



RESEARCH

Reading Accelerator ESSA Level III Study

Grades 7–8, 2024–2025

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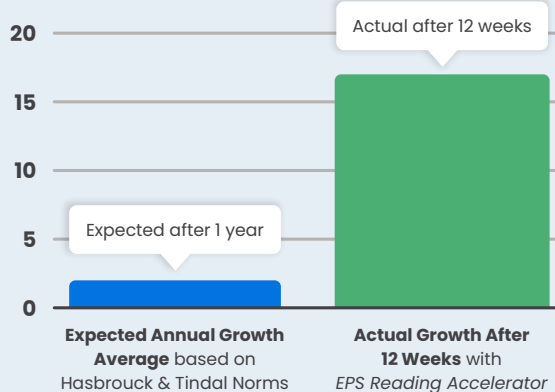
Executive Summary

EPS partnered with Dr. Matthew Jeans to evaluate the relationship between progress in *Reading Accelerator* and student reading outcomes with students in two middle schools in an urban New Jersey public school district. *Reading Accelerator* is an evidence-based Structured Literacy intervention for striving readers in grades 3–8. Grounded in science-of-reading principles, *Reading Accelerator* helps students master foundational literacy skills. Students who can benefit from *Reading Accelerator* include multilingual learners, students with learning differences including dyslexia, and others who have not yet mastered core reading skills. This report provides evidence that *Reading Accelerator* has “Tier III” evidence and qualifies as a “promising” program, according to the ESSA Tiers of Evidence framework.

During the 2024–2025 school year, two urban middle schools in East Orange School District in New Jersey implemented EPS Learning’s *Reading Accelerator* program for 12 weeks to study its effectiveness with students below the 10th percentile in oral reading fluency (ORF). The study included a total of 89 students across two schools co-located in a single building. The study compared students who scored below the 10th percentile on a standardized oral reading fluency assessment across “high-fidelity” and “low-fidelity” classrooms in both schools. This “10th percentile” indicator for both groups of students was selected due to its relationship to overall reading proficiency and its link to the “decoding threshold” (Wang et al., 2019). Students who have not yet crossed the decoding threshold require further development of phonemic awareness, phonics, and decoding skills before they shift to an intervention focusing on vocabulary and comprehension. Middle school students who are below the 10th percentile in ORF typically become stagnant in reading growth, gaining only two words correct per minute (WCPM) in fluency throughout an entire school year (Hasbrouck & Tindal, 2017).

Student growth in “high-fidelity” classrooms (classrooms in which students completed 21–22 lessons of *Reading Accelerator*) was compared to student growth in “low fidelity” classrooms” where there was a wide variation of student lesson completion. In these classrooms, students completed 4–17 lessons. After 12 weeks of implementation, the great majority of students in high-fidelity classrooms exceeded annual growth expectations for all percentile ranks, including the 90th percentile, with average growth in WCPM exceeding 17. Because these gains were accomplished in just one third of the school year, we can reasonably expect that the lowest-performing readers will continue to build on this 12-week observed growth and demonstrate significantly higher levels of ORF growth by the end of the full program and school year.

Expected Annual ORF Growth vs. Actual ORF Growth after 12 Weeks of High-Fidelity Reading Accelerator Use



Further analysis of the comparison group revealed that students in high-fidelity classrooms outperformed expectations based on their starting point, while students in low-fidelity classrooms fell below predicted performance. This pattern was attributed to differences in implementation fidelity across classrooms, indicating that strong outcomes depend not just on completing lessons but also on delivering them with fidelity and consistency. The study meets ESSA Level III (Promising Evidence) criteria, demonstrating that consistent, high-fidelity implementation of *Reading Accelerator* leads to stronger reading fluency growth in struggling middle school readers.

Study Samples, Measures, and Methods

This study was conducted during the 2024–2025 school year and included 89 students in grades 7–8 from two middle schools in East Orange School District in New Jersey. According to the school district’s most recent demographic data, the largest racial/ethnic groups in the district are Black/African American (approx. 80%) and Hispanic (16.5%). Approximately 10% of students are multilingual learners and 51% are economically disadvantaged.

Students’ oral reading fluency (ORF) was assessed at the beginning of the year (BOY) and middle of the year (MOY) by determining the WCPM each student read from standardized oral reading passages. Engagement in EPS Learning’s *Reading Accelerator* program was recorded for each student by determining the total number of lessons completed during the study period.

The primary analysis compared student growth from BOY to MOY between the high- and low-fidelity groups using analysis of covariance (ANCOVA) with BOY WCPM as a covariate. Additional analyses examined residualized gain scores (performance above predicted MOY based on BOY) and the relationship between lesson completion and MOY WCPM, with models adjusted for BOY WCPM and fidelity group. In the context of this research, the high-fidelity group refers to students who completed a range of 21–22 lessons (with a single outlier of a student who completed 16 lessons). The low-fidelity group refers to students who completed 4–17 lessons.

EPS Learning, with a decades-long history of supporting the implementation of reading intervention programs in public schools, defines high-fidelity implementation as delivering a program on pace with the program recommendations, with low variance among the number of lessons completed in each class. To verify implementation fidelity, EPS Learning works collaboratively with school administrators to review student work.

Research Findings

Analyses were conducted to examine differences in literacy performance between classrooms implementing *Reading Accelerator* with high vs. low fidelity. High-fidelity implementation involved consistent completion of 21–22 lessons, while low-fidelity implementation involved the completion of fewer lessons (4–17). Results showed that students in high-fidelity classrooms performed higher than students in low-fidelity classrooms after accounting for BOY scores. Across the total sample, students who completed more lessons tended to have higher MOY performance.

Student Outcomes

- Students in the high-fidelity classroom scored higher on MOY WCPM than students in low-fidelity classrooms, after accounting for differences in BOY scores.
- Students in high-fidelity classrooms showed greater gains in reading fluency than predicted from their starting scores, while students in low-fidelity classrooms declined relative to predictions.
- Across the total sample, students who completed more *Reading Accelerator* lessons tended to have higher MOY performance.

Conclusion

This study provides results to satisfy ESSA evidence requirements for Level III (Promising Evidence) given the study design and positive, statistically significant findings.

Introduction

Product Description

EPS Reading Accelerator is an evidence-based reading intervention program designed primarily for striving middle school students (Grades 6–8, Tier 2), though it is also effective in all grades 3–12. Rooted in the science of reading and Structured Literacy, it focuses on helping students master foundational reading skills to cross the decoding threshold and transition from “learning to read” to “reading to learn.”

Reading Accelerator offers teacher-led instruction across the five pillars of reading: phonemic awareness, phonics, fluency, vocabulary, and comprehension. It features 108 concise 20-minute lessons with a consistent 5-step structure (Sound Round, Rapid Round, Break and Build, Push a Pencil, Time for Texts) designed for swift implementation (one school year or less with just three lessons per week).

After each teacher-led lesson, students engage in intentional practice in the Student Workbook, which includes fluency practice with words, sentences, and decodable passages, along with comprehension and writing activities. *Reading Accelerator* provides additional, optional oral reading fluency practice with immediate micro-interventions (through an AI “tutor”) in its *EPS Reading Assistant* component.

Additionally, *Reading Accelerator* provides automated assessments through its *EPS Reading Assistant* component, allowing teachers to track student growth and obtain actionable data. The assessment features a powerful “5-in-1” Early Literacy Assessment for universal screening, dyslexia identification, diagnostics, benchmarking, and placement, providing actionable reports in English and Spanish.

Reading Accelerator is culturally responsive and supports diverse learners, including multilingual students and those with disabilities, through explicit linguistic scaffolds and NIMAS-compliant materials. It accommodates whole-class, small-group, or individual settings, including remote environments.

Study Description

EPS Learning partnered with Dr. Matthew Jeans to examine the relationship between *Reading Accelerator* usage and student literacy assessment outcomes. Dr. Jeans conducted the analysis and report to satisfy Level III criteria according to the Every Student Succeeds Act (ESSA). This pilot study was designed as an initial evaluation of *Reading Accelerator*’s implementation and outcomes in an applied school setting.

Research Questions

Q1: What was the impact of high- vs. low-fidelity implementation of *Reading Accelerator* on students’ middle-of-year foundational literacy performance, after adjusting for beginning-of-year performance?

Q2: Did students in the high-fidelity classroom demonstrate greater gains than predicted from their beginning-of-year scores, compared to students in the low-fidelity classrooms?

Q3a: What is the overall relationship between lesson completion and middle-of-year foundational literacy performance, adjusting for beginning-of-year scores?

Q3b: To what extent does this relationship persist after accounting for fidelity group differences?

Methods

Setting

The study included an analysis sample of 7th–8th grade students at two middle schools in an urban school district in New Jersey who were all identified as having scores below the 10th percentile at the beginning of the school year according to the Hasbrouck–Tindal Compiled ORF Norms 2017 chart (Hasbrouck & Tindal, 2017).

This school district educates approximately 9,500 students throughout grades PK–12. The district’s student demographics include 78% who identify as Black/African American, 17% who identify as Hispanic, 2% who identify as White, 0.8% who identify as Two or More Races, and the remainder as either Native Hawaiian or Pacific Islander, American Indian or Alaska Native, or Asian (State of New Jersey, 2024).

Participants

There were 48 students in grades 7–8 in the high-fidelity group analytic sample and 41 students in grades 7–8 in the low-fidelity group analytic sample.

Measures

The study included the following measures to provide insight into *Reading Accelerator* implementation and the program’s impact on student literacy growth:

EPS Reading Assistant: *EPS Reading Assistant* is a digital, AI-driven platform that includes an oral reading fluency (ORF) assessment as a critical component of its standardized benchmark assessment, typically administered three times a year (beginning, middle, end) to track student growth. It uses advanced voice recognition technology, allowing automatic scoring of a student’s reading rate and accuracy. Scores are reported in WCPM and percentage accuracy. The assessment dynamically adjusts text complexity based on student performance.

Words Correct Per Minute (WCPM): WCPM is a core metric within *EPS Reading Assistant’s* Oral Reading Fluency (ORF) assessment, accurately measuring a student’s reading rate and accuracy and recording it as WCPM. WCPM data offers crucial diagnostic insights and supports continuous progress monitoring, with alignments to national norms for reliable tracking of student growth and proficiency.

Data Analysis

The data were analyzed in three stages to answer the primary research questions and account for sample characteristics.

ANCOVA was conducted to examine the impact of high- vs. low-fidelity implementation of *Reading Accelerator* on MOY WCPM scores, controlling for BOY WCPM scores. This approach addressed the primary research question regarding differences in literacy performance between fidelity groups. Adjusted means were derived following the ANCOVA model to aid interpretation.

Residualized WCPM gain scores were calculated to evaluate differences in growth relative to baseline performance. The residualized gain scores represent each student's MOY score deviation from the score predicted by their BOY performance. Group differences in these residualized gains were then tested using independent-samples t-tests and confirmed via simple regression models. Effect sizes were calculated using the pooled within-group standard deviation.

Engagement with the *Reading Accelerator* program was operationalized as the number of lessons completed. Two regression models were specified to explore the association between lesson completion and MOY WCPM while adjusting for BOY WCPM.

- **Model 1** estimated the overall association between lessons completed and MOY WCPM, controlling only for BOY WCPM.
- **Model 2** added group (high- vs. low-fidelity implementation) to the model to account for the correlation between lesson completion and fidelity group.

Including both models allowed for examination of the total lessons/performance relationship as well as the relationship net of fidelity differences.

The sequence of analyses was structured to first estimate the primary fidelity relationship, then evaluate growth beyond baseline expectations, and then explore the role of engagement as measured by lessons completed. This progression ensured that the primary program effect was established before examining potential mediating or associated factors.

All analyses were conducted in Stata/MP 19.5. Statistical significance was evaluated at the $\alpha = .05$ level.

Student Outcome Findings

Descriptive Statistics

Descriptive statistics of the analytic sample are shown in Table 1. At BOY, low-fidelity-implementation students had a higher mean WCPM score compared to high-fidelity-implementation students (92.17 vs. 51.65; $p < 0.001$). By MOY, means indicated that low-fidelity-implementation students averaged 86.93 WCPM, while high-fidelity-implementation students averaged 68.93. This difference resulted in observed gains for high-fidelity-implementation students and negative gains for low-fidelity-implementation students, on average (17.29 vs. -5.24; $p < 0.001$).

High-fidelity-implementation students completed an average of 21.77 lessons, while low-fidelity-implementation students who completed an average of 13.32 lessons. The range of lessons completed by low-fidelity-implementation students was 4 to 17, while the range of lessons completed by high-fidelity-implementation students was mostly 21 to 22, except for one student who completed 16 lessons. This highlights the higher variability of usage in the two classes in the low-fidelity group; there was more consistent high usage in the high-fidelity class.

Table 1. Descriptive Statistics of the Analytic Sample, Mean (SD)

	Low-Fidelity ($n=41$)	High-Fidelity ($n=48$)	p -value
BOY WCPM	92.17* (39.24)	51.65 (23.63)	< 0.001
MOY WCPM	86.93* (40.68)	68.93 (25.92)	0.01
WCPM Gain	-5.24 (28.94)	17.29* (16.58)	< 0.001
Number of Lessons	13.32 (3.86)	21.77* (0.90)	< 0.001

* $p < 0.05$

Comparison of High- and Low-Fidelity Implementation

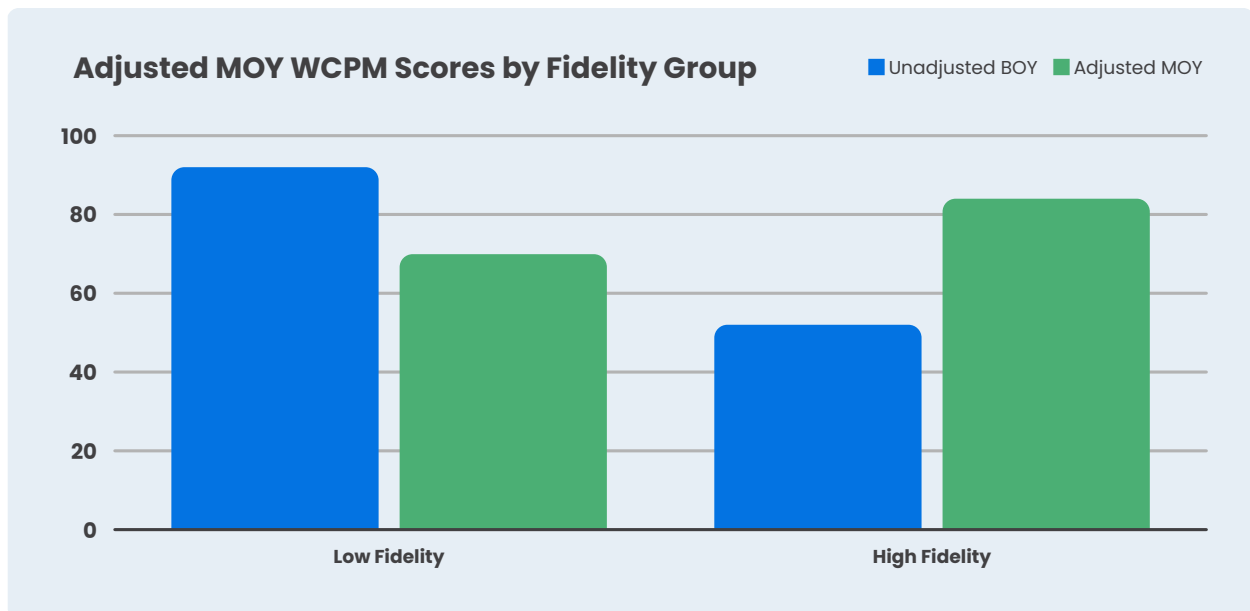
The ANCOVA results examining MOY WCPM scores by fidelity group are shown in Table 2. After controlling for BOY scores, high-fidelity-implementation students scored on average 14.10 WCPM higher than low-fidelity-implementation students ($p = 0.01$), corresponding to a moderate-to-large standardized difference ($d = 0.63$). Figure 1 is a graphical representation of the MOY WCPM adjusted means, which were 83.72 WCPM for high-fidelity-implementation students and 69.62 WCPM for low-fidelity-implementation students.

Table 2. Comparison of MOY WCPM Scores Between Low- and High-Fidelity Groups

	Coefficient (SE)	95% CI [LL, UL]	p-value
Group (High-Fidelity)	14.10 (5.63)	[2.91, 25.29]	0.01
BOY WCPM	0.79 (0.08)	[0.64, 0.94]	< 0.001
Intercept	13.92 (7.75)	[-1.49, 29.32]	0.08

* $p < 0.05$ indicates statistical significance.

Figure 1. Adjusted MOY WCPM Scores by Fidelity Group

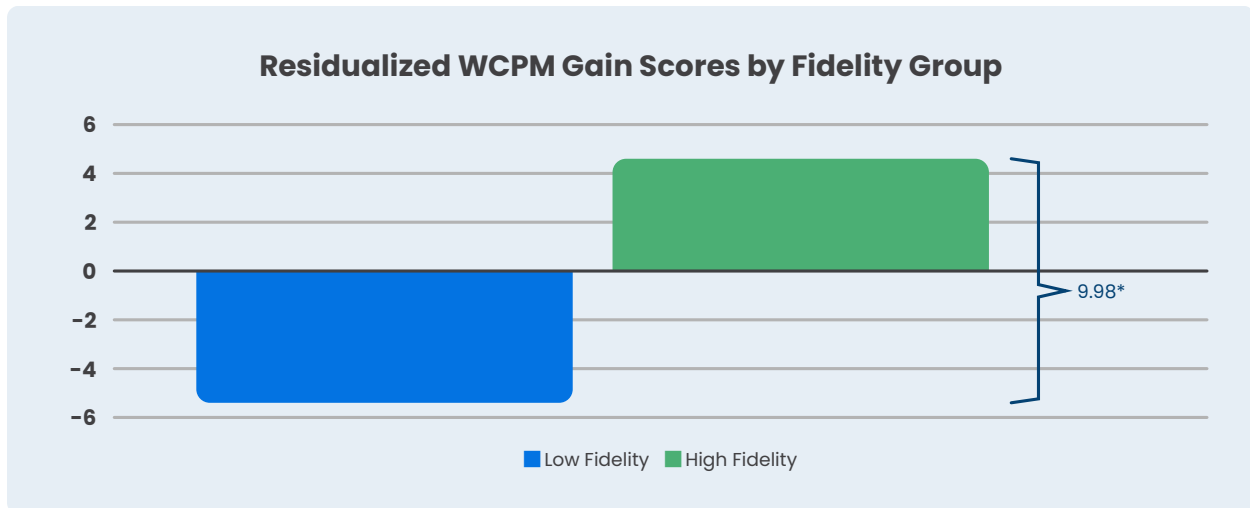


* $p < 0.05$; BOY WCPM means are unadjusted.

Growth Perspective: Residualized Gains

Independent-samples t-tests, shown in Table 3, indicated that high-fidelity-implementation students had significantly higher residualized gains than low-fidelity-implementation students (4.60 vs. -5.38, respectively; $p < 0.05$). The difference of 9.98 WCPM reflected a moderate standardized difference ($d = 0.45$). Figure 2 is a graphical representation of the difference in residualized WCPM gain scores.

Figure 2. Residualized WCPM Gain Scores by Fidelity Group



* $p < 0.05$

Table 3. Residualized WCPM Gain Scores for Low- and High-Fidelity Groups

	Mean Residualized WCPM Gain (SD)	Mean Difference	Cohen's <i>d</i>
Low-Fidelity	-5.38 (27.59)		
High-Fidelity	4.60* (16.69)	9.98*	0.45

* $p < 0.05$

Lessons Completed and MOY Performance

Lesson completion was explored as a measure of program engagement, shown in Table 4. In Model 1, lesson completion was significantly associated with MOY WCPM ($\beta = 1.22, p < 0.05$), indicating that each additional lesson corresponded to an average increase of 1.22 WCPM after controlling for BOY scores.

In Model 2, fidelity group was added to the model to account for the strong association between lesson completion and fidelity condition. In this adjusted model, the lesson coefficient was no longer statistically significant ($\beta = 0.32, p = 0.73$), suggesting that the relationship between lessons and MOY performance observed in Model 1 was largely attributable to fidelity group differences. The group difference remained positive but was not statistically significant ($\beta = 11.60, p = 0.23$).

Table 4. Regression Models Between Lesson Completion and MOY WCPM Scores in Low- and High-Fidelity Groups

	Model 1	Model 2
Number of Lessons	1.22* (0.56)	0.32 (0.90)
BOY WCPM	0.78* (0.08)	0.80* (0.08)
Group (High-Fidelity)		11.60 (9.10)
Intercept	0.91 (13.81)	9.30 (15.25)

Model Fit	Model 1	Model 2
AIC	809.4	809.7
BIC	816.9	819.7

* $p < 0.05$

Summary of Findings

The high-fidelity group demonstrated stronger MOY performance after adjusting for BOY scores and scored above predictions relative to baseline performance when compared to the low-fidelity group. While lesson completion was positively associated with MOY WCPM overall, this association was not statistically significant after adjusting for fidelity group, indicating that the observed relationship was largely explained by group-level differences in implementation.

Conclusion

Students who participated in *Reading Accelerator* classrooms with high implementation fidelity showed stronger growth in reading fluency than those in classrooms with lower implementation fidelity. After controlling for BOY performance, high-fidelity-implementation students had higher MOY performance than low-fidelity-implementation students, which translated to an effect size of 0.63. When the program was delivered consistently and students completed 21-22 lessons, they made greater progress than peers in classrooms where implementation was inconsistent.

Analyses of growth patterns supported that students in high-fidelity classrooms outperformed expectations based on their starting point, while students in low-fidelity classrooms fell below predicted performance. Lesson completion was also related to outcomes across the total sample, with students completing more lessons tending to perform higher at MOY. However, this pattern was explained by differences in classroom fidelity. This indicates that strong outcomes depend not just on completing lessons but also on delivering them with fidelity and consistency.

When *Reading Accelerator* was implemented with high fidelity, it meaningfully impacted student outcomes, resulting in an average 12-week gain that exceeded annual growth expectations.

Hasbrouck, J. & Tindal, G. (2017). An update to compiled ORF norms (Technical Report No. 1702). Eugene, OR, Behavioral Research and Teaching, University of Oregon.

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