Editor’s note: Reading Recovery continues to demonstrate its effectiveness as an early literacy intervention on a year-by-year basis through data collection procedures that are exceptionally well designed and implemented. This article describes highlights of Reading Recovery’s 2003–2004 national data collection and documents the strong levels of success which were achieved with the most at-risk readers in regular first grade classrooms who were selected for Reading Recovery instruction during the 2003–2004 academic year.

A Truly Remarkable Level of Evidence!
The U.S. Department of Education defines 6 levels of evidence which are used for scientific research ranging from anecdote, the lowest level of evidence, to randomized experimental trials, the highest level of evidence (Whitehurst, 2002). For randomized experimental trials, students of equal performance levels have to be randomly assigned to the intervention(s) or to a comparison group with equal probability of being assigned to either group. In education, because of the complexity of working with human subjects and the ethical dilemma raised by denying available treatment to large groups of students, true randomized experimental trials are extremely difficult to design and carry out.

The second highest level of evidence for scientifically based research is the quasi-experimental research design. Reading Recovery evaluation utilizes this second-highest research design, or level of evidence, on a routine yearly basis. Yearly evaluation of an intervention using a quasi-experimental research design is a highly unusual occurrence. The national Reading Recovery data collection procedures, utilizing the expertise of the staff at the National Data Evaluation Center, accomplish this important task annually.

The annual evaluation in which all Reading Recovery students and teachers participate is, technically speaking, called a pretest-posttest two-group quasi-experimental research design. This terminology is not as daunting as it may seem, however! Pretest-posttest means that all children involved in the Reading Recovery intervention are assessed (using An Observation Survey of Early Literacy Achievement and standardized procedures, Clay, 2002) before and after they are served by the intervention. Two-group means we gather data not only for Reading Recovery students but for a comparison group (the random sample students) who we also assess at the beginning and end of the first grade. Quasi-experimental refers to the way in which the data are collected and analyzed, in order to maximize what we can say with certainty about the two different groups listed above.

Every year, we describe the literacy skills of Reading Recovery students before they begin their Reading Recovery lessons, after the intervention has concluded for each student, and in comparison to the literacy skills of their first-grade peers. It is highly unusual for any program or intervention to gather and analyze this type of information on a routine basis. Reading Recovery was able to accomplish this effort for the 2003–2004 year thanks to the hard work of the nearly 15,000 teachers and 640 teacher leaders who worked with nearly 125,000 children. These educators also tested nearly 17,000 children in the random sample comparison group in order to make this quasi-experimental evidence available.

2003–2004 Reading Recovery Results
As always, the children served by Reading Recovery during 2003–2004 were a diverse group; over half...
received free or reduced-priced school lunches; 40% were non-white; 13% were non-native speakers of English; 27% came from urban schools; and 37% from rural schools. Of the 125,000 children who received one or more Reading Recovery lessons, about 96,000 children had the opportunity to receive a full series of lessons. Over three-fourths, or 97,000 of these children had a series of lessons that were successfully discontinued.

The 2003–2004 school year was the fifth year during which the current evaluation methodology was used. These 5 years of data collection by NDEC allow us to examine several important historical trends. For the random sample comparison group, which represents the general population of first graders, the average scores in the fall for all 6 measures of the Observation Survey have steadily increased for the last 5 years. The gains in literacy behavior made by these students during their first-grade year have also increased. Finally, the year-end scores for the random sample students have also increased every year. For example, in the spring of 1999, the average text level for the old random sample, which represented the top 80% readers, was 19.8. In spring of 2004, it was 20.2 for all first graders.

The 5 years of increases in the Observation Survey scores of the random sample students reflects broad positive trends for U.S. schools served by Reading Recovery. This historical trend also represents an increasing challenge for Reading Recovery teachers and students. As the literacy skills of the random sample students improve, Reading Recovery students who enter the intervention are further behind in literacy skills and must make ever greater gains during the intervention in order to catch up to their peers. Remarkably, our data show that Reading Recovery teachers are helping students meet this challenge, and in an ever shorter series of lessons. In other words, while first-grade students overall are doing better every year, struggling readers face increasing obstacles in reaching average reading levels. NDEC data collection and analysis shows that the children served by Reading Recovery have farther to go to catch up, and yet they manage on average to do so in shorter amounts of time than has occurred in the past.

The availability of national norms, through Reading Recovery’s testing and data collection for random sample students, allows us to compare how Reading Recovery students did in comparison with all first graders. In fall of first grade, 49% of Reading Recovery students were in the lowest achievement group on the text reading measure. By spring, only 20% were still scoring in this lowest achievement group. In other words, before their interventions Reading Recovery students are highly overrepresented in the low achievement group and after their interventions, they are no more likely to be in the low achievement groups than the general population of first grade students. Figure 1 represents a remarkable shift because research indicates that students who start first grade as first readers tend to stay low readers.

Several other measures which are external to Reading Recovery also corroborate the effectiveness of the intervention. In fall 2003, classroom teachers rated 92% of the Reading Recovery students as low readers. By the spring of 2004, only 22% of Reading Recovery students were rated as low readers by classroom teachers (Figure 2). Of the over 72,000 Reading Recovery students who successfully discontinued from the series of lessons, and for whom data are available, only 154 (well under 1%) were placed in literacy-related special education during first grade. Similarly, only 159 Reading Recovery students whose lessons were discontinued were retained in grade for reading-related reasons.
The decision to discontinue a child’s series of lessons is a clinical decision indicating that he has reached a reading level which is comparable to that of his peers, and that he has demonstrated he can continue learning to read without further one-to-one support. The decision to discontinue lessons, or successfully graduate a student out of the intervention, is in essence a prediction of future success for each individual student. When any of these students are subsequently placed in special education or retained in grade for reasons related to reading, this result would contradict this prediction. Reading Recovery data, however, demonstrate that this was an exceedingly rare occurrence (about 0.02%).

The Impact of New National Norms
Due to the completion of an extensive data analysis project, new national norms for Reading Recovery data are now available. Although these new norms will be discussed in greater detail in a subsequent article within this journal, a discussion here of some of the highlights from these new norms is in order.

In 1990 when stanines were first established, the average text reading level for first graders in fall was 2; the current national norms place the average text level in fall at 4. In spring, the average text level was 11; now the current national norms place the average spring text level at 20. Using the national norms developed in 1990, a student with a spring text reading level of 6 was at the low end of stanine 4. In the current, new norms a student with a spring text level of 16 is at the low end of stanine 4. These changes in the national norms will have important implications for all U.S. schools, as well as for Reading Recovery implementation and intervention. A text reading level of 16 is now the minimum classroom criterion for reading success at year-end for U.S. first-grade students. This shift upwards in the performance of the random sample students at schools with Reading Recovery implementation has been accomplished in part, no doubt, not only by the success of the Reading Recovery intervention itself but also in its systemic value to fundamentally impact a broad spectrum of school factors related to student achievement. Although this shift in national norms will bring challenges and questions to our schools, it is also certainly worth celebrating!

References