95 PHONICS CORE PROGRAM™
2021-2022, GRADES K-2 EFFICACY STUDY
JUNE 22, 2022

Dr. Rachel Schecter, P.h.D.,
Alicia D. Lynch, P.h.D.,
LXD RESEARCH
95 PERCENT GROUP LLC

Table of Contents

Abstract

LXD Research analyzed data from over 3,200 students in grades K-2 who participated in using the 95 Phonics Core Program in a school district in MO during 2021-2022. The demographic breakdown of this sample included 75% White students, 23% Low Income students, 9% ESL students, 13% SPED students. Schools in the district were paired for similar ELA scores in Spring 2021, and then randomly assigned to treatment or control groups. Students in the 95 Phonics Core Program used the program every day for about 30 minutes during the daily reading block and teachers received the beginning of the year training with two question-answer sessions every few months. 95PCP schools outperformed students in the control group schools who did not receive the 95 Phonics Core Program, according to the Acadience Reading assessment. Students in each grade K-2 had statistically significant findings on either the composite score or a subtest score. The findings and rigorous study design provide support for the 95 Phonics Core Program as a comprehensive program that meets the criteria for ESSA Level 1.

Introduction

There is a growing concern that core reading curricula for the elementary years have not improved reading scores in the US ([The Condition of Education 2020](#)). Reporters such as Emily Hanford ([APM Reports](#)) have shined a light specifically on the need for explicit, systematic, and sequential phonics instruction for every child. In response to this identified need, 95 Percent Group, LLC created [a new phonics core curriculum](#) that can replace the phonics instructional lessons provided with other core reading curricula (typically the first 20 minutes of the reading block).

The 95 Phonics Core Program (95PCP) is a whole-class, Tier I program designed for students in grades K-3 to address and prevent reading gaps using explicit, structured phonics instruction for 20 minutes per day. Instruction is based on a scope and sequence with 25 lessons for Kindergarten and 30 lessons for each of Grades 1-3. For example, the First Grade Scope and Sequence includes 30 lessons disaggregated into seven topics (Introduction, Short Vowel Cvc, Consonant Blends, Consonant Digraphs, Long Vowel Silent-E, Phonograms, And Introduction To Second-Grade Skills). Each lesson focuses on specific phonics skills, provides examples of high-frequency words, and contains information about other skills addressed within the topic. The 95 Percent Group offers a kit for each grade, including a teacher's edition, student workbooks, manipulatives, and a digital presentation. The 95PCP may be offered in-person or virtually. The 95PCP also aligns with assessments and interventions (such as Phonics Lesson Library) offered by 95 Percent Group to ensure consistency.

95 Percent Group partnered with LXD Research to conduct a third-party evaluation of the 95PCP as it was implemented during the 2021-2022 school year in a Missouri school district. All the elementary schools use ReadyGEN as a core reading curriculum, and half were randomly selected to use the 95PCP for phonics instruction instead of the ReadyGEN word study materials. Random assignment to conditions ensures the highest level of scientific rigor (ESSA Evidence Level 1).

Evaluation Questions

The evaluation aims to answer the following questions:
1. How does the 95PCP affect student achievement on formative assessments (of phonics, specifically) in schools that implement the program compared to schools that do not implement the program?
2. How does the impact of the 95PCP vary by school, grade, and student subgroup (gender, English Language Learners [EL] status, students in special education [SPED] status)?

3. What is the nature and extent of the 95PCP implementation?
    a. How is the 95PCP typically implemented?
    b. To what extent is the 95PCP implemented with fidelity, and does the program adhere to the Theory of Action?
    c. How do contextual factors affect 95PCP implementation, such as the content and quality of professional development, and the characteristics of districts and schools, such as the level of administrator support?
4. What is the nature and extent of literacy program implementation in comparison schools?
5. What are teacher and administrator perceptions about the quality and impact of the 95PCP?
    d. What are teacher and administrator initial reactions to the 95PCP and its associated materials, content, pacing, and professional development?
    e. What suggestions do they have for improvement?
6. What is the association between variations in 95PCP implementation and student outcomes?

Methods

This study uses a mixed-method design that includes quantitative and qualitative data collection. The Fall 2021 research activities included the beginning-of-year (BOY), middle-of-year (MOY), and end-of-year (EOY) reading assessment, surveys of teachers, interviews of literacy coaches, and observation of a sample of classes by district administrators and coaches.

Design

This study uses a mixed-methods approach, including a randomized experimental design complemented by classroom observations, teacher surveys, and administrator interviews. This combination of methods allows researchers to understand how the materials are being used in the classroom, collect teacher feedback on the quality and perceived impact of the program, and evaluate student academic achievement.

School districts were recruited in Spring 2021. In exchange for their participation, district leaders received all 95PCP materials and training at no cost and discounts for any 95PCP materials purchased in the 2022-2023 school year. The control schools used the regular materials that they have used in previous years. Prior to the 2021-2022 school year, the district leaders allowed for the randomization of schools to a treatment (95PCP) or control condition. Schools were organized into pairs using school size and ELA scores from Fall 2020 and Spring 2021, and then a coin toss determined which school in each pair would receive the 95PCP. Nearly all teachers (93%) attended a workshop led by the 95 Percent Group, and then additional training or support was provided by district staff members. Students were pretested three times throughout the school year using Acadience Reading (September 1-17, December 13-17, April 18-28). Special assessment teams were used to conduct Acadience, and none of the examiners were the reading teachers of the students they assessed.

Treatment Group: Program Key Features

The 95PCP features instructional practices that differ from the typical reading instruction provided by core curricula. A phonemic awareness and phonics continuum of skills is followed using structured literacy characteristics, described in Table 1.

Table 1. 95 Percent Group's Literacy Characteristics in 95PCP Lessons

Characteristic	Evident in Lesson Framework
1. Explicit	I Do directly states and defines focus skill and student expectations.
2. Systematic	Intentional language and steps include consistent hand gestures and verbal cues; there is a gradual transfer of responsibility from teacher to student.
3. Sequential	Structure moves from simple to complex in key ways including lesson order, word choice, materials used, and teacher talk.
4. Adequate Modeling	This most prominent feature provides precise language at each level of modeling.
5. Corrective Feedback	Teacher response is reactive to individual student errors.
6. Differentiated Instruction	We Do and You Do sections provide two levels that enable teachers to differentiate instruction to meet students' needs.
7. Scaffolded Instruction	Steps of the I Do, We Do, and You Do allow the teacher to gradually transfer responsibility for learning to the students.
8. Continual Assessment	This occurs through informal observation and monitoring during instruction; the focus skill correlates to the *PSI*.

The 95 Percent Group's version of the gradual release model (Table 2) allows all students to practice every skill using multisensory materials, including a phonics mat and chips. While a paper version of the Phonics Chip Kit is included in the 95PCP, a plastic version is available and sold separately.

Table 2. Gradual Release Model in 95PCP

Modeling Steps	Chip Movement	Speaking
I Do	teacher	teacher
We Do		
Level 1: Accuracy	teacher	teacher and students
Level 2: Fluency	teacher	students
You Do	students	students

The 95PCP phonological awareness and phonics continua are shown in Figures 1 and 2, respectively. There is a clear progression from simpler to more complex skills, following the research-based developmental progression for learning to read. The International Dyslexia Association, for example, describes structured literacy as a "systematic means that organization of material follows the logical order of language. The sequence begins with the easiest and most basic concepts and elements and progresses methodically to the more difficult."

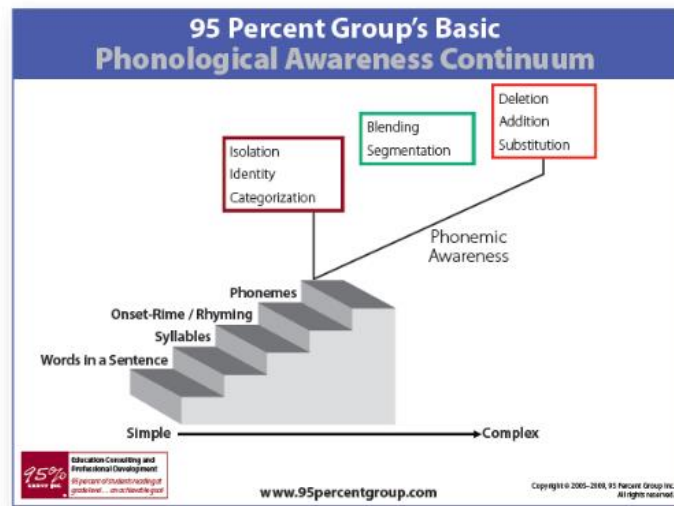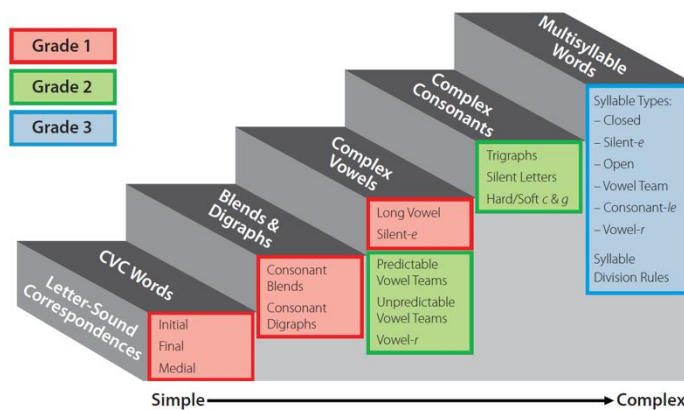*Figure 1. Phonological Awareness Continuum of 95 Percent Group*

Figure 2. Phonics Continuum of Skills of 95 Percent Group

Control Group: Phonics Instruction

The district uses [ReadyGEN](#) for their core reading program, which is published by Savvas Learning Company (formerly Pearson). This curriculum has [one published study](#) that meets the Level 3 (Promising) ESSA criteria for first grade using the Terranova 3 assessment. The program is described as using the Gradual Release of Responsibility Model, a generative approach to vocabulary instruction, and many language-focused, text-based strategies for teaching reading and writing. The curriculum also includes assessments and online games.

Teacher Survey Methods

Teacher surveys were conducted to support the understanding of how teachers in all the schools used different products as part of their literacy instruction. A survey conducted in the Fall of 2021 collected information from the teachers in the control schools about their approach to teaching phonics across all tiers. A total of 83 teachers who teach K-3, the focus grades for the 95PCP, responded; the respondents included at least one representative from each school. A survey of the teachers in the treatment schools was conducted in Spring 2022. A total of 114 teachers who teach K-3 responded with at least one representative from each treatment school.

Control Group Instructional Materials Details

Nearly all teachers use ReadyGEN to teach phonics, with Phonics First being the other consistently mentioned program. More than 25% of teachers indicated that ReadyGEN did not have phonics instruction, or they did not know if it did. The most-used supplemental phonics program was Reading A-Z, with Heggerty Phonemic Awareness and Phonics First following behind. A small group of teachers mentioned using 95 Percent Group's Multisyllable Routine Cards (Second Grade only), Heggerty Bridge the Gap, Raz-Kids, and Leveled Literacy Intervention materials. The amount of time allocated for phonics instruction varied widely within schools and grades, ranging from no time to more than 25 minutes per day.

Treatment Group Instructional Materials Details

All of the participants (100%) in the treatment group reported using the PCP to provide instruction to students 5 days a week, on average. In addition to PCP, nearly all treatment group teachers use ReadyGEN to teach phonics, while only a minority use Leveled Literacy Intervention and Reading Eggs. In Tier 1, the most used supplemental phonics material was Ready Gen. In Tier 2, the most commonly used supplemental phonics program was Reading A-Z. In Tier 3, Phonics First was the most commonly used program. A small group of teachers also mentioned using LETRS. The reading block covered four areas of reading as expected across the grades (i.e., more phonics and decoding in the kindergarten and first grade, and more knowledge building and vocabulary comprehension in the second and third grade). The amount of time allocated for phonics instruction varied widely within schools and grades, ranging from 22 to 37 minutes.

Qualitative Research Methods

Teacher Focus Groups

Four focus groups were conducted in total with Ft Zumwalt K-3 classroom educators. The focus groups were divided into Grades K-1 and 2-3 and averaged 12 teachers in each focus group. The comparison focus groups were conducted in March 2022 and treatment focus groups in April 2022.

Coach Interviews

Interviews were conducted with 14 Ft Zumwalt literacy coaches and one principal/vice principal pairing in February 2022. Eight interviews were conducted with literacy coaches from comparison schools, and seven interviews were conducted with literacy coaches from the treatment schools. The interviews lasted approximately 30 to 40 minutes.

Classroom Observations

Thirty observations were conducted by administrative staff at the school district and one of the program trainers (17 control classrooms and 13 treatment classrooms) across all grades.

Assessment: Acadience Reading K-6

Acadience Reading is an assessment that helps teachers identify children at risk for reading difficulties and determine the skills to target for instructional support. Acadience assessments are standardized and assess core early literacy skills (Table 3). Because the subtests and their weighting change for each assessment period (see [Acadience User Manual](#)), Composite scores are used to compare reading ability in this report.

Table 3. Acadience Reading Subtests and Skill Coverage

Subtest	Indicators of These Basic Early Literacy Skills
First Sound Fluency (FSF) & Phoneme Segmentation Fluency (PSF)	Phonemic Awareness
Letter Naming Fluency (LNF)	Indicator of risk
Nonsense Word Fluency (NWF)	Alphabetic Principle and Basic Phonics (Correct Letter Sounds and Whole Words Read)
Oral Reading Fluency (ORF) & Retell Fluency (RTF)	Advanced Phonics and Word Attack Skills, Accurate and Fluent Reading of Text (ORF Words Correct Per Minute and Errors); Reading Comprehension (RTF Total and Quality of Response)
Maze	Reading Comprehension

Assessment Sample

The 95PCP is being implemented in a majority-White school district in Missouri. A total of 3569 students from 14 schools participated in this Randomized Control Trial. Of these students, 1928 were in the treatment group and 1641 were in the control group.

Among the 3403 students who had complete data from the Beginning of Year (BOY), 149 students did not have End of Year (EOY) data available, signaling an attrition rate of approximately 4%. This attrition was equally likely to occur in the treatment and control groups (χ^2=3.53, p =.06). Within this sample of 3254 students, we found no statistically significant differences in BOY Composite scores in

the treatment versus control group in Kindergarten (t=1.55, p=.122), 1st grade (t=.339, p=.73), or 2nd grade (t=1.51, p=.13; see Table 4).

Table 4. Number of Students, Classes, and Schools by Grade and Condition

Grade Level	School Group	# of Classes	BOY # of Students	EOY # of Students	Matched Sample # of Students
K	Control	27	516	511	488
	Treatment	32	612	629	585
	Total	59	1128	1140	1073
1	Control	29	532	519	502
	Treatment	30	577	586	550
	Total	59	1109	1105	1052
2	Control	27	535	532	514
	Treatment	33	631	646	618
	Total	60	1166	1178	1132

Overall, students in the treatment and control groups were similar in regard to gender and special education status (SPED). However, students in the control group were more likely to be English Language Learners (ELL) (χ^2=11.10, p = .001; see Table 5).

Table 5. Demographic descriptions for treatment and control group

Grade	Group	Male	SPED	ELL
K	Control	51%	14%	11%
	Treatment	49%	13%	8%
1st	Control	50%	11%	8%
	Treatment	50%	11%	8%
2nd	Control	52%	12%	13%
	Treatment	49%	13%	6%
All K-2	Control	51%	12%	10%
	Treatment	50%	12%	7%

Acadience Reading Beginning-of-Year Scores

The random assignment of schools successfully created similar treatment and control groups in each grade. The differences between the groups were less than .25 standard or lower for all grades (Table 6).

Table 6. Acadience Composite Score Results for Beginning of Year (after attrition)

Grade	Condition	Number of students	BOY Score	SD	Significance	Effect Size Cohen's d
K	Treatment	585	31.79	23.95	p=.12	.07
	Control	488	29.54	23.43		
1st grade	Treatment	550	99.92	40.65	p=.73	.02
	Control	502	100.78	39.40		
2nd grade	Treatment	618	161.82	87.42	p=.13	.08
	Control	514	154.08	84.66		

Analytic Approach

This report focuses on exploring the following research questions:
- How does the 95PCP affect K-2 student achievement on formative assessments (of phonics, specifically) in schools that implement the program compared to schools that do not implement the program?
- How does the impact of the 95PCP vary by school, grade, and student subgroup (gender, EL, and SPED status)?
- How does the impact of 95PCP vary by a student's BOY benchmark status (i.e., do students *Below Benchmark* at BOY achieve similar growth as students who were *At Benchmark* at BOY)?

To answer these questions, three-level hierarchical linear regression models (HLMs) with time (level 1) nested within students (level 2) nested with classrooms (level 3) were employed to examine growth in Acadience Reading Composite and subscale scores. All models contained a series of covariates including gender ("Gender"; 1=male, 0=female), ELL status ("ELL"; 1=ELL, 0=non-ELL), SPED status ("SPED"; 1=SPED, 0=non-SPED), an indicator of time ("Time"; 1=BOY, 2=EOY or 1=MOY, 2=EOY if BOY not available for a given subtest), an indicator of whether the student was in the treatment or control group ("group"; 1=Control, 2=Treatment), and an interaction between time and group calculated as the product of time*group ("Tigr").

We explored the main effects of treatment versus the control group by considering the significance of the interaction between time and group ("Tigr"). A significant interaction term would suggest that the slope (i.e., growth) in Composite scores is different for the treatment versus control groups. We also looked at growth in Composite scores separately based on students' BOY benchmark status. All analyses were conducted separately by grade using the statistical software package R 3.6.2.

Results

Educator Results

### Key Findings from the Interviews and Focus Groups

Instructional coach interviews and teacher focus groups provided context around program implementation for interpreting quantitative results and revealed educator perceptions of the PCP:

- Students are more engaged with learning, more confident with reading, and more prepared for next year as a result of the PCP.
- PCP's hands-on, interactive activities, such as phoneme articulation training, using manipulatives, and completing word chains, as well as its familiar routines, facilitate student engagement.
- Students are applying the skills they are learning in the PCP; for instance, they are identifying vowel teams in their books for independent reading, or they are using the finger-stretching strategy when they encounter unknown words.
- Teachers and coaches acknowledged that phonics is a major gap in ReadyGen, and feel that PCP fills that gap well with systematic and explicit instruction.
- The beginning of the year was an adjustment period for teachers who were new to phonics and the PCP's systematic and explicit approach, but the more they used the program, the more confident they became, and the more they saw students growing.
- Teachers and coaches felt that the LETRS professional development program worked very well with the PCP, providing the "why" behind the PCP's "how" of teaching phonics.

Key Findings from the Observations

The observations revealed a number of key areas of differences between the treatment and control groups. These differences related to lesson clarity (was the observer able to know what lesson number was being taught), student independence (the proportion of students who were prepared for the activities without help), the application of skills (in either whole group, small group, or independently, students were performing activities in which they applied the phonics skills they were learning), and student engagement (percentage of students who were on task).
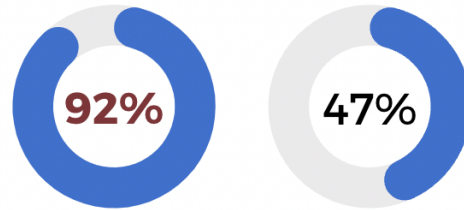
LESSON CLARITY

100%
95 PERCENT GROUP

21%
COMPARISON
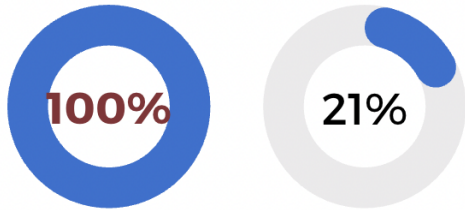
95 Percent Group had 100% of classrooms where the lesson number was clear compared to 21% in the comparison classrooms.
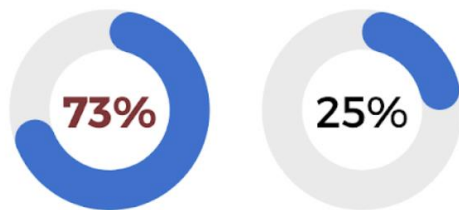
STUDENT INDEPENDENCE

92%
95 PERCENT GROUP

47%
COMPARISON

95 Percent Group had 92% of classrooms where most of the students prepared without help for each lesson segment compared to 47% in the comparison classrooms.
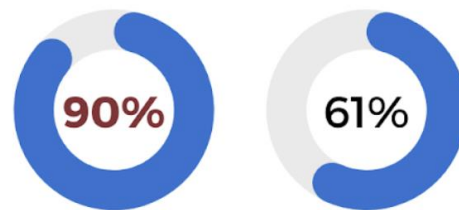
SKILL APPLICATION

73%
95 PERCENT GROUP

25%
COMPARISON

95 Percent Group teachers lead students in skill application during 73% of the lesson compared to only 25% in the comparison classrooms.

STUDENT ENGAGEMENT

90%
95 PERCENT GROUP

61%
COMPARISON

95 Percent Group classrooms had most of the students on task during the lesson compared to 61% in the comparison classrooms.

Key Findings from the Teacher Survey

The Use of Instructional Strategies

- When asked about instructional strategies associated with structured literacy, the treatment group was more likely to use all of the named methods "to a great extent," compared with the control group. [This finding is noteworthy because it is true of each strategy listed, not just a subset of the strategies for whole-group instruction.]
- When asked about the extent to which they used whole language strategies, with the exception of the "Look Say Method", the control group was more likely to use all of the named methods to a moderate or great extent compared with the treatment group.

Perceived Effectiveness of 95PCP

Majority of participants noted Skill instruction worked well for all skills mentioned. Especially true for CVC words (96%), Silent E words (96%), Closed Syllables (95%), and Short Vowels (94%). Student workbooks and presentation files were used daily and over 90% of participants found the Student Workbooks, Presentation files, and Teacher's editions to be very useful or moderately useful.

Teacher Comfort with 95PCP

Nearly all participants (99%) felt moderately or very competent when teaching the PCP. They agreed or strongly agreed that the PCP was easy to use (96%), helped their students develop phonics skills (96%), and helped teachers build their knowledge about phonics instruction (94%). Participants agreed or strongly agreed that "because of using 95 Percent Group's Phonics Core Program and attending their professional development," they understand CVC Phonics Development (97%), what is critical in the development of a skilled reader (97%), the science of reading through phonics (95%), and how to teach phonics (97%).

Student Literacy Assessment Results

Kindergarten

Within the Kindergarten grade sample, we examined growth in Composite scores as well as growth in Phoneme Segmentation Fluency (PSF) and Letter Naming Fluency (LNF) scores. Because the distribution of Composite and LNF scores were positively skewed at the end of the year, we elected to use a [Poisson distribution](#) to examine changes in scores over time.
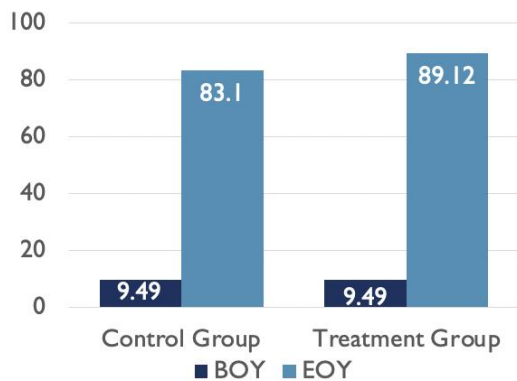
We looked separately at growth in Composite scores among students who were 1) Below or Well Below Benchmark benchmark at baseline or 2) At or Above Benchmark benchmark at baseline because BOY scores were very different for these two groups. Among students who were Below or Well Below Benchmark at BOY, students in the treatment group demonstrated more growth in Composite scores than students in the control group (IRR=1.07, p=.014, f^2=.00). Among students who were At or Above Benchmark benchmark at BOY, students in the treatment group demonstrated more growth in Composite scores than students in the control group (IRR=1.03, p=.033, f^2=.00). Figures 3a-b represent these results graphically. There were no significant findings for the Composite or LNF scores when all the kindergartners were combined.

For the MOY-EOY assessments, PSF scores followed a normal distribution while CLS and WWR scores followed a Poisson distribution. There was a significant effect of treatment on PSF scores; students in the treatment group demonstrated more growth in PSF scores than students in the control group (B=2.26, p=.011, f^2=.01; see Figure 3c). There was a significant effect of treatment on CLS scores; students in the treatment group demonstrated more growth in CLS scores than students in the control group (B=1.03, p=.045, f^2=.00; see Figure 3d). There were no statistically meaningful

differences between treatment and control group in regard to growth in WWR scores. The complete output for each model can be found in [Appendix 1](#).

Figure 3a-b. Kindergarten students in the treatment group demonstrated significantly more growth in Composite scores than students in the control group when grouped by BOY Benchmark Status

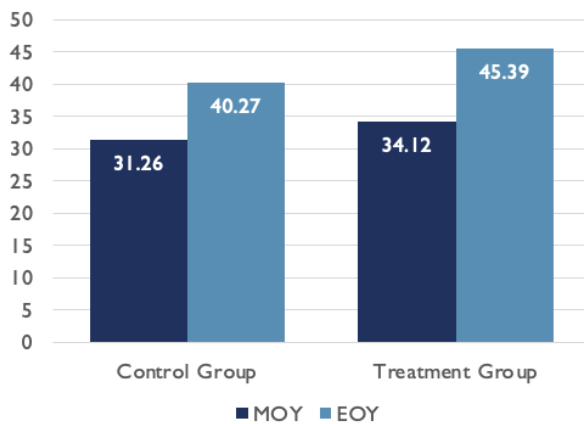*3a. Below or Well Below Benchmark at BOY*   *3b. At or Above Benchmark at BOY*
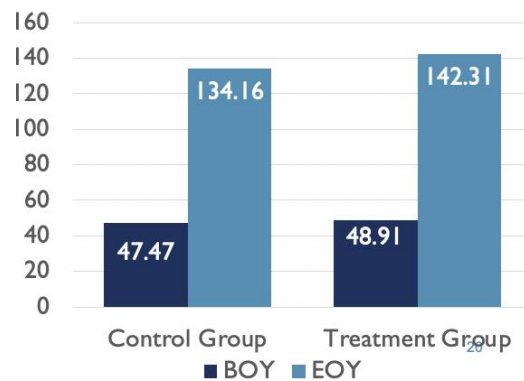
Figure 3c. Kindergarten students in the treatment group demonstrated significantly more growth in PSF scores than students in the control group

Figure 3d. Kindergarten students in the treatment group demonstrated significantly more growth in CLS scores than students in the control group
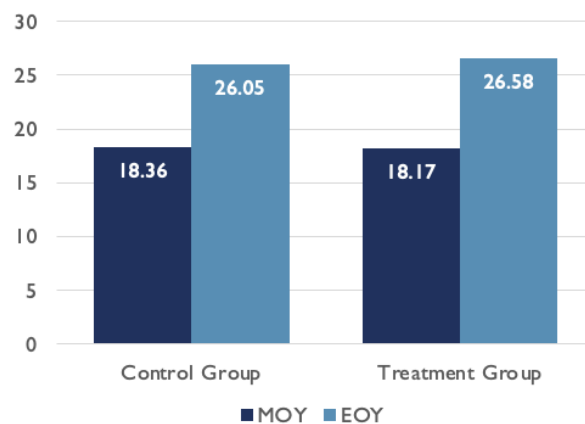
First Grade

Within the First-Grade sample, we examined growth in Composite scores as well as growth in Nonsense Word Fluency Correct Letter Sound (CLS) and Whole Words Read (WWR) scores. Within the First Grade BOY-EOY assessments, there were no statistically meaningful differences between the treatment and control groups in regard to growth in Composite scores and WWR scores. There were

also no significant findings in regard to benchmark status. That is, students tended to demonstrate similar growth in Composite scores regardless of benchmark status.

There was a significant effect of treatment on CLS scores; students in the treatment group demonstrated more growth in CLS scores than students in the control group (B=3.54, p=.026, f^2=.00; Figure 4a). The complete output for each model can be found in Appendix 2.
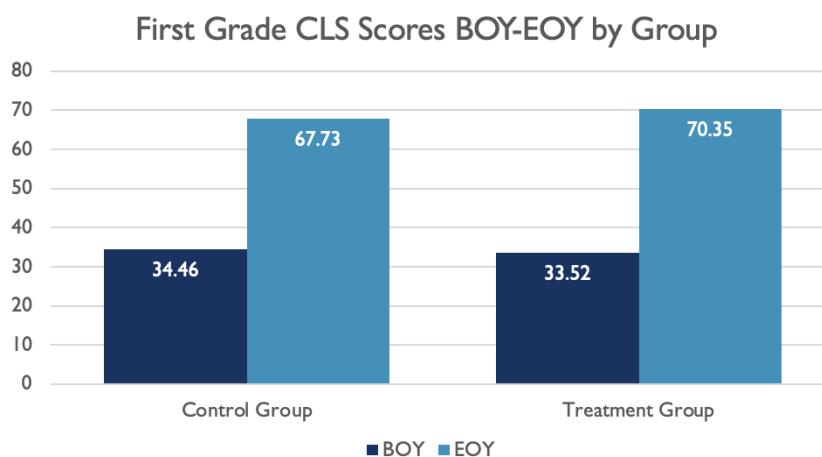
Figure 4a. First-graders in the treatment group demonstrated significantly more growth in CLS scores than students in the control group

First Grade CLS Scores BOY-EOY by Group

Second Grade

Within the Second-Grade sample, we examined growth in Composite scores as well as improvement in Oral Reading Fluency Words Correct Per Minute (ORF) scores, Oral Reading Fluency Accuracy scores (ACCURACY), Oral Reading Fluency Error (ERR) scores, Retell Total (RETELL) scores, and Retell Quality (RETELLQR) scores. Students in the treatment group demonstrated significantly more growth in Composite scores (B=8.99, p=.004, f^2=.01), ORF scores (B=4.20, p<.001, f^2=.01), and ORF Accuracy scores (B=2.42, p=.031, f^2=.01) than students in the control group (Figures 5a, c-d). For students who were At or Above Benchmark at BOY, the treatment group demonstrated significantly more growth in Composite scores (B=10.26, p=.004, f^2=.01; see Figure 5b).
There were no statistically meaningful differences between the treatment and control groups regarding ERR, RETELL, or RETELL QR scores, or moderating effect of teacher training on composite scores. The complete output for each model can be found in Appendix 3.

Figure 5a. Second-graders in the treatment group demonstrated significantly more growth in Composite scores than students in the control group

Second Grade (All) Composite BOY-EOY by Group

Control Group: BOY 166.81, EOY 241.23
Treatment Group: BOY 176.12, EOY 259.55

■ BOY ■ EOY

Figure 5b. For Second-graders who were At or Above Benchmark at BOY, the treatment group demonstrated significantly more growth in Composite scores than students in the control group

Second Grade (At/Above at BOY) Composite BOY-EOY by Group

Control Group: BOY 209.13, EOY 285.23
Treatment Group: BOY 210.99, EOY 297.35

■ BOY ■ EOY

Figure 5c. Second-graders in the treatment group demonstrated significantly more growth in overall ORF scores than students in the control group

Second Grade ORF Overall Scores BOY-EOY by Group

Control Group: BOY 62.02, EOY 89.74
Treatment Group: BOY 66.55, EOY 98.48

■ BOY ■ EOY

Figure 5d. Second-graders in the treatment group demonstrated significantly more growth in ORF Accuracy scores than students in the control group
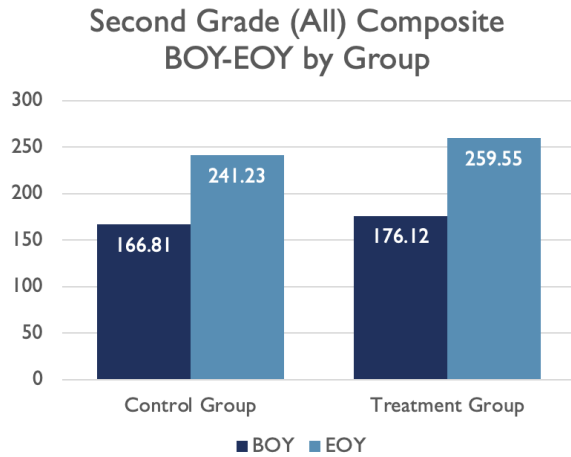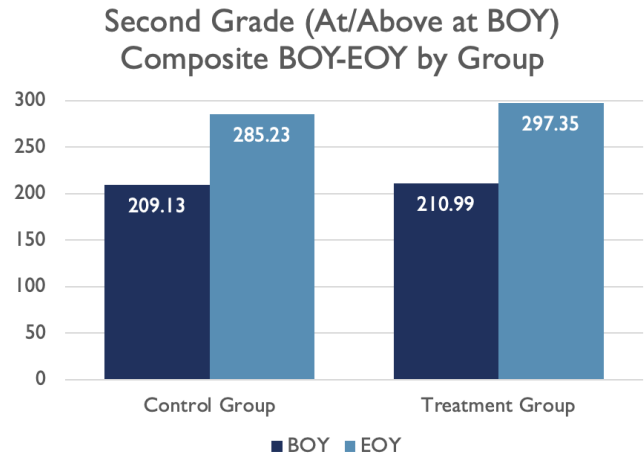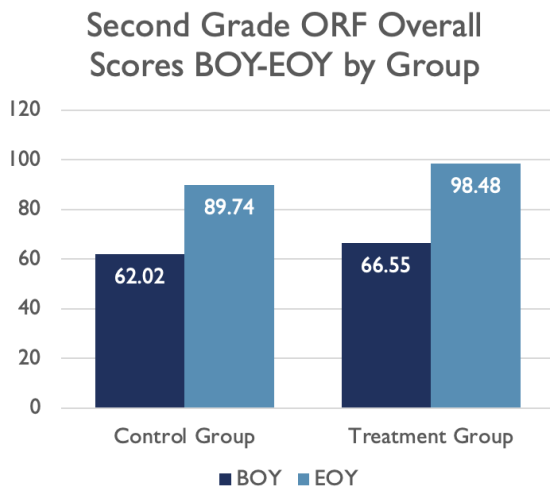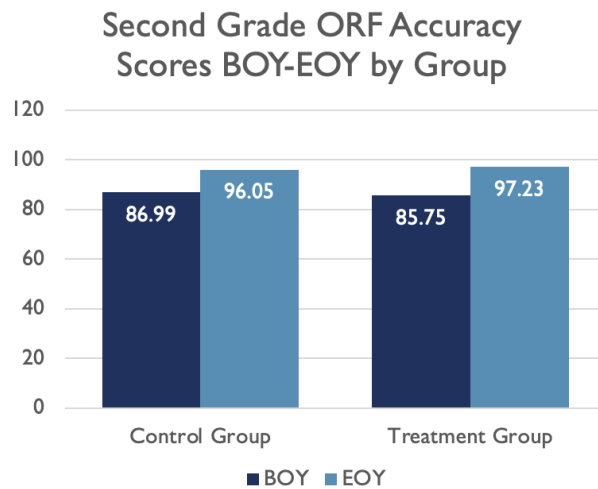
Second Grade ORF Accuracy Scores BOY-EOY by Group

Control Group: BOY 86.99, EOY 96.05
Treatment Group: BOY 85.75, EOY 97.23

■ BOY ■ EOY

Conclusion & Implications for Future Research

The first full year of implementation for any new educational program can be challenging. To change the way a school teaches reading by using structured phonics can be overwhelming for teachers and learners. The research team heard exactly that from the teachers in the treatment group in this study as the teachers worked to simultaneously learn the content and cadence of 95PCP and teach its lessons, but this was only half of the story. The initial struggle to learn a new way of teaching early literacy was overshadowed by their students' reading growth and the sense, expressed by the treatment group teachers, that 95PCP met an urgent need in their curricular toolbox. 95PCP facilitated alignment between their own burgeoning knowledge of the science of reading (SOR) and their teaching tools.

The teachers' implementation stories, gathered through extensive and immersive interviews, focus groups and classroom observation, suggest that even though it took teachers some time to adjust to using the 95PCP, the teachers saw growth in their students. The student assessment data validated what the teachers observed firsthand in their own classrooms. The data show the 95PCP had a positive, significant impact on student achievement for all grades (K-2). There were no noticeable differences in how the program impacted students from different subgroups. For kindergarten in particular, even students who started the year Below Benchmark got a boost in growth from this core supplemental program.

- *Kindergarten students in the treatment group demonstrated significantly more growth in Composite scores than students in the control group when grouped by BOY Benchmark Status.*
- *First grade students in the treatment group demonstrated more growth in CLS scores than students in the control group.*
- *Second-graders in the treatment group demonstrated significantly more growth in Composite scores than students in the control group.*

Future research will focus on how well these initial gains sustain and build over multiple years of use.

Teacher voices heard throughout the interviews and focus groups suggest that this district's teachers are thirsty for new tools that match their growing awareness about the importance and potential impact of phonics instruction in teaching and learning reading. This expressed desire for and satisfaction with news literacy teaching tools, such as 95PCP, suggests that adoption and buy-in to new tools could influence teachers' fidelity to its use and related gains in student learning. Future research will explore the extent to which teachers' growing knowledge of phonics, whether that be gained through a Science of Reading program such as LETRS or independent study, affects teachers' implementation and fidelity to the use of 95PCP.

Appendices

For each grade, a list of all the results is provided. Additional details with the statistical output are provided for all significant results.

Appendix 1: Kindergarten Results

BOY-EOY Assessments

- **Composite score:** (IRR=1.01, p=.52) - no significant differences between treatment and control group
- **LNF score:** (IRR=1.00, p=.93) - no significant differences between treatment and control group

- **For At or Above Benchmark students:** Composite score: (IRR=1.03, p=.036) - significant differences between treatment and control group
- **For Below or Well Below Benchmark students:** Composite score: (IRR=1.07, p=.014) - significant differences between treatment and control group
- **For treatment group:** Composite score by teacher training: (IRR=0.92, p<.001) - significant differences by teacher trainings

MOY-EOY Assessments

- **PSF score:** (B=2.26, p=.011) - significant differences between treatment and control group
- **CLS score:** (IRR=1.03, p=.045) - significant differences between treatment and control group
- **WWR score:** (IRR=1.04, p=.47) - no significant differences between treatment and control group

Details for BOY-EOY Assessments

Below or Well Below Benchmark Comparisons

The variable of interest is "Tigr," which represents the interaction between "Time" and "Group," and tells us whether growth in the outcome is different for students in the control versus treatment groups.

Predictors	comp k		
	Incidence Rate Ratios	CI	p
(Intercept)	1.16	0.87 – 1.54	0.308
Time	8.18	7.46 – 8.97	<0.001
Gender	1.07	0.98 – 1.18	0.144
SPED	0.71	0.63 – 0.80	<0.001
ELL	0.87	0.75 – 1.01	0.076
group	0.94	0.79 – 1.11	0.452
Tigr	1.07	1.01 – 1.14	**0.014**

Random Effects

σ^2	0.02
τ_{00} student_id:class_name	0.25
τ_{00} class_name	0.03
ICC	0.93
N student_id	512
N class_name	59
Observations	1024
Marginal R^2 / Conditional R^2	0.802 / 0.986

At or Above Benchmark Comparisons

The variable of interest is "Tigr," which represents the interaction between "Time" and "Group," and tells us whether growth in the outcome is different for students in the control versus treatment groups.

	comp k		
Predictors	Incidence Rate Ratios	CI	p
(Intercept)	16.78	15.06 – 18.71	<0.001
Time	2.76	2.64 – 2.89	<0.001
Gender	0.99	0.95 – 1.04	0.785
SPED	0.87	0.80 – 0.94	**0.001**
ELL	1.04	0.95 – 1.13	0.397
group	1.00	0.94 – 1.07	0.970
Tigr	1.03	1.00 – 1.06	**0.036**

Random Effects

σ^2	0.01
$\tau_{00 \ student\_id:class\_name}$	0.06
$\tau_{00 \ class\_name}$	0.00
ICC	0.85
$N_{student\_id}$	561
N_{class_name}	59
Observations	1122
Marginal R^2 / Conditional R^2	0.801 / 0.970

Details for MOY-EOY Assessments

PSF Scores

| | psf k | | |
Predictors	Estimates	CI	p
(Intercept)	21.65	14.92 – 28.38	**<0.001**
Time	6.75	3.91 – 9.58	**<0.001**
Gender	2.75	1.18 – 4.32	**0.001**
SPED	-13.87	-16.25 – -11.49	**<0.001**
ELL	-4.07	-6.95 – -1.18	**0.006**
group	0.60	-3.51 – 4.71	0.775
Tigr	2.26	0.51 – 4.00	**0.011**
Random Effects			
σ^2	104.98		
τ_{00} student_id:class_name	114.50		
τ_{00} class_name	28.93		
ICC	0.58		
N student_id	1071		
N class_name	59		
Observations	2142		
Marginal R^2 / Conditional R^2	0.185 / 0.656		

CLS Scores

Predictors	cls k		
	Incidence Rate Ratios	*CI*	*p*
(Intercept)	13.49	10.24 – 17.78	**<0.001**
Time	1.38	1.31 – 1.46	**<0.001**
Gender	1.04	0.95 – 1.14	0.349
SPED	0.50	0.44 – 0.58	**<0.001**
ELL	0.93	0.79 – 1.10	0.410
group	0.96	0.81 – 1.14	0.651
Tigr	1.03	1.00 – 1.07	**0.045**

Random Effects

σ^2	0.05
τ_{00} student_id:class_name	0.53
τ_{00} class_name	0.06
ICC	0.93
N student_id	1071
N class_name	59
Observations	2142
Marginal R^2 / Conditional R^2	0.124 / 0.937

Appendix 2: First Grade Results

BOY-EOY Assessments

- **Composite score:** (B=6.07, p=.16) - no significant differences between treatment and control group
- **CLS score:** (B=3.56, p=.025) - significant differences between treatment and control group
- **WWR score:** (B=1.05, p=.13) - no significant differences between treatment and control group

- **For At or Above students:** Composite score: (B=3.70, p=.56) - no significant differences between treatment and control group
- **For Below or Well Below Benchmark students:** Composite score: (B=8.90, p=.10) - no significant differences between treatment and control group
- **For treatment group:** Composite score by teacher training: (B=-12.76, p=.035) - significant differences by teacher trainings

MOY-EOY Assessments

- **ORF score:** (B=0.66, p=.50) - no significant differences between treatment and control group
- **ORF Accuracy score:** (B=0.67, p=.42) - no significant differences between treatment and control group
- **ERR score:** (B=-0.50, p=.06) - no significant differences between treatment and control group
- **RETELL score:** (B=1.05, p=.11) - no significant differences between treatment and control group
- **RETELL QR score:** (B=0.01, p=.91) - no significant differences between treatment and control group

Details for BOY-EOY Assessments

Predictors	cls 1		
	Estimates	CI	p
(Intercept)	5.69	-4.64 – 16.02	0.280
Time	29.71	24.71 – 34.71	<0.001
Gender	-5.29	-8.31 – -2.28	**0.001**
SPED	-17.88	-22.94 – -12.83	<0.001
ELL	-3.60	-9.38 – 2.18	0.222
group	-4.50	-10.87 – 1.87	0.166
Tigr	3.56	0.44 – 6.69	**0.025**

Random Effects

σ^2	331.19
τ_{00} student_id:class_name	427.43
τ_{00} class_name	37.69
ICC	0.58
N student_id	1047
N class_name	59
Observations	2094
Marginal R^2 / Conditional R^2	0.300 / 0.709

BOY-EOY Assessments

- **Composite score:** (B=9.01, p=.004) - significant differences between treatment and control group
- **ORF score:** (B=4.21, p<.001) - significant differences between treatment and control group
- **ERR score:** (B=0.40, p=.15) - no significant differences between treatment and control group
- **RETELL score:** (B=0.01, p=.99) - no significant differences between treatment and control group
- **RETELL QR score:** (B=-0.02, p=.82) - no significant differences between treatment and control group
- **ORF Accuracy score:** (B=2.42, p=0.031) - significant differences between treatment and control group

- **For At or Above Benchmark students:** Composite score: (B=10.26, p=.004) - significant differences between treatment and control group
- **For Below or Well Below Benchmark students:** Composite score: (B=5.83, p=.30) - no significant differences between treatment and control group
- **For treatment group:** Composite score by teacher training: (B=-2.19, p=.62) - no significant differences by teacher trainings

Details for BOY-EOY Assessments

Composite Score

Predictors	comp 2		
	Estimates	CI	p
(Intercept)	92.09	61.70 – 122.47	<0.001
Time	65.41	55.58 – 75.24	<0.001
Gender	-5.21	-15.06 – 4.63	0.299
SPED	-90.29	-105.29 – -75.29	<0.001
ELL	-2.40	-20.24 – 15.44	0.792
group	0.30	-18.05 – 18.65	0.975
Tigr	9.01	2.96 – 15.07	**0.004**
Random Effects			
σ^2	1336.45		
$\tau_{00\ \text{student\_id:class\_name}}$	6253.41		
$\tau_{00\ \text{class\_name}}$	605.90		
ICC	0.84		
$N_{\text{student\_id}}$	1131		
$N_{\text{class\_name}}$	60		
Observations	2262		
Marginal R^2 / Conditional R^2	0.234 / 0.875		

At or Above Benchmark Comparisons

The variable of interest is "Tigr," which represents the interaction between "Time" and "Group," and tells us whether growth in the outcome is different for students in the control versus treatment groups.

Predictors	Estimates	CI	p
		comp 2	
(Intercept)	141.43	117.68 – 165.17	<0.001
Time	65.84	54.20 – 77.47	<0.001
Gender	3.44	-3.30 – 10.17	0.318
SPED	-9.96	-23.63 – 3.72	0.153
ELL	15.58	3.27 – 27.89	**0.013**
group	-8.40	-22.66 – 5.86	0.248
Tigr	10.26	3.19 – 17.32	**0.004**
Random Effects			
σ^2	1126.15		
τ_{00} student_id:class_name	1445.84		
τ_{00} class_name	169.64		
ICC	0.59		
N student_id	710		
N class_name	60		
Observations	1420		
Marginal R^2 / Conditional R^2	0.386 / 0.748		

ORF Scores

Predictors	orf 2 Estimates	orf 2 CI	orf 2 p
(Intercept)	33.98	21.90 – 46.06	**<0.001**
Time	23.51	19.96 – 27.06	**<0.001**
Gender	-1.78	-6.00 – 2.44	0.408
SPED	-30.59	-37.01 – -24.17	**<0.001**
ELL	1.16	-6.46 – 8.79	0.765
group	0.32	-6.95 – 7.60	0.930
Tigr	4.21	2.02 – 6.40	**<0.001**

Random Effects

σ^2	174.51
τ_{00} student_id:class_name	1183.76
τ_{00} class_name	93.70
ICC	0.88
N student_id	1131
N class_name	60
Observations	2262
Marginal R^2 / Conditional R^2	0.188 / 0.902

ORF Accuracy scores

Predictors	comp acc 2 Estimates	CI	p
(Intercept)	81.59	74.45 – 88.73	**<0.001**
Time	6.64	3.06 – 10.22	**<0.001**
Gender	-1.65	-3.70 – 0.40	0.114
SPED	-21.26	-24.37 – -18.14	**<0.001**
ELL	-3.48	-7.16 – 0.20	0.064
group	-3.66	-8.00 – 0.67	0.098
Tigr	2.42	0.22 – 4.63	**0.031**

Random Effects

σ^2	177.38
τ_{00} student_id:class_name	212.32
τ_{00} class_name	13.93
ICC	0.56
N student_id	1131
N class_name	60
Observations	2262
Marginal R^2 / Conditional R^2	0.159 / 0.631