



Reading Recovery is Based on Scientific Research (SBRR)

Reading Recovery®
Council of North America

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In March 2007, the What Works Clearinghouse (WWC), a branch of the U.S. Department of Education (USDE) and the Institute of Education Sciences (IES), released its independent review of the experimental research on Reading Recovery. The review clearly establishes that Reading Recovery is an effective intervention based on scientific research.

The reauthorization of the Elementary and Secondary Education Act (ESEA) emphasized *scientifically based reading research* (SBRR) when selecting reading programs and interventions. While researchers and scholars may differ on their definitions of “science” and “scientifically based research,” the USDE and IES provided several criteria to be used when selecting effective reading programs and interventions. Reading Recovery meets all of these criteria.

Employs systematic, empirical methods that draw on observation or experiment

The structure and design of Reading Recovery are consistent with a large body of research on how children learn to read and write. In addition to basic research on the reading and writing of young children (Clay, 1966), a series of studies in the 1970s led to the development of Reading Recovery (including field trials, follow-up studies, replication studies, monitoring studies, and subgroup studies).

Numerous studies have examined the effectiveness of Reading Recovery for children with literacy difficulties. At least six published studies meet the rigorous criteria proposed by the USDE to evaluate research evidence: systematic, empirical, rigorous data analysis, valid data collection, strong research design, information reporting, and evidence of expert scrutiny.

Reading Recovery evaluation uses systematic, empirical methods to collect data annually on all children served by the intervention. Data collection, analysis, and assessment are standardized nationally. Data are also collected on a random sample of grade-level peers to provide a comparison group. See www.ndec.us for information about evaluation methodology.

Involves rigorous data analyses that are adequate to test stated hypotheses

The goal of Reading Recovery and Descubriendo la Lectura¹ is to dramatically reduce the number of learners who have extreme difficulty with literacy learning and the cost of these learners to educational systems. This goal calls for Reading Recovery children to make faster-than-average progress so they can work within an average group setting in the regular classroom.

Hypotheses that are tested annually include the following:

- Reading Recovery children will increase their skills in the following areas necessary for reading: letter identification, reading vocabulary, concepts about print, writing vocabulary, hearing and recording sounds (phonemic awareness and letter-sound relationships), and text reading.
- Children who successfully complete Reading Recovery will perform on literacy measures within average grade-level expectations.

¹ Descubriendo la Lectura, Reading Recovery in Spanish, is available for first-grade children whose classroom literacy instruction is in Spanish.

- Children who successfully complete Reading Recovery will continue to make gains in text reading and writing after the intervention and continue to perform competitively with peers who were not initially at risk.

Annual data analyses test these hypotheses and reveal that a large majority of children with complete interventions make accelerated progress and meet average grade-level expectations; they also continue to make progress after the intervention. Because these children were the lowest literacy achievers in the first grade in their schools, we can verify the reduction of the number of children with extreme literacy difficulties.

Rigorous data analysis procedures are carefully implemented by the National Data Evaluation Center (NDEC) which collects data on all children served and provides annual reports of quantitative data. Research questions were developed to guide data analysis and to test Reading Recovery's effectiveness and efficiency. Analyses include information about

- the children served,
- the outcome status of each child,
- progress of all children on multiple literacy measures,
- comparison of Reading Recovery children with a random sample of their peers,
- classroom teacher perspectives of children's literacy performance,
- information about retention and special education,
- analysis of time in program,
- and much more.

In addition to the publication of an annual national report (see www.ndec.us), school, district, and site reports are also available each year.

Relies on measurements or observational methods that provide valid data across evaluators and observers and across multiple measurements and observations

Reading Recovery uses systematic and simultaneous replication studies (Frymier, Barber, Gansneder, & Robertson, 1989) to document program outcomes for all children served—adhering to standardized methods, instruments, and timelines across all schools, school districts, training sites, and states. Replication is important because it provides evidence of accountability that is open to researchers and administrators. Assessments in Reading Recovery have been replicated for more than 1.6 million children across time and location with remarkable consistency.

An Observation Survey of Early Literacy Achievement (Clay, 2002, 2006) is used to measure gains across multiple measurements. This instrument has established validity and reliability (Clay, 2002, 2006; Denton, Ciancio, & Fletcher, 2006). National norms are available for the six tasks of the Observation Survey (Gómez-Bellengé & Thompson, 2005).

Data collected from multiple observers and evaluators include the following:

- Pre- and post-intervention assessments (student outcomes); follow-up assessment at end of year
- Pre- and post-assessment for a random sample of children in the grade-level cohort (to create national norms)
- Reported perceptions of classroom performance of individual children by classroom teachers
- Decisions related to special education referral and placement and retention in grade level, using data and input from non-Reading Recovery school personnel
- Reported perceptions of program effectiveness from parents, administrators, and classroom teachers (optional but recommended)

Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review

Support for various aspects of the Reading Recovery intervention is published in numerous peer-reviewed articles and research reviews. More than 40 peer-reviewed research publications are summarized in Chapter 10 of *Changing Futures: The Influence of Reading Recovery in the United States* (Schmitt et al., 2005). An important independent evaluation of Reading Recovery used specific meta-analytic procedures to study overall effects of Reading Recovery and found positive program effects (D'Agostino & Murphy, 2004).

At least six published studies related to the effectiveness of Reading Recovery meet the criteria for scientifically based reading research set forth by the USDE:

- Center, Y., Wheldall, K., & Freeman, L. (1992). Evaluating the effectiveness of Reading Recovery: A critique. *Educational Psychology*, 12, 263–273.
- Iversen, S., & Tunmer, W. E. (1993). Phonological processing skills and the Reading Recovery program. *Journal of Educational Psychology*, 85(1), 112–126.
- Pinnell, G. S. (1989). Reading Recovery: Helping at-risk children learn to read. *Elementary School Journal*, 90, 161–181.
- 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(1), 8–39.
- Quay, L. C., Steele, D. C., Johnson, C. I., & Hortman, W. (2001). Children's achievement and personal and social development in a first-year Reading Recovery program with teachers-in-training. *Literacy Teaching and Learning: An International Journal of Early Reading and Writing*, 5(2), 7–26.
- Schwartz, R. M. (2005). Literacy learning of at-risk first grade students in the Reading Recovery intervention. *Journal of Educational Psychology*, 97(2), 257–267.

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- Clay, M. M. (2002, 2006). *An observation survey of early literacy achievement*. Portsmouth, NH: Heinemann.
- D'Agostino, J. V., & Murphy, J. A. (2004). A meta-analysis of Reading Recovery in United States schools. *Educational Evaluation and Policy Analysis*, 26(1), 23–38.
- Denton, C. A., Ciancio, D., & Fletcher, J. (2006). Validity, reliability, and utility of the observation survey of early literacy achievement. *Reading Research Quarterly*, 41, 8–34.
- Frymier, J., Barber, L., Gansneder, B., & Robertson, N. (1989). Simultaneous replication: A technique for large-scale research. *Phi Delta Kappan*, 71, 228–231.
- Gómez-Bellengé, F. X., & Thompson, J. R. (2005). *U.S. norms for tasks of an observation survey of early literacy achievement*. (Technical report). Columbus, OH: The National Data Evaluation Center. (www.ndec.us)
- Schmitt, M. C., Askew, B. J., Fountas, I. C., Lyons, C. A., & Pinnell, G. S. (2005). *Changing futures: The influence of Reading Recovery in the United States*. Worthington, OH: Reading Recovery Council of North America.