

### What is it?

Reading Recovery (RR) is an early literacy intervention that provides one-to-one tutoring to children who perform at the lowest levels in their class after one year of school reading instruction (Pinnell, 1989). Developed in New Zealand by Marie Clay, it was designed to interrupt the cycle of reading failure in the first years of school before problems become more severe (Clay, 1987). Introduced in the United States in 1985, the program is now offered in all 50 states and serves approximately 150,000 children per year. It is also offered in Spanish under the name Descubriendo La Lectura.

#### CAUTION

1) incomplete program at year-end, 2) moved while being served, students who move out of the school before completing the 20 weeks, and 3) none of the above, a category denoting children removed from the program for some other reason before completing the 20-week minimum. In 1999-2000, this category was applied to more than 5,000 students, about 4% of all students served by RR in the US (Gomez-Bellenge & Thompson, 2000). In some situations, RR students who fail to make progress or who are placed in special education may be removed from the program by local school officials or RR personnel before the 20-week period is over. RR has been criticized because it does not consistently include data from these children in its reports of program effects.

### For whom is it intended?

In the United States, RR is offered to “hardest-to-teach children” in the first-grade. According to Clay (1993b), only the lowest 10 to 20% of children will require RR. Children are referred for the intervention by their classroom teacher. They are then assessed using Clay’s Observation Survey of Early Literacy Achievement (Clay, 1993a). No formal Special Education referral process or labeling of the child is required. RR stipulates that the lowest-performing students in a school should be served first, and the official policies of RR do not exclude students who have disabilities. However, some individual school districts exclude special education students from RR because of concerns about funding sources when RR is supported through Chapter 1 funds.

RR is designed to be a short-term intervention, lasting approximately 20 weeks. Students have various levels of success given this time frame. The program designates categories of children, according to the outcomes of tutoring. These include 1) full-program children, those who receive services for at least 20 weeks or meet program criteria for successful discontinuation of tutoring before that time, 2) discontinued children, those who meet program success criteria and are removed from tutoring, 3) recommended action after a full program (formerly called “not discontinued” or “dismissed”), denoting a child who did not meet criteria after at least 20 weeks and implying that further assessment of the child is recommended, possibly including referral to special education, edu-

### How does it work?

RR supplements, but does not take the place of, regular classroom reading instruction. Most of the instruction in RR lessons is provided in the context of reading and writing activities, during which students are prompted to use a variety of reading and writing strategies. Students are taught to make use of multiple sources of information in reading text, including graphophonemic (letter-sound), context, and syntactic (the structure of English) cues. Alphabetic decoding strategies taught in RR include associating by analogy to known words and word parts, looking for known patterns within words, and “sounding out” words in a sequential way (RR uses the terminology “say the word slowly”). Students are also taught to use pictures and context to facilitate the identification of words, and for self-monitoring and self-correction. In writing, students learn to segment and record the sounds within words.

RR teachers do not follow a predetermined sequence with specified lessons. Instead, they use ongoing analysis of the child’s reading and writing behaviors to plan individualized daily instruction. At the core of RR is the reading of authentic children’s literature leveled according to difficulty, but not according to decodability. Books are leveled according to text characteristics that provide varying amounts of support for developing readers, including the number of lines of text on a page, picture support, repeated patterns, high-frequency words, language and vocabulary complexity, and text structure. The



process of leveling books includes teacher input and field testing (Fountas & Pinnell, 1999). Each day, the RR teacher selects books for the child that he/she can read with some support, while slowly but steadily increasing the difficulty level of the text over time.

During a RR lesson the teacher: 1) listens to the child read familiar books to promote fluency, 2) takes a running record assessment of text reading (Clay 1993a), 3) provides a brief lesson targeting letter identification and word patterns, usually involving the manipulation of magnetic letters in taking words apart and making new words using similar patterns, 4) scaffolds the child's knowledge of the alphabetic principle as he/she writes a brief story (usually a single sentence), 5) cuts up the child's sentence for the child to reassemble, and 6) scaffolds the reading of a new book after a brief introduction.

## *What does research say about Reading Recovery?*

There are three classes of research on RR, data collected within the program and reported annually by RR National Data Evaluation Center (NDEC), program evaluations conducted by school districts, and formal evaluation studies.

Data collected within RR. The data reporting of the NDEC has been criticized because it does not report on the progress of all students who participate in the program on all measures, and because it measures student progress only using the informal Clay Observation Survey, rather than norm-referenced assessments. The year-end performance of RR students on components of the Observation Survey is compared to that of a randomly-selected group of non-RR students in the same schools, but pretest information is not given for this comparison group. Thus, it is difficult to evaluate the impact of the program using these data.

Local district evaluations. Some school districts have conducted evaluations of their RR programs. Brown, Denton, Kelly, and Neal (1999) found that about 75% of full-program RR students in San Luis Obispo, California were reading at average levels on standardized tests in fifth grade. In a study of RR students in Texas, about 70% of successfully discontinued RR students were able to pass the criterion-referenced reading portion of the Texas Assessment of Academic Skills at the end of Grade 4 (Askew et al., 1998). Baenen, Bernholc, Dulaney, and Banks (1997) reported that, in a school district in North Carolina, about half of all the children served in RR could read on grade level at the end of first grade.

However, there were no real differences between former RR students and students in a comparison group by the end of Grade 3, and no differences in their need for retention, special education, or Chapter 1.

Studies conducted by RR proponents. Researchers at Ohio State University who oversee the implementation of RR in the United States have conducted studies showing consistently positive results. In these studies, RR students scored higher in reading comprehension than comparison children on standardized norm-referenced reading tests (Pinnell, 1989) and maintained their gains as they went into fourth grade (DeFord, Pinnell, Lyons, & Place, 1990). In one evaluation, RR produced results superior to three alternative programs (Pinnell, Lyons, DeFord, Bryk, & Selzer, 1994). These studies have been criticized because some research methods and tests may have made them biased toward the program (Hiebert, 1994; Rasinski, 1995; Shanahan & Barr, 1995; Wasik & Slavin, 1993).

Studies conducted by other researchers. Results from other studies of RR have been mixed. Center, Wheldall, Freeman, Outhred, and McNaught (1995) compared RR students to other low-achieving students in Australian schools. When they exited tutoring, RR students performed significantly better than comparison students on tests of word reading, but twelve months later there was no significant advantage for the RR students. Chapman, Tunmer, and Prochnow (2001) found successfully discontinued RR students in New Zealand whole language classrooms performed about one year below age-level on standardized reading measures 12 months after they had completed the program. Some researchers have found that RR students make progress in certain aspects of reading, but have difficulty using letter-sound associations to decode unknown words (Ross, Smith, Casey, & Slavin, 1995; Stahl, Stahl, & McKenna, 1999). In 1993, Iverson and Tunmer found RR to be effective, and reported that increased emphasis on the teaching of letter and word knowledge helped RR students reach successful levels more quickly. Since that time, the standard RR program has placed increased emphasis on the teaching of word patterns.

Elbaum, Vaughn, Hughes, and Moody (2000) analyzed research on 1:1 reading instruction, and concluded that the effects of RR were stronger than those of other 1:1 first grade tutoring interventions they studied. They noted that RR appeared to have relatively strong effects for successfully discontinued students, but little or no effects for those who did not successfully complete tutoring. The authors suggest

caution in interpreting these findings, since some of the RR studies they reviewed did not include posttest data for all the children who started the intervention. They also concluded that some small group interventions achieved results similar to the individual tutoring in RR.

How effective is Reading Recovery for students with disabilities? Knowledge about the impact of RR on special education is limited. Reports of the RR-NDEC indicate that students who are successful in RR have a low incidence of placement for learning disabilities in reading or writing at the end of grade one, but for students who are not successfully discontinued, referral rates are high. Some suggest that RR serves as a type of pre-referral intervention by reducing the numbers of children requiring additional services under special education, and helping to identify those children who really need these services (Askew et al., 1998; Lyons, 1989; Lyons, 1994). More research is needed to evaluate the effectiveness of RR in this role.

In terms of RR's impact on students already identified as LD, Lyons (1987, 1989, 1991), reports that students identified as LD were as successful in RR as students without the label. Lyons (1991) suggests that these students had "learned their way into the learning disability category" (p. 404) because of their early literacy instruction. However, the Lyons studies are flawed, in that they do not provide adequate information about the basis for classification as LD or about pre- and post-intervention scores on reading measures. In fact, we do not currently have reliable information about the effectiveness of RR for students with disabilities. The negligible effects reported for RR students who were not able to meet criteria for successful discontinuation of tutoring indicate that the program may have little value for students whose reading difficulties are severe (Elbaum et al., 2000).

## How effective is it?

From the available research, we can say that RR works well for some students, but not all. There are also questions about how well successful RR students maintain their gains. What is clear is that we should not expect RR to act as an inoculation that will protect a child from future reading problems (Shannahan & Barr, 1995).

A drawback to RR is that it is expensive. The per-pupil cost of the program has been conservatively estimated at \$4,625 per year (Shannahan & Barr, 1995). Of course, if the program achieves its goal of

"dramatically reducing the number of learners who have extreme difficulty with literacy learning and the cost of these learners to educational systems" (as cited in Askew et al., 1998, p.3), then this cost is well warranted. Unfortunately, it is questionable whether this goal has been achieved. In its 1998-1999 Technical Report, RR-NDEC reports only 56% of all children served met criteria for success in the program. Of the students who were successful, only 80% could read and write at average levels in their schools at the end of first grade. In other words, less than half the children who entered the program achieved the goal of reaching normal 1st-grade performance levels by the end of first grade. According to other research, even fewer can be expected to maintain average performance levels in later grades.

## What questions remain?

Because of limitations in the current research, the true effectiveness of RR is unknown and the relationship between RR and special education is ambiguous. If RR is to be a viable alternative for early literacy intervention, educators should explore ways to improve the program so that it dramatically impacts more children and so that the gains are maintained across the grades. Further study of the provision of RR services in small groups rather than 1:1 tutoring is also warranted.

## How do I learn more?

Data from the RR National Data Evaluation Center are available from their website <http://ndec.reading-recovery.org>. The authors of this Current Practice Alert can be contacted at the Center for Academic and Reading Skills, University of Texas Health Science Center, Houston.

- Askew, B.J., Fountas, I. C., Lyons, C.A., Pinnell, G. S., Schmitt, M. C. (1998). *Reading Recovery review: Understandings, outcomes, and implications*. Columbus, OH: Reading Recovery Council of North America.
- Baenen, N., Bernhole, A., Dulaney, C., & Banks, K. (1997). Reading Recovery: Long-term progress after three cohorts. *Journal of Education for Students Placed At-Risk*, 2(2), 161-181.
- Center, Y., Wheldall, K., Freeman, L., Outhred, L., & McNaught, M. (1995). An evaluation of Reading Recovery. *Reading Research Quarterly*, 30, 240-263.
- Chapman, J.W., Tunmer, W.E., & Prochnow, J.E. (2001). Does success in the Reading Recovery program depend on developing proficiency in phonological processing skills? A longitudinal study in a whole language instructional context. *Scientific Studies of Reading*, 5(2), 141-176.
- Clay, M. M. (1993). *An observation survey of early literacy achievement*. Portsmouth, NH: Heinemann.

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- Clay, M.M. (1993). *Reading Recovery: A guidebook for teachers in training*. Portsmouth, NH: Heinemann.
- Clay, M.M. (1987). Learning to be learning disabled. *New Zealand Journal of Educational Studies*, 22, 155-173.
- Elbaum, B., Vaughn, S., Hughes, M.T., & Moody, S.W. (2000). How effective are one-to-one tutoring programs in reading for elementary students at risk for reading failure? A meta-analysis of the intervention research. *Journal of Educational Psychology*, 92, 605-619.
- Fountas, I.C., & Pinnell, G.S. (1999). *Matching books to readers*. Portsmouth, NH: Heinemann.
- Gomez-Bellenge, F.X., Thompson, J. (2000). *Reading Recovery and Descubriendo La Lectura national report 1998-1999*. (Technical report). Columbus, OH: Ohio State University, Reading Recovery National Data Evaluation Center. <http://ndec.reading-recovery.org>
- Hiebert, E.H. (1994). Reading Recovery in the United States: What difference does it make to an age cohort? *Educational Researcher*, 23, 15-25.
- Iverson, J.A. & Tunmer, W.E. (1993). Phonological processing skills and the Reading Recovery program. *Journal of Educational Psychology*, 85, 112-125.
- Lyons, C.A. (1989). Reading Recovery: An effective early intervention program that can prevent mislabeling children as learning disabled. *ERS Spectrum*, 7, 3-9.
- Lyons, C.A. (1991). Reading Recovery: A viable prevention of learning disability. *Reading Horizons*, 31, 384-408.
- Lyons, C.A. (1994). Reading Recovery and learning disability: Issues, challenges, and implications. *Literacy, Teaching, and Learning*, 1 (1), 109-119.
- Pinnell, G.S. (1989). Reading Recovery: Helping at-risk children learn to read. *Elementary School Journal*, 90, 161-183.
- Pinnell, G.S., Lyons, C.A., DeFord, D.E., Bryk, A.S. & Seltzer, M. (1994). Comparing instructional models for the literacy education of high-risk first graders. *Reading Research Quarterly*, 29, 9-39.
- Rasinski, T. (1995). Commentary on the effects of Reading Recovery: A response to Pinnell, Lyons, DeFord, Bryk, and Seltzer. *Reading Research Quarterly*, 30, 264-270.
- Ross, S. M., Smith, L. J., Casey, J., & Slavin, R.E. (1995). Increasing the academic success of disadvantaged children: An examination of alternative early intervention programs. *American Educational Research Journal*, 32, 773-800.
- Shanahan, T. & Barr, R. (1995). Reading Recovery: An independent evaluation of the effects of an early instructional intervention for at-risk learners. *Reading Research Quarterly*, 30, 958-996.
- Stahl, K.A., Stahl, S.A., & McKenna, M.C. (1999). The development of phonological awareness and orthographic processing in *Reading Recovery*. *Literacy Teaching and Learning*, 4(1), 27-41.
- Wasik, B.A. & Slavin, R.E. (1993). Preventing early reading failure with one-to-one tutoring: A review of five programs. *Reading Research Quarterly*, 28, 179-200.

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## About the Alert Series

Current Practice Alerts is a joint publication of the Division for Learning Disabilities and the Division for Research within the Council for Exceptional Children. The series is intended to provide an authoritative resource concerning the effectiveness of current practices intended for individuals with specific learning disabilities. Each Alerts issue will focus on a single practice or family of practices that is widely used or discussed in the LD field. The Alerts will describe the target practice and provide a critical overview of the existing data regarding its effectiveness for individuals with learning disabilities. Practices judged by the Alerts Editorial Committee to be well validated and reliably used are featured under the rubric of Go For It. Those practices judged to have insufficient evidence of effectiveness are featured as Use Caution. For more information about the Alerts series and a cumulative list of past Alerts topics, visit the Alerts page on the CEC/DLD website: <http://www.TeachingLD.org>