Students	16
How did an ELL student's BOY Overall Placement Group impact phonics growth?	16
How did an ELL student's BOY Phonics Placement Group impact overall reading growth?	19
How did an SPED student's BOY Overall Placement Group impact phonics growth?	19
How did an SPED student's BOY Phonics Group impact overall reading growth?	22
Discussion	23
Tier 2 & 3 Students Benefit From Strong Tier 1 Phonics Instruction	23
Conclusion	24
Appendix	25
References	28

Introduction

The COVID-19 pandemic significantly impacted student learning, particularly in the area of reading. According to the 2023 State of Student Learning report (Curriculum Associates, 2023), fewer students were on grade level in reading in Spring 2023 than historical averages. While the percentage of students on grade level in upper-elementary grades had almost returned to pre-pandemic levels, early-elementary grades continued to lag behind. In particular, 65% of 3rd-grade students were on grade level compared to a historical average of 72%. Though these trends are seen for all students, when examining the data by demographic information, differences in the proportion of students who met the grade level benchmark were significant, particularly for Latino students. For example, in schools serving mostly White students, 74% of Grade 3 students were on grade level in reading, while in schools serving mostly Latino students, only 51% met the same criteria.

More recent data from the National Center for Education Statistics showed that only 33% of 4th graders in the United States performed at or above the Proficient level in reading on the 2022 National Assessment of Educational Progress (NCES, 2022). Additionally, only 21% of Hispanic students performed at the Proficient level (NCES, 2022). It is well known that reading difficulties can pose major barriers to academic success. Thus, students must receive research-based instruction that targets their specific skill gaps.

The science of reading indicates that following a systematic approach across multiple years allows children to develop skills at each level and advance in a sequence that promotes learning (The Reading League, 2022; Cowen, 2016). Researchers agree that schools must improve access to rigorous, grade-level academics with targeted support to accelerate learning (Lambert & Sassone, 2020). Systematic, full-class instruction is an instructional approach that can help reduce intervention needs, especially when it includes adjustments and supports that help different students succeed.

In content areas such as math that also show declines due to the COVID pandemic, focusing on learning acceleration through high-quality instruction on grade level materials rather than remediation can be especially beneficial for learning (Student Achievement Partners, 2021). Two key recommendations follow from these findings. First, leaders should select a high-quality core curriculum that provides teachers with suggestions for in-the-moment support for students who struggle. Second, educators should select programs focusing on grade-level instruction for all students, with embedded diagnostics that assess student understanding at the lesson level. When high-quality core programs embed effective unit assessments that allow for adjustment of instruction, students can receive targeted support at the time when they need it.

"Teachers need to understand that ELs deserve the same grade-level literacy instruction that English-speaking students receive, as outlined in the following pages. But in addition, these students require targeted support and ample high-quality English language development instruction. The two are not the same."

– Student Achievement Partners, 2021

95 Percent Group, LLC created <u>a core phonics curriculum</u> that would replace the phonics instructional lessons provided with a comprehensive core reading curriculum, typically the first 20 minutes of the reading block. The 95 Phonics Core Program (95PCP) is a whole-class, Tier 1 program designed for grades K-3 to address and prevent decoding gaps using explicit, structured phonics instruction with a gradual release model for 30 minutes daily. The first year of research on the 95 PCP at other districts presented strong results, according to the Evidence for ESSA website, showing higher literacy gains for schools randomly assigned to use the program (Schechter & Lynch, 2022) and for students within a mostly Hispanic and Indigenous population of students (Schechter, Lynch, & Ilievski, 2023).

Southside Independent School District implemented the 95 Phonics Core Program (95PCP) for grade 3 instruction, including the unit assessments used to monitor student progress, inform response-to-intervention (RTI), and adjust support as needed. Special education students received push-in/inclusion support for 95PCP. In addition to 95PCP, Southside Independent School District used HMH Into Reading.

Research questions

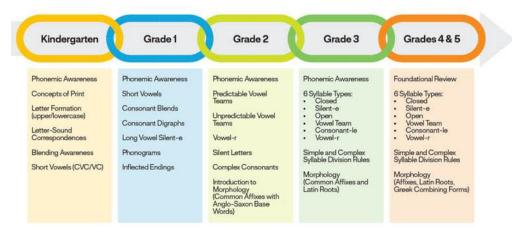
- How do their phonics scores change over time?
- How do third graders' overall reading scores change over time?
- What is the relationship between gains in phonics and gains in overall reading?
- What does that same relationship look like for English Language Learner (ELL) students? For special education (SPED) students?

Program Description

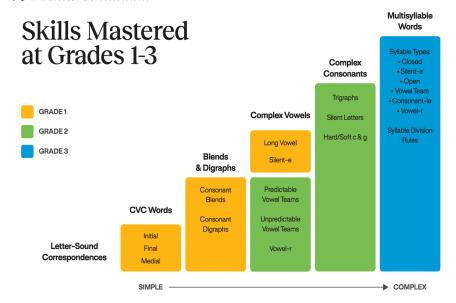
The 95PCP is a whole-class, Tier 1 program designed for grades K-3 to address and prevent decoding gaps using explicit, structured phonics instruction with a gradual release model for 30 minutes per day. The program includes instructional dialogue and consistent routines outlined in the Teacher's Editions, digital presentation files designed to reduce teacher prep, and student workbooks that provide built-in practice for reinforcing skills. The program also offers sound spelling cards, phonics posters, and student manipulatives. 95PCP for Grade 3 specifically focuses on using the

previously taught foundational phonemic awareness and phonics skills to build automaticity in reading multi-syllable words in both isolation and in text. Instruction centers on explicitly teaching the six syllable types and the morphological structures of words. Decoding and encoding tasks ensure students have the word attack skills necessary for reading and writing text with increasing complexity.

95 Phonics Core Program Skills by Grade



95 Phonics Continuum



Method

Participants

Phonics and overall reading skill scores were collected for four elementary schools in the Southside Independent School District in San Antonio, Texas, in the fall (BOY: beginning of year), winter (MOY: middle of year), and spring (EOY: end of year) of the 2022-2023 academic school year.

The present study focuses exclusively on third graders. Of the 410 students with a BOY phonics skill score and no 'red rush flag' (which indicates when items have been answered too quickly, in less than 11 seconds), 93% were Hispanic, 79% were English Language Learners, 71% were economically disadvantaged, and 20% were special education students.

This district had substantially fewer students on grade level than national trends. The 2023 i-Ready report on national reading scores indicated that 65% of third graders were on grade level, and 19% were two or more years below grade level as of spring 2023 (<u>Curriculum Associates, 2023</u>). In the current sample, 26% were on grade level, and 68% were below grade level at BOY. This sample is nearly the opposite trend of the national average, indicating this district's need for a higher quality Tier 1 curriculum.

Measures

Phonics and Overall Reading Scores

iReady is a computer adaptive screener intended to be a "temperature check" on students' reading skills. It is designed to be as short as possible; it uses predictive analytics to determine how many questions each student gets and only uses items that help the algorithms know what the students' scores should be. Each student's scores are compared to a normed sample of students, all tested before the pandemic, and the scores are organized into benchmark categories. The present study examined Phonics Scale Scores and Overall Reading Scale Scores from fall, winter, and spring administrations of the iReady assessment.

Criteria for Phonics Grouping Classification

The full sample comprised 410 students after subsetting to third graders and excluding cases where students had a 'red rush flag' indicating that they went through the test too quickly for the scores to be considered accurate. These 410 students are called the "full sample" within this study.

To create phonics groupings, third graders from each school were aggregated by beginning-of-year placement levels, which reflected grade-level skills demonstrated by the student in the fall. BOY phonics placement levels classified students as exhibiting skills 3+ years below grade level (kindergarten skills), 2 years below grade level (first-grade skills), 1 year below grade level (second-grade skills), or on/above grade level (third-grade level skills and beyond).

Analytic Plan

All analyses were conducted with data from third graders. We classified students into phonics groupings based on the BOY grade-level skills described above. Descriptive statistics, correlations, and data visualizations confirmed that statistical assumptions were tenable. Researchers conducted

longitudinal models to examine how the phonics intervention was associated with phonics growth and overall reading growth from Fall 2022 to Spring 2023. Researchers also examined associations between phonics skills and overall reading skills, investigating whether BOY skills in one were associated with growth in the other. Effect sizes were examined in conjunction with tests of statistical significance. Further, researchers examined plots of growth trajectories by BOY phonics group along with raw scores by group at each measurement occasion to consider how much each group grew between each measurement occasion to glean a full-picture understanding of third graders' phonics growth from fall to winter to spring both overall in the full sample and each BOY phonics group. Additionally, subgroup analyses were performed to examine whether full sample trends were the same or different for ELL and SPED students when examined without the rest of the sample.

Full Sample Results

Characterizing student phonics growth

Traveling scatterplots show clear growth (depicted in Figure 1), as do corresponding means (emphasized in blue in Figure 1 and in bold in Table 1). The average phonics scale score in the fall was 436. Of the total growth from fall to spring, the majority of the growth occurred between fall and winter (which indicates that students quickly filled gaps and made accelerated phonics knowledge progress). On average, *students benefited from the phonics intervention regardless of their phonics scores before the intervention.* The following statistical analyses examine the growth trends for the full sample and each BOY phonics group.

Figure 1. Phonics Scale Scores Across the School Year Individual student scores are in black; mean scores at each time point are in blue.

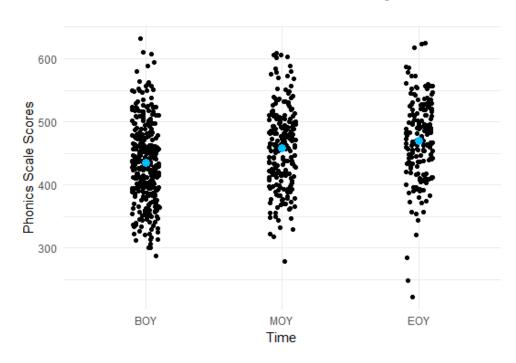


Table 1. Mean Phonics Scale Scores and Sample Sizes at BOY, MOY, and EOY

Measurement occasion	Number of Students	Mean Phonics Scale Score
BOY: Fall	344	436
MOY: Winter	224	459
EOY: Spring	182	469

Analyses performed on the full sample should be interpreted considering the proportion of students in each BOY phonics group (sample sizes are reported in Table 2 years below). The 3+ years below group had the biggest sample size of the BOY phonics groups (comprising 176 out of 410 students, rendering 3+ years below 43% of the sample); thus, students in the 3+ years below BOY group are most heavily represented in full sample findings. Subsequent analyses examine patterns within individual groups and investigate between-group differences.

Phonics groupings

See Table 2 years below for a summary of the phonics groupings. There were 176 students in the 3+ years below BOY phonics skill group, 103 students in the 2 years below BOY phonics skill group, 26 students in the 1 year below group, and 105 students in the on/above group.

Table 2.	Summary	of Phonics	Groupings
10000 2.	During 1	0 1 13010003	Groupings

Phonics BOY Grouping	Phonics Level(s) Within that Grouping	Number of Students
3+ Years Below	Level K	176
2 Years Below l	Level 1	103
1 Year Below	Level 2	26
On/Above	Level Early 3, Mid 3, Tested Out, and Max Score	105

How did the growth in phonics differ by BOY overall reading groups?

A repeated measures ANOVA examined the association of Phonics Scale Scores from fall to winter to spring with BOY Reading Overall Placement Group, Time, and the interaction of BOY Reading Overall Placement Group and Time. All were statistically significant, as shown in Table 3 below. Students had different growth rates based on their beginning-of-year overall reading level. BOY Reading Overall Placement Group significantly predicted Phonics Scale Scores from Fall to Winter to Spring, with a generalized effect size of .3. Time significantly predicted Phonics Scale Scores from Fall to Winter to Spring, with a generalized effect size of .2. There was a significant two-way interaction between BOY Reading Overall Placement Group and Time, meaning that how much children grew depended on where they started at the beginning of the school year.

Table 3. Full Sample Repeated Measures ANOVA for Phonics Scale Scores

	F * = significant	Generalized Effect Size
BOY Reading Overall Placement Group	44.99*	.30
Time	95.63*	.19
Interaction of BOY Reading Overall Placement Group and Time	2.81*	.01

How did a student's beginning-of-year phonics skill level impact their phonics growth?

As the repeated measures ANOVA revealed that phonics growth trajectories depended on which BOY Reading Overall Placement Group students were in, researchers next examined: Within a given BOY Phonics group, how did a student's beginning of year phonics placement level impact their phonics growth? With special attention to how overall gains from fall to spring compared for students who started way below grade level in phonics and students who performed closer to grade level.

Tables 4 and 5 and Figure 2 years below show that the 3+ years below grade level, 2 years below grade level, and 1 year below grade level BOY phonics groups grew between each measurement occasion, with different growth rates between each measurement occasion for each group. Students who started below grade level grew faster than those who performed closer to grade level.

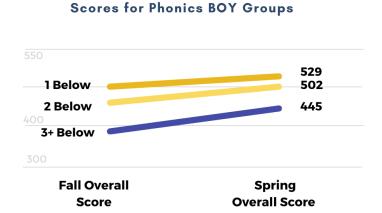
Table 4. Phonics Scale Scores for BOY Phonics Groups at Each Measurement Occasion

BOY Phonics Group	BOY: Fall Phonics Scale Score	MOY: Winter Phonics Scale Score	EOY: Spring Phonics Scale Score
3+ Years Below	385	427	445
2 Years Below	460	485	502
1 Year Below	502	518	529
On/Above	543	n/a*	n/a

^{*}Fewer than 30 students were assessed due to students advancing in skills and no longer needing to be assessed in phonics due to the iReady assessment rules; therefore, the averages are not reported.

To better understand the different growth rates, the remainder of this section focuses on students who started the year below grade level. See Figure 2 and Table 5, which explore the trajectory for each below-level group and further facilitate comparison between groups and across time. Figure 2 years below depicts the encouraging convergence reported in Table 4: the gap between average scores for each BOY phonics grouping narrows considerably from fall to spring. In Figure 2, note how the average scores cluster closer together within a smaller range in the spring, demonstrating that, on average, students who started with lower scores grew more. On average, third graders scored from 487 to 521 nationally during the 2022-2023 school year.

Figure 2. Phonics Growth Across the School Year for Below-Level BOY Groups



Average Fall and Spring Overall Scale

EOY Overall Scale Score for on-level, third graders is 511 and above.

Students already on grade level did not experience the rapid boosts across the year, as shown by groups with more to gain from the phonics intervention. *The more students needed to catch up, the more they grew*. Table 5 below probes this finding further by showing the exact amount of growth between each measurement occasion. Table 5 shows that 3+ years below level students grew the most *overall* and grew the most *between* each measurement occasion. The pattern holds where the 2 years below level group had the most growth after the 3+ years below level group, growing more between each measurement occasion than 1 year below level group.

Table 5. Growth Between Each Measurement Occasion for Below-Level Phonics Groupings

BOY Phonics Group	Phonics Scale Score Growth from Fall to Winter	Phonics Scale Score Growth from Winter to Spring	Phonics Scale Score Growth Overall from Fall to Spring
3+ Years Below	42 points	19 points	60 points
2 Years Below	25 points	17 points	42 points
1 Year Below	16 points	11 points	27 points

The numbers in Table 5 were computed without rounding. Table 4 contains the scores rounded to whole numbers; thus, a few numbers in Table 5 may appear slightly different than what they would be if using the numbers from Table 4. The same logic holds for Tables 10 and 14, which are subgroup versions of Table 5.

Table 5 above demonstrates that the 3+ years below grade level, 2 years below grade level, and 1 year below grade level BOY groups grew substantially, with the 3+ years below group growing 60 points *from fall to spring*. Students in the 3+ years below grade level group grew the most overall, followed by the 2 years below grade level group, and then the 1 year below grade level group, both from fall to spring and from fall to winter and winter to spring.

How did growth in phonics impact overall iReady EOY scores?

More growth in phonics was associated with higher overall end-of-year scores. Table 6 below shows how much each group grew in phonics from fall to spring, their spring phonics scores, and their spring overall reading score. Note the general relation between spring phonics and reading scores for below-level BOY phonics groups.

Table 6. Growth From Fall to Spring Displayed with Spring Phonics and Reading Scores for BOY Groups

BOY Phonics Group	Phonics Scale Score Growth Fall to Spring	Spring Phonics Scale Score	Spring Overall Reading Scale Score
3+ Years Below	60 points	445	454
2 Years Below	42 points	502	507
1 Year Below	27 points	529	521

How was Overall Reading growth impacted by BOY Phonics Groups?

A repeated measures ANOVA examined the association of Overall Reading Scale Scores from fall to winter to spring with BOY Phonics Group, Time, and the interaction of BOY BOY Phonics Group and Time. (The ANOVA earlier in this paper, reported in Table 3, examined how overall *reading* scores at the beginning of the year impacted *phonics* scores through third grade. This ANOVA (reported in Table 7) examines how beginning-of-the-year *phonics* scores impact overall *reading* scores through third grade.)

Phonics BOY Group, Time, and the interaction of Phonics BOY Group with Time were significant predictors of Overall Reading Scale Scores, as shown in Table 7 below. Students showed different rates of growth depending on their beginning-of-year phonics skill levels. Phonics BOY Group significantly predicted Overall Reading Scale Scores from Fall to Winter to Spring, with a generalized effect size of .6. Time significantly predicted Overall Reading Scale Scores from Fall to Winter to Spring, with a generalized effect size of .2. There was a significant two-way interaction between BOY Phonics Group and Time, meaning that how much children grew depended on where they started at the beginning of the school year.

Table 7. Full Sample Repeated Measures ANOVA for Overall Re

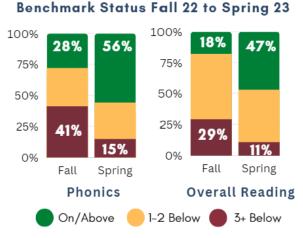
	F * = significant	Generalized Effect Size
Phonics BOY Group	165.12*	.58
Time	328.73*	.20
Interaction of Phonics BOY Group and Time	2.38*	.01

Phonics Benchmark Category Changes

Third graders from across the ability spectrum benefited from the 95 Phonics Core Program. Students who started the year below grade level filled gaps quickly, building skills throughout the year. An impressive 20% of students 3+ grade levels below in the fall advanced to on-grade level in phonics by spring. Stronger Tier 1 instruction contributed towards 2.5 times more third graders at grade level by Spring. See Tables A1 - A3 in the Appendix for the number of students in a given BOY phonics group who were in a given EOY phonics group.

Figures 3 - 5 show benchmark category changes between fall and spring by BOY groups, with students 1 or 2 years below grade level combined in the visualizations for ease of interpretation. Figure 3 shows benchmark category changes for the full sample; Figures 4 and 5 zoom in on English Language Learners and special education students, respectively. In each figure, the bar chart on the left represents phonics growth from fall to spring, and the bar chart on the right is for overall reading growth, demonstrating the percentage of students in each benchmark category in the fall and spring. In all cases, the percentage of students on or above grade level (green) notably increased from fall to spring, while the percentage 3+ years below grade level (red) notably decreased, indicating that below-grade level students were growing considerably. On average, 22% of third graders nationally were two or more years below grade level.

Figure 3. Phonics and Overall Reading Benchmark Categories Changes between Fall and Spring, by BOY Groups for the Full Sample



Phonics: F(2,141) = 44.99, p < .001, generalized effect size = .30 Overall Reading: F(3,286) = 165.12, p < .001, generalized effect size = .58

The positive trend of more green and less red is patently clear for the full sample (Figure 3 above). This upward trend of more students on/above grade level (green) from fall to spring for both Phonics and Overall Reading is even more pronounced for ELL students (Figure 4, below). The ELL group showed similar or stronger gains, with equivalent or more dramatically positive benchmark status changes. For both phonics and overall reading skills, the ELL group started with a lower percentage of students on/above grade level (green; Figure 4) in the fall than the percentage of students on/above grade level (green; Figure 3) in the full sample, yet the ELL group had a higher percentage of students on/above grade level in the spring (Figure 4) than the full sample did (Figure 3). For the full sample and ELL students, the red portion for 3+ levels below shrinks dramatically from fall to spring for both Phonics and Overall Reading. Given the nature of the intervention, it is noteworthy that ELL

students (N=324) made substantial gains from whole-group class instruction. SPED students (N=83) also made substantial gains from whole-group class instruction (see Figure 5).

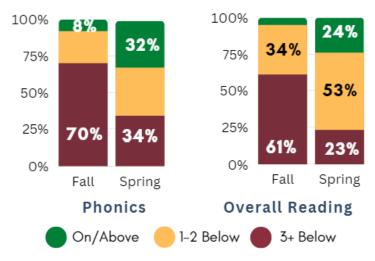
Figure 4. Phonics and Overall Reading Benchmark Categories Changes between Fall and Spring, by BOY Groups for ELL Students

Benchmark Status Fall 22 to Spring 23 100% 100% 16% 25% 58% 75% 75% 50% 50% 25% 25% 13% 0% 0% Fall Spring Fall Spring **Phonics** Overall Reading On/Above 1-2 Below 3+ Below

Phonics: F (2,126) = 41.08, p < .001, generalized effect size = .30 Overall Reading: F (3, 262) = 144.19, p < .001, generalized effect size = .57

Figure 5. Phonics and Overall Reading Benchmark Categories Changes between Fall and Spring, by BOY Groups for SPED Students

Benchmark Status Fall 22 to Spring 23



Phonics: F (2, 47) = 13.42, p < .001, generalized effect size = .27 Overall Reading: F (3, 63) = 37.99, p < .001, generalized effect size = .56 The above bar charts reveal that students made gains overall but that the nature of the gains was not identical for ELL and SPED students and for the full sample. The statistical models thus far in this study analyzed the full sample. Below, we perform the statistical analysis individually for ELL and special education students to investigate whether trends are the same or different from full sample findings.

Results for ELL and Special Education Students

To understand how well the product works for different populations of students, the analysis below examines whether the trends were the same or different for the ELL and special education students subgroups. There were 324 ELL students and 83 special education students.

How did an ELL student's BOY Overall Placement Group impact phonics growth?

A repeated measures ANOVA was conducted exclusively with ELL students to examine the association of Phonics Scale Scores from fall to winter to spring with BOY Reading Overall Placement Group, Time, and the interaction of BOY Reading Overall Placement Group and Time. Results are located in Table 8 below. All variables were statistically significant, as with the corresponding full-sample analysis. As with the full sample, there were different rates of growth for ELL students based on their beginning-of-year overall reading level. BOY Reading Overall Placement Group significantly predicted Phonics Scale Scores from Fall to Winter to Spring for ELL students with an effect size of .3 (matching the full sample result). Consistent with the full sample model, time significantly predicted Phonics Scale Scores from Fall to Winter to Spring for ELL students. The effect sizes were equivalent for the ELL group and the full sample (for whom it was slightly smaller). As with the full sample, there was a significant two-way interaction between BOY overall placement group and time for ELL students, meaning that how much ELL students grew depended on where they started at the beginning of the school year.

Table 8. English Language Learners: Repeated Measures ANOVA for Phonics Scale Scores

	F * = significant	Generalized Effect Size
BOY Reading Overall Placement Group	41.08*	.30
Time	89.50*	.20
Interaction of BOY Reading Overall Placement Group and Time	3.54*	.02

After learning from the Repeated Measures ANOVA that phonics growth trajectories depended on which BOY Overall Placement Group ELL students were in, a natural next step is to tease apart: How did an ELL student's beginning of year phonics placement level impact their phonics growth? Tables 9 and 10 and Figure 6 below demonstrate that as with the full sample, the 3+ years below grade level, 2 years below grade level, and 1 year below grade level BOY phonics groups grew between each measurement occasion, with different rates of growth between each measurement occasion for each group. As with the full sample, students who started below grade level grew more and grew faster than students who performed closer to grade level. However, growth itself was not identical to the full sample trend.

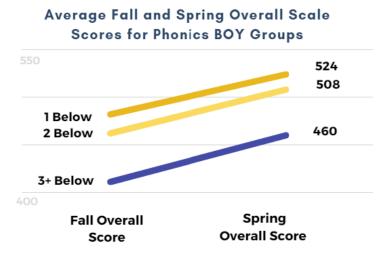
Table 9. English Language Learners: Average Phonics Scores for BOY Phonics Groups at Each Measurement Occasion

BOY Phonics Group	Fall Phonics Scale Score	Winter Phonics Scale Score	Spring Phonics Scale Score
3+ Years Below	387	429	451
2 Years Below	461	488	504
1 Year Below	502	521	527
On/Above	543	n/a*	n/a

^{*}Fewer than 30 students were assessed due to students advancing in skills and no longer needing to be assessed in phonics due to the iReady assessment rules; therefore, the averages are not reported.

To better understand the different rates of growth, Figure 6 and Table 10 focus on the trajectories for ELL students who started the year below grade level. ELL students made gains overall, clearly depicted by how all lines trend upwards in Figure 6. Note how the line for 3+ years below grade level (in blue) is much further down, with a steeper slope than the lines for students 1 or 2 years below grade level. Figure 6 demonstrates that students at all levels benefitted from the phonics intervention, and students 3+ years below grade level gained the most.

Figure 6. English Language Learners' Phonics Growth Across the School Year for Below-Level BOY Groups



EOY Overall Scale Score for on-level, third graders is 511 and above.

As with the full sample, the more students needed to catch up, the more they grew, with slightly more dramatic growth for the ELL students. Table 10 below probes this finding further, showing the exact amount of growth between each measurement occasion for below-level ELL students. As with the full sample, the pattern holds where the 2 years below grade level group had the most growth after the 3+ years below group, growing more between each measurement occasion than 1 year below grade level group.

Table 10. English Language Learners: Growth Between Each Measurement Occasion by BOY Phonics Groupings

BOY Phonics Group	Phonics Scale Score Growth from Fall to Winter	Phonics Scale Score Growth from Winter to Spring	Phonics Scale Score Growth overall from Fall to Spring
3+ Years Below	42 points	22 points	64 points
2 Years Below	27 points	16 points	43 points
1 Year Below	18 points	7 points	25 points

Table 10 above demonstrates that the 3+ years below grade level, 2 years below grade level, and 1 year below grade level BOY groups grew substantially, with the 3+ years below group growing 64 points *from fall to spring* (whereas the full sample grew 60 points). Students in the 3+ years below

grade level group grew the most overall, followed by the 2 years below grade level group, and then the 1 year below grade level group, both from fall to spring and from fall to winter and winter to spring. This matches the pattern exhibited by the full sample between BOY phonics groupings and between measurement occasions.

How did an ELL student's BOY Phonics Placement Group impact overall reading growth?

A repeated measures ANOVA for the ELL sub-sample examined the association of Overall Reading Scale Scores from fall to winter to spring with BOY Phonics Group, Time, and the interaction of BOY Phonics Group and Time. As with the full sample, BOY Phonics Group, Time, and the interaction of BOY Phonics Group with Time were significant predictors of reading scores, as shown in Table 11 year below. As with the full sample, students showed different growth rates depending on their beginning-of-year phonics skill levels. As with the full sample, BOY Phonics Group significantly predicted Overall Reading Scale Scores from fall to winter to spring, with a generalized effect size of .6. As with the full sample, Time significantly predicted Overall Reading Scale Scores from fall to winter to spring, with a generalized effect size of .2. As with the full sample, there was a significant two-way interaction between BOY Phonics Group and Time, meaning that how much children grew depended on where they started at the beginning of the school year.

Table 11. English Language Learners: Repeated Measures ANOVA for Overall Reading Scale Scores

	F * = significant	Generalized Effect Size
BOY Phonics Group	144.19*	.57
Time	333.60*	.22
Interaction of BOY Phonics Group and Time	2.85*	.01

How did an SPED student's BOY Overall Placement Group impact phonics growth?

A repeated measures ANOVA examined the association of Phonics Scale Scores from fall to winter to spring with BOY Reading Overall Placement Group, Time, and the interaction of BOY Reading Overall Placement Group and Time for special education students. As with the full sample and with the ELL sub-sample, there were different rates of growth for special education students based on their beginning-of-year overall reading level. As with the full sample and the ELL group, BOY Reading Overall Placement Group significantly predicted Phonics Scale Scores from fall to winter to spring; the effect sizes were comparable in each sample's analysis, rounding to .3. As with the full

sample and the ELL group, time significantly predicted Phonics Scale Scores from Fall to Winter to Spring with an effect size of .2. Unlike with the full sample and ELL group, there was not a significant two-way interaction between BOY Reading Overall Placement Group and Time.

Table 12. Special Education: Repeated Measures ANOVA for Phonics Scale Scores

	F * = significant	Generalized Effect Size
BOY Reading Overall Placement Group	13.42*	.27
Time	31.50*	.19
Interaction of BOY Reading Overall Placement Group and Time	.54	.01

As the repeated measures ANOVA revealed that phonics growth trajectories for special education students depended on which BOY Reading Overall Placement Group students were in, researchers next examined: Within a given BOY Phonics group, how did special education students' beginning of year phonics placement level impact their phonics growth? Tables 13 and 14 and Figure 7 below show that as with the full sample and the ELL sub-sample, the 3+ years below grade level, 2 years below grade level, and 1 year below grade level BOY phonics groups grew between each measurement occasion, with different rates of growth between each measurement occasion for each group. As with the full sample and the ELL sub-sample, students who started below grade level grew more and grew faster than students who performed closer to grade level at the beginning of the year.

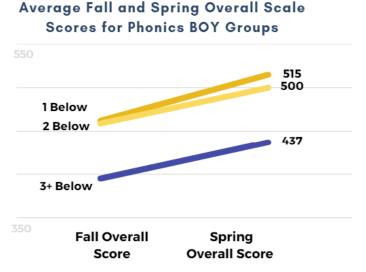
Table 13. Special Education: Average Phonics Scores for BOY Phonics Groups at Each Time Period

BOY Phonics Group	Fall Phonics Scale Score	Winter Phonics Scale Score	Spring Phonics Scale Score
3+ Years Below	375	414	434
2 Years Below	461	466	524
1 Year Below	503	509	554
On/Above	538	n/a*	n/a

^{*}Fewer than 30 students were assessed due to students advancing in skills and no longer needing to be assessed in phonics due to the iReady assessment rules, therefore the averages are not reported.

To better understand the different growth rates, the remainder of this section focuses on students who started the year below grade level. Figure 7 and Table 14 explore the trajectory for each group and further facilitate comparison between groups and across time, demonstrating that *special education students made substantial gains from whole-group phonics class instruction*. As with the full sample and the ELL student sub-sample, all levels benefitted, and students 3+ years below grade level gained the most from fall to spring.

Figure 7. Special Education Students' Phonics Growth Across the School Year for Below-Level BOY Groups



EOY Overall Scale Score for on-level, third graders is 511 and above.

All special education below-level groups grew substantially, as with the full sample and the ELL sample, but trends looked different between measurement occasions for special education students. Table 14 below shows the exact amount of growth between each measurement occasion for special education students. Students who were 2 grade levels below grew the most, followed by students 3+ years below grade level, then students 1 year below grade level. This pattern for special education students was different than for the full sample and for English Language Learners, for whom the 2 years below grade level group had the most growth after the 3+ years below group, growing more between each measurement occasion than 1 year below grade level group. Further, special education students who were 3+ years below grade level experienced rapid growth from fall to winter (40 points) and continued to grow at a less rapid pace (19 points) from winter to spring. More growth from fall to winter than winter to spring is consistent with the overall growth pattern for each below-level group for the full sample and ELL students. The opposite pattern held for special education students 1 or 2 years below grade level with slower growth from fall to winter followed by rapid growth from winter to spring.

Table 14. Special Education: Growth Between Each Measurement Occasion by BOY Phonics Groupings

BOY Phonics Group	Phonics Scale Score Growth from Fall to Winter	Phonics Scale Score Growth from Winter to Spring	Phonics Scale Score Growth overall from Fall to Spring
3+ years below	40 points	19 points	59 points
2 years below	4 points	58 points	63 points
1 year below	6 points	44 points	50 points

How did an SPED student's BOY Phonics Group impact overall reading growth?

A repeated measures ANOVA for the special education sub-sample examined the association of Overall Reading Scale Scores from fall to winter to spring with BOY Phonics Group, Time, and the interaction of BOY Phonics Group and Time. As with the full sample and the ELL sub-sample, BOY Phonics Group, Time, and the interaction of BOY Phonics Group with Time were significant predictors of reading scores, as shown in Table 15 below. As with the full sample and the ELL sub-sample, students showed different growth rates depending on their beginning-of-year phonics skill levels. As with the full sample and ELL sub-sample, BOY Phonics Group significantly predicted Overall Reading Scale Scores from fall to winter to spring, with a generalized effect size of .6. Consistent with the full sample and ELL sub-sample, Time significantly predicted Overall Reading Scale Scores from fall to winter to spring, with a generalized effect size of .2. Unlike with the full sample and ELL sub-sample, there was not a significant two-way interaction between BOY Phonics Group and Time.

Table 15. Special Education: Repeated Measures ANOVA for Overall Reading Scale Scores

	F * = significant	Generalized Effect Size
BOY Phonics Group	37.99*	.56
Time	52.37*	.20
Interaction of Phonics BOY Group and Time	.38	.01

Discussion

A major question facing education leaders as they decide amongst programs to help their students is how to address the varying needs of students. Some turn to computer programs that personalize and differentiate learning depending on the needs of the students; others have turned to high-dosage tutoring. However, programs vary to the degree that they effectively differentiate instruction and may leave students continually playing catch-up with skills from previous grades rather than helping reduce gaps and bring them up to grade level. This paper looks at the impact of increasing explicit phonics instruction in core instruction, which includes monthly assessments for review and reteaching, to support students below grade level.

Tier 2 & 3 Students Benefit From Strong Tier 1 Phonics Instruction

The current study demonstrates evidence that 95PCP effectively closed reading gaps. The sample in the current study started with more than two-thirds of students below grade level at the beginning of the year. The results showed all students in the program who were below grade level benefited from the whole-class instruction, even students who were considered 3+ years below grade level or reading at a kindergarten level in third grade. The more students needed to catch up, the more they grew. Students considered 3+ years below grade level at BOY grew the most overall. This subgroup of students also grew the most between each measurement occasion. The next largest growth was seen in students who were 2 years below grade level, growing more between each measurement occasion than 1 year below grade level students.

In addition, following the phonics intervention, the 1 year below-grade level group caught up with the on/above group by spring, showing equivalent spring scores, despite the headstart the on/above group had in the fall. Notably, a whole group program enabled students who were 1 year below grade level to gain two years in one and catch up with their on-level peers.

Interestingly, students who were already on or above grade level did not experience the rapid boosts across the year that groups who had more to gain from learning phonics. However, the range of possible growth is narrower for students already on grade level compared to students who needed more support from the start. This finding highlights that students who needed support got the support they needed and made significant progress towards being on grade level. As such, 95PCP served as an effective whole-class approach that met the needs of all students in the classroom.

Notably, 95PCP is not a differentiated program, but students all receive the same instruction. Although the program can be adjusted, students received whole class instruction that did not involve high-intensity, time-consuming intervention or personalized computer programs. The success of the 95PCP at closing reading skill gaps is suggestive evidence that strong, high-quality whole-class instruction is needed to help students get back on grade level.

This study has limitations, as it is a correlational study with all students and did not compare students to a control group. Researchers conducted this study retrospectively, meaning that teachers were not assigned conditions nor involved in monitoring program implementation while students were learning. This study instead examined the relationships between beginning-of-year phonics skills and students' end-of-year overall reading skills for all students and then subgroups of students. Future research conducted with 95PCP could compare students in schools that use the program with those that do not.

Conclusion

The evidence from the current study shows that third graders with different starting phonics scores benefit from whole-class instruction that is unique for third graders. 95PCP has different instructional materials for each grade level, and the students in this sample were instructed using the materials specific for third graders, which focuses on using the previously taught foundational phonemic awareness and phonics skills to build automaticity in reading multi-syllable words in both isolation and in text. Students taught with the Grade 3 version of the 95PCP are assumed to know phonics skills already, but given the current sample, that was not the case for many students. Even without this phonics foundation, students receiving the third-grade 95PCP whole-class lessons significantly improved by spring. This is compelling evidence that 95PCP includes such strong instruction and design components that it can even help third graders read at a kindergarten level. The strength of this evidence is promising, given the inequities that have resulted in high rates of learning loss. An effective core curriculum that can reduce the number of students requiring intervention services can help ensure that students receive the support they need without increasing the demand for teachers.

Appendix

Table A1. Phonics Benchmark Categories for the Full Sample

	EOY Phonics Group			
BOY Phonics Group	3+ Years Below Grade Level	2 Years Below Grade Level	1 Year Below Grade Level	On/Above Grade Level
3+ Years Below Grade Level (Total N=134)	48	48	11	27
2 Years Below Grade Level (Total N=78)	1	20	8	49
1 Year Below Grade Level (Total N=20)			2	18
On/Above Grade Level (Total N=92)	1	2	3	86
Total N EOY By Group	50	70	24	180

Table A2. Phonics Benchmark Categories for English Language Learners

	EOY Phonics Group			
BOY Phonics Group	3+ Years Below Grade Level	2 Years Below Grade Level	1 Year Below Grade Level	On/Above Grade Level
3+ Years Below Grade Level (Total N=135)	35	39	11	26
2 Years Below Grade Level (Total N=84)	1	17	7	46
1 Year Below Grade Level (Total N=24)			2	17
On/Above Grade Level (Total N=81)		2	2	74
Total N EOYBy Group	36	58	22	163

Table A3. Phonics Benchmark Categories for Special Education Students

BOY Phonics Group	EOY Phonics Group			
	3+ Years Below Grade Level	2 Years Below Grade Level	1 Year Below Grade Level	On/above Grade Level
3+ Years Below Grade Level (Total N=58)	23	17	4	4
2 Years Below Grade Level (Total N=13)	1	1	2	8
1 Year Below Grade Level (Total N=5)				4
On/above Grade Level (Total N=7)				7
Total N EOY by Group	24	18	6	23

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