# Final Report

## Overview

Reading Partners, a national literacy nonprofit, engaged Child Trends, a national, nonprofit research group, to learn more about how to improve programming and, ultimately, boost learning outcomes for students who struggle with reading. In California reading centers, Child Trends evaluated five key areas of Reading Partners programs:

Dosage: Document the amount of tutoring each student receives.

Tutor engagement and quality: Examine the extent to which Reading Partners is successful in recruiting, engaging, and retaining tutors. Assess the quality of tutors' interactions with students and the effect those encounters have on children.

AmeriCorps member experiences: Identify skills AmeriCorps members bring to Reading Partners and collect feedback about



## Introduction

Reading is a critical academic skill, yet only 37 percent of U.S. fourth graders read proficiently. Reading Partners, a national literacy nonprofit, is seeking to close this literacy gap by partnering with under-resourced schools and engaging community volunteers to provide one-on-one tutoring to elementary school-aged students.

In spring 2016, Reading Partners commissioned Child Trends to conduct an independent evaluation of Reading Partners' California reading centers. This evaluation was designed to build upon the findings of a prior <u>evaluation</u> conducted by MDRC and included an in-depth examination of how key program implementation characteristics (e.g., tutoring dosage, fidelity, student-tutor relationships, and AmeriCorps member characteristics) influence children's learning. The goal was to provide actionable information to improve Reading Partners programs, and enhance the experiences and outcomes of the children, volunteer tutors, and AmeriCorps members who participate in Reading Partners.

This brief highlights key themes and findings from the evaluation regarding student outcomes and provides a snapshot of:

Student development in early literacy and reading Trends in students' Social-Emotional Learning (SEL) development

Predictors of student reading and SEL outcomes

To learn more about the methods used in this evaluation, please refer to the evaluation plan and the factsheets published in Year 1 of the evaluation.

 $\underline{https://www.nationsreportcard.gov/reading~2017/\#/nation/achievement?grade=4}$ 



<sup>&</sup>lt;sup>1</sup> U.S. Department of Education, National Center for Education Statistics (2017). *National Assessment of Educational Progress Reading: Grade 4 National Results.* Retrieved from

# Predictors of student development in early literacy and reading

Researchers also analyzed the associations between students' development in early literacy and reading and student characteristics (i.e., grade level, English Language Learner status, and baseline reading ability), program participation or "dosage" (i.e., total sessions attended, duration, and pacing), and program implementation characteristics (i.e., Reading Partners' region, tutor-student relationship quality, tutor fidelity, tutor characteristics, and AmeriCorps member characteristics). Multi-level statistical models were used to examine associations between student outcomes and each of the predictor variables. For each set of analyses, we first examined associations between predictor variables and outcome variables across all students. Then, we disaggregated the data by type of Star assessment (Early Literacy or Reading) to assess whether the patterns that emerged were consistent across both assessment types.



significantly associated with the likelihood that a student would be reading at grade level. Even after controlling for students' baseline performance, students in lower grades were significantly more likely to be reading at grade level at posttest than students in upper grades. As can be seen in Figure 3, the proportion of children reading at grade level at post-test decreased dramatically in second grade and remained relatively stable in grades two through four, before declining again in fifth grade.

In terms of reading intervention level, as one would expect, students who scored in a higher intervention level at baseline were significantly more likely to be reading at grade level at post-test (Figure 4).<sup>13</sup>

When the data were disaggregated by type of Star assessment, we found that for students who took the Star Reading Assessment, ELL status was significantly associated with the likelihood a student would be reading at grade level. Students identified as ELL were significantly less likely to be reading at grade level than were students not identified as ELL. This pattern was not observed for students who took the Star Early Literacy Assessment.

 $<sup>^{14}</sup>$  B = -0.55, SE=.15, p<.05



<sup>&</sup>lt;sup>12</sup> B = -.448, SE .05, p<.001

<sup>&</sup>lt;sup>13</sup> B = 1.10, SE=.05, p<.001

# Dosage

Overall, student dosage levels were not significantly



that students would be reading at grade level at post-test. 18 However, there was a significant association between the number of tutors that a student had and the likelihood that a student would be reading at grade level at post-test. Students who had more than one tutor were less likely to be reading at grade level at post-test (Figure 6). 19,20

#### Improvement in intervention level

To further examine factors associated with students' development in early literacy and reading, we analyzed associations between the likelihood that students improved their intervention level at post-test and the predictor variables. Improving an intervention level was defined as being categorized in a higher intervention level at post-test than at pre-test



observations were excluded from the analyses. Results for each set of predictor variables are described below.

#### Student characteristics

As illustrated in Figure 7, students' grade level was significantly associated with the likelihood that a student would improve their intervention level at post-test. Students in lower grade levels were significantly more likely to improve than students in upper grade levels.<sup>21,22</sup> In contrast, students who were in lower intervention levels at baseline were significantly more likely to improve than students in higher intervention levels. 23,24 Finally, students who were identified

Students with more intense participation and longer durations in Reading Partners were significantly more likely to improve intervention levels at post-test than their peers.

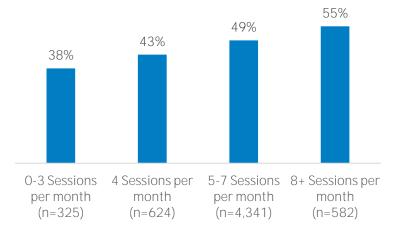
as ELL were significantly less likely to improve their intervention level at post-test (42 percent)

than students who were not identified as ELL (48 percent).25

Figure 8: Proportion of student

#### Dosage

Students who, on average, attended a greater number of Reading Partners sessions per week were significantly more likely to improve their intervention level at post-test than students who attended fewer sessions per week.<sup>26,27</sup> Figure 8 highlights the proportion of children who improved their intervention level based on their intensity of participation. The sessionsper-month breakdowns selected represent students who, on average, attended Reading Partners sessions less than once per week, about



Note: These data are based on students who have matched pre-test and post-test Star data. Improving an intervention tier was defined as scoring in a higher intervention level at post-test than at pre-test. Source: Reading Partners administrative data, 2016-2018.

<sup>&</sup>lt;sup>27</sup> When data were disaggregated by Star assessment type, this relationship was only observed among students who took the Star Reading assessment.



 $<sup>^{21}</sup>$  B = -.26, SE .03, p<.001

<sup>&</sup>lt;sup>22</sup> When data were disaggregated by Star assessment type, this relationship was only observed among students who took the Star Early Literacy assessment.

 $<sup>^{23}</sup>$  B = -.11, SE .04, p<.05

<sup>&</sup>lt;sup>24</sup> When data were disaggregated by Star assessment type, this relationship was only observed among students who took the Star Early Literacy assessment.

 $<sup>^{25}</sup>$  B = -.22, SE .07, p<.01

<sup>&</sup>lt;sup>26</sup> B=.08, SE=.03, p<.01

once per week, once or twice per week, and two or more times per week. As noted in Figure 8, just



## Region

Geographic region was significantly associated with the likelihood that a student would improve their reading intervention level at post-test.<sup>32</sup> As noted in Figure 10, students in the Los Angeles region were most likely to improve their intervention level at post-test, followed by those in Sacramento, Silicon Valley, and the San Francisco Bay Area.



to 15 percent of students who scored in the Intervention level at pre-test. When data were disaggregated by Star assessment type, a significant association emerged between student grade level and the likelihood a student's reading level would decline. A mong students who took the Star Early Literacy assessment, those in higher grades were significantly more likely to experience a decline than students in lower grades. Given that third grade students only take the Star Early Literacy assessment if they are identified as4(ch)13rfar



# Student Social-Emotional Learning Outcomes

This section focuses on how participation in Reading Partners was related to students' development in social-emotional learning (SEL) skills. "Social and emotional learning (SEL) is the



Figure 13 displays teachers' ratings of students SEL skills at



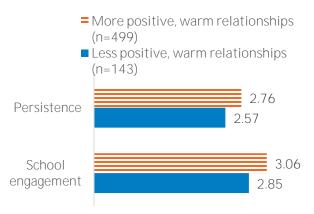
participation or "dosage" (total sessions attended, duration, and pacing), and program implementation characteristics (region, tutor-student relationship quality, tutor fidelity, tutor characteristics, and AmeriCorps member characteristics), net of students' pre-test scores.<sup>37</sup>

Across each SEL skill, the only variables that were consistently related to teachers' ratings of students' SEL skills at post-test were those characterizing the quality of the tutor-student relationship: closeness and conflict. Specifically, positive, warm relationships between tutors and students were favorably associated with students' growth in school engagement <sup>38</sup> and persistence. <sup>39</sup> After controlling for students' pre-test scores, students whose tutors perceived more positive student-tutor relationships were rated by their teachers as having significantly higher persistence and school engagement than students whose tutors perceived less positive student-tutor relationships, net of pre-test scores (Figure 14).

Similarly, there were also significant associations between tutors' perceptions of conflict in the tutor-student relationship and students' development in social competence, 40 reading engagement, 41 and self-control. 42 Students whose

Warm and positive student-tutor relationships were favorably associated with children's development of SEL skills, while student-tutor relationships with conflict were negatively associated with children's development of SEL skills.

Figure 14: Average teacher rating of social-emotional learning (SEL) skills at post-test, by tutor perceptions of student-tutor relationship closeness (*N*=642)



Note: These data are based on students who have matched pretest and post-test teacher SEL data and spring tutor SEL data. SEL Skills were rated on a 4-point scale (1= None of the time; 4=All of the time). More positive, warm relationships were defined as scale scores that fall between 3 and 4, and less positive relationships were defined as scale scores that fall between 1 and 2.9. Source: Child Trends' adapted versions of Reading Partners' Teacher Referral Form and End of Year Teacher Survey and the Tutor Reading Engagement Survey, 2016-2018.

<sup>&</sup>lt;sup>42</sup> B=-.10, SE=.03, p<.01



<sup>&</sup>lt;sup>37</sup> Given that SEL data were only available for students from a subsample of sites within two regions (Los Angeles and Sacramento), we were unable to estimate multi-level models for these analyses. Accordingly, we estimated path models, controlling for school-level differences by entering a series of dummy-coded variables into the models.

<sup>&</sup>lt;sup>38</sup> B=.13, SE=.04, p<.01

<sup>&</sup>lt;sup>39</sup> B=.15, SE=.04, p<.01

<sup>&</sup>lt;sup>40</sup> B=-.08, SE=.03, p<.01

<sup>&</sup>lt;sup>41</sup> B=-.13, SE=.04, p<.01

 $tutors\,perceived\,more\,conflict\,had\,significantly$ 



research base, which finds that reading problems are more persistent among older children, 43 and indicates that this population of Reading Partners participants may be particularly at-risk for poor reading outcomes.

Across all enrollees, more intense participation (pacing) and longer durations in Reading Partners were associated with a greater likelihood of improving intervention levels at post-test. This suggests that students who attend Reading Partners consistently may be benefiting the most. When data were disaggregated by assessment type, inconsistent patterns between dosage and reading and early literacy outcomes emerged. For students who took the Star Early Literacy assessment, 44 the only significant association between dosage and early literacy outcomes was between total sessions attended and the likelihood a student would improve intervention levels.

For students who took the Star Reading assessment, duration was associated with an increased likelihood that they would be reading at grade level and improve their intervention levels at posttest. Additionally, there was a positive association between pacing and the likelihood that students who took the Star Reading assessment would improve intervention levels.

In contrast, there was a significant, negative association between total sessions attended and the likelihood that students who took the Star Reading assessment would improve intervention level. This paints a somewhat unclear portrait of how, among students who took the Star Reading assessment, student dosage is related to improvements in reading. Given that the Star Reading assessment is administered to older students (grades 3-5), and that older students typically experience more challenges with reading, this finding may suggest that different levels of participation are more beneficial for students with different reading needs.

There were no other associations between program dosage and students' development in reading, early literacy, and SEL skills. One reason for this may be that, on average, students attended Reading Partners guite regularly. 45 In fact, more than 75 percent of students met or exceeded the recommended tutoring dosage threshold of 16 hours of tutoring (~21 sessions). In addition, more



<sup>&</sup>lt;sup>43</sup> National Institute for Literacy (2008). Developing Early Literacy: Report of the National Early Literacy Panel. Jessup, MD: National Institute for Literacy. https://www.nichd.nih.gov/publications/pubs/documents/NELPReport09.pdf <sup>44</sup> The Star