

FOCUSING ON PHONICS WITH THE 95 PORTFOLIO: EFFICACY STUDY FOR KINDERGARTEN AND

FIRST GRADE (2020-2022)

LXD RESEARCH
95 PERCENT GROUP LLC

95 PERCENT GROUP LLC PORTFOLIO STUDY



95 PHONICS CORE PROGRAM, PHONOLOGICAL AWARENESS LESSONS, PHONICS LESSON LIBRARY, & PHONICS CHIP KIT **
20-21/21-22 RESULTS - KINDERGARTEN TO SECOND GRADE

PROGRAM DESCRIPTION

The 95 Phonics Core Program adds an explicit phonics strand to the daily Reading Block to ensure that all K-3 students receive consistent evidence- and research-based phonics instruction to improve outcomes. Combined, the Phonics Chip Kit (PCK), the Phonological Awareness (PA) Lessons, and Phonics Lesson Library (PLL) provide all Tiers the structured literacy support at the level of intensity that they need in grades K-3.

OPPORTUNITY GAP

National reporting that measured the opportunity gap from before the pandemic to Fall 2021 shows a slight dip in students on grade level. For Wicomico, the loss was 8x greater than the national average for first grade (-3 pts vs. -24 pts).

Difference between Historical Fall & Fall 2021



Decrease in % On/Above Grade Level

Wicomico leaders piloted all of the 95 Percent Group products in one elementary school during the 2020–2021 school year and rolled them out to all schools for 2021–2022.

SAMPLE DESCRIPTION

LOCATION: Wicomico County, Maryland GRADE: Kindergarten – Second Grade

SIZE: 498 students

DEMOGRAPHICS:

- 54% Black/African American
- 8% SPED
- 15% ELL
- 75% Economic Disadvantage

CHANGE IN LITERACY TOOLKIT

2020-2021

LITERACY CURRICULUM - REMOTE

- **Tier 1:** County-created curriciulum and teacher-created materials
- Tier 2/3: iReady lessons (digital)

ONE-SCHOOL PILOT OF NEW TOOKLIT

2021-2022

NEW LITERACY TOOLKIT - IN PERSON

- Tier 1 Knowledge: County-created curriculum
- Tier 1 Phonics: 95 Phonics Core Program
- Tier 2: Phonics Chip Kit
- Tier 3: Phonological Awareness Lessons & Phonics Lesson Library

Phonics products (95 Portfolio)

ASSESSMENT

READING DIAGNOSTIC

i–Ready® Diagnostic reading assessment was conducted at the beginning, middle, and end of each school year (2020–2021, 2021–2022).





95PCP, PCK, PA LESSONS, & PLL

20-21/21-22 RESULTS - KINDERGARTEN TO SECOND GRADE

STUDY DESIGN

The goal of our study was to compare the pilot school (treatment) with a comparison school that started with 95 Percent Group the following year. A pool of schools similar to the pilot school in terms of baseline iReady Scores and demographics were identified. One was **randomly chosen** to be the comparison school.

Number of Students by Grade and Group

Grades	Treatment	Comparison
K 1st	79 101	130 130
1st 2nd	103 87	153 155

ANALYSIS DESIGN

What was the difference in iReady scores between the two schools over time?

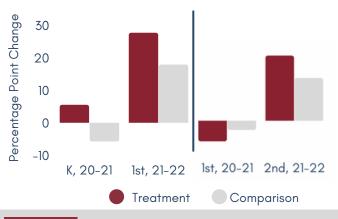
"Waves" of time were examined using an analysis of variance (ANOVA) to understand the difference in scores between the two schools during each wave. Each time period was compared to Fall 2020.



RESULTS EACH YEAR BY GRADE

The treatment school outperformed the comparison school in both grades in 2021–2022. Notably, the Kindergartners in the treatment group made impressive progress during 2020–2021 (5.5 pts increase).

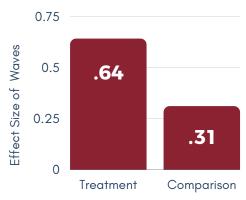
Annual Fall-to-Spring Change in the % of Students On/Above Grade Level



RESULTS OVER TWO YEARS

Both groups showed significant reading gains. Over the two years, the effect size of the 95 Percent Group portfolio (treatment) group was double that of the comparison group (0.64 vs. 0.31)

Impact of 95 Portfolio on iReady Gains Over Two Years









Focusing on Phonics with the 95 Percent Group Portfolio: Two-Year Efficacy Study for Kindergarten and First Grade (2020-2022)

Prepared by Rachel Schechter, Ph.D., Paul A. Chase, Ph.D. and <u>Learning Experience Design (LXD)</u> <u>Research</u>

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Introduction

Laying a strong foundation for reading skills in kindergarten and first grade is critical, as these years provide the building blocks students need to advance in reading skill. Importantly, kindergarteners and first graders from the past two years have never had a 'normal' year of school, with the remote learning format presenting unique challenges for the youngest learners who are often unable to login to lessons on their own or maintain their attention on virtual lessons (The Hechinger Report, 2021). Further, kindergarteners and first-graders came to the classroom for the first time with wider differences in fine motor skills, socio-emotional skills, independence, and ability to follow routines than in the past (The Hechinger Report, 2021), meaning classroom time was allocated to address these skills as well.

Benchmark reports from Fall 2019 to Winter 2021 show that students experienced up to 2.5 months of learning lag in ELA skills (Education Analytics, 2021) due to interrupted learning during that time. The Science of Reading indicates that following a structured, systematic approach across multiple years provides time for children to develop skills at each level and advance in a sequence that promotes learning (The Reading League, 2022). To support students where they are right now, schools not only need to identify high-quality and effective curricula for Core instruction but also often need to employ aligned Tier 2 or Tier 3 intervention products to accelerate learning for all emerging readers.

95 Percent Group has created a portfolio of products that are meant to be used together to support literacy development, especially amongst students who are struggling to learn to read. The portfolio that Wicomico employed included the 95 Phonics Core Program (95PCP), the Phonological Awareness (PA) Lessons, Phonics Lesson Library, and Phonics Chip Kit. The **95PCP** is a whole-class, Tier 1 program designed for grades K-3 to address and prevent decoding gaps using explicit, structured phonics instruction with a gradual release model for 30 minutes per day. The **PA Lessons Deluxe Package** is a small-group, Tier 2 or Tier 3 intervention product designed primarily for grades K-1, sequenced in order from the simplest syllable skills with compound words to the most complex phoneme substitution tasks. The **Phonics Lesson Library** is an extensive and comprehensive phonics intervention program designed for small-group use with grades 1-6 to specifically support phonics skill development (there are three levels: Basic, Advanced, and Multisyllable). The **Phonics Chip Kit** is a small-group, Tier 2 or Tier 3 intervention product designed for grades 1-6 to help teachers explain phonics patterns using manipulatives and sound-spelling mapping and can be integrated with the PLL to intensify instruction. This particular K-2 combination of 95 Percent Group resources used in Wicomico will be called the "95 Portfolio" for this report.

Stories from the first two years of using the 95PCP have been overwhelmingly positive. Even in the face of challenges that arise during the first full year of implementation for any new educational

program, a recent ESSA Level 1 (Strong) study was conducted by LXD Research that showed positive, statistically significant results for grades K-2 (LXD Research, 2022). Despite these promising results, changing the way a school teaches reading by introducing a new structured Science of Reading approach can be overwhelming for teachers and learners. Therefore, assessing efficacy across multiple years allows time for the learning curve to level out and provides clearer insight into the long-term use and benefits of a new portfolio of products.

95 Percent Group partnered with LXD Research to conduct a third-party evaluation of the 95 Portfolio as it was implemented during the 2020-2021 and 2021-2022 school years in a diverse Maryland school district.

Evaluation Questions

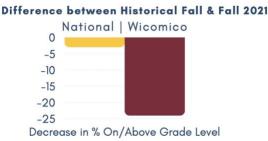
The evaluation aims to answer the following questions:

- 1. How does the use of the 95 Portfolio affect student achievement on benchmark reading assessments in schools that started implementing the program in Fall 2020 compared to schools that started implementing the program in Fall 2021?
- 2. What does the impact of the 95 Portfolio look like for different student subgroups (Economically Disadvantaged and Black students)?
- 3. If a significant change is found to correspond with the use of the 95 Portfolio, over which of the time periods is the impact greatest?

Methods

The 95 Portfolio is being implemented in Wicomico County, a geographically and demographically diverse school district in Maryland that received \$47.4 Million in ESSER Funds to support recovery from the pandemic (Edunomics Lab at Georgetown, 2022). Estimates from Georgetown University indicate that students at Wicomico lost an average of 15 weeks of learning in reading during Spring

2020-Spring 2021. A 2021 national report measuring the opportunity gap from before the pandemic (Fall 2019 to Fall 2021) showed stalled growth and a 3-point drop in the percentage of students on/above grade level in first grade. For Wicomico, the opportunity loss led to 8x greater losses than the national average (-3 vs. -24 points).



This study is a longitudinal quantitative analysis using data collected on four occasions by the school district during the 2020-2021 and 2021-2022 school years. The iReady Diagnostic Reading Assessment (iReady) was used by all students across the district for the full two-year period, including the Fall and Spring assessments analyzed in this study for each of the two academic years. Wicomico

leaders piloted multiple of the 95 Percent Group products in one elementary school during the 2020-2021 school year and then rolled them out to all schools for 2021-2022. District and school-level leaders spoke with literacy coaches often and regularly visited classrooms to conduct walk-throughs and observe teachers implementing their ELA programs.

Treatment Group: Program Key Features

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

Table 1. 95 Percent Group's Literacy Characteristics

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 <i>PSI</i> .

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. Schools had Phonics Chip Kits and accompanying lessons.

Table 2. Gradual Release Model

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	

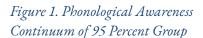
The 95 Percent Group's phonological awareness and phonics continua are shown in Figures 1 and 2, respectively. There is a clear progression from simpler to more complex skills, following the research-based developmental progression for learning to read. The <u>International Dyslexia Association</u>, for

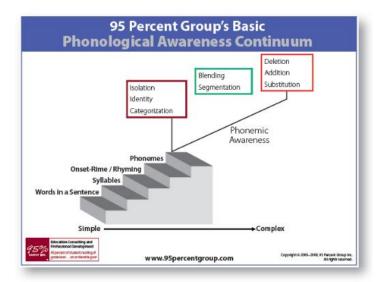
example, describes structured literacy as a "systematic means that organization of material follows the logical order of language. The sequence begins with the easiest and most basic concepts and elements and progresses methodically to the more difficult." The 95 Portfolio used in this study features products designed for whole-class, small group, and intervention.

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 involves 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. 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.

The Phonological Awareness (PA) Lessons are designed primarily for Tier 2 or Tier 3 phonological awareness intervention in Grade K. In the study, the PA Lesson intervention included the use of an initial diagnostic screener, and then the use of the 95 Percent Group's Phonological Awareness Screener for Intervention TM (PASI) to group students into intervention groups based on skill needs every three weeks. Students who were Below Benchmark are identified for intervention through use of a curriculum-based measure or an early literacy screener assessment used by the district, and then placed into lessons along the

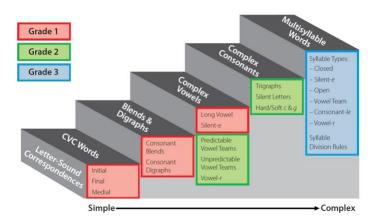
Phonological Awareness Continuum through the PASI. The PA Lessons support students who are not meeting benchmarks through comprehensive lesson plans that target skills aligned with the Phonological Awareness Continuum (Figure 1), from readiness (understanding concepts and terms; applying language) through phonological awareness (syllables; onset rimes; phonemes).





The Phonics Lesson Library (PLL) is designed primarily for Tier 2 or Tier 3 phonics intervention in Grades 1-3. In the study, the PLL intervention included the use of an initial diagnostic screener and then the use of 95 Percent Group's Phonics Screener for Intervention TM (PSI) to place students into intervention groups based on skill needs every three weeks. Students who were Below Benchmark were identified for intervention through use of a curriculum-based measure or an early literacy screener assessment used by the district and then placed into lessons along the Phonics Continuum through the PSI. The PLL supports students who are not meeting benchmarks through comprehensive lesson plans that target skills aligned with the Phonics Continuum (Figure 2), from learning simple lettersound correspondences to blending words with more complex and variable letter combinations to using syllabication to decode multisyllabic words.

Figure 2. Phonics Continuum of Skills of 95 Percent Group



The Phonics Chip Kit (PCK) helps teachers explain phonics patterns using manipulatives and sound-spelling mapping. Each kit helps teachers focus on sound-spelling pattern identification rather than word reading and directs student's attention to identifying individual phonemes in words and analyzing sound-spelling patterns. Each kit provides strategies for identifying different sound-spelling patterns in words. All schools leveraged these materials with the lessons for the core and intervention products.

Comparison Group: Phonics Instruction

During 2020-2021, teachers in the comparison group created and modified materials from a variety of sources to teach phonics. Students were instructed to use iReady Instruction in between assessments, and teachers used iReady lessons to complement online learning. iReady Instruction did not have any eligible research on Evidence for ESSA at the time of this publication.

Other Curriculum

The district uses its own reading comprehension (knowledge) curriculum that aligns with <u>The Maryland College and Career Ready Standards (MCCRS) for English Language Arts</u>. Fountas and Pinnell Classroom books include Shared Reading, Interactive Read Alouds, and Book Clubs.

iReady

iReady Diagnostic Reading is an assessment that helps teachers identify children at risk for reading difficulties and determine the skills to target for instructional support. iReady assessments are standardized, delivered online, and assess core literacy skills (Table 3). Students in Kindergarten – 5th grade take the iReady Diagnostic three times a year.

Table 3. iReady Diagnostic Reading Subtests and Skill Coverage

Subtest	Grades	Indicators of These Basic Early Literacy Skills
		Rhyme Recognition
		Phoneme Identity and Isolation
Phonological Awareness	K-1	Phoneme Blending and Segmentation
		Phoneme Addition and Substitution
		Phoneme Deletion
High-Frequency Words	K-3	From Dolch and Fry lists
		Letter Recognition
		Consonant Sounds
		Short and Long Vowels
		Decoding One- and Two-Syllable Words
Phonics	K-4	Inflectional Endings
		Prefixes and Suffixes
		Digraphs and Diphthongs
		Vowel Patterns
		Decoding Longer Words
		Academic and Domain-Specific Vocabulary
		Word Relationships
Vocabulary	K-12	Word-Learning Strategies
		Use of Reference Materials
		Prefixes, Suffixes, and Root Words
		Author's Purpose
		Categorize and Classify
Comprehension:	K-12	Cause and Effect
Informational Text		Drawing Conclusions/Making Inferences
		Fact and Opinion
		Main Idea and Details

Subtest	Grades	Indicators of These Basic Early Literacy Skills
		Message
Comprehension:		Summarizing/Retelling
Informational Text	K-12	Text Structure
(cont'd)		Determining Word Meaning
		Compare and Contrast Across Different Texts and Mediums
		Analysis of Close Reading of a Text
		Citing Textual Evidence
		Point of View and Purpose
	K-12	Cause and Effect
Comprehension: Literary		Drawing Conclusions/Making Inferences
		Figurative Language
		Story Elements
		Summarizing/Retelling
Text		Theme/Mood
		Analyzing Character
		Determining Word Meaning
	l	Compare and Contrast Across Different Texts and Mediums
		Analysis of Close Reading of a Text
		Citing Textual Evidence

Assessment Sample

A total of 498 students from two schools participated in this study. Of these students, 190 were in the intervention group and 308 were in the comparison group. Among the 260 comparison group students who had complete data from the Beginning of Year 1, 15 did not have data for the Spring of Year 2, signaling an attrition rate of approximately 6%. Among the 180 comparison group students who had complete data from the Beginning of Year 1, 31 did not have data for the Spring of Year 2, signaling an attrition rate of approximately 17%. The difference in attrition between the treatment group and the comparison group was not significant (χ^2 =0.83, p=.36).

Table 4. Number of Students by Grade and Condition

	Group that Started in K (Grade, Year)		-	arted in 1st Grade de, Year)
School Group	K, 20-21 1st, 21-22		1st, 20-21	2nd, 21-22
Comparison Group	130	130	153	155
Treatment Group	79	101	103	87
Total	209	231	256	242

Overall, students in the treatment and comparison groups did not differ significantly with regard to gender, race/ethnicity, special education (SPED) status, or English Language Learner (ELL) status (See Tables 5 and 6).

Table 5. Demographics by Condition in Fall 2020

Group	Grade	Male	SPED	ELL	Economic Disadvantage
Comparison Group	Kindergarten	53.1%	7.5%	19.4%	74.0%
Comparison Group	First	51.9%	9.6%	16.7%	68.6%
Treatment Group	Kindergarten	56.9%	8.9%	10.1%	85.8%
Treatment Group	First	50.5%	5.9%	10.9%	76.7%
Total Sampl	e	52.7%	8.0%	15.0%	75.0%

Table 6. Demographics by Condition in Fall 2020: Race/Ethnicity

Group	American Indian/ Native American	Asian/ Pacific Islander	Black/ African American	White/ European American	Other
Treatment Group	1.7%	1.7%	65.3%	21.2%	10.1%
Comparison Group	11.1%	1.0%	45.5%	25.5%	13.1%
Total Sample	7.7%	1.8%	54.1%	24.1%	12.3%

Procedure

The goal of our analytic procedure was to select two schools; one school that had received the 95 Percent Group intervention for two years (i.e., Fall of 2020 - Spring of 2022) and one comparison school that had only received the intervention during the second year of the study (i.e., Fall of 2021 - Spring of 2022). Of the 11 elementary schools in the district that had provided data, only one school had received the intervention for the full two years. Therefore, students from this elementary school were selected as the intervention group by default. We, therefore, used quasi-randomly to select a school for comparison.

Rather than selecting a school completely randomly, we decided to only consider schools that had similar grade levels and baseline (i.e., Fall 2020) Overall iReady Scale Scores. The intervention school sample had an average baseline iReady score of 398. Of the 10 possible schools to choose from, baseline Overall Scale Scores ranged from 392 - 425. Four schools with the most comparable scale scores at baseline (i.e., ranging from 392-407) were selected as finalists for quasi-random selection. One comparison school was randomly selected of those four schools which had an average baseline Overall Scale Score of 402. As noted above, the comparison group did not significantly differ from the intervention group with regard to gender, race, ELL status, or SPED status.

iReady Beginning-of-Year Scores in Fall 2020

The random assignment of schools successfully created similar treatment and comparison groups. The differences between the groups were non-significant (Table 7).

Condition	Number of students	Average BOY Score	SD	Significance
Treatment	180	398	56.6	P = .37 (n/s)
Comparison	251	402	64.0	1 – .5/ (11/8)

Table 7. iReady Overall Scale Score for Beginning of Year Fall 2020

Analytic Approach

This report focuses on exploring the following research questions:

- How does the use of the 95 Portfolio affect student achievement on benchmark reading
 assessments in schools that started implementing the program in Fall 2020 compared to
 schools that started implementing the program in Fall 2021?
- What does the impact of the 95 Portfolio look like for different student subgroups (Economically Disadvantaged and Black students)?
- If a significant change is found to correspond with the use of the 95 Portfolio, over which of the time periods is the impact greatest?

To answer these questions, we conducted repeated-measures ANOVAs with posthoc tests of mean

differences to determine whether iReady Reading Overall Scale Scores changed significantly over the four waves of data collection. All models included an indicator of time ("Wave"; 1=Fall 2020, 2=Spring 2021, 3=Fall 2021, and 4=Spring 2022).



All models also included an indicator of whether the student was in the treatment or comparison group ("group"; 1=Treatment, 2=Comparison).

We explored the main effects of treatment versus the comparison group by considering the difference in significance and effect sizes across four waves between the treatment and comparison groups (each time period is compared to the wave Fall 2020). A significant difference in the effect size regarding the change in Overall Scale Scores would indicate that the treatment and comparison groups' growth trajectories differed over the two years of testing. We also conducted the same analyses with Black/African American students only and Economically Disadvantaged students only, to determine whether the effects were different for the Black/African American and Economically Disadvantaged samples. All analyses were conducted with the statistical software package SPSS Version 26.

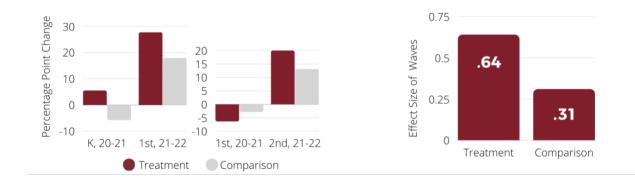
Results

Summary Graphs

Both groups showed significant gains over the four waves. Looking at each grade and year, the Kindergartners in the 95 Portfolio group made impressive progress during 2020-2021 (+5.5 points), unlike other groups and the national trends. Students (and educators) with previous experience using the 95 Portfolio outperformed the comparison group in 2021-2022 (Figure 3. The effect size of these differences can be measured and reported through the analysis (Figure 4). Over the two years, the effect size of the 95 Portfolio was double that of the comparison group (.64 vs. .31).

Figure 3. Change in the % of students On/Above Grade Level from Fall to Spring by year and grade

Figure 4. Impact of 95 Portfolio on iReady Gains over Two Years



Student Literacy Assessment Results

We examined the results of our repeated-measures ANOVAs with posthoc tests of mean differences to determine whether iReady Reading Overall Scale Scores changed significantly over the four waves of data collection and whether those changes differed between the treatment and comparison groups. We also examined the nature of this change to determine when the mean changes were significant across waves of the study.

Effect Size by Wave and Condition

The analysis showed significant change in Overall Reading Scale Scores across the four waves for both the treatment group (F(3, 1) = 55.4, p = < .001) and the comparison group (F(3, 1) = 49.4, p = < .001). Tables 8a-c present the results by wave and group for the following: all students, only students who were in the Black/African American subgroup, and only students who were in the Economically Disadvantaged subgroup. Students in both curriculum groups demonstrated significant growth in Overall Reading Scale Scores from Fall 2020 to Spring 2022 (for both cases, p < .001). However, overall effect sizes (i.e., partial eta squared values) differed between groups. The effect of Wave on Overall Reading Scale Scores for the treatment group was $\mu 2 = .638$, compared to $\mu 2 = .308$ for the comparison group (Table 9). Notably, the effect sizes were similar for the Black/African American and the Economic Disadvantage subgroups (Figure 5)

Table 8a. Results by Wave and Condition for All Participants

	Wave	Change in Scale Score	SD	Significance
	Fall 2020	n/a	n/a	n/a
Treatment	Spring 2021	-10.85	4.54	P = .02*
Group	Fall 2021	14.94	8.76	P = .09
	Spring 2022	37.06	5.31	P < .001***
	Fall 2020	n/a	n/a	n/a
Comparison	Spring 2021	-1.56	5.33	P = .77
Group	Fall 2021	8.03	6.45	P = .21
	Spring 2022	36.50	5.36	P < .001***

Note: P < .05 = *, P < .01 = **, and <math>P < .001 = ***, above.

Table 8b. Results by Wave and Group for Black/African American

	Wave	Change in Scale Score	SD	Significance
	Fall 2020	n/a	n/a	n/a
Treatment	Spring 2021	-16.72	5.70	P = .004**
Group	Fall 2021	14.16	11.89	P = .24
	Spring 2022	30.35	6.77	P < .001***
	Fall 2020	n/a	n/a	n/a
Comparison Group	Spring 2021	-7.55	9.01	P = .40
	Fall 2021	0.41	9.97	P = .97
	Spring 2022	24.86	8.32	P = .004**

Note: P < .05 = *, P < .01 = **, and <math>P < .001 = ***, above.

Table 8c. Results by Wave and Group for Economically Disadvantaged

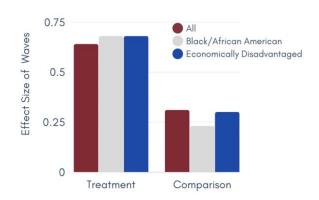
	Wave	Change in Scale Score	SD	Significance
Treatment Group (N=119)	Fall 2020	n/a	n/a	n/a
	Spring 2021	-16.78	5.69	P = .004**
	Fall 2021	14.16	11.89	P = .24
	Spring 2022	30.35	6.77	P < .001***
Comparison Group (N=217)	Fall 2020	n/a	n/a	n/a
	Spring 2021	-1.51	6.39	P = .81
	Fall 2021	12.19	7.87	P = .12
	Spring 2022	36.17	6.33	P < .001***

Note: P < .05 = *, P < .01 = **, and <math>P < .001 = ***, above.

Table 9. Effect Sizes by Student Subgroup and Condition

	Effect Size of Wave			
Subgroup	Treatment	Comparison		
All	.64	.31		
Black / African American	.68	.23		
Economically Disadvantaged	.68	.30		

Figure 5. Effect Sizes Across Student Subgroups



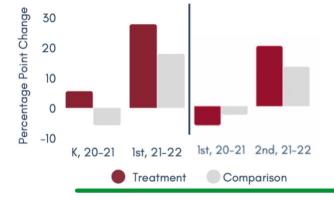
Percent of Students On/Above Grade Level

To further explore why the impact for the Treatment group was double the size of the Comparison group, we examined student's scores relative to their grade level. The drop in students On/Above Grade Level described during this report's introduction is evident by comparing the Fall 2020 to the Fall 2021 percentages. What is striking, though, when looking at the remote school year (Fall 2020-Spring 2021), the treatment kindergarten group increased 5.5 points while all other groups showed a loss (Table 10). The following year (Fall 2021-Spring 2022) the treatment group had a stronger rebound than the comparison group (Figure 6).

Table 10. Percent of Students On/Above Grade Level by Wave and Group

	Treatment (K->1st)	Comparison (K->1st)	Treatment (1st->2nd)	Comparison (1st->2nd)
Fall 2020	57.5%	66.2%	24.5%	26.3%
Spring 2021	63.0%	60.5%	18.2%	23.5%
Fall 2021	3.8%	11.1%	6.7%	9.3%
Spring 2022	31.5%	29.0%	26.7%	22.4%

Figure 6. Annual Fall-to-Spring Change in the Percent of Students On/Above Grade Level



Discussion

This study examined gains in overall reading performance indexed by iReady scores in two schools: one school that implemented the 95 Portfolio over two years (i.e., from Fall 2020 - Spring 2022) and a randomly-selected comparison school that implemented the 95 Portfolio intervention for only one year (i.e., from Fall 2021- Spring 2022). Students in both schools demonstrated significant gains in iReady Overall Scale Scores over the two years. Still, the strength of the effect over time was greatest in the treatment group that had an extra year of experience using the 95 Portfolio. These parallel differences in the improvement strength were indicated by the percentage of students in each school that improved their reading from "Below Grade Level" to "On or Above Grade Level" by Spring 2022.

To determine if these findings were relevant across race/ethnicity and/or socio-economic status, we analyzed the data with only students that identified as Black/African American, and separately with only students whose families were Economically Disadvantaged. There were no significant changes in the between-group differences in outcomes noted above for either the Black/African American students or the Economically Disadvantaged students, indicating that the effects were consistent across racial/ethnic and socioeconomic groups.

Educators around the country know that the pandemic threw school leaders and teachers into unprecedented situations. In the comparison schools, teachers needed to create their own materials and leverage what they had that could be completed remotely (e.g., iReady Instruction lessons). Treatment teachers had scripted lessons with HTML files to guide remote learning for Tier 1 instruction and with intervention materials that matched the pedagogy and terminology for students who needed more intensive support.

While the clear boost in Kindergarten scores matches the narrative above, the fewer on-level first graders do not. Why would first graders in the treatment group have delayed gains? One thought is that due to school closures, first graders had many more phonics skills to fill from Spring 2020. The structured and systematic nature of the 95 Percent Group skill continuums provided first graders with the opportunity to fill in the phonological awareness and phonics skills they missed to build a solid early literacy foundation. This may have delayed the first graders in the treatment school from covering the first-grade skills in the Spring 2021 iReady assessment. Once the students became second graders, however, the rebound in scores led to the treatment group having a higher percentage of students on grade level than the comparison group (for which those kindergarten and first-grade skill gaps remained).

In addition to students being more familiar with the skills and terminology of the program, the teachers at the treatment school became familiar with the 95 Portfolio during the first year. This improved understanding and confidence with the material would improve the fidelity of implementation in year 2, leading to greater gains for students.

Conclusion & Implications for Future Research

When evaluating the efficacy of a new product, it is important to note that the first full year of implementation for any new educational program can be challenging. Changing the way a school teaches reading by using a new structured Science of Reading approach can be overwhelming and a significant adjustment for teachers and learners. Therefore, assessing efficacy across multiple years allows time for the learning curve to level out and provides clearer insight into the long-term use and benefits of a new product. Aligning pedagogy and terminology across Tiered support also promotes a more seamless transition for the learner (i.e., reducing the cognitive load and increasing comfort with the lesson design and routines), potentially leading to increased access to long-term learning. This report provides evidence that a double-dose of 95 Percent Group products leads to double the impact.

Indeed, in a recent study of the 95PCP (LXD Research, 2022), LXD Research found that the treatment group teachers reported that it was a challenge to simultaneously learn the content and cadence of 95PCP and teach its lessons. Nonetheless, the treatment group teachers expressed that the initial struggle to learn a new way of teaching early literacy was overshadowed by their students' reading growth and the sense that 95PCP met an urgent need in their curricular toolbox. 95PCP facilitated alignment between their teaching tools and their expanding knowledge of the Science of Reading. Both the teachers' implementation stories and the data suggest that overcoming the initial learning curve was worth it, as the reports showed that 95PCP had a positive, significant impact on student achievement for students.

Future research will focus on how well these initial gains sustain and continue to build over multiple years of use. It will also be important to conduct evaluations of the 95 Portfolio in school districts with different student demographic profiles and in other geographic areas. This district covers an entire county with urban, suburban, and rural areas and a particular demographic profile, so future research could investigate populations in different settings and demographic profiles. It may also be possible that after multiple years of use, instructors improve their pace of instruction and increase their understanding of the content they are teaching, which may accelerate student learning.