

Reading Recovery: An Evaluation of Benefits and Costs

READING RECOVERY: AN EVALUATION OF BENEFITS AND COSTS

Bonnie Grossen and Gail Coulter, University of Oregon
Barbara Ruggles, Beacon Hill Elementary, Park Forest, Illinois

Executive Summary

Reading Recovery is being widely adopted in North America:

"Reading Recovery sites operated in four Canadian provinces, 48 U.S. States, and the District of Columbia. Approximately 60,000 North American children were served by Reading Recovery educators during the 1993-94 school year. In California alone, more than 500 school districts served approximately 5000 children." (Schwartz & Klein, 1996)

Many believe Reading Recovery to be the best available program for preventing reading failure. Reading Recovery was developed in the 1970s by Dr. Marie Clay, a New Zealand educator, to deal with the reading failure occurring there. It was introduced in the United States through the Ohio State University in 1984 by Dr. Gay Su Pinnell and Dr. Charlotte Huck. Gay Sue Pinnell, Diane Deford, and Carol A. Lyons are directors of the National Reading Recovery Center at Ohio State in the U.S.

In Reading Recovery, program-trained teachers provide one-to-one tutoring in 30-minute daily sessions to the lowest 10 to 20% of a first-grade class who have the prerequisite skills for Reading Recovery. Reading Recovery advocates claim that the program brings the lowest performing children up to the average level of their local class by the end of first grade within 60 lessons, or 12 weeks. When students reach this goal they are "discontinued" from the Reading Recovery program, at which time the Reading Recovery teacher can take another student into the 30-minute slot.

Each Reading Recovery-trained teacher, working a half-day with Reading Recovery, is expected to be able to tutor 8 students in one year, though actual figures from the national data set indicate that the average number of students per teacher is much lower-5.5, or 11 students for a full-time equivalent teacher, according to Hiebert (1994).

Because of Reading Recovery's increasing popularity, and its expense, more independent evaluators are raising questions and reviewing the research that is cited to support claims regarding its effectiveness. Following is a summary of the findings of these reviews and other studies evaluating the impact of Reading Recovery. These findings should be considered in deciding whether to adopt, expand, or terminate Reading Recovery programs.

The Reading Recovery data reporting system is flawed.

<<http://darkwing.uoregon.edu/~bgrossen/rr.htm#data>>

The in-house Reading Recovery evaluation system results in considerable bias in the data collected through that system. Persons responsible for success collect the data on success. Without explanation, about half the data on children eligible for Reading Recovery are omitted from final analyses (Shanahan & Barr, 1995). In addition, the measures used to evaluate Reading Recovery (Clay Diagnostic Measures) emphasize tasks that align with the specific strategies taught in Reading Recovery (Center, Wheldall, & Freeman, 1992; Wasik & Slavin, 1993). For example, the children are taught to use context to predict words rather than sounding them out. The reading measure uses predictable text, rather than text that uses authentic, natural language patterns.

Children who have learned the prediction strategies of Reading Recovery will score better reading predictable text than they will reading authentic text. Because of the close alignment of the measures with the strategies taught in Reading Recovery, the results of an evaluation using these measures are biased in favor of Reading Recovery.

The standard for successful completion of Reading Recovery is not equitable.

<<http://darkwing.uoregon.edu/~bgrossen/rr.htm#equity>>

Reading Recovery's goal to bring the lowest pupils to the average level of their class, falls short of a more equitable standard level, such as the national average. The average level of performance of a class of children from low income areas is about the 20th percentile on national norm-referenced measures. ("Grade level" is the 50th percentile.) In inner-city schools where so many students do not learn to read, only a few students can be served with Reading Recovery. Some of the lowest children will be brought up to only the 20th percentile and many children performing below the 20th percentile will not be served. As a statewide intervention Reading Recovery would result in allocating the same resources to the goal of raising a few children in a low income school to the 20th percentile that it would allocate to a high income school raising children scoring below the 80th percentile to the 80th percentile. This inequity raises constitutional issues because it impacts minority children, who are over-represented in low income schools. Average first-grade children are more likely to be non readers in low income schools.

Reading Recovery does not raise overall school achievement levels.

<<http://darkwing.uoregon.edu/~bgrossen/rr.htm#overall>>

If a school's goal is to raise the overall level of reading performance, Reading Recovery is not the appropriate intervention to choose. Overall school achievement scores are not improved with the use of Reading Recovery (Hiebert, 1994). Both Reading Recovery advocates and critics agree on this point (Hiebert, 1994; Pinnell & Lyons, 1995)

Far fewer students than claimed actually benefit from Reading Recovery.

<<http://darkwing.uoregon.edu/~bgrossen/rr.htm#fewer>>

Analyses reporting that 75 to 85% of the children in Reading Recovery are successful are misleading because (a) nearly half the data are systematically omitted from the analyses (Shanahan & Barr, 1995), and (b) successful does not mean the children are readers. Successful is defined as being able to read text level measures at the average level of the child's class. Various independent evaluations have accounted for the missing data (Battelle, 1995; Shanahan & Barr, 1995). Figures 1 and 2 present these findings in graphic form. In both figures the black areas represent the proportion of children who were served in Reading Recovery and the grey areas represent an estimate of the children who were eligible but were not served. Figure 1 shows the national Reading Recovery data that were gathered through the in-house data collection system. Figure 2 shows the Columbus, Ohio data that were gathered by an independent evaluator (Pollock, 1996) and reported as percentages of children served (shown in black).

<file://localhost/Users/caroltolman/Library/Caches/TemporaryItems/msoclip/0/clip_image002.png>

<file://localhost/Users/caroltolman/Library/Caches/TemporaryItems/msoclip/0/clip_image004.png>

Both evaluations omitted the number of children who are eligible but never served-often because they lacked prerequisite skills or were already identified for special education. Battelle (1995) is the only source that has reported this number (19%) in an evaluation of Ohio's Reading Recovery program. Battelle's figure is used in both figures (shown in grey). Children served but who do not

complete Reading Recovery include children who are removed because they do not make adequate progress. These children are not counted in the calculation of Reading Recovery success rates. Excluding eligible children who are never served and served children who do not complete the program for various reasons inflates the success rate. In reality, the success rate describes how accurately the Reading Recovery teacher was able to predict which students would be able to match the classroom average on the Clay Diagnostic Measures upon completion of the program. Those the teacher predicted would not succeed, s/he should have removed from the program prior to completion.

Reading Recovery does not reduce the need for other compensatory reading services.

<<http://darkwing.uoregon.edu/~bgrossen/rr.htm#other>>

Reading Recovery does not eliminate the need for Title I. Pollack (1996) reports that in Columbus, Ohio, in the 1995-6 school year, only 14.7% of the children who completed the program reached national norms, and 81% of those completing the program still remained eligible for Title I services. When all eligible children are included in the calculation, only an estimated 6.5% reached national norms and 92% continued to be eligible for Title I after Reading Recovery was implemented. (Those who are never served or who do not complete Reading Recovery remain eligible for Title I services also.) Even among the smaller portion of children counted as successful over an eight-year period by Reading Recovery standards, 31% were still eligible for Title I services (Pollock, 1994).

Reading Recovery does not eliminate the need for special education. Six or 7% of the children who are served are referred to special education (Shanahan & Barr, 1995). Wake County Public School System (WCPSS) in North Carolina found that Reading Recovery students, "compared to a control group, were just as likely to be retained, placed in special education, or served in [Title] I a year later" (1995, p. ii). Reading Recovery does not serve the lowest performing children. The average entry level percentile score of children who complete Reading Recovery is 34.5 (Hiebert, 1994).

Children successful in Reading Recovery are often not successful later.

<<http://darkwing.uoregon.edu/~bgrossen/rr.htm#later>>

Other research has documented that children who complete Reading Recovery and return to the class do not continue to learn at the same rate as average children in the class, but seem to immediately begin falling behind again (DeFord, Pinnell, Lyons, and Place, 1990; Glynn, Crooks, Bethune, Ballard, and Smith, 1989; Shanahan & Barr, 1995). The learning rate of returned Reading Recovery children was slower than that of other low-achieving children (Glynn, Crooks, Bethune, Ballard, & Smith, 1989).

Research-based alternative interventions are more effective than Reading Recovery.

<<http://darkwing.uoregon.edu/~bgrossen/rr.htm#alternative>>

Independent evaluations have compared Reading Recovery with other common compensatory programs (Battelle, 1995; Fincher, 1991; WCPSS, 1995) and found no advantage for Reading Recovery on measures using authentic text (the natural text used in the reading comprehension passages of standardized measures). One frequently cited study found Reading Recovery superior to other interventions (Pinnell, Lyons, DeFord, Bryk, & Seltzer, 1994). Pinnell et al. compared specific variations of Reading Recovery and found approximately equal results regardless of whether the teachers had less training or the instruction was delivered in groups of four. Rasinski (1995) found serious methodological flaws in the Pinnell et al. study. He adjusted the scores to hold instructional time equal and found that the effect of Reading Recovery was at best only equivalent to the other treatments on measures of authentic text (Gates-McGinitie). Fincher (1991) compared the performance of children in Reading Recovery with that of children in other compensatory

programs in Canton City Schools, Ohio, over a five-year period and found that common Title I programs resulted in better performance on measures using authentic text and other standardized measures.

"Teaching Assistants with almost no training and minimal teaching materials with which to teach and working in less than desirable conditions, outperformed the Reading Recovery teachers when their students' overall achievement was compared. Also, Reading Recovery teachers, when their Reading Recovery students are compared with their Chapter I students, tend to get better results with the regular Chapter I program than with Reading Recovery. This has been the case every year since 1985-86, the year Reading Recovery was implemented in Canton." (Fincher, 1991)

Research shows that explicit instruction in phonemic awareness beginning in kindergarten followed by explicit systematic instruction in phonics combined with extensive practice reading decodable text are emerging as important factors in the effective treatment of reading disabilities. Iversen and Tunmer (1993) added a component of systematic phonics to Reading Recovery. Reading Recovery with systematic phonics was 37% more efficient. Wasik and Slavin (1993) compared the relative effect sizes achieved by five treatments for reading problems. Reading Recovery was not nearly as effective as two programs that provided explicit systematic phonics with extensive practice reading decodable text (the Success for All and Wallach and Wallach programs). Decodable text is quite different from the predictable text used for practice in Reading Recovery.

<file://localhost/Users/caroltolman/Library/Caches/TemporaryItems/msoclip/0/clip_image006.png>

(1) Rasinski, 1995

(2) Iversen & Tunmer, 1993

(3) Wasik & Slavin, 1993

Very recently the research program of the National Institute of Child Health and Human Development (Foorman, Francis, Beeler, Winikates, and Fletcher, in press) has found that changing the regular classroom program from whole language to incorporate explicit instruction in phonemic awareness and systematic phonics with decodable text is more effective than tutorial programs in reducing the occurrence of reading disabilities. Foorman et al. (in press) compared (a) whole language combined with an unlicensed Reading Recovery model, (b) embedded phonics, a semi-systematic program, and (c) explicit phonemic awareness with systematic explicit phonics and decodable text. All these treatments were delivered in the regular classroom. The explicit systematic phonic approach was more than 1 ½ times as effective in preventing reading disabilities as whole language combined with the unlicensed Reading Recovery program (see Figure 4).

<file://localhost/Users/caroltolman/Library/Caches/TemporaryItems/msoclip/0/clip_image008.png>

* Foorman, Francis, Beeler, Winikates, and Fletcher, in press

Reading Recovery is extremely expensive and does not save other costs.

<<http://darkwing.uoregon.edu/~bgrossen/rr.htm#cost>>

Thirty hours of instruction for one child in Reading Recovery costs more than a full year of schooling for the child. Reading Recovery advocates argue that even when the highest cost estimates are used, the expense is cheap because the multi-year educational costs of special education and Title I are saved, as are the social costs of letting children fail to learn to read. However, best estimates indicate that approximately 90% of the children eligible for Reading

Recovery services continue to need other compensatory services. Other alternative models are more effective. Many of these models are classwide and actually cost much less, affect more students, produce higher performance, and, most importantly, change school and classroom practices so that the need for costly after-the-fact interventions are minimized. For the cost of one year of Reading Recovery in a school, class sizes could be reduced and the whole school's early literacy program could be redesigned. By adopting research-supported best practices and whole-school change, schools could significantly increase the number of students who can read authentic grade level text. Installing a more effective school-wide program is a one-time-only investment while Reading Recovery requires the same level of investment year after year.