intervention are able to make accelerated progress and continue learning with their peers in the classroom without further intervention or placement in special education for literacy difficulties—a considerable cost savings to districts.

Training Programs for Special Educators and Interventionists

Many Michigan schools that have fully implemented Reading Recovery have requested that other members of the instructional staff have access to the Reading Recovery training without the requirement of taking four training days for their training programs. Literacy Labs (LL) for special educators and interventionists, are provided by the Pojoaque language teachers and Literacy Support (LS) for classroom teachers and reading interventionists, are provided to these teachers as they train alongside teachers in Reading Recovery. During their training year, these LL and LS teachers are introduced to the complex literacy processing model that informs Reading Recovery while teaching two students daily for the minimum of four students per Reading Recovery one-on-one lessons. Following their training year, LL and LS teachers apply their new expertise as they continue teaching at least one child, one-to-one, each year from their class roster or other caseloads (Konstantellou & Lose, 2009).

References Cited


Lose, M. K. (2007). A child’s ‘Response to Intervention’ as they continue teaching at least one child, one-to-one, each year from their class roster or other caseloads (Konstantellou & Lose, 2009).


History of Reading Recovery

Internationally renowned developmental psychologist and distinguished literacy researcher, Dr. Marie M. Clay, developed a set of research-based teaching procedures found to reverse literacy failure in a short period of time. Reading Recovery, implemented in 20 schools in the United States in 1984 when the first class of teachers was trained at The Ohio State University. Now implemented in nearly every country, Reading Recovery has expanded not only in the U.S. and New Zealand, but also in Australia, Bermuda, Canada, Caribbean, Europe, the United Kingdom and U.S. Department of Defense Schools. The not-for-profit collaborative effort among schools and universities trains teachers to work with the lowest-performing first graders. Children are identified for service based on their scores on the six tasks of an Observation Survey of Early Literacy Achievement (OSELIA) with the lowest children selected for service first (Lose & Konstantellou, 2005). Teachers trained in Reading Recovery use the assessment information and sensitive observation to design individual literacy lessons that are responsive to each child’s skills and abilities. Children meet with their Reading Recovery teacher for 50-minute lessons each day for an average of 12-20 weeks. The goal is to accelerate children’s development to within-average levels in reading and writing in a year so that they can benefit from good classroom instruction. Of children who are trained in Reading Recovery, two thirds attribute this accelerative progress to the responsive instructional activities provided in the one-to-one setting and others have participated in Reading Recovery’s professional development. Reading Recovery also serves as a pre-referral option to identify children who need longer term support (Lose, et al., 2005). Schools that implement Reading Recovery assign staff teachers flexibly to maximize the teachers’ access to the intervention and permit teachers to apply their Reading Recovery training in their other instructional roles (Lose & Best, 2011).

Reading Recovery in Michigan 2012-2013

During the 2012-2013 school year, 2,170 students were taught by 261 teachers trained in Reading Recovery (50 of whom were in-service teachers). Reading Recovery served over 2,170 students represented a full day of instruction. Of these students, 28% (N=601) were taught by trained Reading Recovery educators in the school district, 72% (N=1,569) received interventions that lasted up to 20 weeks. Thirty-seven percent of students received interventions that lasted between 10-14 weeks, 31% between 15-19 weeks, and 18% of the interventions lasted 20 weeks or less. Not all of the students who were enrolled received a full intervention, their interventions were cut short before the end of the school year; for example, 6% were opting out for their uppers limits in the year (N=342), benefited they missed (3%) N=55, and for other reasons (1%, N=29).

In 2012, 726 students who received a complete intervention (about 30-35 hours of instruction total), 72% (N=1,243) reached average performance levels in reading and writing and their interventions were discontinued (see Figure 1). The completion of the complete intervention students: 28% (N=483), made...
Another independent evaluation of Reading Recovery was released in fall 2013. Early results from the rigorous evaluation of the investing in innovation (i3) scale-up of Reading Recovery conducted by the Consortium for Policy Research in Education reveal significant positive effects on reading and comprehension as measured by the ITBS Reading Words and Reading Comprehension subscales (Mey et al., 2013). The results were also large for ELL students and students in rural schools. While results varied across schools, the impact estimates for most schools were moderate to large.

Effect of Reading Recovery on Reading Achievement

Figure 3 demonstrates the effect of Reading Recovery instruction on the reading achievement of the lowest performing literacy learners in first grade and compares this to the progress to the Random Sample of their peers and the Low Random Sample of children in schools with Reading Recovery.

Low Random Sample Children – The purple line at the top shows the Random Sample’s progress on test reading at three points in time. In these results, the students start the year at a higher text reading level and make progress throughout the year.

Reading Recovery (RR) Children served in the fall semester – The blue line shows the progress of Reading Recovery children who were selected during the fall semester for Reading Recovery service. Initially the lowest performing, they catch up to and even surpass the Random Sample by mid-year when their Reading Recovery lessons end and continue to maintain their progress.

Response to Intervention and Learning Disabilities

A federal initiative that is derived from the 2004 Individuals with Disabilities Education Act (IDEA) offers schools facing increased enrollments of students with learning disabilities (LD) two options for addressing this growing population (Lose et al., 2007; Allington, 2009). The first option is that local education agencies can use as much as 15% of their special education funds to pay for early intervening services (EIS) and to support professional development and literacy instruction (Lose, 2005). The second option offered by the IDEA is Response to Intervention (RTI) that can be used to provide high quality instruction based on children’s needs without the requirement of labeling students at risk for school failure as LD (Johnston, 2010). The goal is to limit referrals based on inadequate instruction or limited English proficiency and to reduce the number of children identified for LD services (Fuchs & Fuchs, 2006). To achieve this goal, trained in Reading Recovery is just as effective as the instruction delivered daily and one-to-one by these same teachers. To address this question Schwartz, Schmidt, & Lose (2012) used a randomized control trial methodology to evaluate the effect of variations in teacher-student ratio on intervention effectiveness delivered by teachers trained in Reading Recovery. Even with the expertise of these teachers, students in the 1:1 condition scored significantly higher on the text reading measure than students in the 1:2, 1:3, and 1:5 group conditions. The researchers concluded that a sound approach to RTI would be comprehensive with provision for one-to-one early preventive instruction for the lowest performing learners, effective small group instruction for less struggling older learners, strong classrooms for all, and longer-term intervention for the very few children who continue to need intensive support in later grades.

Reading Recovery: An Evidence-Based Approach to Response To Intervention

In their seminal article, Learning to be Learning Disabled, published over 25 years ago, Marie Clay (1987) gave validity and support to the idea that many children labeled LD are in fact instructionally challenged through a series of unfortunate experiences either before, or very early in, their formal schooling. However, provided an appropriate early intervention to meet their accelerative learning and response to intervention, the number of children identified as LD can be reduced to only 1-2 percent.

For over 25 years in the United States, Reading Recovery has operated as an RTI approach. Reading Recovery trained and professionally developed teachers design interventions tailored precisely to the needs of the individual students delivered daily and one-to-one, in support of the literacy learning of the most at-risk children (Clay, 2005a; 2005b). While many children respond quite well to whole group and small group instruction, evidence has shown that the lowest performing learners provided with the Reading Recovery

Empirical Support for Reading Recovery

The United States Department of Education What Works Clearinghouse (WWC) publishes intervention reports that assess research on beginning reading curricula and instructional strategies for students from kindergarten through third grade. In July 2013, the WWC released its newest independent review of Reading Recovery’s empirical evidence in general reading achievement providing compelling evidence that the intervention has a positive effect on student outcomes in general reading and the highest overall score in general reading achievement for any of the 26 beginning reading programs reviewed to date. Reading Recovery also received high ratings for the other three domains – alphabetic, reading fluency, and comprehension. Ratings in all four of the domains provided evidence that Reading Recovery has a positive effect on student outcomes.

Progress but not sufficient enough to reach the rigorous criteria for the discontinuation designation. These students then were recommended for follow-up support in their classrooms and in small group instructional settings. Of the total number of students who received a complete Reading Recovery intervention, less than 2% were referred for LD.

The change in classroom reading group placement from fall to year-end for students who received complete interventions and whose progress was discontinued is another indication of students’ progress in literacy as illustrated in Figure 2. At the end of the year, these once lowest performing learners have now moved to within average performance levels, restoring the normal distribution of students in grade one.

Figure 2 - Classroom Reading Group Placement of Reading Recovery Students with Complete Interventions and Students Whose Lessons Were Discontinued - Oakland University - Michigan 2012-2013

Figure 2 Classroom Reading Group Placement of Reading Recovery Students with Complete Interventions and Students Whose Lessons Were Discontinued - Oakland University - Michigan 2012-2013

Figure 3 - Gains on Text Reading Level for Reading Recovery Children, 2012-2013

Table 1: Students in Grade One.

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fficiency. Ratings in all four of the domains measured provide evidence that Reading Recovery has a positive effect on student outcomes. 1.1

Reading Recovery (RR) Children served in the spring semester – The red line shows the progress of Reading Recovery children selected for service at mid-year when slots by Reading Recovery children served in the RR became available. Although these children made some progress in the fall without Reading Recovery, they are well behind their Random Sample peers at mid-year. Provided with Reading Recovery however, these children make accelerated progress, reduce the gap between themselves and the Random Sample and achieve within-average performance levels by year-end.

Low Random Sample Children – The purple line at the bottom shows the progress of the Low Random Sample. These students who did not receive Reading Recovery were low at the beginning of the school year and remain low throughout the year. While they made some progress throughout the year, it is not enough to reduce the achievement gap. Had they been able to receive Reading Recovery, it is likely they would have achieved accelerated progress and reached within-average performance levels.

Response to Intervention

The IDEA attempts to ensure that schools achieve the following (Lose, 2007, 2008):

• Provide early identification and intervention for all children struggling with literacy learning.
• Develop ways to appropriately identify and intervene on behalf of children with LD.
• Provide effective, intensive, evidence-based early intervening services.
• Monitor each child’s progress using data-based documentation.
• Accelerate children’s reading progress to meet annual progress criteria.
• Create a multi-tiered problem-solving team to support comprehensive literacy efforts.
• Provide the highest quality of professional development for teachers of low achievers.

These findings confirm Judj’s (1988) research which showed that children who were low-performing in literacy in first grade are very likely to remain low performing in fourth grade. However, provided with contingent, responsive teaching by specially trained and professionally developed teachers, even the lowest-performing children can make accelerated progress. The benefits from good classroom instruction, and continued learning with their peers (McKenna, Lose, & Schwartz, 2006).

United States Department of Education Investing in Innovation (I3) Grant

Reading Recovery is the recipient of an I3 federal grant to scale up Reading Recovery throughout the United States from 2010/2011. Under the i3 grant opportunity, teachers are trained at Reading Recovery sites affiliated with 19 Reading Recovery university training centers across the country. Under the grant, the Reading Recovery Center of Michigan at Oakland University provides 10 graduate credits in early literacy intervention course work, books, and instructional materials to 250 certified teachers in Michigan elementary schools. Information about the i3 grant and the application process is found at oakland.edu/readingrecovery

Reading Recovery has a strong track record of preventing literacy failure for many first graders. Results support the investment of resources for this prevention. Yet, many of the lessons from programs providing Reading Recovery to all the children who need it. Many of the lessons from programs providing Reading Recovery to all the children who need it. Many of the lessons from programs providing Reading Recovery to all the children who need it.
Figure 2: Classroom Reading Group Placement of Reading Recovery Students with Complete Interventions and Students Whose Lessons Were Disconnected—Oakland University—Michigan 2012-2013

Figure 3: Gains on Test Reading Level for Reading Recovery Children, 2012-2013

Empirical Support for Reading Recovery
The United States Department of Education What Works Clearinghouse (WWC) publishes intervention reports that assess research on beginning curricula and instructional strategies for students from kindergarten through third grade. In July 2013, the WWC released its newest independent review of Reading Recovery's experimental design. The meta-analysis review revealed significant positive effects on reading comprehension as measured by the ITBS Reading Words and Reading Comprehension subscales (Mey et al., 2013). The results were also large for ELL students and students in rural schools. While results varied across schools, the impact estimates for most schools were moderate to large.

Reading Recovery (RR) Children served in the spring semester – The red line shows the progress of Reading Recovery children selected for service at mid-year when slots by Reading Recovery children served to RR became available. Although these children made some progress in the fall without Reading Recovery, they are well behind their Random Sample peers at mid-year. Provided with Reading Recovery, however, these children make accelerated progress, reducing the gap between themselves and the Random Sample and achieve within-average performance levels by year-end.

Low Random Sample Children – The purple line at the top shows the progress of the Low Random Sample in the fall semester. These students who did not receive Reading Recovery were low at the beginning of the school year and remain low throughout the year. It is not enough to reduce the achievement gap. Had these children been able to receive Reading Recovery, it is likely they would have achieved accelerated progress and reached within-average performance levels.

Reading Recovery has a strong track record of preventing literacy failure for many first graders. Results support the investment of resources for this prevention approach. Yet, many of the children progressing through Reading Recovery to the children who need it. Many of the studies comparing teachers’ performance across grade levels. The results of variations in teacher-quality can be very high or in their early grades. However, provided an appropriate early intervention program to support their acceleration learning and response to instruction, the learning gap identified by LD can be reduced to only 1-2 percent. For over 25 years in the United States, Reading Recovery has operated as an RTI approach. Reading Recovery trained and professionally developed teachers design instructional sequences that are delivered daily and one-to-one, in support of the literacy learning of the most at-risk children (Clay, 2005a, 2005b). While many children respond quite well to all small group instruction, evidence has shown that the lowest performing learners provided with Reading Recovery.

Response to Intervention and Teacher-Student Ratio
Some of the schools have found that small group instruction delivered by teachers trained in Reading Recovery is just as effective as the instruction delivered daily and one-to-one by these same teachers. To address this challenge, teachers are trained at Reading Recovery sites affiliated with 19 Reading Recovery university training centers across the country. Under the grant, the Reading Recovery Center of Michigan at Oakland University provides 10 graduate credits in early literacy intervention course work, books, and instructional materials to 250 certified teachers in Michigan elementary schools. Information about this grant and the application process is found at oakland.edu/read recovery.
Reading Recovery Regional Training Sites® Affiliated with the Reading Recovery Center of Michigan at Oakland University
Bloomfield Hills Public Schools
Detroit Public Schools
Dowagiac Union Schools
Eastern Upper Peninsula Intermediate School District
Genesee Intermediate School District
Grand Rapids Area
Kalamazoo Public Schools
Oakland Regional
Partridge Public Schools
Port Huron Area School District
South Lyon Community Schools
Walled Lake Consolidated Schools
Jackson County Intermediate School District
*School districts or consortia of school districts comprise each Reading Recovery Regional Training Site."

Introduction
Reading Recovery is a program of professional development for teachers: university faculty train and professionally develop teacher leaders who, in turn, disseminate the knowledge to other teachers. By the end of the first grade, children having extreme difficulty learning to read and write. Since its implementation in the United States, Reading Recovery has served more than 2 million children. Oakland County, Michigan is one of 19 universities in the United States to serve as a Reading Recovery training center. Since its establishment in Michigan in 1991, Reading Recovery has trained over 1,260 teachers who have served almost 102,000 Michigan first graders.

History of Reading Recovery
Internationally renowned developmental psychologists and distinguished literacy researchers, research. Dr. Marie M. Clay, developed a set of research-based teaching procedures found Reprint available at: www.reading-recovery.org; or the Reading Recovery website, www.reading-recovery.org. The Reading Recovery intervention last 26 weeks. Thirty- seven percent of students received intervention, leaving 284 students who received no intervention. Twenty-one percent of students who received intervention for at least 20 days, 31% of students who received intervention for at least 40 days, and 33% of students who received intervention for at least 60 days. All students who received at least 20 continuous days of intervention at least once achieved a Level 1 reading level. 30% of students who received intervention for at least 40 days achieved a Level 2 reading level, and 33% of students who received intervention for at least 60 days achieved a Level 3 reading level. The average reading level for students who received intervention for at least 60 days was Level 3.5, which is equivalent to the reading level of a third grader. The average reading level for students who received intervention for at least 40 days was Level 2.5, which is equivalent to the reading level of a second grader. The average reading level for students who received intervention for at least 20 days was Level 1.5, which is equivalent to the reading level of a first grader. The average reading level for students who received no intervention was Level 0, which is equivalent to the reading level of a kindergarten student.