Reading Partners Evaluation

Society for Research in Educational Effectiveness

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Overview

I. The Reading Partners Program
II. Assessing Fidelity of Implementation
III. Treatment Contrast
IV. Main Impact Findings
V. Cost Findings
VI. Summary of Findings/Conclusions
The Reading Partners Program

- School serving grades K-5 in low-income communities
- One-on-one instruction by community volunteers
- Structured curriculum
- Sites are run and volunteers supported by AmeriCorps Site Coordinators
- Site Coordinators are supervised weekly by Program Managers
Evaluation Design

- Reading Partners was competitively selected for the EMCF SIF known as the True North Fund

- Evaluation period: School Year 2012-2013

- Study sample
  - Grades 2 - 5
  - Eligible for Reading Partners
  - 1,250 students randomly assigned within 19 schools
  - Low attrition rate (~8%), no differential attrition
  - Baseline equivalence of treatment and control groups
Research Questions

- Implementation
  - In what context was Reading Partners implemented and was it implemented with fidelity?

- Impact
  - What effect does the Reading Partners program have on students who participate?
    - Impact on receipt of services
    - Impact on reading proficiency

- Cost
  - What resources are needed to implement the program?
  - What proportion of these are borne by the school?
Assessing Implementation & Fidelity

- Reading Partners MIS data
- One day, two-person site visits to all 19 sites
- Study-developed fidelity index based on the “key components” of the Reading Partners program

- Regular one-on-one tutoring
- Space and materials
- Data-driven instruction
- Training
- Supervision and support
Overview of Reading Partners as Implemented

Average Student's Experience in Reading Partners

<table>
<thead>
<tr>
<th>Program Characteristic</th>
<th>Program Group</th>
<th>School-Level Averages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
</tr>
<tr>
<td>Number of sessions per week</td>
<td>1.55</td>
<td>1.76</td>
</tr>
<tr>
<td>Length of participation in program (weeks)</td>
<td>28.13</td>
<td>32.01</td>
</tr>
<tr>
<td>Student attendance rate (%)</td>
<td>78.76</td>
<td>88.98</td>
</tr>
<tr>
<td>Number of tutors assigned</td>
<td>2.52</td>
<td>3.60</td>
</tr>
<tr>
<td>Duration of each tutoring relationship (weeks)</td>
<td>19.81</td>
<td>26.01</td>
</tr>
<tr>
<td>Scheduled sessions per week with primary tutora</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scheduled once per week (%)</td>
<td>76.38</td>
<td>91.24</td>
</tr>
<tr>
<td>Scheduled twice per week (%)</td>
<td>23.62</td>
<td>60.42</td>
</tr>
</tbody>
</table>

Sample size 594
Findings: Fidelity of Implementation

Fidelity Scores of Study Schools

Average Score = 17.9

Study schools

- A
- B
- C
- D
- E
- F
- G
- H
- I
- J
- K
- L
- M
- N
- O
- P
- Q
- R
- S

Fidelity scores:

- Regular 1:1 tutoring (maximum score = 3)
- Space and materials (maximum score = 5)
- Data-driven instruction (maximum score = 5)
- Training (maximum score = 5)
- Supervision and support (maximum score = 7)
Measuring the Treatment Contrast

- Interviews with principals and Reading Coordinators regarding the availability of other supplemental reading services

- Teacher surveys about individual students
  - How much time was spent on reading instruction?
  - Which students participated in the supplemental reading programs?
    - How often and for how long?
Findings: Treatment Contrast

- 65% of students in the control group were also receiving services

- 21% of students in the control group received one-on-one tutoring

- Impact of the program is the impact relative to other supplemental service receipt, not the impact of Reading Partners compared to no intervention
Time Spent in Reading Instruction and Supplemental Services

Weekly Minutes

- Reading Partners
- Supplemental services, excluding Reading Partners
- In-class one-on-one instruction
- In-class group instruction

Program Group: 48 minutes

Control Group:
Assessing the Impact of Reading Partners on Reading Proficiency

- Students within schools randomly assigned to Reading Partners or “as is” control condition
- Assessed at baseline and end of year using three assessments
  - SAT-10 reading comprehension subtest
  - TOWRE-II sight word efficiency test
  - AIMSweb one minute oral reading fluency test
- Teacher surveys asked about general academic performance and academic behavior in class
Findings:
Average Impact of the Program

- Reading Partners had a positive impact on all three measures of reading proficiency
  - Sight word reading
  - Fluency
  - Reading comprehension

- Effect sizes around .10 standard deviations
  - 1.5 to 2 months of additional growth compared to the control group

- No statistically significant impact on teacher reports of academic behavior or performance
Variation Based on Student Characteristics

- The program was effective for a wide range of students
  - Boys and girls
  - English language learners and fluent English speakers
  - Different baseline reading abilities

- The program appears to be particularly effective for those beginning the study with the weakest reading skills
Variation Based on Incoming Ability

Reading Partners Improves Reading Skills for the Lowest-Achieving Students

- **Reading comprehension**
- **Sight word efficiency**
- **Fluency**

Effect Size

- Bottom quartile
- Top 3 quartiles
Assessing the Cost of Reading Partners

- Sample for cost study included six of 19 study sites
  - Chosen based on strong implementation, geographic diversity and ability to collect reliable data
- Total cost was calculated by summing the costs of all the resources that were necessary to implement the program (Levin & McEwan, 2001)
  - Included both in-kind and financial costs
  - Used national prices
- Same approach used to assess the cost of the other supplemental reading programs offered at these six schools
### Findings: Cost of Reading Partners

#### Cost of Reading Partners per Program Group Student

<table>
<thead>
<tr>
<th>Cost</th>
<th>Cost per Student</th>
<th>Distribution of Cost per Student</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ingredients</strong></td>
<td></td>
<td>Cost to School</td>
</tr>
<tr>
<td>Reading Partners staff</td>
<td>690</td>
<td>690</td>
</tr>
<tr>
<td>AmeriCorps members</td>
<td>930</td>
<td>930</td>
</tr>
<tr>
<td>School staff</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Volunteer time and transportation</td>
<td>1,520</td>
<td>1,520</td>
</tr>
<tr>
<td>Facilities</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Materials and equipment</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td><strong>Total ingredients</strong></td>
<td><strong>3,610</strong></td>
<td><strong>390</strong></td>
</tr>
<tr>
<td>Fee for service ($)</td>
<td>320</td>
<td>-320</td>
</tr>
<tr>
<td>AmeriCorps grant ($)</td>
<td></td>
<td>-270</td>
</tr>
<tr>
<td><strong>Net cost per student</strong> (Total ingredients + fee for service + AmeriCorps grant) ($)</td>
<td>710</td>
<td>1,520</td>
</tr>
<tr>
<td>Portion of net cost per student (%)</td>
<td>20</td>
<td>42</td>
</tr>
</tbody>
</table>
## Findings: Cost of Other Available Supplemental Reading Services

<table>
<thead>
<tr>
<th>Site</th>
<th>School Contribution per Student ($)</th>
<th>Other Supplemental Services ($)</th>
<th>Total Resources per Student ($)</th>
<th>Contribution Provided by School (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reading Partners</td>
<td></td>
<td>Reading Partners</td>
<td>Other Supplemental Services</td>
</tr>
<tr>
<td>Site A</td>
<td>690</td>
<td>1,840</td>
<td>3,450</td>
<td>1,840</td>
</tr>
<tr>
<td>Site B</td>
<td>520</td>
<td>1,850</td>
<td>3,420</td>
<td>2,230</td>
</tr>
<tr>
<td>Site C</td>
<td>940</td>
<td>2,680</td>
<td>3,570</td>
<td>2,680</td>
</tr>
<tr>
<td>Site D</td>
<td>1,270</td>
<td>1,040</td>
<td>5,190</td>
<td>1,050</td>
</tr>
<tr>
<td>Site E</td>
<td>660</td>
<td>1,310</td>
<td>4,210</td>
<td>1,980</td>
</tr>
<tr>
<td>Site F</td>
<td>480</td>
<td>4,890</td>
<td>2,740</td>
<td>4,890</td>
</tr>
<tr>
<td>Pooled</td>
<td>710</td>
<td>1,700</td>
<td>3,610</td>
<td>1,780</td>
</tr>
</tbody>
</table>

Contribution Provided by School: Reading Partners (%), Other Supplemental Services (100% - Reading Partners %)
Conclusions

- Reading Partners was implemented with a high degree of fidelity across the study sites
- Reading Partners makes a statistically significant and educationally meaningful difference for students
- The program is effective for a wide range of students
- Reading Partners is an efficient option for under-resourced schools
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Report available online via MDRC website
## Baseline Characteristics of Program and Control Group Students

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Program Group</th>
<th>Control Group</th>
<th>Difference</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male (%)</td>
<td>54.88</td>
<td>54.50</td>
<td>0.38</td>
<td>0.899</td>
</tr>
<tr>
<td>Ethnicity (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>19.39</td>
<td>19.03</td>
<td>0.37</td>
<td>0.864</td>
</tr>
<tr>
<td>Hispanic</td>
<td>65.09</td>
<td>65.27</td>
<td>-0.18</td>
<td>0.944</td>
</tr>
<tr>
<td>Asian</td>
<td>8.43</td>
<td>9.09</td>
<td>-0.66</td>
<td>0.691</td>
</tr>
<tr>
<td>White</td>
<td>5.90</td>
<td>5.40</td>
<td>0.50</td>
<td>0.709</td>
</tr>
<tr>
<td>Other</td>
<td>1.18</td>
<td>1.02</td>
<td>0.16</td>
<td>0.856</td>
</tr>
<tr>
<td>Special education (%)</td>
<td>11.62</td>
<td>10.49</td>
<td>1.13</td>
<td>0.550</td>
</tr>
<tr>
<td>English language learner (%)</td>
<td>55.21</td>
<td>55.50</td>
<td>-0.29</td>
<td>0.916</td>
</tr>
<tr>
<td>Eligible for free/reduced-price lunch (%)</td>
<td>91.35</td>
<td>90.22</td>
<td>1.13</td>
<td>0.540</td>
</tr>
<tr>
<td>Prior Reading Partners participation (%)</td>
<td>31.82</td>
<td>25.75</td>
<td>6.07 *</td>
<td>0.074</td>
</tr>
<tr>
<td>Average age (years)</td>
<td>8.79</td>
<td>8.76</td>
<td>0.03</td>
<td>0.413</td>
</tr>
<tr>
<td>Overage for grade&lt;sup&gt;a&lt;/sup&gt; (%)</td>
<td>9.83</td>
<td>8.40</td>
<td>1.43</td>
<td>0.408</td>
</tr>
<tr>
<td>Average baseline achievement scores&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehension</td>
<td>574.74</td>
<td>573.49</td>
<td>1.26</td>
<td>0.544</td>
</tr>
<tr>
<td>Sight word efficiency</td>
<td>91.15</td>
<td>90.38</td>
<td>0.77</td>
<td>0.328</td>
</tr>
<tr>
<td>Fluency</td>
<td>0.03</td>
<td>0.00</td>
<td>0.03</td>
<td>0.573</td>
</tr>
</tbody>
</table>

Sample size: 594 572