

Proven Practices

Paired Intervention Delivery Proven Effective for 2nd and 3rd Grade Students



Reading Corps is a high dosage tutoring program for K-3 students that has strong empirical evidence in support of its impact on key literacy skills (Markovitz et al., 2014; 2018). Among second and third grade students, Reading Corps is delivered individually in 20-minute daily tutoring sessions. Reading Corps tutors are AmeriCorps members who receive training and coaching to deliver the program model as intended. The program also uses a data-based decision-making framework for selecting students, monitoring growth, and making exit decisions. For a full overview of Reading Corps, refer to readingandmath.org.

The Project

In this project, we sought to evaluate the impact of paired tutoring relative to the business as usual Reading Corps model of individual tutoring. We were guided by two key research questions regarding students who either received paired tutoring or individual tutoring:

1. Do students differ in their reading performance?
2. Do students exit intervention at different rates?

Why It Matters

Paired intervention substantially increases the number of students who can receive high-dosage with very minimal impact on operational cost. Before adopting paired interventions at scale, it is critical to evaluate the impact of paired tutoring on implementation and impact metrics in order to understand the impacts (if any) of paired implementation on the integrity of the program.

Key Takeaways

- Students who received tutoring in pairs and students who received tutoring individually achieved similar growth (see Table 1).
- Tutoring in pairs can potentially double the number of students a tutor can serve.
- We recommend wide-scale adoption of paired tutoring for second and third grade students supported by Reading Corps tutors.

Table 1. Winter performance and intervention dosage across matched groups.

Outcome	Second Grade		Third Grade	
	Individual Mean (M)	Pairs M	Individual M	Pairs M
Winter Score <i>Words read correct (WRC) per min</i>	79	78	99	102
Weekly Growth <i>Weekly gain in WRC/min</i>	2.87	2.52	2.66	2.59
Percent with Successful Exit	41%	41%	45%	41%

Methodology Overview

We adopted a quasi-experimental design to evaluate the potential impact of paired tutoring. During the 2022-23 academic year, 49 schools were randomly assigned to receive training on the paired intervention and 46 schools were assigned to deliver the program individually. A subset of students received paired intervention in treatment schools and propensity score matching was used to match these students with peers at comparison schools who received a similar fluency intervention individually (Table 2).

Table 2. Inclusion criteria and procedures for student matching.

	Treatment	Comparison
Full Sample	135	378
Enrolled in the fall	✓	✓
In second or third grade	✓	✓
Required fluency support	✓	✓
Received tutoring in pairs	✓	
<i>Students matched using grade, race, and fall fluency score</i>		
Analytic Sample	135	135

A series of t-tests and chi-square tests provided evidence that there were no statistically significant differences between groups in regard to fall fluency scores, racial composition, or intervention dosage (Table 3). That is, the two groups of students – 135 in each –

were similar with the exception that half received paired intervention.

Table 3. Fall performance and intervention dosage across matched groups.

Outcome	Second Grade		Third Grade	
	Individual Mean (M)	Pairs M	Individual M	Pairs M
Fall Score <i>Words read correct per min</i>	43	44	69	69
Tutoring Sessions	47	48	45	48
Tutoring Weeks	15	15	14	15

Results

To evaluate potential differences between groups in regard to winter fluency scores, we fit a series of linear and logistic regression models to the data. The linear and logistic regression models—regardless of adjustments for clustering, separation by grade, or the addition of other covariates—produced the same results. Although fall baseline score was strongly linked to winter scores and exit rate, students who received paired intervention did not differ in performance on winter benchmarking or in likelihood of exiting the intervention. Mean values for winter scores, fluency growth, and exit rate across groups are provided in Table 1.

Based on the current project, we recommend scaling paired intervention for fluency skills among second and third grade students receiving Reading Corps support.

Continuous Improvement

At scale, paired intervention delivery significantly improves access to high-quality literacy support in schools. We recommend additional analysis if paired tutoring is scaled, including metrics of interest such as tutor satisfaction, students served, and the application of pairs in contexts outside of fluency intervention for second and third grade students.