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## ABSTRACT

This monograph presents information about Reading Recovery, describes the latest research concerning the program, and summarizes practical experience concerning the implementation of this innovation in reading instruction. Chapter 1 presents a general description of Reading Recovery instructional procedures. Chapter 2 contains three case studies that provide a more concrete look at how the program works with individual children and teachers. Chapter 3 discusses a longitudinal study conducted in the Columbus Public Schools to determine both the short-range and the long-range effects of Reading Recovery on a group of at-risk students. Chapter 4 describes the studies of Reading Recovery at sites throughout the state of Ohio during the years of 1985-86, 1986-87, and 198-88. Chapter 5 describes the Reading Recovery staff development component, along with studies of teacher training and development in program techniques. Chapter 6 presents suggestions for school districts or state agencies that wish to implement Reading Recovery. Thirty-three references and three appendixes containing a list of books used in Reading Recovery, a description of the alternative intervention program employed during the first year of the longitudinal study, and measures used to assess children in the Reading Recovery Program are attached. (MS)

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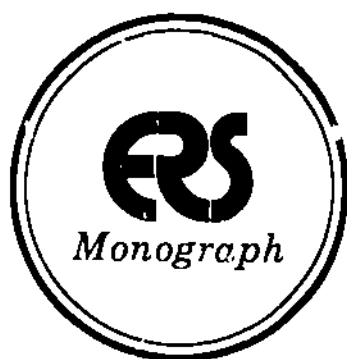
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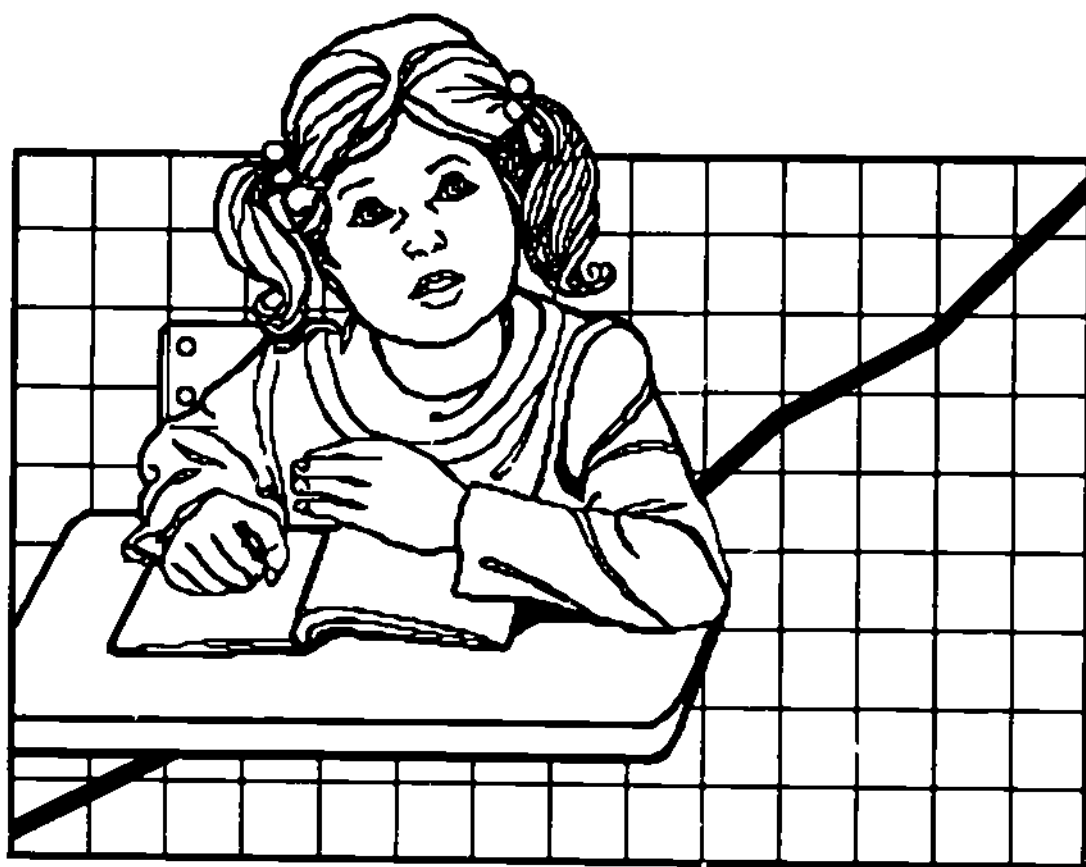
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# Reading Recovery: Early Intervention for At-Risk First Graders

*Gay Su Pinnell  
Diane E. DeFord  
Carol A. Lyons*



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## Foreword

Early reading difficulties can prevent children from achieving initial success in school, locking many of them into an early pattern of school failure. Even with extensive and costly remedial assistance throughout their school careers, such children often do not break out of this pattern. The dilemma of how to take children with early reading difficulties and put them on the road to success is a major concern for school officials and teachers.

This monograph, *Reading Recovery: Early intervention for At-Risk First Graders*, describes an innovative program that has achieved impressive results with a large percentage of faltering early readers. Reading Recovery originated in New Zealand, and has been a nationwide program in that country since 1979. It has been successfully adapted and tested for four years in Ohio, and is now being disseminated to many other locations throughout the United States, Canada, and Australia.

I have had the opportunity to observe the Reading Recovery program in action first-hand in Ohio, in New Zealand, and in Australia. In each of these varied locations and with a variety of children, the program has consistently produced positive results by taking a large proportion of children who were performing in the bottom 15 or 20 percent of their class in reading skills and raising these children to the average range for their class in a very short time. Moreover, these gains were consistently sustained over the long term without further intervention.

Although the Educational Research Service, in accordance with its standard policy, does not endorse any particular program or instructional method, the Reading Recovery results and evaluations presented in this monograph deserve the special consideration of educators and concerned citizens nationwide. The monograph describes these study results, how Reading Recovery operates, and how it may be implemented in local school districts. The monograph is an example of the role that ERS plays in providing dependable information that school officials, other educators, and responsible citizens need to make sound educational decisions in their states and school districts. As with all ERS monographs, the data and views presented in this publication are solely those of the authors, and should not be construed as those of ERS or any of its sponsoring organizations.

ERS wishes to thank the authors of this monograph, Drs. Gay Su Pinnell, Diane DeFord, and Carol Lyons, for the excellent work they have done in explaining in an interesting and understandable way both the Reading Recovery process and the research on its immediate and long-term effects on children having difficulty learning to read. In addition, I personally want to acknowledge and thank Dr. Marie Clay, Professor of Child Psychology, the University of Auckland, who initially researched and developed Reading Recovery, and Dr. Barbara Watson, who is Director of Reading Recovery in New Zealand, for their kind assistance in acquainting me with their research and their long-term experience with Reading Recovery in the land of its origin.

Glen Robinson  
Director of Research  
Educational Research Service

## Acknowledgments

The story of Reading Recovery implementation is in itself a case study of the kind of inter-institutional and interpersonal collaboration needed to create positive change in education. The first year of the project was jointly funded by The Martha Holden Jennings Foundation and the Columbus Foundation, with additional resources contributed by The Ohio State University and Columbus Public Schools. Since summer 1985, funds for training and materials have been provided by The Ohio General Assembly.

From the beginning, a number of exceptional individuals in different organizations have collaborated to conceptualize and implement the Reading Recovery project. The Ohio Department of Education, under the leadership of Franklin Walter, Superintendent of Public Instruction, G. Robert Bowers, Associate Superintendent, Nancy N. Eberhart, Director, and Hilda Edwards of the Division of Inservice Education, worked to communicate with school districts and other agencies, to create the necessary policy climate, and to solve implementation problems. James Hyre, who was Superintendent of the Columbus Public Schools at the start of the project, made the first test and longitudinal research for the program possible; the current Superintendent, Ronald Etheridge, has provided the continuing strong administrative support so necessary to the program's long-term success. Evelyn Luckey, Assistant Superintendent, played a critical leadership role in encouraging teachers and administrators to undertake the project. Stacey Woodford, Director of Federal Programs, and Shirley Mann provided support and encouragement. Teachers in the project are especially grateful to John Hilliard, Director of Chapter 1, for his problem-solving ability and his commitment to making Reading Recovery a quality program for children.

At The Ohio State University, the Office of Research and Graduate Studies, Thomas L. Sweeney Associate Vice President, has contributed tuition costs for NDN Teacher Leaders. The Office of the Provost, David Boyne Associate Provost, has contributed continuing support for the project. The Office of the Dean of Education, Donald P. Anderson, Dean, and the OSU Research Foundation have provided valuable leadership. Faculty members involved in the project especially thank our Department Chair, Frank Zidonis, and our colleagues in Language, Literature, and Reading.

The first teacher leaders, Mary Fried, Arlene Stuck, and Edwina Bradley, now Director of Reading, as well as those teacher leaders, site coordinators, and area administrators who have assumed the responsibility for the state of Ohio program, took on extra heavy work loads and many new responsibilities. Those leaders and the Reading Recovery teachers have been willing to learn new ways of teaching and performing their roles, and they have done so with such high quality that they are responsible for the results described here. At The Ohio State University, the Reading Recovery project staff over the five-year period has included Katie Button, Eleanor Handershan, Kathleen Holland, Nancy Nussbaum, Andrea McCarrier, Barbara Peterson, Jim Schnug, Kathy G. Short, Susan Tancock, Nora White, and Daniel Woolsey. Special thanks are due to Phil Young, Jim Rinehart, Will Place, and David Bates for data analysis, and to Linda Hopper, Adrienne Johnson, and Karen Kerr for preparation of reports.

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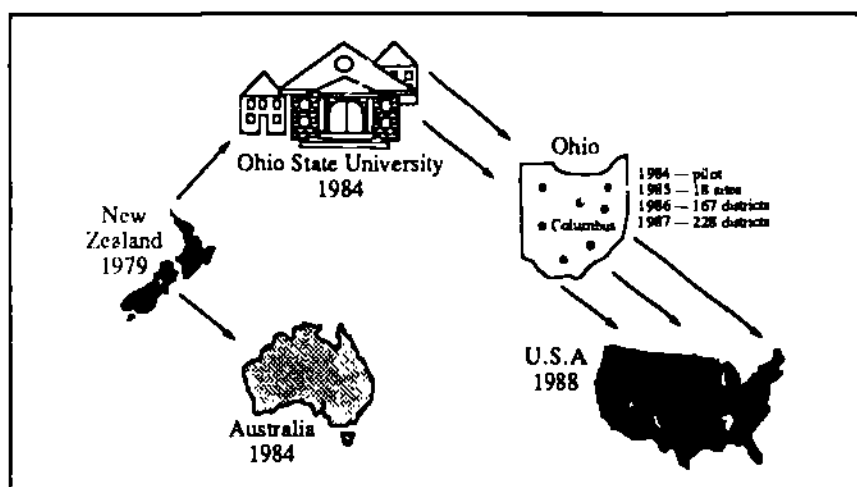
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## Introduction: What is Reading Recovery?



The early years are crucial in the process of becoming literate. Although most children make the "breakthrough" to literacy during their first years of school, many find it difficult to learn to read and write.

It is risky to wait and see whether such children will "grow into reading" or "catch on" later in school. When a child cannot read, the problem soon goes beyond reading. Children who experience reading difficulties quickly fall behind in school, meet failure repeatedly, and require continuous and expensive extra help for many years. Often, they never learn to read well.

Current efforts to help such children require an enormous, long-term investment of resources. Unfortunately, the evidence shows that this remediation often fails to help many children with difficulties. The problem is not simply one of immaturity, to be solved by holding children back to give them time to grow. Nor is it a matter of raising standards so that children are not promoted until they are "motivated" or master certain skills. Children who have early difficulty with reading need extra time and special help, and they need it in the initial stages of learning. We must find ways to teach the skills children need so that they can make timely progress and can function productively in school.

Fortunately, research has provided the basis for promising approaches which can now be ap-

plied in a variety of school settings. This monograph reports the implementation and evaluation of Reading Recovery, which is an early intervention effort to reach those first-grade children who are having the most difficulty learning to read and to help them catch up before they fall into a pattern of school failure.

### The Reading Recovery Program

Literacy at age six or seven serves children throughout school and frees them to continue to acquire knowledge and understanding all their lives. It is crucial, therefore, to ensure that all children have access to literacy in the early years of their education. That was the goal of the Ohio Department of Education, The Ohio State University, and the Columbus Public Schools when they decided to try a new program of early intervention for children who were at risk of reading failure in their first year of school.

Originally developed by New Zealand child psychologist and educator Marie M. Clay, Reading Recovery has been successfully adapted and tested for four years in Ohio. It has won support from teachers, principals, school boards, the state education agency, and the state legislature. Studies of the research and development phase demonstrate the program's effectiveness across economic and ethnic groups. Now, Reading Recov-

ery is a statewide program in Ohio, existing in 228 school districts. Separate school district projects have begun in Arizona; Illinois; South Carolina; Texas; Ontario, Canada; and Victoria, Australia. Reading Recovery has been a nationwide program in New Zealand since 1979.

Reading Recovery is based on the premise that early, high-quality help has the greatest potential for lasting impact and for reducing the need for continued compensatory help.

The program is an intensive one-to-one intervention program for the poorest readers (lowest 20 percent) in first-grade classrooms, as identified by teacher judgment and a Diagnostic Survey. The primary goals of Reading Recovery are to reduce reading failure through early intervention and to help children become independent readers. The program accomplishes this by: 1) bringing children who are "at risk" of reading failure up to the average of their class within a short period of time, so that they can profit from ongoing classroom instruction, and 2) helping these children develop a self-improving system for continued growth in reading, so that additional help is not necessary.

Reading Recovery supplements but does not substitute for conventional classroom teaching. During daily, 30-minute lessons, teachers who are specially trained in Reading Recovery techniques individually tutor these faltering readers to help them develop the kinds of strategies that good readers use. The power of Reading Recovery is in the framework of the lesson itself and in the development of teacher knowledge and problem-solving ability. The approach combines the use of related reading and writing experiences, close interaction between teacher and child within the lesson, and careful selection of materials for reading. In this instructional program, the teacher follows and guides the child individually in his or her use of reading and writing strategies. The teacher closely assesses and monitors progress

and makes appropriate decisions to accelerate the child's progress.

Research to date indicates that Reading Recovery has potential for substantially reducing the number of children with reading difficulties. As a result of accelerated progress, children typically leave the program within 12 to 16 weeks and are able to perform at satisfactory levels in reading without continued extra help. The sustained success that Reading Recovery achieves with the poorest performers in first-grade classes runs counter to the experience in most remedial education programs.

### **Unique Features of Reading Recovery**

A number of specific aspects characterize Reading Recovery and distinguish it from other programs designed to help children who have reading problems. Some of these unique features are listed below.

#### **1. Early Intervention.**

Reading Recovery is an early intervention program rather than a remediation program. The idea is to provide intensive and focused intervention while the child is in the process of learning the early strategies of reading. The intervention takes place before the emotional impact and confusion of failure occurs. The program attempts to get children on the right track in reading, thus preventing further difficulty.

#### **2. Short-Term Extra Help.**

The program provides temporary help that enables children to develop the self-generating system they need to continue learning independently. Like most remedial programs, Reading Recovery means taking the child out of the classroom for 30 minutes each day; however, this "pull-out" period lasts a relatively short time and yields a tremendous payoff by boosting the read-

ing skills of a high percentage of at-risk readers up to the classroom average.

### 3. Building on Strengths.

Reading Recovery supports the development of reading strategies by helping children use what they already know. Some remedial "deficiency" models focus on drilling children on the very items that confuse them. In contrast, the Reading Recovery teacher assesses each child's strengths in great detail and builds on those strengths in daily, individual lessons. Children gain confidence because they realize that what they already know and can do has value in the reading-writing process. More importantly, they learn specific strategies for applying their own knowledge.

### 4. Independence.

In Reading Recovery, children learn how to be independent because they are taught how to solve problems using specific strategies such as self-monitoring, cross-checking, predicting, and confirming. They are encouraged to use multiple sources of information while reading and writing; they learn to "orchestrate" strategies while attending to the meaning of the text. The program emphasizes learning "how to" rather than memorizing any specific list of words.

### 5. Flexibility and Responsiveness.

Unlike other programs, Reading Recovery does not depend on particular materials. It is not based on the use of any one set of reading texts or one teaching method. Instead, it depends on teachers developing a systematic knowledge of the reading-writing process and helping children to acquire the strategies they need to construct meaning from texts.

Once teachers are trained to work with children in Reading Recovery, they can effectively select and use a wide range of books and can help children use their own writing to assist in reading.

They can perform and record their own assessments. No prescribed, step-by-step kits or sets of consumable materials are necessary.

### 6. Action-Oriented.

The program is based on the premise that children are active learners. As they interact with others and with texts, they bring their own meaning to the books they read. The instructional setting provides the opportunity for children to think and solve problems while reading. The teacher provides choices and support, but the child must do the work and solve the problems.

### 7. Enabled Participation.

Reading Recovery is not specifically tailored to match the classroom program. However, the teacher is constantly aware of the level the child must reach to be released from Reading Recovery. The program goal is not a set criterion or "gain." The aim is to help each child reach the average range for the particular instructional setting (class or school, whichever makes sense programmatically) in which he or she is operating.

Children who enter this program at some time during their first-grade experience generally have already fallen far behind. They may have difficulty making sense of much that goes on in classroom instruction. When a child has moved ahead in the Reading Recovery program to the point where he or she can read texts equivalent to the average group in the classroom, then the child can begin to profit substantially from the ongoing instruction and can continue to improve in reading without extra help.

### 8. Accelerated Progress.

Reading Recovery children are expected to make accelerated progress so that they can catch up with their peers in the regular classroom setting. Intensive individual tutoring by specially trained teachers supports the children so that they

grow better and better at using various strategies. The child does the accelerating, supported and guided by a knowledgeable teacher.

### **9. Reading-Writing Connections.**

Every Reading Recovery lesson has both reading and writing components; learning in each situation enhances learning in the other. Writing is used in lessons as a support to developing reading strategies. Writing allows children to attend to the details of print and to develop strategies for hearing sounds in words, for generating new words from known words, and for monitoring, searching, and cross-checking.

### **10. Individual Tailoring of Instruction.**

The lesson provides a framework of activity; within this framework, however, the program differs for each child. The difference takes place in the nature of the moment-to-moment interactions between teacher and child, in the particular texts selected and read, and in the writing work on a message the child has composed.

### **11. Teacher Expertise and Judgment.**

Children are identified for the program by their teachers rather than by specialists. These children are the lowest achievers in the first-grade age cohort, excluding none. Thus, Reading Recovery provides a good "first net" for children who are most likely to have reading problems. It enables good teachers to work with children in special ways. These teachers, who because of the nature and high intensity of the program work only half of the day in Reading Recovery, can and usually do teach other subjects during the rest of the day.

### **12. Focus on Meaning.**

In Reading Recovery, children read for meaning from the very beginning stages of their instructional program. From a list of over 500 very short and interesting story books, the teacher

selects those that suit the child's interests, that have appealing language and stories, and that are at a relatively easy level for the child to read. Thus, at every level of text difficulty, children read fluently and for meaning and enjoyment.

### **13. Sound-Letter Relationships.**

Although the basic approach is to teach the child to read fluently for meaning and enjoyment, each lesson includes writing, through which children learn the relationship between the sounds contained in problem words and their relationship to specific letters and combinations of letters. Thus, the child is encouraged to use the sound-letter relationships as one of the basic strategies in solving problems that he or she encounters when reading. Unlike some other approaches, in Reading Recovery the child works from the sounds in words to the letters representing those sounds, rather than from letters to sounds.

### **14. Staff Development.**

Initial training for teachers takes one academic year, but Reading Recovery teachers and Teacher Leaders begin to work with children immediately. In the year-long staff development program, teachers learn to observe children's behavior carefully and systematically, to draw inferences from their observations, and to make decisions based on that information. From their wide repertoire of actions, they try to select the most powerful and the most supportive at the particular time. A key feature of the staff development program is the extensive use of a one-way glass through which teachers watch each other and analyze the child and teacher interacting in various situations.

### **15. System Intervention.**

Reading Recovery is more than a program for children and a staff development course. It is a carefully designed set of interlocking principles and actions that require the long-term commitment

of an entire school system in order to ensure a quality program and sustained results.

## Contents of the Monograph

The purpose of this monograph is to present information about Reading Recovery, to describe the latest research concerning Reading Recovery, and to summarize practical experience concerning the implementation of this innovation in reading instruction. The monograph has been prepared for the use of school officials, teachers, parents, political leaders, and concerned citizens who are interested in examining and perhaps implementing a Reading Recovery project.

Chapter 1 presents a general description of Reading Recovery instructional procedures. However, it is not the purpose of this document to provide specific instructions on how to apply the teaching procedures used in Reading Recovery. The procedures for diagnosis and instruction are discussed in detail in the text used in the year-long training program for teachers, *The Early Detection of Reading Difficulties* by Marie M. Clay (Heinemann, 1988).

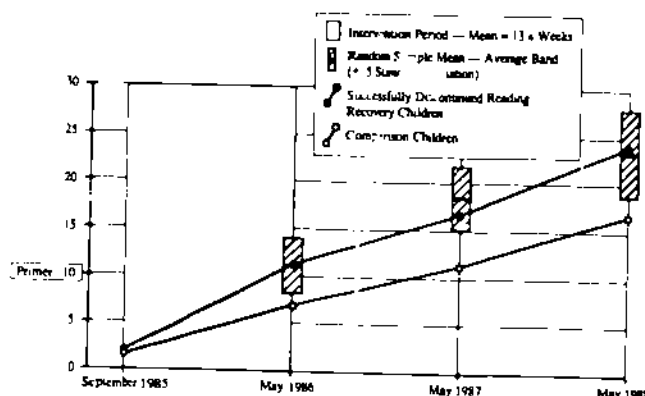
Chapter 2 contains three case studies that provide a more concrete look at how the program works with individual children and teachers.

In the Chapters 3 and 4, we report the results of evaluation studies conducted in Ohio to assess the effectiveness of Reading Recovery.

Chapter 3 discusses a longitudinal study conducted in the Columbus Public Schools to determine both the short-range and the long-range effects of Reading Recovery on a group of at-risk students. These children, who were first graders in fall 1985, were in the bottom 20 percent of their class in reading skills, according to diagnostic measures and their teachers' assessments. Evaluations through the end of their third-grade year showed that the Reading Recovery intervention these children received in the first grade raised a large proportion of them (73 percent) up

to the average reading level of other first-grade children. Most importantly, these gains were maintained for a substantial number of these children through the end of grade three *without further intervention*.

The chart below, from Chapter 3 page 36, shows that the group of successfully discontinued Reading Recovery children (those who were successfully released from the program) made sustained gains compared with the band of average scores of a random sample of all first-grade students, and also compared with a group of similar children who received an alternative intervention program.



Chapter 4 describes the studies of Reading Recovery at sites throughout the state of Ohio during the years 1985-86, 1986-87, and 1987-88. Children who received Reading Recovery instruction at these sites were assessed on various measures and compared with a random sample of first graders at the end of their respective first-grade years. The results statewide supported the positive findings of the longitudinal Columbus study.

Chapter 5 describes the Reading Recovery staff development component, along with studies of teacher training and development in program techniques. Finally, Chapter 6 presents suggestions for school districts or state agencies that wish to implement Reading Recovery

## Chapter 1: Description of Reading Recovery Lessons



This chapter describes how the Reading Recovery program works for children: how the lesson format was developed, how the lessons are structured, and the theoretical assumptions on which the instruction is based. This general description is followed in Chapter 2 by three case studies showing the difference that Reading Recovery has made in the lives of individual children.

Reading Recovery provides individually designed lessons to help children who are having reading difficulties to develop the kinds of strategies used by good beginning readers. This goal is accomplished through teachers interacting with children who are engaged in holistic reading and writing activities.

### Development of the Process

Marie M. Clay, a professor in child psychology at the University of Auckland, who developed Reading Recovery in New Zealand, began her research with detailed observations of good readers in the early stages of learning to read. After constructing knowledge of just what these good readers do, she looked at children who were having difficulty, asking the question: "Can we see the reading process going wrong in the first year of schooling?" As teachers of young

children can verify, the answer to that question was "yes" (1988).

Clay went on to design and experiment with intervention procedures based on her detailed observations. Acting on their observations while working with children, teachers sensitively intervened to support children's development of strategies. The goal was to help children expand the range of strategies available for their use.

Next, Clay's research team constructed a lesson framework. The activities were selected not as a "lesson plan" with a script to follow, but as a set of generative activities that would provide plenty of opportunity to read extended text, to talk about what was being read, and to use the full range of information sources available for constructing meaning. After pilot Reading Recovery procedures were further refined, the staff development program was created. Reading Recovery has been a nationwide program in New Zealand since 1979.

### Diagnostic Procedures

In Ohio, children are selected for Reading Recovery in the middle or late September of their first-grade year. All children selected for Reading Recovery must be in the lowest 20 percent achievement group of their first-grade class in

reading. The Reading Recovery teacher selects students by using a combination of measures, including the classroom teacher's ranking, the kindergarten teacher's opinion if applicable, scores on the six measures of the Diagnostic Survey, and any additional information, such as standardized test scores, that may be available. (In districts where Reading Recovery is supported by Chapter 1 funds, all children served must also qualify under Chapter 1 criteria.)

Prior to beginning a Reading Recovery program, children are assessed using the comprehensive set of individually administered instruments that make up the Diagnostic Survey. To administer the Diagnostic Survey, teachers involve the children in six assessments, each presenting a different aspect of reading and writing. The goal is to gain an understanding of what the child already knows about reading and writing.

There are several important points to note concerning the Diagnostic Survey. First, most of the measures involve children in reading and writing tasks. Throughout the testing, which takes about one hour, the teacher and child interact in an informal way with books and through writing.

Second, no one of the measures is intended to be used as the sole determinant of a child's program. Reading Recovery teachers look at the child's behavior across all measures to summarize relevant information about the child. This summary is only the beginning of the teacher's detailed observation of the child's behavior. He/she will spend the first 10 days of the program interacting with the child and observing closely the reading and writing behavior that provides clues to the child's additional knowledge.

Third, scores on the assessment instruments are less important than the observations and notes made during the assessment and teaching sessions. Teachers are prepared to notice significant behavior and to draw inferences to build their knowledge of the child's competence.

Fourth, these assessments should not be confused with the instructional program. They are intended to provide a broad first look at the child. Several of the tasks — for example, writing all the words the child knows — are not used in instruction. Successful release from the program depends on a qualitative look at the documentation of the child's progress over time.

The Diagnostic Survey includes the following assessments:

1. *Letter Identification.* Children are asked to identify as many as they can of 54 characters (the entire upper-case and lower-case alphabets, plus the alternative printed forms of "a" and "g"). They may identify the name of the letter or the sound the letter makes, or they may suggest a word that starts with that letter. Any of these responses would be considered correct. Teachers notice the kinds of substitutions children make as well as their accurate responses; for example, calling a "j" by the name of "t" may indicate awareness of distinctive features. This assessment is used not because children must be able to name all the letters in order to read; rather, teachers must find out what the child knows about letters to help integrate this information into the instructional program.
2. *Word Test.* The word list used in Ohio was compiled from the high frequency words on a Dolch word list. Clay (1988) advises that the list be made up of the most frequently occurring words in whatever basic reading texts are being used in the system. This test helps the teacher get an idea as to whether the child is acquiring knowledge of frequently occurring words; it does not provide information as to the child's ability to read extended text. Again, the assessment should not be confused with instruction. At no time in the Reading Recovery program is the child asked to read isolated words.

3. *Concepts About Print.* The teacher and child interact as the teacher reads a little book with pictures. The teacher questions the child in order to assess the child's development of significant concepts about printed language. For example, the child is asked to show a letter or a word, the front of the book, where we start to read, and which way we go when we read.

4. *Writing.* Children are asked to write all the words they can write (on a blank piece of paper) during a maximum of 10 minutes. After the child exhausts his/her supply of known words, perhaps beginning with the child's name, the teacher prompts from a list of high frequency words. The teacher notes words at which children make good attempts, because those show competence and knowledge.

Reading Recovery teachers and classroom teachers may also examine writing samples produced by the child in the classroom setting, to gain as much information as possible about the child's knowledge of writing. (An informal period of two weeks will follow the assessment, during which the child will engage in writing, and the teacher will have a chance to observe the process.)

5. *Dictation Test.* The teacher reads a simple sentence, containing 17 phonemes, and asks the child to try to write it. Here, we are interested in the child's ability to analyze a word and to represent its sounds heard. Accurate spelling is not the goal.

6. *Text Reading.* The teacher takes a "running record" of the child's reading of an extended piece of text. For a child who cannot yet independently read even very short books, the teacher does most of the reading aloud and asks the child to read predictable books with repeated language patterns. A child who can read a little is asked to read texts while the teacher uses checks and other sym-

bols to record reading behavior. Then, the teacher analyzes the record, looking for evidence about how the child uses the cueing systems in reading (meaning, language structure, or visual information) and getting information about the complex processes going on during reading.

The Text Reading level is a numerical score and refers to the level of difficulty a child can read with 90 percent accuracy or above. In addition to level, the teacher makes a qualitative assessment of the child's reading based on the behavior observed in reading various texts, from hard to easy.

This list provides only a brief description of the Diagnostic Survey. For a full description and directions for administration and use, see Clay, *The Early Detection of Reading Difficulties*, 1988, third edition.

In all of these assessments, teacher judgment and ability to analyze are the critical factors. The process produces a set of numerical scores that can be quantified and used as justification for providing special help (for funding agencies, for example) or as documentation of progress. By adding the qualitative analysis, the teacher builds the foundation for the instructional program. This analysis provides the basis for the Diagnostic Summary, a written document in which the teacher brings all the test results together. The teacher looks across assessments to make a set of summary statements that will provide a starting point for Reading Recovery instruction.

### "Roaming Around the Known"

For the first 10 days of the child's 30-minute daily program, the teacher does not teach, but rather, explores reading and writing with the child. During this time they can talk together, enjoy books and collaborative writing, and get to know each other. The teacher has some basic in-



formation about what the child knows, and uses this information to involve the child in very easy tasks that make the most of what the child can do.

In this very supportive situation, the child may begin to take risks and to produce responses that have not been evident in the classroom or testing situation. By the end of the "roaming around the known" period, the teacher has a much broader knowledge of the child and a better knowledge base on which to proceed. Additionally, a foundation of trust has been established and the teacher and child go into more intensive lessons with greater confidence.

### **The Reading Recovery Lesson**

Each Reading Recovery lesson includes reading many small books and composing and writing a story. The lesson framework includes the following.

#### **The child rereads familiar books.**

The child reads again several favorite books that he/she has previously read. The materials are story books with natural language rather than controlled vocabulary. Books within a lesson may range from quite easy to more challenging, but the child is generally reading above 90 percent accuracy. The accuracy rate here guides the teacher in making sure that the texts selected are appropriate for the child; that is, they are easy enough for the child to use effective strategies, and difficult enough to provide opportunities for independent problem solving.

In addition to the accuracy index, the teacher also assesses the balance of strategies and cues. During this time, the child has a chance to gain experience in fluent reading and in using strategies "on the run" while focusing on the meaning of the text. The teacher interacts with the child during and after the reading, not "correcting," but talking with the child about the story and supporting the effective actions the child has taken.

#### **The teachers analyzes reading using the running record.**

Each day the teacher takes a "running record" of a book that was new for the child the previous day. The running record is a procedure similar to miscue analysis (Goodman, Watson, and Burke, 1987). Using a kind of shorthand of checks and other symbols, the teacher records the child's reading behavior during oral reading of the day's selected book. The teacher examines running records closely, analyzing errors and paying particular attention to behavior such as self-correction. In this way, he/she determines the strategies the child is using to gain meaning from text. This assessment provides an ongoing picture of the progress the child makes.

The Reading Recovery teacher does not consider one record an adequate source of evidence about a child's reading. He or she looks across records, taken daily over a period of time, to discern patterns and change. During this time, the teacher acts as a neutral observer; the child works independently. The accuracy check tells the teacher whether the text has been well selected and introduced the day before.

#### **The child writes messages and stories and then reads them.**

Every day the child is invited to compose a message and to write it with the support of the teacher. Writing is considered an integral part of gaining control over messages in print. The process gives the child a chance to closely examine the details of written language in a message that he/she has composed, supported by his/her own language and sense of meaning. Through writing, the child also develops strategies for hearing sounds in words and using visual information to monitor and check his/her own reading.

After the construction of the message, the teacher writes it on a sentence strip and cuts it up for the child to reassemble and read. This activity provides a chance to search, check, and notice

visual information. Using plastic letters on a magnetic board, the teacher may take the opportunity to work briefly with the letters to increase the child's familiarity with the names of letters and their use in known words, such as the child's name. This work will vary according to the knowledge the child already has.

### **The child reads new books.**

Every day the child is introduced to a new book that he/she will be expected to read without help the next day. Before reading, the teacher talks with the child about the book as they look at the pictures. The teacher helps the child build a frame of meaning prior to reading the text. The purpose of the introduction is not necessarily to introduce new words, but to create understanding in advance of reading so that it will be easier to keep a focus on meaning.

This basic framework for the Reading Recovery lesson provides a guide, but the teacher's own knowledge of the child and of the repertoire of possible variations make it possible to individualize the lesson. Within this framework, every child's program differs. Children do a great deal of reading, but not from a graded sequence. No child reads the same series of books. The small books are carefully selected by the teacher for that child at that time. In writing, children work on their own messages, so they are writing and reading works that are important to them individually. The special techniques used in the writing part of the lesson are most powerful when used on the children's own produced text. The major difference within and across lessons lies in the teacher's ability to follow each child and to respond in ways that support acceleration and the development of strategies.

### **Meeting the Child's Individual Needs**

Reading Recovery teachers recognize that the difficulties children experience in learning to

read differ greatly from child to child. Therefore, although all Reading Recovery lessons follow a standard structure, within this structure the teacher carefully selects the activities needed by each child at a particular time. Throughout the lessons, the teacher looks for effective reading strategies that the child needs to acquire or strengthen. Such strategies may include directional movement, one-to-one matching, self-monitoring, cross-checking, using multiple cue sources, and self-correction. The Reading Recovery teacher uses instructional techniques designed to help the child develop and use such strategies.

As one example of the different instructional techniques that the teacher may weave through the basic lesson to encourage a specific reading skill, a section of *The Early Detection of Reading Difficulties* (1988) is reproduced below. Clay outlines the following suggestions for teaching the skill of self-monitoring.

The successful reader who is making no errors is monitoring his reading at all times. Effective monitoring is a highly skilled process constructed over many years of reading. It begins early but must be continually adapted to encompass new challenges.

- To encourage self-monitoring in the very early stages ask the child to go back to one to one pointing:  
Say 'point to each one.'  
Or 'Use a pointer and make them match.'
- Direct the child's attention to meaning:  
Say 'Look at the picture.'  
Or 'What happened in the story when...'
- For particular attention to an error allow the child to continue to the end of the sentence:  
Say 'I like the way you did that.  
But can you find the hard bit?'  
Or 'I like the way you did that.  
You found the hard bit.  
Where was it?'
- If the child gives signs of uncertainty — hesitation, frowning, a little shake of the head — even though he takes no action:  
Say 'Was that OK?'  
Or 'Why did you stop?'  
Or 'What did you notice?'

These questions tell the child that you want him to monitor his own reading. The operation to be learned is checking on oneself. It is more important that the child comes to check on his own behaviour than that

he be required to use all the sources of cues at this stage.

- Don't forget to reinforce the child for his self-monitoring attempts whether they are successful or not. Say *'I liked the way you tried to work that out.'*
- Cues from letter sequences. Let the child predict the word he expects it to be. Cover the problem word and ask for something you know he knows about that word. One of these questions might be useful. *'What do you expect to see at the beginning?'*  
*at the end?*  
*after the 'M'?*  
Then ask him to check as you uncover the work.
- Ask the child 'Where you right?' after both *correct* and *incorrect* words. Ask 'How did you know?' after correct words.
- As the child becomes more skilled do less teaching and prompting and modelling. Merely say 'Try that again' but make sure that your voice carries two messages. You are requiring him to search, because you know he can, and you are confident he can solve the problem. (Clay 1988, pp. 72-73)

## Completion of the Program

There is no set time or sequence of activities to finish in order for the child to be released from the Reading Recovery program. Instruction continues until the individual child has reached about the average level of text reading for his/her class or school. In addition, analysis of the child's reading behavior must provide substantial evidence that he or she has developed effective reading strategies and will be able to continue learning without extra help. This may happen any time during the school year. A typical program could last for 12 to 16 weeks. Clay's guidelines state the following:

There is no fixed set of strategies nor any required levels of text nor any test score that must be attained to warrant discontinuing. It is essential that the child has a system of strategies which work in such a way that the child learns from his own attempts to read. (Clay 1988, p. 82)

The goal of the program has been achieved when the child has developed the kind of independent reading system that good readers use. Then, the child can profit from the ongoing instruction in the regular classroom and stands a good chance of surviving without compensatory help.

## Materials

The Reading Recovery program uses few consumable materials. There are no workbooks or worksheets. Instead, teachers use blank writing books and pencils or markers. They also have a set of magnetic letters and a small magnetic chalkboard.

The major materials for the program are the hundreds of little books that the children read. Books come from many different publishers and have been selected for their potential in supporting literacy development for young children. They include many different stories that offer support for readers by using familiar language patterns within the framework of a predictable story. The easiest levels include repetitive or patterned language; more difficult levels present a wider variety of writing styles.

Books are organized into 20 reading levels for teachers to use in tracking children's progress and as a guide in selecting the daily new book. Level 1 approximates a pre-reading stage in classroom instruction and indicates that the child can read very little beyond his or her name in an unsupported situation; Level 20 approximates material that good first-grade readers can read by the end of the year.

A committee of Reading Recovery Teacher Leaders has emphasized that "the Booklist is not a list of required or recommended books but a resource for Reading Recovery teachers. Selecting the appropriate new book is a decision-making process that draws on a knowledgeable teacher's understanding of a child's current use of strategies and need for engaging in some reading work" (Report of the Committee on Books, 1988). Appendix A contains an abbreviated booklist.

## Theoretical Principles

To summarize the program description, we would like to emphasize six theoretical principles

that serve as the foundation for the Reading Recovery program for children.

**1. Reading is a strategic process that takes place inside the reader's mind.**

Readers are required to monitor and to use information or "cues" from a range of sources, including meaning, language structure, features of print, visual information, letter-sound relationships, and connections with individuals' own unique backgrounds. Through complex, "in the head" processes, called "strategies," readers access the information they need to construct meaning from written text. The meaning is never contained only in the print; readers bring their own meanings to the text. Therefore, even beginning readers need to go beyond simple decoding and to maintain a focus on meaning throughout all literacy activities.

Good readers have several ways of functioning according to the difficulty of the material. They "orchestrate" strategies, simultaneously monitoring cues while maintaining a focus on the messages. Poor readers, on the other hand, may operate on a narrow range of strategies, perhaps focusing on one kind of information and neglecting others. The goal of Reading Recovery is to help children become good readers who can use effective strategies in a flexible and integrated way. For those readers, skill improves whenever they read because they have developed a "self-improving system."

**2. Reading and writing are interconnected, reciprocal processes.**

As children read and write, they make the connections that form their basic understandings about both processes. Learning in one area enhances learning in the other. Discovering and using reading-writing connections may be an important part of the process of becoming literate.

Children becoming literate — especially children at risk — need many opportunities for

exploring and relating the two processes. Throughout the Reading Recovery program, reading and writing are used flexibly to help children develop concepts and skills. The supportive situation allows children many chances to make connections between reading and writing. Teachers actively support that process.

**3. In order to make accelerated progress in reading, children must actually engage in reading.**

Almost every minute during the lesson, children actively engage in reading or writing messages and stories. Familiar material helps children build fluency and experience success; new material challenges children to do independent problem solving. The teacher selects texts that are clear, interesting, and easy for the child and that include language close to the child's natural way of talking. These texts should provide opportunities for the child to apply new responses, skills, or procedures.

**4. Literacy instruction in school has a powerful influence on children's developing concepts of what reading is all about.**

This statement is especially true for children at risk because they are vulnerable to the school experience. Programs linked to abstract drill on small segments of language may not provide the experience in reading whole texts that children need. Children may become convinced that reading is only looking at words or letters and making sounds; those readers may fail to integrate the isolated activities into the larger process of constructing meaning from text.

On the other hand, programs that assume a "macro" view and emphasize only language and meaning may not give at-risk children the special support they need in order to focus on details of print within a meaningful context. Those children

may not know how to use what they already know to make sense of reading.

As they learn to read, children develop their own theories about the process of reading; they need experiences that help them develop an implicit understanding of the whole range of information that they must use in reading and writing.

**5. It is most educationally productive to intervene early.**

In the past, many educators have believed that children need to "mature" into reading and that given time and a rich environment, all children will become literate. In our view, development has a role, but children's experiences have an enormous impact. For the small group of children who, no matter how good the classroom teaching, have great difficulty in learning to read, it makes sense to intervene early, before the child is locked into unproductive responses and experiences the frustration of failure and accompanying deficits in other areas of the curriculum. These children need sensitive early intervention with a high quality program that involves the child in real reading and writing.

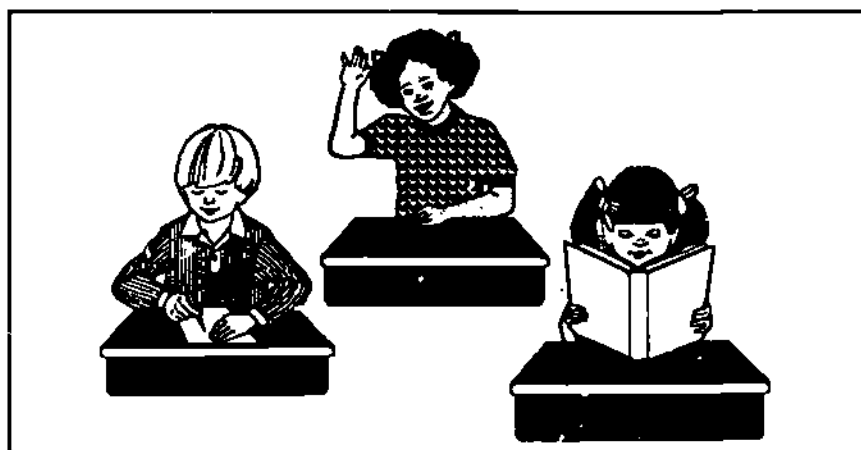
We can see the reading process going wrong in the first year of instruction; we can identify causes of the problem; we can identify the child's strengths; we can trace subtle shifts that indicate progress; and we can assist those children to develop the same abilities that good readers have. Since we *can* do it, we are *obliged* to do it.

**6. Accelerated progress is possible.**

Children at risk can make the accelerated progress needed in order to catch up with their peers. Acceleration is not achieved by applying pressure or making the child struggle. It is not Reading Recovery's goal to force fast pacing or accuracy. In our experience, young children do want to read — some want it desperately — and with the right support they will learn.

Because the teacher and child are working together, the at-risk child can achieve more than would be possible alone or in a group. Acceleration is achieved as the child takes over the learning process and works independently, discovering new things and pushing the boundaries of his/her own knowledge.

## Chapter 2: Case Studies Of Children



The following three case studies, as told by the children's Reading Recovery teachers, give an idea of how the program works for real children. The case studies also allow insights into the views of the teachers involved. These three children provide "living images" that represent important information for program implementers. They attend both urban and suburban schools, and they represent different races. All three had great difficulty in beginning reading.

As these case histories illustrate, traditional program evaluation is only part of the data to be examined in implementing a Reading Recovery program. Raising test scores is important, but it is also important to learn more about how individual children develop their own successful reading strategies. Detailed analyses of individual lessons provide insights into teacher-child interactions that produce success as well as ways teachers can tailor instruction to meet individual needs.

### KEY TO NOTATIONS USED IN RUNNING RECORDS

The figures that appear in the following pages illustrate teacher running records made during Reading Recovery lessons in these case studies. Notations in the running records include:

Notation	Meaning
✓	Child read word correctly.
<u>child's response</u> correct word	Child read word incorrectly. Child's response is written above line, and correct word is written below line.
SC	Child self-corrected.
↶ R	Child returned to beginning of arrow and reread.
•	Child skipped word.

The columns on the right of some running records (beginning in Figure 3) are used to tabulate (first two columns) and then to analyze (second two columns) errors and self-corrections. The letters are codes representing the probable source of information being used by the child:

- M=using information from the meaning system.
- S=using information related to the structure of language.
- V=using visual information, including letter/sound correspondence.

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## MELANIE

by Andrea McCarrier

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Melanie was the lowest reader in her first-grade class when I began working with her in the Reading Recovery program. She was able to remember and use language patterns in reading, but she appeared uncertain about whether pictures or print carried the message. She did not have control of left-to-right directionality or one-to-one matching in reading. Consequently, she tended to invent the text rather than attend to the printed message. She had a strong sense of story structure and could predict a meaningful message, but she did not notice discrepancies between her own reading and the written text.

A good example occurred during her third lesson. (See the running record in Figure 1, page 17.) She was reading *The Tree House*, a book that she had read for the first time the day before. When she came to the last sentence, one with an inverted structure, Melanie's strong sense of oral language patterns overrode the visual information, so that she read the sentence as it would more commonly occur.

Based on the diagnostic tests and on many examples such as the one above, I decided that Melanie needed to learn to check her predictions with the visual information in the text. I would continue supporting her sense of meaning and use of language to predict, but I would also encourage her to attend to the print. It would also be important to encourage her to point to words as she read to build her knowledge of early strategies such as directionality and one-to-one matching.

As Melanie gained experience in reading, she became more aware of 1) a mismatch between the number of words in the text and her reading; and 2) discrepancies between her oral rendition and the print on the page. She began to monitor

her own reading and to hesitate and self-correct when appropriate.

Melanie also began to attend more closely to print as she wrote her own messages and then reassembled them after they had been written on a paper strip and cut apart. This activity gave her a chance to notice visual details within a language context that was particularly her own. She began to look more closely at initial letters and to use her knowledge of the alphabet. Writing helped her to slow down the process so that noticing visual details would not distract her from the meaning of the language.

She quickly gained control over early strategies, and soon she did not need to point to words while reading, although she continued to use this technique in a flexible way when she read difficult pieces of text. As her lessons progressed, she continued to learn more about how to integrate visual cues with other sources of information. For example, when she read *You'll Soon Grow Into Them, Titch*, she substituted "socks" for "sweater." Both items of clothing were depicted in the illustration, and the two words started with the same letter. By carefully checking her prediction with the details of print, Melanie was able to self-correct, therefore gaining an understanding of the text.

Even though she was working in a classroom where invented spellings were acceptable and writing was a daily activity, Melanie was reluctant to attempt writing her own stories. By writing every day in Reading Recovery, Melanie discovered how to make her own sound analyses of words and to represent sounds with letters in writing. She began to take more risks and to

produce more writing both in the individual session and in classroom work.

By the end of her program, Melanie was reading fluently in materials comparable with the average reading group in class. She continued to check the illustrations for information but did not have to depend on them totally. She displayed the ability to use multiple sources of information as she read, and she showed evidence of being an independent reader. In the example illustrated in Figure 2, Melanie showed self-correction and the

ability to cross-check one source of information with another.

In the last running record taken in the program (Figure 3) Melanie showed her ability to read a difficult text. She focused on meaning and used her ability to predict; as competent readers do, she made meaningful miscues that did not need to be corrected, but she was able to solve her own problems when she had difficulty in getting meaning from her reading.

FIGURE 1.—In her third lesson, Melanie's strong sense of oral language patterns overrode visual information.



The tree  
Down came

house came down  
the tree house  
✓ ✓ ✓

FIGURE 2.—Melanie showed self-correction and ability to cross-check.



the next day  
he said to his friends  
yesterday I could read.

← ✓ R yesterday / sc day / sc  
next  
✓ ✓ ✓ ✓ ✓  
yes / sc yesterday R ✓ ✓ ✓



Melanie was discontinued from the program after 55 lessons over a span of about 16 weeks (with some time gaps because of vacation periods and absences). At that time, she was able to read beginning second-grade material. Her mother reported that her reading grade had also improved

from a "D" at the beginning of first grade to an "A" at the beginning of spring and that Melanie enjoyed reading at home. Melanie thinks her two younger sisters should not have to wait until first grade to learn how to read. According to her mother, Melanie is giving them lessons now!

FIGURE 3.—Last running record taken in program: Melanie read a difficult text.

There's a Nightmare in my Closet Level 15		Accuracy = 96%			
Page		E SC		CUES USED E SC	
1	There used to be a nightmare in my closet. Before going to sleep, I always closed the closet door. I was even afraid to turn around and look. When I was safe in bed, <u>I did</u> I'd peek... sometimes	1		MSV	
The Great Big Enormous Turnip Level 12		Accuracy = 99%			
Page		E SC		CUES USED E SC	
2	Once upon a time an old man <sup>aided/SC</sup> planted a little turnip		1	MSV	MSV
3	The old man aid, "Grow, grow little turnip. Grow sweet Grow <sup>R</sup> grow, grow, little turnip. Grow strong."	1			
4	<u>one/SC</u> And the turnip grew up sweet and strong and big <sup>the/SC</sup> and enormous.		1	MSV	MSV
			1	MSV	MSV

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## TIM

by Carol A. Lyons

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The principal of Tim's school pulled a thick folder from her top desk drawer and began to describe this first-grade boy who had just spent one year in a kindergarten class for learning disabled children. The principal said she had never received so many records on a young child in her 10 years of experience as an administrator. As I examined the records, I wondered how a six year old could have endured so many standardized tests. Two teams of evaluators, school psychologists at a private clinic, and an interdisciplinary team of professionals had diagnosed him as learning disabled. The problem was that no LD classroom would be available until second grade. Tim's parents felt sure that he could not survive in a regular first-grade classroom. We ended the conference with my agreeing to work with Tim in the Reading Recovery program.

After administering the Diagnostic Survey, I predicted that Tim would have a good chance for success in the program. He had control of some early strategies such as word-by-word matching and directionality, and he knew most of the alphabet letters. He could represent 16 of the 37 phonemes on the dictation test. On the other hand, he seemed confused about how to use his knowledge when he was actually reading text, and he could not recognize words in isolation. I had discovered, however, that Tim had quite a bit of knowledge about reading and writing. He needed to learn how to make the most of his strengths.

For the first two weeks of Tim's program, I watched for and recorded what he knew about reading. I read many books to him, and soon we were reading favorite books together. He also read many very simple books to me. We collaboratively

wrote messages and whole stories that Tim read in subsequent lessons.

During this two-week "roaming around the known" period, Tim demonstrated many more strengths that were not evident even in the individualized testing in the Diagnostic Survey. For example, Tim was well aware of the special language used in books. When we read together, he could easily move his finger under the words. However, when he tried to read more than one line of print independently, he was not able to attend to the print. Instead, he invented a text that was meaningful and corresponded to the illustration, but he did not monitor his reading using visual information.

Initially, Tim did not want to write anything. He had no trouble creating sentences; in fact, he usually composed several sentences. But he hesitated to write. As we worked together, he was persuaded to provide parts of the messages he composed and his strong awareness of letter/sound relationships was evident in his writing. He was particularly good at analyzing words for initial sounds, and his reading showed evidence that he could use this knowledge.

In the first two weeks, when we were reading together and the texts were very simple, Tim was growing in confidence, and his mother reported that Tim was developing "a new attitude toward reading." Although he did not give a great deal of attention to visual information, he freely invented meaningful text based on his own language sense.

When we began more structured lessons, however, I had a surprise. Tim seemed to abandon his own language sense and meaning as a source of information in reading. He appeared *not* to be attending to meaning. Instead, he tried

to look for the individual words he knew. On unfamiliar words, he guessed, using the first letter as the main source of information. He almost totally disregarded the pictures which would have been good sources for prediction. Early in his program, he provided an example of reading (see Figure 4 on page 21).

When Tim finished reading *The Bicycle*, I said, "Tim, you said 'the lake got on.' Check the picture. Did a 'lake' get on the bicycle?"

"Oh," Tim said, carefully looking at the picture. "That's silly. How could a lake get on a bicycle? It's a girl."

Here, I asked him to predict what letters he would expect to see in "girl" and check the word again. He was able finally to select "lady" as the word in the text and to reread the section to make sure that it made sense.

Tim continued in this kind of problem-solving work while reading. He began to regain his expectation that reading should make sense, and was not content to produce nonsense even if it did match the visual information. He became more consistent in reading for meaning and in using his own strong sense of language to predict what he thought the text might say. He could check those predictions with his knowledge of letters and sounds. During the next period I provided increasingly more difficult texts to try to give him more chances for problem solving. The running record shown in Figure 5 reveals Tim's progress as he independently read *Mouse*. At this point, he had shifted from an over-reliance on visual information to a more balanced set of strategies. In this example, Tim often reread, getting a "running start" to establish the language patterns and use them to predict. He was self-correcting and reading for comprehension.

Tim also made good progress in writing. He had no trouble composing a message; his sentences often contained high frequency words that he knew how to write. With unfamiliar words, he would produce all the letters he could, and I

would fill in the rest. He was good at analyzing sounds in words, although he could not necessarily represent them in sequence. The underlined words and letters in Figure 6 show what Tim wrote independently. The numbered boxes at the top indicate letter sounds that he produced when asked to sound out the word. Note that he produced these sounds out of sequence; the ending sound of each word was the first one produced.

Several weeks later, Tim could analyze sounds in sequence and write much more independently, as illustrated in Figure 7.

Tim continued to make good progress and was discontinued from the program in less than 10 weeks, when he was placed in the middle reading group in his first-grade class. In second grade, he was placed in the highest reading group and has remained a good reader through the third grade. In September, he will enter fourth grade as one of the best readers in his class.

I suspect that Tim believed that reading was *only* sounding out letters and visually analyzing words. He seemed to rely on visual information and to ignore his own sense of meaning and knowledge of language.

Tim's early responses to books, in protected home situations, may have been like those he displayed during the "roaming around the known" period. According to his parents, the LD kindergarten curriculum focused on isolated letter naming and letter/sound relationships. Tim rarely read any books at school, although his parents read to him at home. Could his later reading behavior have been influenced by the instructional program in kindergarten?

If the answer is yes, then Tim may have *learned* to be "learning disabled." His development of a broader range of strategies illustrates that he could learn. My hunch is that Tim was never really learning disabled. A more appropriate term might have been "instructionally disabled."

FIGURE 4.—In Tim's early reading, he disregarded his own language sense and meaning.

Page	Level 3 Bicycle Accuracy 58%	week #1			
		Cues used			
		E	SC	E	SC
2	The clown got on				
3	and the <sup>lake</sup> lady got on	1		ms✓	
4	and the <sup>bill</sup> boy got on	1		ms✓	
5	and the <sup>green</sup> girl got on	1		ms✓	
6	and the <sup>bus</sup> bear got on	1		ms✓	
7,8	and the bicycle got <sup>saw</sup> squashed.	1		ms✓	

FIGURE 5.—Later, Tim used a balanced set of strategies to read for comprehension.

mouse Level 4		Accuracy 100% week #3		cues used			
Page		E	SC	E	SC		
2	Out of the <sup>home</sup> hole   R   SC creep creep		1	ms✓	ms✓		
3	Throw Through the grass creep creep   R   SC "that doesn't make sense"		1	ms✓	ms✓		
4	Up the <sup>stairs</sup> step   R   SC creep creep		1	ms✓	ms✓		
5	Under the door creep creep						
6	Around Across the floor   R   SC creep creep		1	ms✓	ms✓		
7	In <sup>cabinet</sup> Into the cupboard   R   SC creep creep		1	ms✓	ms✓		
8	Up to the cheese creep creep						

FIGURE 6.—Tim's writing, Week 1. He produced letter sounds out of sequence.

b	e	d
---	---	---

t	o	p
---	---	---

It is fun to  
climb up on my  
top bunk bed.

FIGURE 7.—Tim's writing, Week 4. He wrote more independently and produced letter sounds in sequence.

I	d	s	t
---	---	---	---

I was in the fourth  
of July parade  
last year.

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## SARAH

by Diane DeFord

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Sarah was seven when she was evaluated for Reading Recovery. She was among the lowest in her first-grade class, and her parents, both teachers, were concerned about the possibility that she might be retained.

Sarah had been read to by her parents since she was a toddler, and by her teachers in kindergarten and first grade. She was in a rich literacy environment, and had caring adults who supported her learning. However, by the beginning of November, she was still being considered for learning disabilities tutoring and was at risk within the classroom setting. After initial testing, Sarah was identified as one of the children to be included in the Reading Recovery program.

The early diagnostic testing indicated that Sarah had many strengths. She identified 53 of the 54 letters, was able to read 8 words out of a list of 20 basic vocabulary items (and, the, down, am, there, little, them, yes), and was familiar with many book handling concepts. She exhibited all of the early strategies, but did not attend to letter/word/line order information in the Concepts About Print Test. She could easily identify letters and specific words (was, no), and she understood the difference between the concepts of "word," "letter," "first," and "last."

In the writing portions of the Diagnostic Survey, she was able to write 13 words and to represent 19 of the 37 phonemes in the sentence "The bus is coming. It will stop here to let me get on."

As I began working with Sarah, it was evident that she was a risk taker. She made many attempts during the testing and early lessons that showed her willingness to try.

During the first 10 sessions, "roaming around the known," Sarah produced three books, exhibited another 26 written vocabulary items, and read 26 different books. She was actively participating in writing and reading experiences, and rapidly developing the necessary strategies that allowed her to quickly begin to accelerate within the program. I decided to begin her instructional program at a Level 2.

On an early reading at Level 6 (five weeks into lessons), I was pleased to see that she was reading for meaning, using language cues and checking these sources of information against visual information. (See Figure 8, page 24.)

Sarah clearly enjoyed our writing sessions. A writing sample collected in the last week before Christmas indicated that Sarah was independently generating stories and writing all of the text. (See Figure 9.) Her language was rich, and her stories creative. Her attitude in class had changed, and she was rapidly becoming one of the better readers within the lowest reading group. She was still having difficulty with writing during independent writing times, but was more often able to complete most of her seatwork in the time provided.

Sarah was discontinued within 47 lessons across 12 weeks. She grew to be an independent reader and writer, and was functioning within the average of her class in the middle reading group by the end of February. The example of her reading of *The Little Red Hen* (Figure 10) illustrates the type of strategies she exhibited at the point of being discontinued. She was reading at Level 12, which was typical of first-grade reading material with the average of her class. She was able to solve problems independently as a reader and a writer.

The dictation and writing subtests of the discontinuing testing indicate her progress in writing. She had a core of at least 35 high-frequency words she could write with ease, and she was able to represent 36 out of 37 phonemes in the sentences "I have a big dog at home. Today I am going to take him to school." In short, Sarah had developed into an independent reader and writer, and indicated she had a self-improving system.

In a follow-up of children in Sarah's school, I found that she was still progressing as a reader, and going beyond the average of her classmates. At the end of second grade, Sarah was reading at a Level 18, or at the end of the second-grade reading material. At the end of third grade, she had progressed to a Level 28, or fifth-grade material. When we talked with her classroom teacher, she indicated her surprise that Sarah had ever had problems in reading as a first grader.

**FIGURE 8.**—In an early reading, Sarah is reading for meaning, used language cues, and checked these sources of information against visual information.

PAGE	Cats and Kittens	E	SC	Cues Used	
				E	SC
2	Cats play.				
3	Kittens play too.				
4	Cats like milk.				
5	Kittens like milk too.				
6	Cats keep clean.				
	They <sup>like</sup> lick their fur.	I		mVb	
7	<del>Kittens</del> Cats keep their kittens clean too.		I	mSV	mSV
8	Cats hunt.				
9	Kittens hunt too.				
10	Cats get mad.				
	Their fur stands on end.				
	Their <sup>tail</sup> tails <sup>puffs</sup> puff up.				
11	Kittens get mad too.	II			
12	Cats sleep.				
13	Kittens sleep too.				

FIGURE 9.—Writing sample: Sarah independently generated story and wrote text.

IT'S  
CHRISTMAS  
Mon  
It's time  
to open  
presents.

Presents! time to  
open presents!  
Sarah really  
wants 'O. Real  
Baby

sarah I S WALKING  
down the stairs  
sue see a  
christmas  
tree and presents

stockings hang on  
the fireplace. They  
have presents in  
them too.

DICK WALKS down the  
stairs. "all right,  
come on down!"  
he said.  
Debbi, Carolyn and  
sarah came  
down.

all the presents  
ARE here. The cards  
say: Carolyn and  
Dick and Debbi, Sarah.

so we all open  
the presents while  
DICK Takes  
Movie pictures.

Christ Mas IS  
over. It Was fun!



FIGURE 10.—Running record showing strategies Sarah was using in reading typical first-grade material at the time she was successfully discontinued.

PAGE	The Little Red Hen	E	SC	Cues Used	
				E	SC
1	<p>✓ Once upon a time</p> <p>✓ a cat and a dog and a mouse</p> <p>✓ and a little red hen</p> <p>✓ all lived together in a cozy little house. <sup>R</sup> SC</p>		<p> </p> <p> </p> <p> </p>	<p>(M)SV</p> <p>(M)SV</p> <p>(M)SV</p>	<p>MSV</p> <p>MSV</p> <p>MSV</p>
3	<p>✓ The cat liked to sleep all day</p> <p>✓ on the soft couch.</p>				
5	<p>✓ The dog liked to nap all day</p> <p>✓ on the <sup>step</sup> sunny back porch. SC</p>		<p> </p>	<p>(M)SV</p>	<p>MSV</p>
6	<p>✓ The mouse liked to snooze all day</p> <p>✓ in the warm chair by the <sup>fire</sup> fireside.</p>	<p> </p>		<p>(M)SV</p>	
7	<p>✓ So the little red hen had to do all</p> <p>✓ the housework.</p> <p>✓ She cooked the meals and washed the dishes</p> <p>✓ and <sup>she</sup> made the beds. SC She swept the floor</p> <p>✓ and washed the windows</p> <p>✓ and <sup>made</sup> mended the clothes.</p>	<p> </p>	<p> </p>	<p>(M)SV</p> <p>(M)SV</p>	<p>MSV</p> <p>MSV</p>

## Chapter 3: Longitudinal Study, Columbus Public Schools

Studies of Reading Recovery in Ohio				
	1984-85	1985-86	1986-87	1987-88
Columbus Pilot Study				
Columbus Longitudinal Study				
Ohio State Study, 1st Year				
Ohio State Study, 2nd Year				
Ohio State Study, 3rd Year				

In Chapter 3 and Chapter 4, we describe the results of detailed studies of Reading Recovery that have been conducted in the Columbus Public Schools and in many school districts throughout the state of Ohio in the last few years. The results indicate that Reading Recovery can produce major, sustained improvement in the reading ability of a high proportion of at-risk first-grade students, rescuing these children from a future of school failure.

We present these research results as evidence of the unusual effectiveness that distinguishes Reading Recovery from the many other compensatory reading programs in use.

Chapter 3 discusses the longitudinal study of Reading Recovery conducted in the Columbus Public Schools. This study followed the progress of a cohort of students who were in the bottom 20 percent of their classes in reading skills and who received Reading Recovery instruction in first grade during the 1985-86 school year.

The results showed that the short-term Reading Recovery intervention had greatly improved the reading skills of these children, and before the end of their first-grade year had enabled 73 percent of them to be successfully released to regular instruction at the average level of their first-grade classmates. The two follow-up

studies show that the initial gains of a high percentage of these children were sustained through the second grade and on through the third grade *without any further intervention*.

Chapter 4 reports on the implementation of Reading Recovery at sites throughout the state of Ohio. In 1985-86, the same year that the longitudinal study began in Columbus, Reading Recovery was implemented at 18 regional training sites throughout Ohio. The statewide program was expanded to 23 sites in 1986-87 and 1987-88. In Chapter 4 we describe studies of Ohio Reading Recovery students at the end of first grade in each of the three years. The results of the three separate first-grade studies confirm the positive findings documented in the first year of the Columbus Public Schools longitudinal study.

### Background: From New Zealand to Ohio

The Reading Recovery program was piloted in New Zealand in 1979 with remarkable results. In Clay's study (1982, 1988), New Zealand children in the Reading Recovery program made accelerated progress and were able to reach the average levels for their classmates in an average of 14 to 16 weeks. Over 90 percent of the chil-

dren served were successfully discontinued; that is, they reached average levels and displayed evidence of having developed an independent system of reading.

After being successfully released from the Reading Recovery program, children received no further special help. Three years later, a high percentage continued to make progress and to perform at average reading levels. Based on these research results, Reading Recovery was made a national program in New Zealand.

In 1984-85, Marie Clay and Barbara Watson, National Director of Reading Recovery in New Zealand, came to The Ohio State University to train Reading Recovery teachers and Teacher Leaders. As part of the training, these teachers piloted Reading Recovery in six Columbus Public Schools from January through May 1985. Positive results of the pilot project encouraged the Columbus Public Schools to proceed with implementation of the Reading Recovery program in the 1985-86 school year and to initiate a longitudinal study of the effects of Reading Recovery.

### Columbus Longitudinal Study, Initial Year

In 1985-86, the initial year of the longitudinal study, Reading Recovery was implemented in 12 schools in Columbus.

Thirty-two teachers were involved in the 1985-1986 Reading Recovery project. Of these, 12 had received their Reading Recovery training during the previous (pilot) year; another 20 were new Reading Recovery teachers who received their training during 1985-86. (For a description of the teacher training program, see Chapter 5.)

These 32 teachers began to teach Reading Recovery children in October, 1985. In some cases, a sharing arrangement was used, in which two teachers trained in Reading Recovery were paired and shared one first-grade class; each

teacher spent half the day teaching the whole class, and the other half tutoring Reading Recovery children. In other cases, teachers who taught the whole class were not trained in Reading Recovery.\*

### Research Groups —

In September 1985, the lowest 20 percent of children in the classrooms taught by Reading Recovery teachers (as determined by the Diagnostic Survey and the classroom teachers' judgment) were selected for Reading Recovery. The lowest 20 percent of children were also identified in other classrooms in the same schools: half of these children were randomly assigned to receive Reading Recovery intervention, and the other half were randomly assigned to an alternative compensatory program. A total of 136 were assigned to receive Reading Recovery tutoring, and a total of 51 were assigned to the alternative compensatory program. (See Appendix B for a description of the alternative program.)

For research purposes, *Reading Recovery children* were defined as those children who at some time during their first-grade year had 60 or more lessons or were successfully discontinued (released) from the program. *Comparison*

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\*The question arose: Would children receiving separate Reading Recovery tutoring and also taught reading in first-grade classes taught by Reading Recovery teachers achieve more than did children in first-grade classes taught by regular teachers who were not Reading Recovery-trained? A rather elaborate design was established to detect any such possible impact. The results of this research have been reported in Pinnell and others (1984-86) and Deford and others (1986-88). A slight difference was found in favor of students taught in the whole class by Reading Recovery teachers, but the difference was not statistically significant. For purposes of brevity in this monograph, all children receiving Reading Recovery instruction will be treated as a single group.

children were those initially identified as being in the lowest 20 percent of regular classrooms who were served all year by the *alternative compensatory* program. No children were served by both programs.

Figure 11 on page 30 summarizes the composition of the different research groups used in the longitudinal study during the initial year (1985-86) and the two follow-up years, as this cohort of first graders moved on to the second grade and then to the third grade.

### Research Questions, Initial Year —

The first evaluation of the effects of Reading Recovery on 1985-86 first graders was conducted in May 1986, at the end of their first-grade year. Reading Recovery children had received tutoring for various lengths of time during the year. Most of them had been successfully discontinued from the program; some had not been successfully discontinued by the end of the year. The following research questions were addressed:

- 1) How did Reading Recovery children and Comparison children compare at the end of grade one on a variety of measures of reading ability?
- 2) How did Reading Recovery and Comparison children perform at the end of grade one on nationally normed standardized tests?
- 3) What proportion of successfully discontinued Reading Recovery children (those who were successfully released from the program) achieved end-of-year scores equivalent to the average band of achievement of a Random Sample of first-grade students?

### Procedures, Initial Year —

In October and May, the Reading Recovery and Comparison children were assessed on eight dependent measures. (For a description of each of the dependent measures, see Appendix C.) The measures were:

- 1) Text Reading;

- 2) Letter Identification;
- 3) Word Test;
- 4) Concepts About Print;
- 5) Writing Vocabulary;
- 6) Dictation;
- 7) Two subtests of the *Comprehensive Tests of Basic Skills* (Reading Vocabulary and Reading Comprehension); and
- 8) A writing sample.

In addition to the Reading Recovery and Comparison groups, a random sample of 102 first-grade students in Columbus project schools was also tested on the first seven dependent measures listed above. This Random Sample group provided a perspective for comparing the achievement of the two groups of Research children with the average achievement of other children at the same grade level.

Means and standard deviations were calculated on all measures.

### Results and Analysis, Initial Year —

Of the 136 children assigned to Reading Recovery in September 1985, 73.5 percent were successfully discontinued from the program at various times during the school year and received no further treatment. (Three of these successfully discontinued children moved from the district before the end of the year, and therefore do not appear in the May testing results). These successfully discontinued children received an average of 67 thirty-minute Reading Recovery lessons. The other 26.5 percent of children had not been discontinued by the end of the school year.

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**Question #1 —** How did Reading Recovery children and Comparison children compare at the end of grade one on a variety of measures of reading ability?

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In Table 1 on page 38, September and May scores on the first seven measures are presented

FIGURE 11.

## Summary of Groups: Longitudinal Study, Columbus Public Schools

### Initial Year (1985-86)

#### FALL 1985 (BEGINNING OF FIRST GRADE)

Reading Recovery children —  
 from bottom 20% in reading  
 assigned to receive Reading Recovery program ..... 136

Comparison Children —  
 from bottom 20% in reading, assigned to receive regular remedial instruction for full school year.....51

#### MAY 1986 TESTING (END OF FIRST GRADE)

All Reading Recovery Children  
 Received at least 60 Reading Recovery lessons or were successfully discontinued  
 from the program during the school year. (Three children from fall cohort who had been  
 successfully discontinued moved from district before spring testing) ..... 133

Number successfully discontinued from program (100 minus 3 who moved) ..... 97

Number not discontinued from program ..... 36

Percent of all Reading Recovery children (including three who left school system)  
 who were successfully discontinued ..... 73.5%

Average number of daily, 30-minute sessions for children successfully discontinued ..... 67 sessions

Comparison Children (same group as in fall 1985).....51

Random sample of first-grade students in project schools, excluding Reading Recovery  
 and Comparison children (base for first-grade average) ..... 102

### Follow-up (1986-87 and 1987-88)

#### MAY 1987 TESTING (END OF SECOND GRADE)

Reading Recovery Children  
 successfully discontinued and not-discontinued children from fall 1985 cohort who were  
 still in district in spring 1987 ..... 116

Comparison Children  
 from fall 1985 cohort who were still in district in spring 1987 ..... 43

Random sample of second-grade students in project schools, excluding Reading Recovery  
 and Comparison children (base for 2nd-grade average)..... 68

#### MAY 1988 TESTING (END OF THIRD GRADE)

Reading Recovery Children  
 successfully discontinued and not-discontinued children from fall 1985 cohort  
 who were still in district in spring 1988 ..... 105

Comparison Children  
 from fall 1985 cohort who were still in district in spring 1987 ..... 42

Random sample of third-grade students in project schools, excluding Reading Recovery  
 and Comparison children (base for third-grade average) ..... 67

for three groups: 1) Reading Recovery children, 2) Comparison children; and 3) Random Sample of all first-grade children in project schools.

These data indicate that in May of 1986, Reading Recovery children as a total group (successfully discontinued and not-discontinued combined) scored higher than Comparison children on all measures. In fact, the scores of the total Reading Recovery children were very similar to those of the Random Sample group of first-grade students. Specifically, the Reading Recovery group scored slightly higher on Letter Identification, Concepts About Print, Writing Sample, and Dictation, and slightly lower on Writing Vocabulary, Text Reading, and Word Test. As a group, the Reading Recovery children, who were in the lowest 20 percent of their class in reading skills at the beginning of the year, now scored about the same as a group of average first graders.

Table 2 (page 39) shows the May 1986 end-of-year scores broken into two groups: 1) successfully discontinued Reading Recovery children, who had made sufficient progress to be released from Reading Recovery; and 2) not-discontinued Reading Recovery children. The scores of these two groups and the scores for the Comparison group are compared with the scores for the Random Sample of all first graders. The figures show successfully discontinued Reading Recovery students scoring *higher* than the Random Sample of all students on *all* seven measures, while not-discontinued Reading Recovery students and Comparison students score lower on every measure.

Discontinued and not-discontinued children are considered separately because the expectations are different for these two groups of children. Discontinued children not only have made accelerated progress in the program; an analysis of their reading behaviors indicated that they have developed the strategies necessary to keep on learning to read better and eventually to learn from their reading. They have made the "breakthrough"

to literacy. For children in some classrooms, meeting this criterion also may mean scoring at the high end of "average" or even above average. In other classrooms, a child might score at the low end of "average" yet show the necessary evidence of effective reading strategies. Barring extraordinarily negative school environments, we would expect those children to keep on making progress, and to the extent that they do, the discontinuing judgments have been made successfully.

Not-discontinued children are those who have not qualified for release either by score or by the analysis of reading and writing behaviors. Perhaps they needed a longer than average time of individual tutoring; or there may be physical or emotional difficulties that indicated the need for continued extra help. Those children may have made progress, but the system is probably not in place for them to continue that progress. They will tend to do what is typical of children in remedial programs; they will make very slow progress even with extra help.

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**Question #2** — How did Reading Recovery and Comparison Children perform at the end of grade one on nationally normed standardized tests?

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Results from the Reading Vocabulary subtest of the *Comprehensive Tests of Basic Skills*, a nationally normed standardized test, show that Reading Recovery children had a Normal Curve Equivalent (NCE) gain score of 7.4 compared to -2.6 for Comparison children. On the Reading Comprehension subtest, Reading Recovery children had an NCE gain of 7.0, compared to -4.5 for Comparison children. On the Total Reading combined score, the NCE gain was 8.6 for Reading Recovery children and -2.4 for Comparison children. Thus, Comparison children lost ground