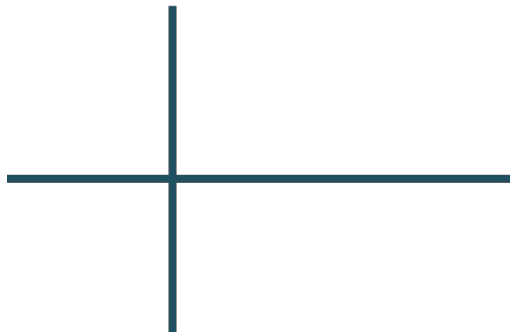




**ACCELERATING READING
GAINS WITH ONE95:
TWO-YEAR EFFICACY STUDY
FOR KINDERGARTEN AND
FIRST GRADE (2020-2022)**

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**LXD RESEARCH
95 PERCENT GROUP LLC**



Learning Experience Design (LXD) Research & Consulting

A division of Charles River Media, Inc.

Accelerating Reading Gains with One95: Two-Year Efficacy Study for Kindergarten and First Grade (2020-2022)

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Table of Contents

Abstract	3
Introduction	3
Methods	4
Treatment Group: Program Key Features	5
Comparison Group: Phonics Instruction.....	5
Other Curriculum.....	5
iReady	6
Assessment Sample.....	6
Procedure.....	6
Table 1. iReady Overall Scale Score for Beginning of Year Fall 2020	7
Analytic Approach	7
Results	7
Summary of Findings.....	7
Student Literacy Assessment Results	8
Table 2. Results by Wave and Group for All Participants	8
Figure 1. Percent of Students On or Above Grade Level by Wave and Group.....	9
Table 3. The Difference in Percent of Students On or Above Grade Level by School Year and Group	9
Discussion	9
Limitations	10
Conclusion & Implications for Future Research	10
References	11
Acknowledgements	12

Abstract

This study explores the efficacy of core phonics and intervention products by 95 Percent Group, LLC (“One95”), drawing on the relationship between technology, the science of reading, and learning sciences. Researchers analyzed data from 440 K-1 students in Maryland that rolled out One95 over two school years, fall 2020 to spring 2022. The sample included students who were 54% Black, 15% ELL, 8% SPED, and 75% Economically Disadvantaged. According to iReady® Diagnostic Reading, One95 students outperformed similar students who did not receive the program in the first year. In the second year, both groups used One95, and students with two years of use showed earlier growth and doubled the effect sizes than those with one year of use (0.64 vs. 0.31). Black One95 students also showed stronger reading outcomes than their comparison group peers by spring 2022. These results support that One95 positively and significantly impacted student literacy achievement.

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 skills. Importantly, kindergarteners and first graders from the past two years have never had a “normal” year of school because the remote learning format presented unique challenges for the youngest learners who are often unable to login to lessons on their own or maintain attention on virtual lessons (Mader, 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 the ability to follow routines than in the past years (Mader, 2021), meaning teachers were forced to allocate classroom time to address these skills. Leveraging technology to increase the level of interactivity in the classroom is one way to support engagement while also filling skill gaps.

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). Unfortunately, many teachers never received training on providing structured literacy instruction (Moats, 1999). Again, this is where technology could help boost teachers’ skills and standardize the content taught across classrooms. With these methods, teachers will be able to provide high-quality and effective curricula for Core instruction that aligns with Tier 2 or Tier 3 intervention products to accelerate learning for all emerging readers.

Students need high-quality instruction and early intervention to address gaps in their foundational reading skills. However, many elementary teachers lack knowledge or experience in explicit phonics instruction. When given adequate training, educators can make significant progress in closing phonics gaps through systematic instruction (Ehri & Flugman, 2018).

The 95 Percent Group, LLC is a literacy curriculum company that has created a portfolio of products called One95 intended to be used together to support literacy development, especially with struggling readers. Wicomico, MD school district used the 95 Phonics Core Program (95PCP), the Phonological Awareness (PA) Lessons, the Phonics Lesson Library (PLL), and the 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 **PLL** is an extensive and comprehensive phonics intervention program designed for small group use to specifically support phonics skill development through three levels; Basic, Advanced and Multisyllable. The **Phonics Chip Kit** is a small-group, Tier 2 or Tier 3 intervention product designed for grades K-6 to help teachers explain phonics patterns using manipulatives and sound-spelling mapping and can be integrated with the PLL to intensify instruction. Using all three of these tools together, the school toolkit covers: teaching the alphabetic principle (Foorman., Francis, Fletcher, Schatschneider, & Mehta, 1998); delivering a systematic phonics continuum and curriculum (Ehri, Nunes, Stahl, & Willows, 2001); and incorporating multimodal and scaffolded lessons for diverse learners in a Tier 1 environment (Blomert & Froyen, 2010; Ehri, 2014).

In response to the COVID-19 pandemic, the 95 Percent Group created HTML files to coincide with the 95 PCP to better align with an online learning environment. Since then, these files have become integral to facilitating the lessons and engaging students through interactive learning. Scholars suggest that the integration of multimedia, such as slides, pictures, and videos, into the learning environment can be more effective in engaging students compared to traditional classroom settings, as evidenced by studies conducted by Mayer, (2017) and Mayuni and Dhieni, (2022).

The combination of the company's expert knowledge in the science of reading and learning sciences created a variety of new learning opportunities that benefit both teachers and students. While the educator presents the HTML files, there is a corresponding lesson with research-based routines that gives the instructor explicit language for each section of the lesson. Scripted routines ensure consistent, high-quality instruction derived from evidence-based practices for whole-class instruction across classrooms and schools (Rockoff, 2004). Access to these ready-to-use files and scripts saves teachers' planning time and reduces the instructor's cognitive load or "technostress," which allows them to focus on the students (Pepler, Schindler, & Huang, 2022). 95 PCP's interactive files increase students' motivation to engage in the lesson, while allowing the teacher more time to circulate and progress monitor all students compared to a traditional classroom setting (Javed & Odhabi, 2018). One study conducted by Lauc, Jagodic, & Bistrovic, (2020) revealed that the incorporation of multimedia in learning environments was associated with heightened levels of student motivation and improved academic performance. These HTML files enable the educator to utilize interactive learning strategies to get instant feedback and gauge students' mastery of concepts and understanding of academic performance. Each lesson follows the Gradual Release of Responsibility method, which in tandem with the presentations, allows teachers to scaffold further based on the individual needs of their students (Rosenshine, 2012).

95 Percent Group partnered with Learning Experience Design (LXD) Research to conduct a third-party evaluation of One95 during the 2020-2021 and 2021-2022 school years in the diverse Wicomico, Maryland, school district. The evaluation aims to determine how the use of One95 affects student achievement on benchmark reading assessments in a school that started implementing the program in the fall of 2020 compared to a school that started in the fall of 2021 and follows them through the spring of 2022.

Methods

This study of One95 takes place in Wicomico County, a geographically and demographically diverse school district in Maryland that received \$47.4 Million in ESSER Funds to support academic 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 (Curriculum Associates, 2021). 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. iReady diagnostic tests were administered to 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 One95 in one elementary school during the 2020-2021 school year and then rolled it out to all schools in 2021-2022. Therefore, this study compares the treatment school (with two years of One95 programming) to the comparison group (with only one year of One95 programming). The research questions are as follows:

1. "How does the use of One95 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 One95 look like for different student subgroups (e.g., Black students)? and
3. "If a significant change is found to correspond with the use of One95, over which of the time periods is the impact greatest?"

Treatment Group: Program Key Features

One95 features instructional practices and strategies that differ from the typical reading instruction provided by core curricula. The products cultivate phonemic awareness and phonics continuum of skills using structured literacy characteristics. The 95 Percent Group's version of the Gradual Release model uses a multimodal "I do, we do, you do" approach that allows all students to practice every skill using speaking, listening, and manipulatives, including a phonics mat and chips.

Each lesson is defined by eight unique characteristics: explicit, systematic, sequential, adequate modeling, corrective feedback, differentiated instruction, scaffolded instruction, and continual assessment. Explicit instruction is the first step of the "I do" phase. Throughout the lessons, educators model concepts and are given precise language at each level of the lesson. This ensures that lessons are consistent and high quality across schools. The lessons continue systematically, using intentional language, hand gestures, consistent verbal cues, and promoting gradual transfer from teacher to student. These lessons are intentionally sequential, building on students' previously mastered concepts, ranging from the simplest skills to the most complex. During the "we do" and "you do" phases of the lesson, teachers give corrective feedback to students and can differentiate the lessons to their students' further needs. Finally, continual assessment occurs through informal observation; the instructor can conduct a formal assessment using the Phonics Screener for Intervention (PSI). Research on the 95PCP has been reviewed by the state of Arizona and the Evidence for ESSA website (Schechter & Lynch, 2022a; Schechter & Lynch, 2022b; Schechter & Lynch, 2023).

The 95 Percent Group's phonological awareness and phonics continuum follow a prescribed sequence that progresses from the simplest concepts and skills to the most complex. All 95 Percent Group products are aligned to the continua, and each lesson is intended to build on earlier mastered concepts. On the phonological awareness continuum, students begin their learning with concepts like words in a sentence, then progress to syllables, onset rhymes, and rhyming, and finally to phonemes. The intention of this method is to increase students' phonemic awareness. The most complex skills consist of three groups: the first consists of concepts around isolation, identity, and categorization; the second group is blending and segmentation; and the last group of skills includes concepts such as deletion, addition, and substitution.

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" (Cowan, 2016).

Comparison Group: Phonics Instruction

During 2020-2021, teachers in the comparison group created and modified materials from various sources to teach phonics. Students were instructed to use iReady Instruction in between assessments, and teachers used iReady lessons to complement online learning. iReady Reading Instruction did not have any eligible research on the Evidence for ESSA website at the time of this publication. A study evaluating the impact of iReady instruction that uses iReady Diagnostic was conducted during 2018-2019, and effect sizes for kindergarten and first grade were .20 and .10 respectively (Swain, Randel, & Dvorak, 2020).

Other Curriculum

The district uses its own reading comprehension (knowledge) curriculum that aligns with The Maryland College and Career Ready Standards (MCCRS) for English Language Arts. 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, including Phonological Awareness, High-Frequency Words, Phonics, Vocabulary, and Comprehension with Informational Text and Literary Text. Students in k-5th grade take the iReady Diagnostic three times a year.

Assessment Sample

In this study, researchers had Year 1 data from a total of 440 students from two schools. Of these students, 180 were in the intervention school, and 260 were in the comparison school. The demographic sample included 53% Male, 15% ELL, 8% SPED, and 75% Economically Disadvantaged. Regarding race and ethnicity, the sample was 54% Black/African American (Black), 24% White/European American, 12% Other, 8% American Indian/Native American, and 2% Asian/Pacific Islander. 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.

Procedure

The goal of the 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. A school was quasi-randomly selected for the comparison school.

This quasi-random selection was conducted by considering schools with 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 from those four schools, with an average baseline Overall Scale Score of 402. The quasi-random selection of schools successfully created similar treatment and comparison groups. The differences between the groups were non-significant (Table 1).

In addition, looking at Black students' performance on literacy assessments can give essential insight into the effectiveness of the program overall. This is imperative in understanding the district landscape; Black students make up approximately 54% of the Wicomico School District. White students in this district are 2.8x as likely to be enrolled in at least one AP class as Black students, and Black students are, on average, academically 2.3 grades behind White students (Propublica, 2018). By focusing on Black students' literacy scores, it can be investigated to see if this program not only increases student achievement but also considers an equity lens, particularly for historically marginalized groups (Tab. 1).

Table 1. *iReady Overall Scale Score for Beginning of Year Fall 2020*

Student Group	Condition	Number of students	Average BOY Score	SD	Significance
All Students	Treatment	180	398	56.6	P = .37 (n/s)
	Comparison	251	402	64.0	
Black Students	Treatment	117	404	59.2	P = .67 (n/s)
	Comparison	122	408	75.6	

Analytic Approach

This report focuses on exploring the following research questions:

1. How does the use of One95 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 One95 look like for different student subgroups (e.g., Black students)?
3. If a significant change is found to correspond with the use of One95, over which of the time periods is the impact greatest?

To answer these questions, analysts conducted repeated-measures ANOVAs with post hoc 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).

Among the 260 comparison students who had complete data in Year 1, 15 did not have data for the spring of Year 2, signaling an attrition rate of approximately 6%. Among the 180 treatment group students who had complete data in 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 ($\chi^2=0.83$, $p=.36$).

Analysts 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 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. All analyses were conducted with the statistical software package SPSS Version 26.

Results

Summary of Findings

Both groups showed significant gains over the four waves. Looking at each group and year, One95 group made impressive progress during 2021-2022 rebounding from the pandemic faster than the national trends. Students (and educators) with previous experience using One95 outperformed the comparison group when comparing fall 2020 to spring 2022. The effect size of these differences can be measured and reported through the analysis. Over the two years, the effect size of One95 was double that of the comparison group (.64 vs. .31), and for the Black student subgroup, the effect size comparison was even more pronounced (.68 vs. .23).

Student Literacy Assessment Results

Analysts examined the results of the repeated-measures ANOVAs with post hoc 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. Analysts also examined the nature of this change to determine when the mean changes were significant across waves of the study.

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 ($F(3, 1) = 49.4, p < .001$). 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 $\mu^2 = .64$, compared to $\mu^2 = .31$ for the comparison group (Tab.2). Examining the results from the Black student subgroup revealed similar findings. The effect of Wave on Overall Reading Scale Scores from the Black students of the treatment group was $\mu^2 = .68$, compared to $\mu^2 = .23$. The same pattern of effects was visible in the percentage of students on or above grade level (Fig. 1; Tab. 3).

Table 2. Results by Wave and Group for All Participants

Group	Wave	Results for All Students			Results for Black Students		
		Change in Scale Score	SD	Significance	Change in Scale Score	SD	Significance
Treatment Group	Fall 2020	n/a	n/a	n/a	n/a	n/a	n/a
	Spring 2021	-10.85	4.54	P = .02*	-16.72	5.70	P = .004**
	Fall 2021	14.94	8.76	P = .09	14.16	11.89	P = .24
	Spring 2022	37.06	5.31	P < .001***	30.35	6.77	P < .001***
Comparison Group	Fall 2020	n/a	n/a	n/a	n/a	n/a	n/a
	Spring 2021	-1.56	5.33	P = .77	-7.55	9.01	P = .40
	Fall 2021	8.03	6.45	P = .21	0.41	9.97	P = .97
	Spring 2022	36.50	5.36	P < .001***	24.86	8.32	P = .004**

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

Figure 1. Percent of Students On or Above Grade Level by Wave and Group

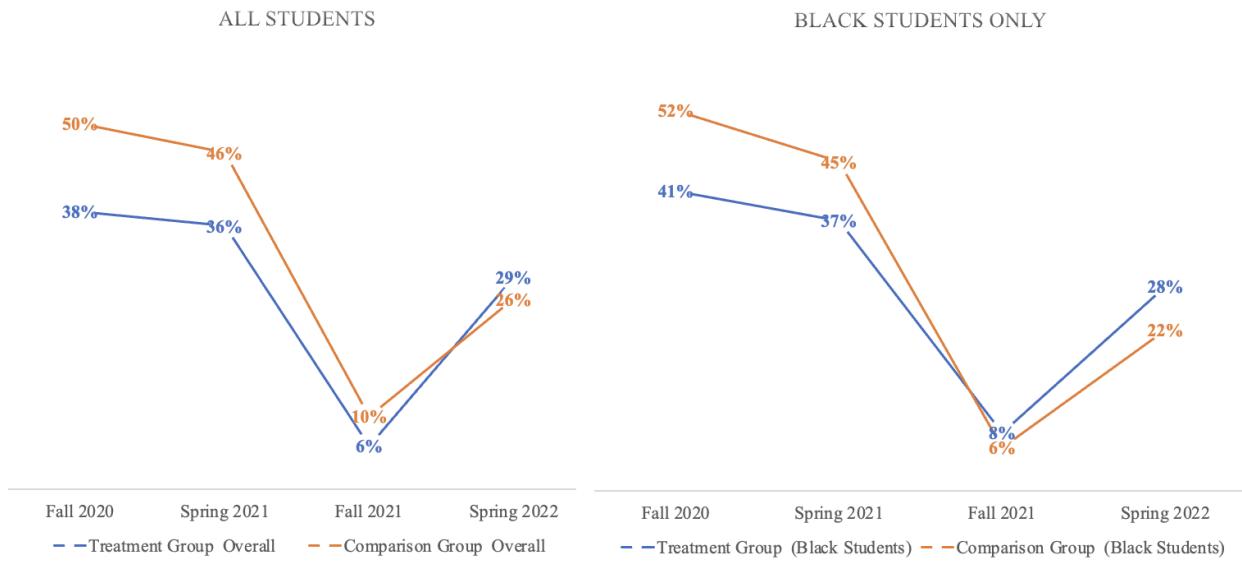


Table 3. The Difference in Percent of Students On or Above Grade Level by School Year and Group

Group	Difference Year 1 (Spring 2021-Fall 2020)	Difference Year 2 (Spring 2022-Fall 2021)
One95 (Overall)	-2% (36%-38%)	23 (29%-6%)
Comparison (Overall)	-4 (46%-50%)	16 (26%-10%)
One95 (Black Students)	-4 (37%-41%)	20 (28%-8%)
Comparison (Black Students)	-7 (45%-52%)	16 (22%-6%)

Discussion

This study examined gains in overall reading performance indexed by iReady scores in two schools: one school that implemented One95 over two years (i.e., from fall 2020-spring 2022) and a randomly selected comparison school that implemented One95 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. The treatment group had a steeper slide during the first year, perhaps because students were filling in gaps left by the pandemic and preventing them from advancing as far on the reading test. The following year, the treatment students rebounded from their losses and made greater gains than the comparison group. A second indicator mirrored the increased gains during year two, the percentage

of students in each school that improved their reading from "Below Grade Level" to "On or Above Grade Level" by spring 2022.

Educators around the country know that the pandemic threw school leaders and teachers into unprecedented situations. In 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 intervention materials that matched the pedagogy and terminology for students who needed more intensive support. Beyond whole classroom instruction, materials from the same publisher were used for Tiers 2 and 3 to increase the amount of time, intensity, and focus on phonics using the same terminology and skill sequence. This coordination would allow for increased teacher collective efficacy and for teachers to build their knowledge and skills during the second year, leading to greater gains for students.

It is important to note that the treatment group had greater losses during the first year of program use than the control group. One possible explanation is that students had many more skill gaps due to school closures during spring 2020. The structured and systematic nature of the 95 Percent Group skill continua would have filled the phonological awareness, and phonics skill gaps students needed to build a solid early literacy foundation, but that work may not have been measured accurately by the iReady assessment. Once the students became first graders, however, the assessment was more difficult, and the treatment group's stronger skill foundation helped their scores rebound, thereby having a higher percentage of students on grade level than the comparison group (for which those kindergarten and first-grade skill gaps remained).

Limitations

The results of this study are compelling, but potential limitations should be acknowledged. The study is limited in scope and does not account for student and teacher attendance, a chronic issue during these two years of school (Gottfried, 2019). Additionally, while the selection of the comparison group was random, the district chose the pilot school to implement One95 for reasons unknown to the researcher. An additional limitation of this study is the lack of qualitative data collection that could have helped the researchers understand how different the instructional materials were in the comparison school or understand other outside factors that could contribute to student growth on iReady.

Conclusion & Implications for Future Research

The first full year of implementation for any new educational program can be challenging. 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 a greater impact.

In a recent study of the 95PCP (Schechter & Lynch, 2022a), researchers 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 One95 in school districts with different student demographic profiles and in other geographic areas. 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.

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