A study examined the cost effectiveness of Reading Recovery in the Fall River, Massachusetts Public Schools. Costs per pupil and total costs were calculated and compared to the cost of referring students for special education or Title I services had Reading Recovery services not been available. Results indicated a net savings of nearly $1.3 million over a two-school-year period. Findings demonstrating the cost effectiveness of Reading Recovery helped achieve change in the district's hiring policy and contributed to the passage of a state bill to help fund the training of Reading Recovery teachers. Contains 3 references and 5 tables of data. (RS)
Demonstrating the Cost Effectiveness of Reading Recovery: Because It Makes a Difference

An Example from One School District

Sheila Assad

Marjorie A. Condon
Demonstrating the Cost Effectiveness of Reading Recovery: Because It Makes a Difference

An Example from One School District

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FALL RIVER, MASSACHUSETTS

There should be little doubt by now that Reading Recovery (RR) works. The educational effectiveness of the program has been proven repeatedly in research studies that adhere to the most rigorous standards (Clay, 1993; DeFord, Lyons, & Pinnell, 1993). With this issue resolved, it now appears the main battlefront for acceptance of RR is the issue of cost effectiveness. As a Reading Recovery teacher leader and a district site coordinator, we find increasingly that educators believe RR is clearly effective, but too expensive to implement.

Recently, two events compelled us to look closely at the cost effectiveness of our own RR Program. First, at the state level, the Massachusetts Reading Recovery Task Force, after three years of intense lobbying, had succeeded in getting a legislator to sponsor an amendment to the Massachusetts Education Reform Bill delegating money for a grant program for early intervention and an individual tutorial program. Reading Recovery teachers, administrators, friends, and parents bombarded legislators with letters and phone calls to ensure their support of its passage. The messages cited powerful research, as well as moving stories of the success of individual children. But as the vote neared, legislators asked more and more about cost effectiveness and in particular made requests for cost-analyses of the program in particular school systems.

Secondly, at the local level, we were seeking agreement from the system's superintendent, and from the Title I, Special Needs, and Reading Directors to have job descriptions for all new teachers in these positions require both training and work as RR Teachers. Although these individuals had assisted in the initial implementation efforts and supported this next step as necessary for full implementation of RR in our district, they requested financial justification.

School committees and state and national directors of remedial and compensatory programs quite legitimately will seek such justifications as a basis for new or continuing support. In this article, we will illustrate how we, in the Fall River, Massachusetts Public Schools, conducted such an analysis.

Determining the Overall Costs of the Early Intervention

Per Pupil Costs for the Early Intervention. Data from the 1993-94 and 1994-95 Fall River Reading Recovery Project Research Reports indicated that 186 children were served by the program for an average of eight children per teacher (see Table 1).

The Reading Recovery per pupil cost was determined in the following manner:

- **Teacher Training:** We calculated the cost of the teacher training by considering it over a five year period, with the assumption that the teacher would remain in the position for five years. Our $7000 initial training fee and $1,200 continuing contact fee ($300 per year for four years) total $8,200. This results in a per-year training cost of $1,640 when considered over five years.

- **Teacher Salary:** We calculated 50% of the maximum teacher salary since RR teachers serve in half-time positions at this site. Half of the $34,511 salary is $17,256.

- **Total Teacher Expenses:** We added the teacher's salary ($17,256) to the training cost ($1,640) to determine the total cost of employing a RR teacher: $18,896.

- **Per Pupil Cost:** We calculated the per pupil cost by dividing the teacher salary plus training cost ($18,896) by the average number of children served by each RR teacher (8). This resulted in a per pupil cost of $2,362.

Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Students Served</th>
<th>Full Program Students</th>
<th>Discontinued Students</th>
<th>Number of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-1994</td>
<td>88</td>
<td>71</td>
<td>66</td>
<td>11</td>
</tr>
<tr>
<td>1994-1995</td>
<td>98</td>
<td>80</td>
<td>76</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 2

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Additional Per Pupil Cost</th>
<th>Avg. Time in Program</th>
<th>Total Cost per Pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Recovery</td>
<td>$2,362</td>
<td>18 weeks</td>
<td>$2,362</td>
</tr>
<tr>
<td>Special Education</td>
<td>$3,566</td>
<td>5 years</td>
<td>$17,830</td>
</tr>
<tr>
<td>Title I</td>
<td>$1,620</td>
<td>3 years</td>
<td>$4,860</td>
</tr>
<tr>
<td>Retention</td>
<td>$3,843</td>
<td>1 year</td>
<td>$3,843</td>
</tr>
</tbody>
</table>

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Demonstrating the Cost Effectiveness...

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The per-pupil cost for special education, retention, as well as maximum teacher salary used to determine RR per-pupil cost were taken from Fall River Community Report Card on Education (1995), prepared by the Center for Policy Analysis at the University of Massachusetts, Dartmouth. The average time in program for Special Needs students was estimated by the elementary coordinator of that program based on entry and departure rates. The average time in program for RR students was taken from the Fall River Reading Recovery Research Project Reports (1993-1995). Title I figures were obtained from its director (see Table 2). Although data are discussed from a two-year RR implementation, cost savings were projected for a five-year period.

Total Costs for the Early Intervention. The number of children served (186) was multiplied by the per pupil cost to total $439,332. Added to this was the cost of additional interventions for the nine program children who were not discontinued, as depicted in Table 3.

Table 3
Status of Non-Discontinued Children

<table>
<thead>
<tr>
<th>Non-Discontinued Program Students</th>
<th>Special Education Referrals</th>
<th>Title I Referrals</th>
<th>Retentions Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

These include three Title I referrals for $14,580, one special education referral for $17,830, and three retentions for $11,529. (Of the 186 children served, 151 had complete programs; data for the 35 children who did not receive full programs were not readily available since many of them had moved.) Taken together, the total cost for implementing Reading Recovery and providing other interventions for the nine non-discontinued children was $483,271.

Considering the Costs With and Without the Early Intervention

Fall River RR teachers served the lowest 20% of first-grade children in their schools. Based on past statistics in our district, it is estimated that without the Reading Recovery intervention, 50% of the 151 RR program students would have been referred to special education services, and 50% would have received Title I services. These numbers were multiplied by the total per pupil cost of these services. School system records indicated the grade 1 retention rate was 5.7%. It was estimated, then, that 8.6 of the 151 program students would have been retained and still would have required either Title I or Special Needs services (see Tables 2 & 4).

Table 4
Total Costs of Other Interventions

<table>
<thead>
<tr>
<th>Special Education</th>
<th>Title I</th>
<th>Retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,346,165</td>
<td>$366,930</td>
<td>$33,050</td>
</tr>
</tbody>
</table>

The projected costs of these interventions were added together to obtain a total of $1,746,145. The cost of the RR intervention was subtracted from this total to result in a net savings of $1,282,032 (see Table 5). This cost savings would appear over a period of five to seven years.

Our analysis reflects a number of variables specific to our district. For example, we used our maximum teacher salary because most of our RR teachers are veteran staff members; at the same time, our maximum salary is relatively low in comparison to statewide averages. Other variables include the percentage of special needs and Title I students, the average cost of serving these students, and the average length of time they remain in our programs.

One variable that could be quite different in other districts is the savings projected in special education which is more than Dyer (1992) projected in a similar analysis. We based this on the premise that 50% of the discontinued students would otherwise have been referred for special education or comparably expensive services by grade three. This is true in our district for a number of reasons: (a) we have a high special education referral rate of 15.5% in our school district; (b) literacy problems predominate as the reason children are referred for special education services; and (c) because we have large class sizes and overtaxed remedial reading staff, schools frequently request special education services for students who in other districts might receive other reading interventions.

Table 5
Net Savings With Reading Recovery Intervention

<table>
<thead>
<tr>
<th>Total Cost-Other Interventions</th>
<th>Total Reading Recovery Costs</th>
<th>Net Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,746,145</td>
<td>$483,271</td>
<td>$1,262,874</td>
</tr>
</tbody>
</table>

Assessing the Impact of the Early Intervention

Although the net savings figure of a two-year Reading Recovery implementation is impressive, the dollar amount does not translate directly into a reduction in our school department spending. Rather, it is an estimate of the resources that will not be needed for teaching basic literacy skills in the long term, thereby allowing for funds to be shifted to meet other important needs.

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For example, in our urban district, socio-economic and behavioral factors are highly correlated with early academic failure. Because literacy failure is the earliest and most troublesome outcome to emerge from these factors, it becomes the focus for identifying and helping these children. Services are concentrated on the symptom--literacy failure--rather than the underlying cause. Children with attention deficit disorder, for example, may receive many years of literacy tutoring that absorbs most of the staff time available to them. When their literacy problems are corrected early by RR, however, compensatory staff are free to help students in other ways such as in acquiring the organizational skills needed to achieve in all subjects. They may also be used to guide teachers in how to improve the classroom learning environment for these children. Such support is particularly important for those RR students who maintain strong reading and writing strategies but are not seen as successful by the classroom teacher because they do not apply these strategies to complete assignments or they perform poorly in other subjects.

Classroom teachers, too, are able to improve instruction for all children, since they will be spending less time with students who need help in reading and writing as the trajectory of progress from low to average for the lowest 20% of first grade children changes because of early intervention before children fail. The same dollars will be used more efficiently and effectively, resulting in greater student success and increased self-esteem.

Demonstrating the cost-effectiveness of RR in these terms helped us to achieve change in our district's hiring policy and contributed to the passage of a state bill to help fund the training of Reading Recovery teachers. Our hope is that our explanations will help other districts analyze and demonstrate cost effectiveness in their own contexts because it is a critical issue in the expansion of this remarkable early intervention program.

References


Title: Network News

Author(s): Reading Recovery Council of North America

Publication Date: Winter 1996

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