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Evaluating the Effectiveness of 95 Phonics Core Program™ in 4th and 5th Grade

2023-2024 School Year Report

ESSA PROMISING III
LXD RESEARCH

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Understanding ESSA Evidence

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

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

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

This product meets the requirements for Tier 3:

- ✔ In correlational design, students who used the program are compared to normed referenced samples or other group averages for comparison.

- ✔ Multiple studies with the proper design and implementation with at least two teachers and 30 students show statistically significant, positive findings.

- ✔ The study uses a program implementation that could be replicated.

- ⭐ A third-party research organization has reviewed the documentation for ESSA validation.

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

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

EFFICACY STUDY SUMMARY
2023-2024

ESSA PROMISING III
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PROGRAM DESCRIPTION

95 Phonics Core Program (95 PCP) is a Tier 1, phonics curriculum designed for grades K-5 to support students with phonics and morphology skills and reading more intricate texts. For grades 4 and 5, the 30-minute daily lessons focus on word study where students move beyond simple decoding where they can understand words in decodable and non-decodable text passages. The lessons include explicit instruction on syllable types and morphology, reading authentic texts, and demonstrating comprehension through oral and written responses.

STUDY DETAILS

Location
Red Clay, Delaware

Analysis Sample Sizes
Grades 4
- 3 Treatment schools, 192 students

Grades 5
- 6 Treatment schools, 489 students

Demographics
72% White | 18% Black | 3% Asian
Percent Hispanic/Latinx = 36%

Time Frame
August 2023 - May 2024

Implementation Description
- 95 PCP teachers used 95 PCP daily for their Tier 1 core phonics instruction

Methodology
- Compared student BOY-EOY scores on i-Ready and DeSSA State Test

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STUDY CONTEXT

95 Percent Group hired LXD Research as third-party researchers to investigate the impact of 95 PCP Tier 1 instruction on 4th and 5th graders literacy in Red Clay, Delaware. Nine schools volunteered to use 95 PCP. Using the district's assessment of i-Ready from the Beginning-of-Year (BOY) and End-of-Year (EOY), LXD Research was able to run analyses to understand the impact of 95 PCP on student scores. The EOY findings show encouraging results that using 95 PCP as core instruction can improve students placement levels on i-Ready and close the gap of students 2+ grades behind.

KEY FINDINGS

Fourth and fifth graders using 95 PCP had mean score improvements from the BOY to EOY, significant performance level changes, and substantial improvement on subdomains.

4th grade
- Overall scale scores increased by 30 points
- Significantly more students were on/above grade level by EOY, a 24% increase from BOY
- Phonics subdomain average mean growth of +44.8 points

5th grade
- Overall scale scores increased by 27 points
- Significantly more students were on/above grade level by EOY, an 11% increase from BOY
- Phonics subdomain average mean growth of +31.2 points

Significantly more fourth and fifth graders using 95 PCP were considered on/above grade level by the EOY than in the BOY.

On/Above Benchmark on i-Ready at BOY and EOY
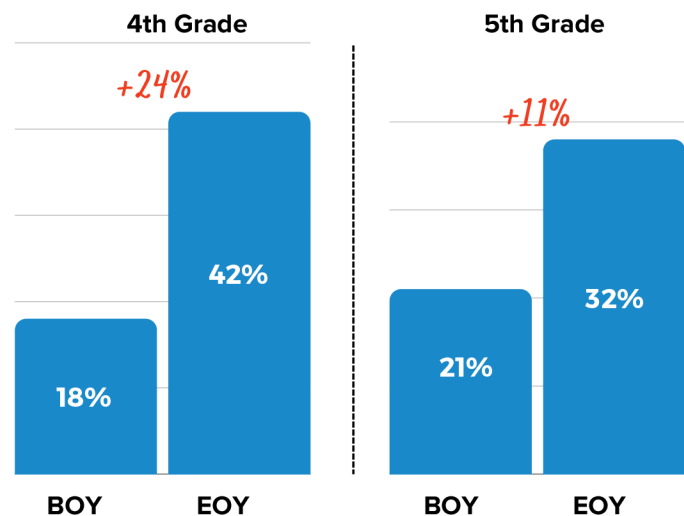
4th: $\chi^2 = 51.6$, $p < .001$, $\phi = .26$;   5th: $\chi^2 = 165.4$, $p < .001$, $\phi = .19$

OVERALL GROWTH

Both grades showed overall scale score growth on i-Ready from BOY-EOY. Fourth graders' Overall Scale Scores grew 30 points on average and fifth graders' Overall Scale Scores grew 27 points on average, exceeding the national norms of +26 points and +21 points, respectively.
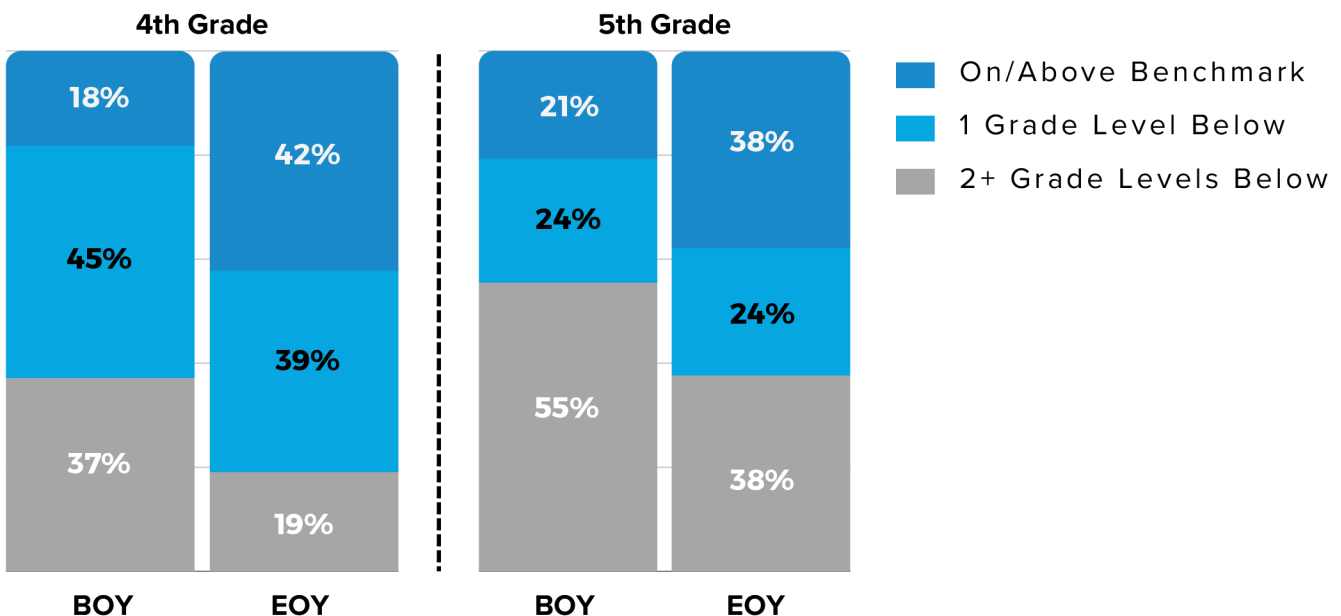
Grade	n	BOY		EOY		Mean Growth from BOY-EOY
		Mean	SD	Mean	SD	
Fourth	188	512.2	58.8	542.21	57.93	30.01 points
Fifth	461	531.75	60.46	558.77	57.74	27.02 points

PERFORMANCE LEVEL GROWTH

Focusing on the i-Ready ELA performance levels from BOY-EOY, LXD first analyzed the change in students on/above grade level. For both grades, there was a significant growth in the percentage of students on/above grade level. Fourth grade students grew significantly in on grade level percentage from BOY (18%) to EOY (42%; $\chi2$ = 51.61, p < .001, with a moderate effect size, ϕ = .26). Fifth graders on/above grade level grew from 21% to 38%, $\chi2$ = 165.41, p < .001, with a small effect size (per Cohen, 1988), ϕ = .19.

Of the students below grade level, students were either considered one grade level below or two or more grade levels below. For both grades, performance level group membership changed substantially from BOY to EOY. Significantly fewer fourth graders were considered 2 or more grade levels behind by EOY, decreasing from 37% to 19%. Significantly fewer fifth graders were considered 2 or more grade levels below by EOY, decreasing from 55% to 38%.

i-Ready ELA Overall Performance Levels at BOY and EOY

4th Grade

BOY: 18% On/Above Benchmark, 45% 1 Grade Level Below, 37% 2+ Grade Levels Below
EOY: 42% On/Above Benchmark, 39% 1 Grade Level Below, 19% 2+ Grade Levels Below

5th Grade

BOY: 21% On/Above Benchmark, 24% 1 Grade Level Below, 55% 2+ Grade Levels Below
EOY: 38% On/Above Benchmark, 24% 1 Grade Level Below, 38% 2+ Grade Levels Below

Legend:
- On/Above Benchmark
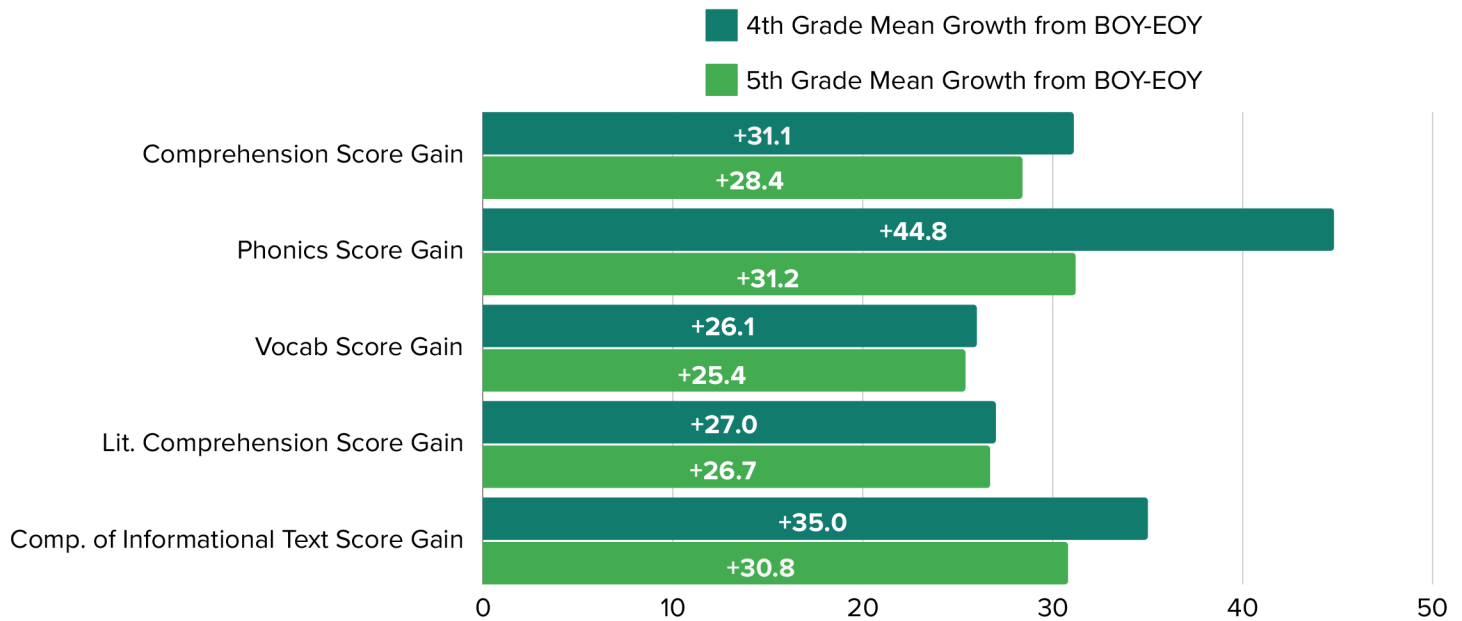- 1 Grade Level Below
- 2+ Grade Levels Below

Note: These are relative to the time of year, so they grew much more than the norm.

I-READY SUBDOMAIN FINDINGS

Analysis of subdomain scores for students in both grades reveal substantial growth across various reading subdomains from BOY to EOY. In fourth grade, the phonics scale score showed a mean growth of 44.8 points, increasing from a mean of 463.13 (SD = 56.09) at BOY to 507.88 (SD = 55.48) at EOY. The Average **Phonics gain was the largest subdomain growth for both grades,** with 4th graders growing 44.8 points on average and 5th graders growing 31.2 points on average**.** Interestingly, the comprehension subdomain growth was on par with the other subdomains, showing that explicit phonics instruction predicts improvement in comprehension.

Subdomain Findings for Each Grade

■ 4th Grade Mean Growth from BOY-EOY

■ 5th Grade Mean Growth from BOY-EOY

Subdomain	4th Grade	5th Grade
Comprehension Score Gain	+31.1	+28.4
Phonics Score Gain	+44.8	+31.2
Vocab Score Gain	+26.1	+25.4
Lit. Comprehension Score Gain	+27.0	+26.7
Comp. of Informational Text Score Gain	+35.0	+30.8

Note: Phonics was only being included in the Overall Scale Score for 28% of the students which could have impacted the statistical significance.

DeSSA ELA STATE TEST SCORES

Both grades grew significantly on the DeSSA ELA State Test from the 2023 Spring scores to the 2024 Spring scores. Fourth graders grew 26 points (t = 5.2, p < .001) and fifth graders grew 33 points (t = 9.7, p < .001). These supplemental findings point to the 95 PCP positively affecting student growth on the state assessment as well as the district wide assessments.

*

+33 Points

□ 2023

□ 2024

*

+ 26 Points

* showing significance

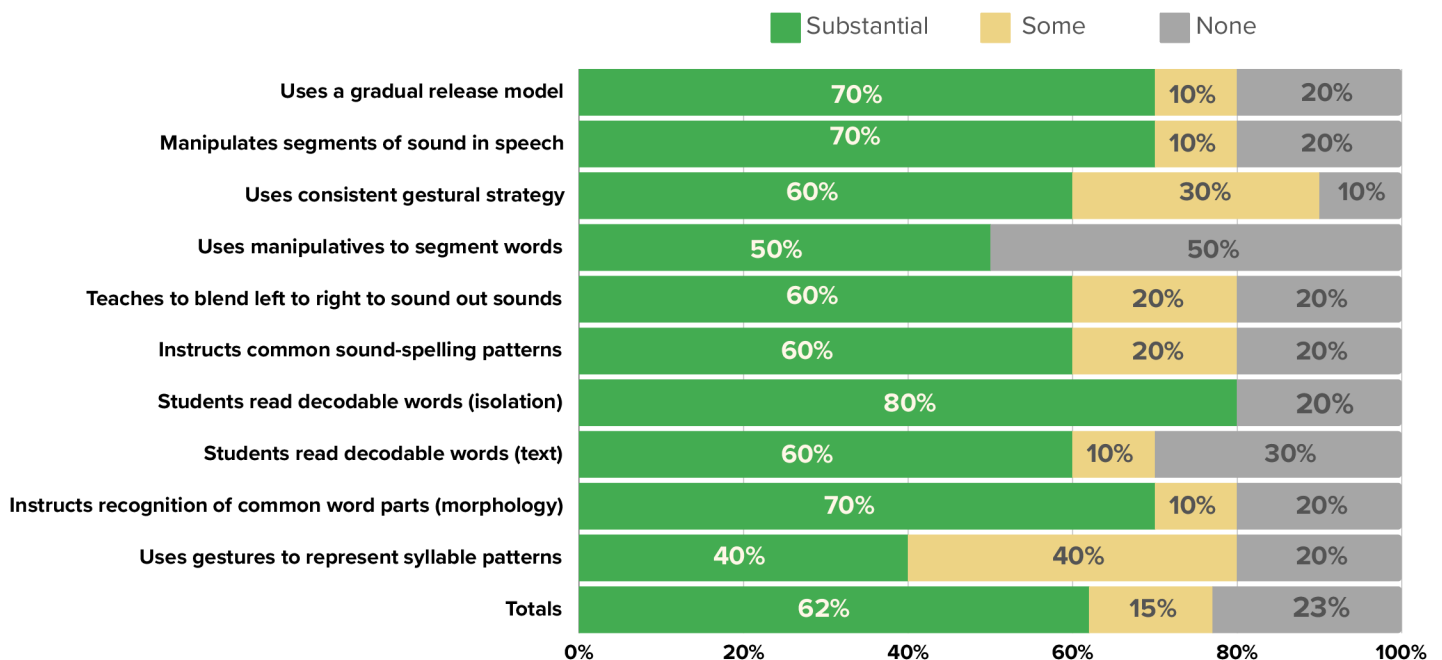**4th Grade**   **5th Grade**
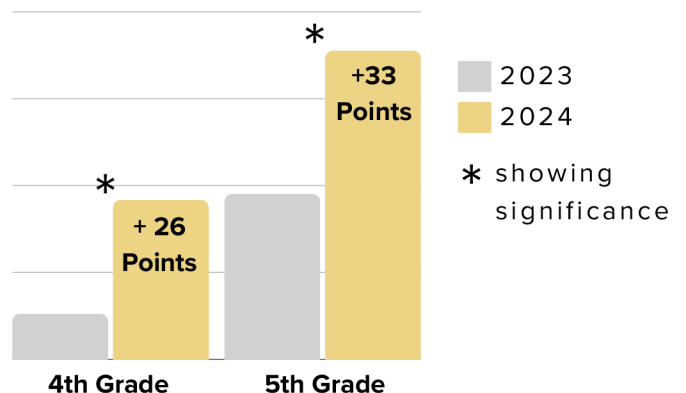
EDUCATOR VOICES

To understand the 95 PCP implementation perspective, 14 teachers completed a survey and LXD interviewed multiple administrators (i.e. literacy coaches) from participating schools.

- Teachers reported allocating 26-30 minutes per day for phonics instruction for 5 days per week, while administrators reported allocating 30-40 minutes. Teachers mentioned that their school day tended to be filled with various requirements spanning different subjects that the students need to learn for the state assessments which influenced the lesson timing.
- Administrators reported themselves and their teachers enjoying the routine & style of the program because it required minimal preparation effort. Administrators and teachers also enjoyed the manipulatives associated with the program as it kept students engaged.
- Teachers reported that students improved in literacy skills, such as understanding syllable types, demonstrating phonics patterns, and reading more fluently after using 95 PCP.

> "they're [the students] feeling like they can confidently find syllables, they can confidently decode parts of words, whereas they just would see the words before and it would just be like fear and intimidation…"
> - Literacy Coach implementing 95 PCP

SITE OBSERVATIONS - PHONICS INSTRUCTIONAL STRATEGIES

LXD Research visited fourth and fifth grade classrooms implementing 95 PCP across the Red Clay Consolidated School District. Observers noted the level of phonics instructional strategies being used during the lesson as substantial, some, or none. 70% of the lessons observed had a substantial amount of the gradual release model teaching strategy, a key component to teaching phonics. 80% of lessons observed had students reading decodable words in isolation, providing students with exposure and opportunities to practice their phonics and fluency skills. Overall, 62% of lessons observed had a substantial amount of phonics instructional strategies demonstrating that the implementation of 95 PCP was aligned with the design of the program.

	Substantial	Some	None
Uses a gradual release model	70%	10%	20%
Manipulates segments of sound in speech	70%	10%	20%
Uses consistent gestural strategy	60%	30%	10%
Uses manipulatives to segment words	50%		50%
Teaches to blend left to right to sound out sounds	60%	20%	20%
Instructs common sound-spelling patterns	60%	20%	20%
Students read decodable words (isolation)	80%		20%
Students read decodable words (text)	60%	10%	30%
Instructs recognition of common word parts (morphology)	70%	10%	20%
Uses gestures to represent syllable patterns	40%	40%	20%
Totals	62%	15%	23%

Evaluating the Effectiveness of 95 Phonics Core Program™ in 4th and 5th Grade

2023-2024 School Year Report

Conducted by Rachel L. Schechter, Ph.D., Isabella Ilievski, Ed.M., and Rachel Gross, Ph.D.
LXD Research at Charles River Media Inc.

Abstract

LXD Research was engaged by 95 Percent Group to conduct a third-party, mixed-methods efficacy study of their 95 Phonics Core Program (95 PCP) to evaluate the impact on fourth and fifth grade literacy outcomes over the school year 2023-2024. LXD analyzed the formative assessment data from i-Ready, focusing on overall scale scores, subdomains, and performance level growth, as well as the summative assessment data of the Delaware System of Student Assessment's English Language Arts State Test (DeSSA). LXD also conducted qualitative research activities including educator surveys, administrator interviews, and site observations to evaluate the implementation and training from the perspective of participating educators. Results indicated that one year of 95 PCP positively impacted the fourth and fifth grade literacy by improving their i-Ready Overall Scale Scores from beginning-of-year (BOY) to end-of-year (EOY). Additionally, on the DeSSA ELA State Test, both grades significantly improved from Spring 2023 to Spring 2024. The educator insights provided context for our quantitative findings, and showed that there was a learning curve for the fourth and fifth grade classroom teachers regarding both the content and science of reading practices. Teachers did report feeling more comfortable with program use by EOY, and reported meaningful growth in their students' reading abilities. These educator perspectives, paired with the significant quantitative findings, indicated the efficacy of 95 PCP for fourth and fifth grade students.

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Introduction

Reading proficiency remains a significant challenge in the current educational landscape, particularly for fourth grade students. The lingering effects of the COVID-19 pandemic are evident in their reading abilities. According to the 2022 National Assessment of Educational Progress (NAEP), 65% of fourth graders scored basic or below in reading, representing the lowest scores in three decades. Looking at the national trends more deeply reveals a pattern that third graders in 2023, who were in kindergarten during the pandemic, have made the least improvement from two years ago compared to other grades and none at all from the previous year (Amplify, 2023). This is particularly worrisome because students in upper elementary are required to read and understand more complex texts across subjects.

The fourth grade presents an additional challenge known as the "fourth grade slump", where students transition from basic literacy skills to tackling more advanced and sophisticated texts. This shift requires the ability to decode and a strong knowledge of multisyllabic words and morphology to enable critical thinking when reading (Fiester, 2010). Compounding this hurdle, fifth graders also struggle with academic demands as they prepare for their transition from elementary to middle school (U.S. Department of Education, 2008).

Research suggests that aligning reading instruction with science of reading practices can significantly improve student outcomes (Shanahan, 2010). Science of reading is a research-based framework emphasizing decoding (D) and language comprehension (LC) as essential components for reading comprehension (RC), expressed as RC = D x LC. Fourth grade students are expected to extract meaning from text, identify details, make inferences, and express opinions with contextual support (NAEP, 2022). The What Works Clearinghouse reading guide interventions recommends targeted interventions to improve decoding skills, such as reading multisyllabic words, as a foundation for comprehending increasingly complex texts (Vaughn et al., 2022).

The 95 Phonics Core Program (95 PCP) is core literacy program designed K-5, but specifically for 4th and 5th grade, it is a curriculum designed to support students' development in morphological skills and engage them in reading more intricate texts to establish a robust foundation for word study. The program has 30 weekly lessons structured for 30-minute daily sessions, and is meant to be integrated into the broader reading and language arts curriculum of a school. Word study is emphasized in 95 PCP, and asks students to engage in both informational and literary texts to foster their ability to decipher and understand words within various contexts. 95 PCP moves students beyond simple decoding and transitions from decodable texts to non-decodable passages, encouraging them to become adept "word detectives." Each lesson encompasses activities that align with Common Core Standards such as warm-ups for skill review, explicit instruction on syllable types and morphology, reading authentic texts, and demonstrating comprehension through oral and written responses. Furthermore, unit tests are provided as

pre-assessments to evaluate students' foundational skills before progressing into more complex word structures. These pre-test results assist educators to tailor the intervention accordingly.
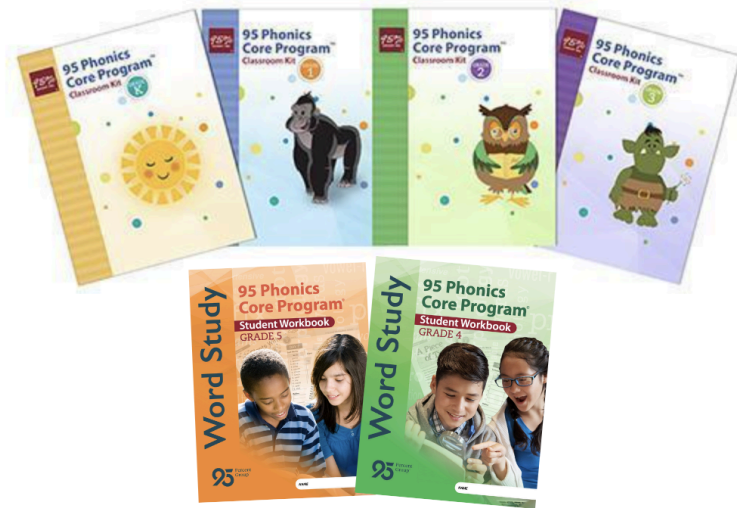
95 Percent Group enlisted LXD Research to conduct a third-party evaluation of the 95 Phonics Core Program as it was implemented during the 2023-2024 school year in a Delaware school district. All the elementary schools use ReadyGen as a core reading curriculum, and nine schools volunteered to pilot 95 PCP as phonics instruction instead. Student growth was analyzed throughout the 2023-2024 school year to evaluate the impact of 95 PCP.

Evaluation Questions

The evaluation aims to answer the following research questions:

1. How does 95 PCP affect student achievement on formative assessments (i.e. phonics skills)?
2. How does the impact of 95 PCP vary by school, grade, and student subgroups (e.g., students who qualify for Free or Reduced-price Meals (FRM), English language learners, students in special education, and racial and ethnic minority students)?
3. What is the nature and extent of the 95 PCP implementation?
   a. How is 95 PCP typically implemented?
   b. To what extent is 95 PCP implemented with fidelity, and does the program adhere to the Theory of Action?
   c. How do contextual factors affect 95 PCP implementation, such as the content and quality of professional development, and characteristics of districts and schools, such as administrator support?
4. What are teacher and administrator perceptions about the quality and impact of the 95 PCP?
   d. What are teachers' and administrators' initial reactions to the 95 PCP, and associated materials, content, pacing, and professional development?

     e. What suggestions do participating teachers and administrators have for improvement?

5. What is the association between variations in the 95 PCP implementation and student outcomes?

Method

Design

This study used a mixed-method approach, including a quasi-experimental quantitative design complemented by classroom observations, teacher surveys, and administrator interviews. This combination of methods allowed researchers to evaluate how the materials were used in the classroom, solicited educator feedback and the perceived impact of the program, while also evaluating the impact on academic achievement.

95 PCP was implemented in a district in Delaware. Entire 4th and/or 5th grade teams volunteered to use the 95 Phonics Core Program with their students in nine schools. In exchange for their participation, district leaders received all 95 PCP materials for 2023-2024 and training at no cost. Additionally, 95 Phonics Lesson Library has been and is continuing to be implemented for Tiers 2 and 3 in all schools, but this product is not discussed in this report.

Treatment Group Program

The 95 PCP features explicit and systematic instructional practices that follow a routine in every lesson. Using structured literacy characteristics, skills follow a phonemic awareness and phonics continuum in 95 PCP lessons.

Table 1. Structured Literacy Characteristics in 95 PCP 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 utilizes the gradual release model, allowing all students to practice each skill using multisensory materials, including a phonics mat and chips, word sorts, elkonin boxes, and other tools. Additionally, 95 PCP derives its scope and sequence from Scarborough's Reading Rope (Figure 2) that identifies the necessary knowledge of language comprehension and word recognition to develop skilled reading (Scarborough, 2001).

Table 2. Gradual Release Model in 95 PCP

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

Figure 1. Phonics Continuum of Skills

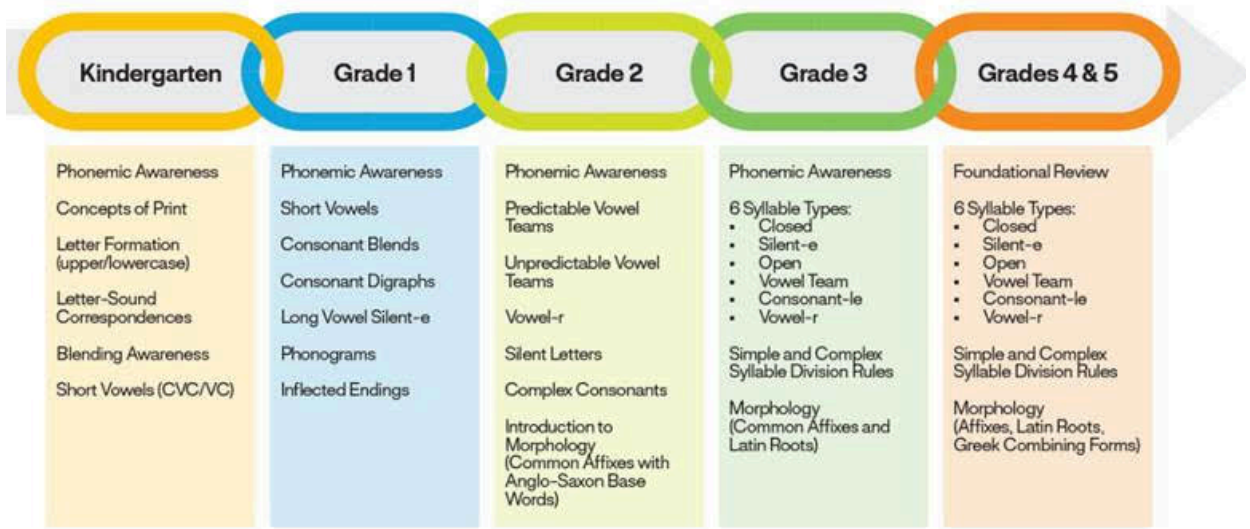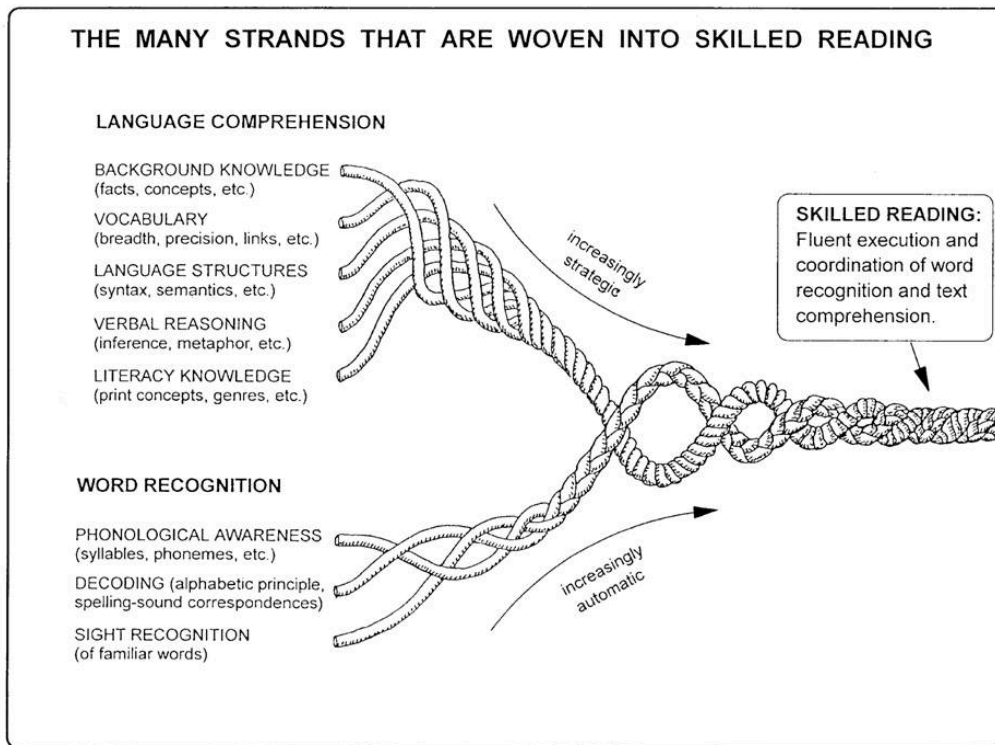| Kindergarten	Grade 1	Grade 2	Grade 3	Grades 4 & 5
Phonemic Awareness	Phonemic Awareness	Phonemic Awareness	Phonemic Awareness	Foundational Review
Concepts of Print	Short Vowels	Predictable Vowel Teams	6 Syllable Types: • Closed • Silent-e • Open • Vowel Team • Consonant-le • Vowel-r	6 Syllable Types: • Closed • Silent-e • Open • Vowel Team • Consonant-le • Vowel-r
Letter Formation (upper/lowercase)	Consonant Blends	Unpredictable Vowel Teams		
Letter-Sound Correspondences	Consonant Digraphs	Vowel-r		
Blending Awareness	Long Vowel Silent-e	Silent Letters	Simple and Complex Syllable Division Rules	Simple and Complex Syllable Division Rules
Short Vowels (CVC/VC)	Phonograms	Complex Consonants	Morphology (Common Affixes and Latin Roots)	Morphology (Affixes, Latin Roots, Greek Combining Forms)
	Inflected Endings	Introduction to Morphology (Common Affixes with Anglo-Saxon Base Words)		

Figure 2. Scarborough's Reading Rope

Assessment Descriptions

i-Ready

i-Ready Diagnostic is a computer-based adaptive screener that is intended to be a "temperature check" on students' reading skills designed by Curriculum Associates (Curriculum Associates, 2023). The program is designed to be as short as possible; as such, it uses predictive analytics to determine how many questions each student receives. The assessment only includes items that help the algorithms to ascertain what the students' scores should be. After assessment, the scores of each student are compared to a normed sample of students tested before the pandemic, and the scores are organized into the benchmark categories. With i-Ready, there are multiple outcome measures such as Overall Scale Score, Domain-level scores, Benchmark Status, and Placement Levels. Below, Table 3 highlights the i-Ready Reading Domains that are assessed.

Table 3. i-Ready Reading Domains

Reading Domains
Phonological Awareness
Phonics
High-Frequency Words
Vocabulary

Comprehension: Overall
     ● Comprehension Literature
     ● Comprehension Informational Text

DeSSA ELA State Test

The [Delaware System of Student Assessment](#) (DeSSA) is Delaware's assessment program including the Smarter English Language Arts/Literacy (ELA) and Mathematics assessments for grades 3-8. For this study, the sample included fourth and fifth graders - therefore, LXD Research was able to analyze their growth on the [Smarter ELA/Literacy Assessment](#) from Spring 2023-Spring 2024. The assessment is a computer adaptive test that is given at the end of each year to assess a students' progress on learning the state's common core standards.

Educator Feedback Methods

Educator Survey: Educators had the opportunity to respond asynchronously to an online survey about their perceptions of the implementation and professional development of 95 PCP. Nine educators who taught fourth and fifth grade responded to the survey.

Administrator Interviews: LXD Research interviewed three administrators over Zoom to ask for their perspectives of implementation from the administrator level.

Site Observations: Two LXD Researchers visited the 95 PCP schools in December 2023. The principals arranged a schedule of which classrooms to observe depending on their literacy block time. LXD Research observed 10 fourth and fifth grade classrooms implementing 95 PCP. Every five minutes for a total of 30 minutes, the observer noted what was occurring in the classroom, and indicated whether the instructional structure was whole class, small group, or independent work, as well as whether or not students were applying skills learned from the lesson to an activity or being interactive with the lesson.

Student Sample

LXD Research tested for differences between beginning-of-year (BOY) and end-of-year (EOY) assessment scores for fourth and fifth grade students using 95 PCP in their Tier 1 core literacy instruction during the 2023-2024 school year. LXD Research conducted BOY analysis to ascertain students' baseline reading levels at the start of the year. Table 4 below shows the total numbers of students and schools per grade in the sample (185 fourth graders and 452 fifth

graders for 637 students total). Table 5 shows student demographic data (Race/Ethnicity, Gender, and SPED Status) for the sample by grade. Table 6 highlights the BOY i-Ready Overall Scale Scores for fourth and fifth grade, respectively, and the Overall Performance Levels. Only 18.1% of fourth graders and 20.6% of fifth graders were "on or above grade level" at baseline in i-Ready overall scores.

Sample Description

Table 4. Number of Students and Schools per Grade

Grade	# of Students	# of Schools
Fourth	185	3
Fifth	452	6
Total	637	9

Table 5. Demographic Data for Students by Grade and Group

Grade	Race/Ethnicity		Gender & SPED Status	
Fourth	White Hispanic Black Asian Multiple Indigenous	59% 36% 27% 6.5% 6.5% 1%	Male Female SPED	47.6% 52.4% 21%
Fifth	White Black Hispanic Asian Multiple Indigenous Native Hawaiian or Other Pacific Islander	68% 20% 37% 6% 6% <1% <1%	Male Female SPED	48% 52% 21%

Note. Percentages might not equal 100 because the Hispanic ethnicity was asked as a separate question, indicated by a yes/no.

Table 6. i-Ready Overall Scale Scores and Overall Performance Levels at BOY for Grades 4 & 5

Grade	Overall Scale Scores		Overall Performance Levels	
	Mean	**Standard Deviation**	**% On or Above**	**% Below**
Fourth	512.2	58.8	18.1%	81.9%
Fifth	531.75	60.46	20.6%	79.4%

Attrition from BOY to EOY

An attrition analysis was conducted to determine the overall attrition in i-Ready and DeSSA scores for both grades from BOY to EOY, respectively. The attrition was minimal (3.6% for fourth grade and 7.6% for fifth grade). For full details, please see Table 7, below.

Table 7. Attrition from BOY to EOY by Grade

Grade	BOY (# of Students)	EOY (# of Students)	% Attrition
Fourth	192	185	3.6%
Fifth	489	452	7.6%

Results

Student Outcomes

LXD Research's preliminary analysis involved evaluation of growth on i-Ready Overall Scale Score from BOY-EOY in the 2023-2024 school year for students using 95 PCP. Subsequent analyzes included change in i-Ready Overall Performance Levels and i-Ready Subdomains. Additionally, LXD Research analyzed the student growth on the DeSSA Smarter ELA/Literacy Assessment from Spring 2023 (i.e., before 95 PCP) to Spring 2024 (i.e., after 95 PCP).

i-Ready Overall Findings

Both fourth and fifth grade students showed growth from BOY to EOY on i-Ready Overall Scale Scores (Table 8). Fourth graders increased by 30 points and fifth graders increased by 27 points, exceeding pre-pandemic national norms of fourth graders growing 26 points and fifth graders growing 21 points, respectively.

Table 8. i-Ready Overall Scale Score Growth from BOY to EOY

Grade	BOY		EOY		Mean Growth from BOY-EOY
	Mean	**SD**	**Mean**	**SD**	
Fourth	512.2	58.8	542.21	57.93	30.01 points
Fifth	531.8	60.46	558.77	57.74	27.02 points

When comparing the i-Ready ELA Overall Performance Level from BOY to EOY for fourth and fifth graders, more students became on/above grade level by the EOY after one year of 95 PCP. Fourth graders on/above grade level percentage increased significantly, from 18% at BOY to 42% at EOY (χ^2 = 51.6, p < .001, Phi coefficient effect size = .26 (Cohen, 1988). Fifth graders percentage on/above grade level also significantly increased from 20.6% at BOY to 37.7% at EOY (χ^2 = 165.4, p < .001, Phi coefficient effect size = .19 (Cohen, 1988).

The i-Ready Performance Levels also indicate whether students are 1 grade level below or 2 or more grade levels below their expected performance. For both grades, performance level group membership changed substantially from BOY to EOY. Significantly fewer fourth graders were considered 2 or more grade levels behind by EOY, decreasing from 37% to 19% (χ^2 = 114.2, p < .001, with a large Cramér's V effect size of .55). Significantly fewer fifth graders were considered 2 or more grade levels below by EOY, decreasing from 55% to 38% (χ^2 = 295.2, p < .001, also with a large effect size (a Cramér's V effect size of .57)). Refer to Table 9 below for more details.

Table 9. i-Ready ELA Overall Performance Levels at BOY and EOY for Both Grades

Grade	Time of Year	Overall Performance Level			
		n	**% On or Above**	**% 1 Grade Below**	**% 2+ Grades Below**
Fourth	BOY	188	18.1%	44.7%	37.2%
Fourth	EOY		42.0%	38.8%	19.1%
Fifth	BOY	461	20.6%	23.9%	55.5%
Fifth	EOY		37.7%	24.5%	37.7%

Note. Percentages that may not add to precisely 100 are due to rounding.

Figure 3. i-Ready ELA Overall Performance Levels at BOY and EOY
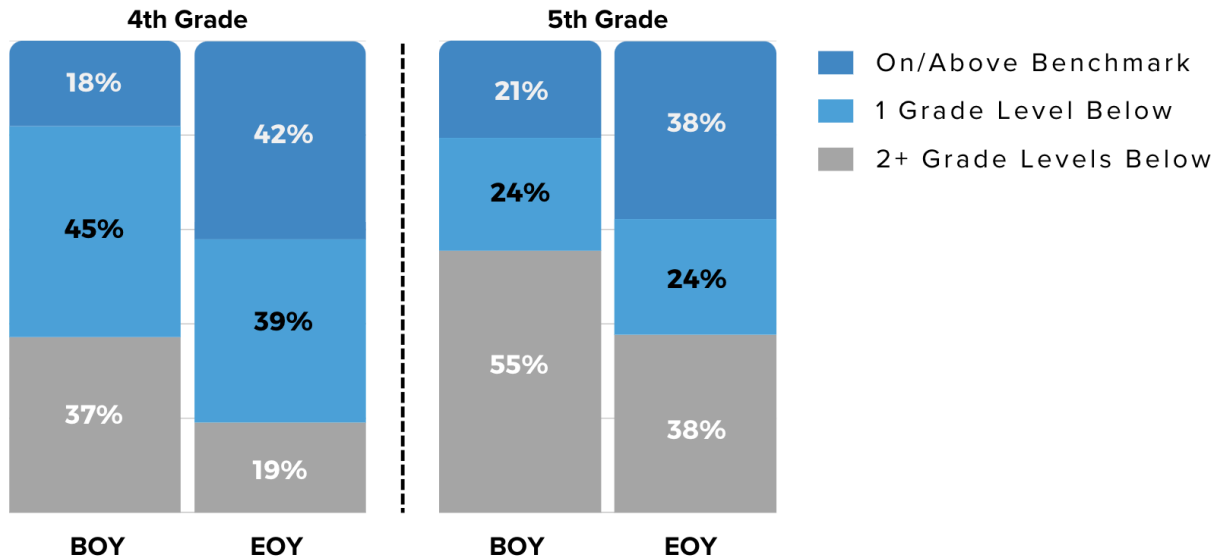
i-Ready Subdomain Findings

Analysis of i-Ready subdomain scores for students in both grades revealed substantial growth across various reading subdomains from BOY to EOY. In fourth grade, the phonics subdomain showed the highest mean growth of 44.8 points over the year, increasing from a mean of 463.1 (SD = 56.09) at BOY to 507.9 (SD = 55.48) at EOY. Notably, two comprehension subdomains were the next highest mean growth. On the comprehension subdomain, fourth graders grew 31 points from BOY to EOY and on the comprehension of information text subdomain, fourth graders grew 35 points from BOY to EOY. Please refer to Table 10 below for more details on fourth grade subdomain growth.

Table 10. Fourth Grade i-Ready Subdomain Score Growth from BOY to EOY

Domain	BOY			EOY			Mean Growth from BOY-EOY
	n	Mean	SD	n	Mean	SD	
Phonics Scale Score	52	463.13	56.09	52	507.88	55.48	44.8 points
Vocabulary Scale Score	188	516.87	58.02	188	542.94	59.40	26.1 points

Comprehension Overall Scale Score	188	507.88	64.6	188	538.93	63.46	31.1 points
Comprehension of Literature Scale Score	188	514.74	67.17	188	541.78	63.88	27.0 points
Comprehension of Informational Text Scale Score	188	500.79	65.11	188	535.78	67.44	35.0 points

For fifth grade students, the highest subdomain mean growth from BOY-EOY was also on the phonics subdomain, with students growing 31.2 points from BOY to EOY. These gains were followed closely by the gains on the comprehension of information text subdomain, in which fifth grade students improved by 30.8 points from BOY to EOY. For full details, please see Table 11 and Figure 4 below for fifth grade growth on subdomain scores. Also of note, due to the adaptive nature of the i-Ready assessment, the test only incorporated phonics subdomain scores in 28% of the students' Overall Scale Scores. This reduced emphasis on phonics in the overall score may have reduced the magnitude of effects on EOY overall scale scores.

Table 11. Fifth Grade i-Ready Subdomain Score Growth From BOY to EOY

Domain	BOY			EOY			Mean Growth from BOY-EOY
	n	Mean	SD	n	Mean	SD	
Phonics Scale Score	81	462.22	58.37	81	493.38	60.15	31.2 points
Vocabulary Scale Score	461	536.67	60.11	461	562.1	58.47	25.4 points
Comprehension Overall Scale Score	461	527.39	65.3	461	555.8	62.14	28.4 points
Comprehension of Literature Scale Score	461	532.55	67.33	461	559.24	64.1	26.7 points
Comprehension of Informational Text Scale Score	461	521.53	67.84	461	552.29	64.86	30.8 points

Figure 4. i-Ready Subdomain Gains for Both Grades

Legend:
- 4th Grade Mean Growth from BOY-EOY
- 5th Grade Mean Growth from BOY-EOY

Subdomain	4th Grade	5th Grade
Comprehension Score Gain	+31.1	+28.4
Phonics Score Gain	+44.8	+31.2
Vocab Score Gain	+26.1	+25.4
Lit. Comprehension Score Gain	+27.0	+26.7
Comp. of Informational Text Score Gain	+35.0	+30.8
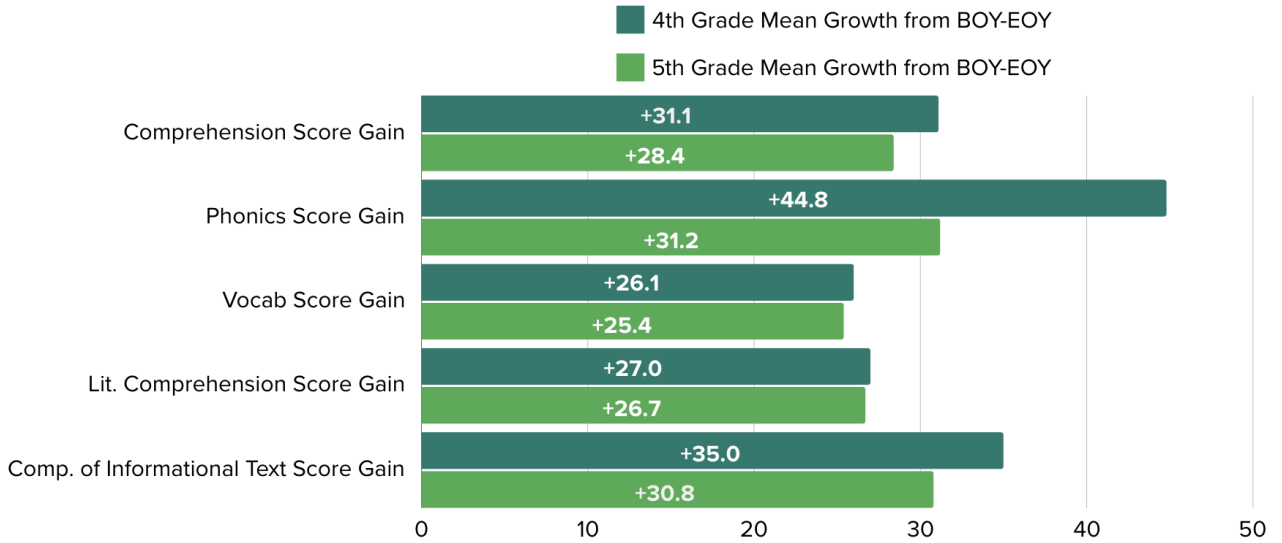
DeSSA ELA State Test Findings

LXD Research analyzed the year-year change in scores from the 2023 DeSSA ELA state test compared to the 2024 DeSSA ELA state test, after one year of 95 PCP. On the DeSSA ELA state test, the fourth graders' overall scores grew significantly 26.2 points (t(5.2), $p < .001$) and the fifth graders' overall scores also increased significantly 33.0 points (t(9.7), $p < .001$) from Spring 2023 to Spring 2024. Table 12 below shows the DeSSA state test scores and Figure 5 visualizes the gains.

Table 12. DeSSA ELA State Test Scores: Spring 2023 to Spring 2024

Grade	State Test 2023		State Test 2024		Growth From Spring 2023 to Spring 2024
	Mean	**SD**	**Mean**	**SD**	
Fourth	2,410.47	103.25	2,436.67	98.97	26.20 points
Fifth	2,438.04	107.10	2,471.00	107.74	32.96 points

Figure 5. DeSSA ELA State Test Overall Score Growth from Spring 2023 to Spring 2024
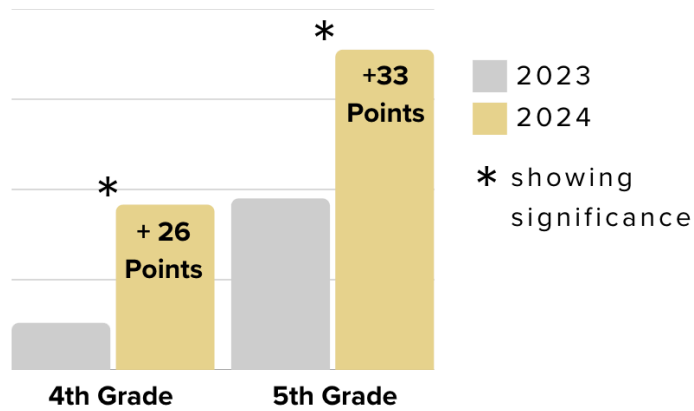
Table 13 below indicates benchmark change in the percent proficient or advanced from spring 2023 to spring 2024. ELA state test benchmarks remained relatively stable for both grades from Spring 2023 to Spring 2024 in terms of percent proficient or advanced, indicating that students' growth was in line with pre-pandemic norms expected growth.

Table 13. DeSSA ELA State Test Benchmark Changes

Student Cohort	Percent Proficient or Advanced (Spring 2023)	Percent Proficient or Advanced (Spring 2024)
Fourth Grade (2024)	37.9%	37.4%
Fifth Grade (2024)	37.4%	38.6%

Educator Feedback & Observation Outcomes

Teacher Survey

A survey of 14 teachers from the nine treatment schools was conducted to understand their perception of 95 PCP implementation for 4th and 5th grade. Specifically, 43% of the teachers taught 4th grade, another 57% taught 5th grade. Schools using 95 PCP typically allocated 26-30 minutes per day for phonics instruction after excluding transition time, 5 days per week, for 21-40 weeks. The majority of teachers spent their literacy blocks on whole group instruction with the least amount of time spent on fluency. After using 95 PCP, teachers reported students improved in literacy skills such as understanding syllable types, demonstrating phonics patterns, and reading more fluently. Most teachers found the teacher's editions and student workbooks to be most useful for their instruction with 80% of teachers reporting that they use these two resources daily. Demographically, 71% of the teachers identified as female and 21% identified as male. 79%

of the teachers identified as White, and 14% identified as Black. The teaching experience ranged from 1-23 years. The majority of the teachers held a Master's degree, and two teachers had earned Ph.Ds.

29% of teachers reported that reading assessment, reading methods, and reading intervention were all equally emphasized in their studies. Only two teachers were familiar with the science of reading research. All teachers reported receiving professional learning, and most received professional development training two to three times per year provided by the school district.

Administrator Interviews

LXD Research interviewed three administrators across different schools from the school district. The qualitative data collected revealed a variety of perspectives on the implementation and efficacy of the 95 Phonics Core Program.

The three interviewees included an assistant principal with a background in reading and literacy coaching, a reading specialist with experience teaching English language arts, and a literacy coach with a background in elementary and special education. All three were involved in the implementation of 95 PCP in the school which was typically implemented daily for approximately 30 minutes. All materials from the Classroom Kit Box were utilized, including teacher's editions, student workbooks, student manipulatives with phonics chips, and sound-spelling cards. Notably, 95 PCP was often used in conjunction with other core literacy programs, most commonly ReadyGen and one school supplemented with West Virginia Phonics.

The impact of 95 PCP on students' literacy development was perceived to be positive, with improvements noted in i-Ready scores and a basic understanding of foundational skills - particularly seen in students' ability to break down larger words. The interviewees reported that the program also boosted educators' confidence in their ability to provide effective phonics instruction. The program's activities and materials were found to be engaging for students, with manipulatives and smartboard lessons being particularly popular. 95 PCP was also used as an intervention for pull-out groups. The program was also implemented with Tier 2 and 3 intervention students, with the use of the 95 Phonics Lesson Library and Chip Kit.

Some feedback from administrators addressed the large amount of content; they suggested more support would help teachers adapt and practice pacing for better implementation. In the process of implementing the program, educators generally took approximately one year to feel comfortable. Feedback on the initial 95 PCP workshop by the 95 Percent Group was mixed, with some teachers feeling unprepared and requesting more training and resources. Additional support was provided by reading specialists who were LETRS trained, or in the form of district-provided small group instruction in phonics professional development.

Overall, the implementation of 95 PCP in this school was deemed successful by all interviewees, with visible, positive impacts on student literacy development and teacher confidence. It was suggested that further training and support may improve the adoption experience in addition to gaining full buy-in from all teachers to increase implementation with fidelity.

Site Observation

Two researchers from LXD Research visited the school district in Delaware to observe 95 PCP classrooms and comparison classrooms. The researchers observed a total of 10 95 PCP classrooms. The average lesson time observed was 22 minutes, and there was an average of 20 students per class. 90% of the classrooms had a digital presentation displayed the entirety of the lesson, and 80% of classrooms used it for most of the instructional time. When looking for instructional language, 100% of the teachers used instructional language such as morpheme, syllable pattern/type, digraph, morphology, etc.

Student Application

When observing the classrooms, LXD researchers noted the type of student instruction grouping (whole group, small group, and independent work) and whether students were applying what they were learning throughout the lesson. As shown in Figure 7, in 95 PCP classrooms, students were learning in a whole group, but still applying their learning to some sort of activity in 61% of the lessons observed. These student application activities were associated with 95 PCP and included students working in their student workbooks, using individual whiteboards, reading and highlighting passages, using gestures, and repeating instructions. For 20% of the time in the lesson, students were completing independent work associated with the program such as using their workbook. For approximately 18% of the lesson time, students were not applying their learning, as they were either listening to instructions or transitioning to another activity. Figure 6 below shows this breakdown in activities.

Figure 6. Student Application by Student Instruction Grouping and School Group
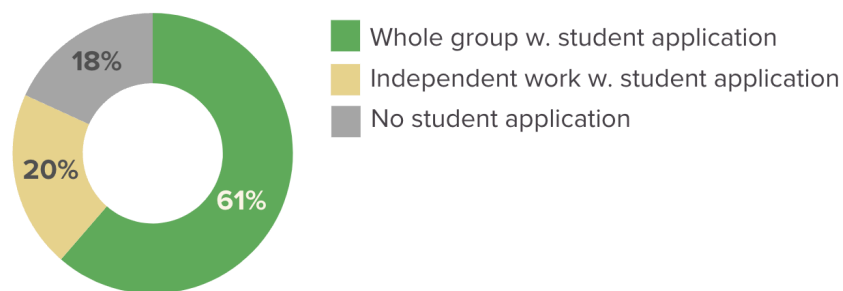
Instructional Strategies

The two LXD Researchers monitored instruction for over 20 instructional strategies during the lesson time observed. Specifically, the researchers monitored occurrences of instructional strategies related to phonics, comprehension and fluency, and several other practices, indicating whether they observed Substantial (over 75%), Some (25%-75%), or None (less than 25%) of each strategy.

During the time observed, classroom teachers were observed using substantial levels of instructional strategies for phonics 62% of the time. Researchers observed a substantial amount of many phonics instructional strategies, including reading decodable words in isolation (80%), gradual release model of I do, we do, you do (70%), manipulation of segments of sounds in speech (70%), and recognition of common word parts (70%). Teachers instructing students on "blending left to right" to sound out sounds in words, common sound-spelling patterns, students reading decodable words in text passages, and use of consistent gestural strategy throughout the lesson were substantially observed in 60% of lesson time. For further details, see Figure 7.

Regarding comprehension and fluency instructional strategies, these were not seen as substantially as the phonics instructional strategies. However, researchers did observe a substantial amount of opportunities to expand vocabulary through explicit instruction and were taught to make text-to-text/to-self/to-world connection when reading in 20% of lesson time observed. Please refer to Figure 8 for more details.

Figure 7. Phonics Instructional Strategies Observed

Strategy	Substantial	Some	None
Uses a gradual release model	70%	10%	20%
Manipulates segments of sound in speech	70%	10%	20%
Uses consistent gestural strategy	60%	30%	10%
Uses manipulatives to segment words	50%		50%
Teaches to blend left to right to sound out sounds	60%	20%	20%
Instructs common sound-spelling patterns	60%	20%	20%
Students read decodable words (isolation)	80%		20%
Students read decodable words (text)	60%	10%	30%
Instructs recognition of common word parts (morphology)	70%	10%	20%
Uses gestures to represent syllable patterns	40%	40%	20%
Totals	62%	15%	23%

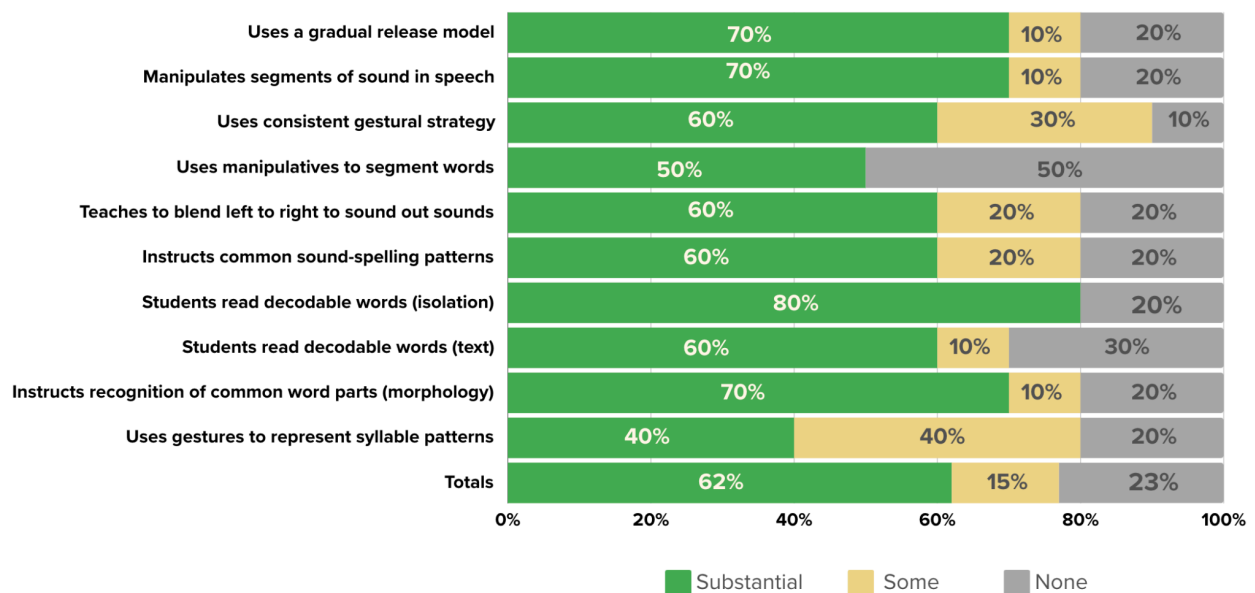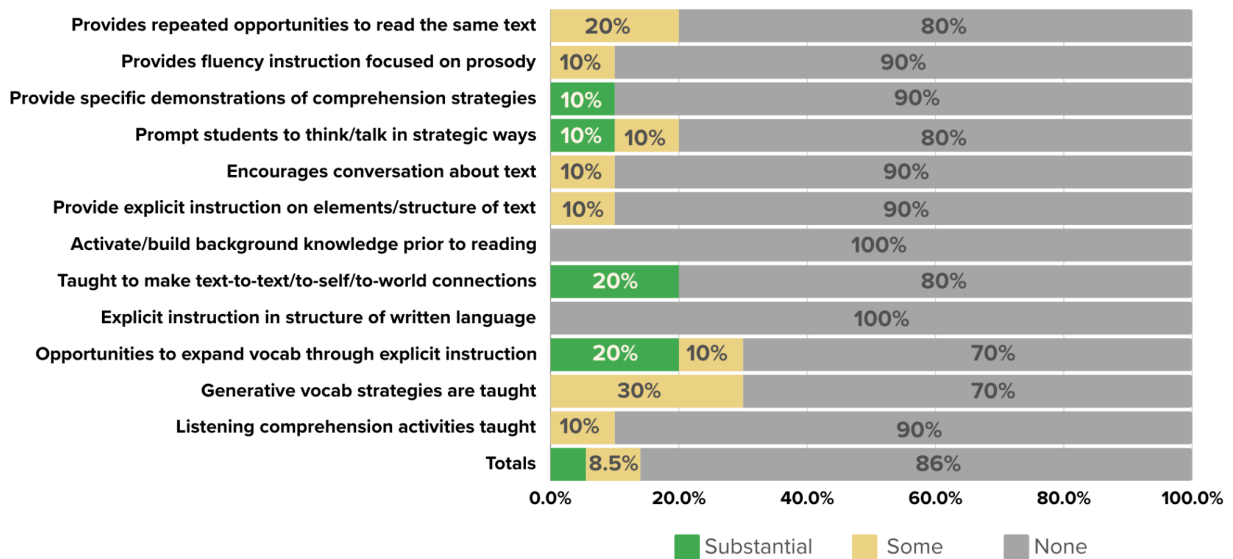Legend: ■ Substantial ■ Some ■ None

Figure 8. Comprehension and Fluency Instructional Strategies Observed

Discussion

This study focused on comparing beginning-of-year scores to end-of-year scores of fourth and fifth grade students using 95 Phonics Core Program (95 PCP) as their Tier 1 literacy instruction. The findings revealed that using 95 PCP for one year had a strong impact on student achievement on literacy assessments of i-Ready and DeSSA ELA State Test. On i-Ready, both grades 4 and 5 showed Overall Scale Score improvement from BOY-EOY. Fourth graders grew, on average, 30 points over the year and fifth graders grew 27 points on average, both exceeding national norms of 26 point growth for fourth graders and 21 point growth for fifth graders, respectively. Looking deeper into the i-Ready subdomains, while the phonics subdomain had the largest gain for both grades from BOY-EOY, the comprehension subdomains showed similar growth over the year. One explanation is that teaching phonics in upper elementary grades to struggling students may improve their reading comprehension while improving their foundational reading skills. On i-Ready performance levels, significantly more students were considered on or above grade level by EOY compared to BOY. Additionally, significantly fewer students were considered two or more grade levels behind by EOY, indicating that use of 95 PCP for one year may have contributed to students' ability to catch up to their expected grade level.

In addition to the i-Ready findings, additional positive results were observed on the DeSSA ELA state test scores. Both grades 4 and 5 grew significantly from Spring 2023 to Spring 2024 in line with pre-pandemic norms for on-grade level readers. These encouraging results highlighted how 95 PCP use was associated with a positive impact not only district level assessments, but also the state assessments.

The qualitative activities in this study revealed key perspectives on the implementation and training process. Few participating teachers had previous experience with science of reading practices or phonics content, as they were fourth and fifth grade classroom teachers who were not typically trained on these strategies as part of their late-elementary ELA pedagogy. While the educators and administrators perceived a positive effect of the program, they requested more training specifically related to grade 4 and 5 phonics program implementation. Such additional training would reduce the learning curve for teachers to feel fully comfortable implementing the program. Educators perceived that, once they were implementing the program with fidelity, their students were becoming better readers, implying that subsequent years of implementation may yield greater gains in student performance.

The site observations reiterated these findings, and allowed the researchers to gain a better understanding of the implementation. LXD researchers observed educators attempting to maintain the fidelity of the program by adhering to the 95 PCP script, instructing the whole class at once in these practices, and emphasizing student application through phonics activities.

Conclusion

Overall, the first year of 95 PCP implementation in fourth and fifth grade in a Delaware school district showed promising results on student literacy achievement. Across formative and summative assessments, participating fourth and fifth grade students demonstrated significant improvement in reading outcomes after the first year of Tier 1 95 PCP phonics instruction. As it was the first year of implementation, there were some "growing pains," but teachers felt confident by the end of the year that they were teaching the program with fidelity, and reported significant reading improvement in their classrooms. These educator perceptions were in alignment with the quantitative i-Ready and state test findings, as well as the observational findings. Future studies could include a multi-year longitudinal evaluation of these students and teachers in their second and third year of implementation to determine the relative impact of high-fidelity implementation across multiple years and cohorts of students.

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Appendix

Appendix

Table A1. Number of Students per Grade, per School

	Fourth Grade	Fifth Grade	Total
Anna P Mote Elementary	–	57	57
Austin D Baltz Elementary	81	83	164
Brandywine Springs School	–	80	80
Forest Oak Elementary School	–	77	77
Linden Hill Elementary	70	79	149
Richardson Park Elementary	–	76	76
W C Lewis Dual Language Elementary	34	–	34
Total	**185**	**452**	**637**

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