READING HORIZONS

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READING HORIZONS has been published since 1960, on the campus of Western Michigan University in Kalamazoo Michigan. As a journal devoted to teaching reading at all levels it seeks to bring together, through articles and reports of research findings, those concerned and interested professionals working in the ever widening horizons of reading and related areas of language.

This issue of READING HORIZONS is the first of a series of annual themed issues, which this year is devoted to Reading Recovery. The guest editor for this issue is Jim Burns.

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READING HORIZONS

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First Themed Issue: Reading Recovery

The first themed issue of Reading Horizons has as its topic Reading Recovery, a program which is becoming widely known for its success in the prevention of reading failure. Our lead article is contributed by Dr. Marie Clay, the originator of Reading Recovery. Each article is preceded by an introductory comment from the guest editor for this issue, Dr. Jim Burns.

Call for Manuscripts

1992 Themed Issue: Grouping for Reading

The June 1992 issue of Reading Horizons will be devoted to the theme of grouping for reading. Contributions in the form of case studies, commentaries, research reports, and articles discussing theory and practice of various forms of grouping for reading and language arts instruction are welcomed. Manuscripts should be submitted following Reading Horizons guidelines: send three copies and two stamped, self-addressed envelopes; include a cover sheet with author name and affiliation; use a running head (without author identity) on subsequent pages; follow APA guidelines for references and use of gender-free language. Manuscripts intended for the themed issue should be postmarked by January 31, 1992. Address all manuscripts to Dr. Jeanne M. Jacobson, Editor, Reading Horizons, Reading Center and Clinic, Western Michigan University, Kalamazoo, MI 49008.

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Reading Recovery Themed Issue
Guest Editor: Jim Burns

Jim Burns is Professor of Education and Professional Development at Western Michigan University where for 24 years he has been involved with the education of primary teachers, particularly in reading, children's literature and the language arts. In 1975-76, a sabbatical leave involved a close look at reading and language development in the British primary schools, teacher-training colleges, teacher centers and universities. His first acquaintance with Marie Clay's work came during previous visits to England to visit British Informal Schools; in 1973, he purchased the 24 page first edition of *The Early Detection of Reading Difficulties* (ED) and *Sand*.

In 1978-1979, he attempted to use the second edition of *ED* along with the Concepts About Print assessment in a graduate course for teachers on Language, Reading and the Young Child. "In each class period," Jim recalls, "it was a terrible ordeal to try to help teachers understand the great value of the text. One must remember those were the days of massive skill lists, skill charts, and commercially prepared scan sheets of skills — and the relevance of *ED* was not easily seen. What a joy to see *ED* receive the accolades which are long overdue. One can't talk about Reading Recovery at any time now without someone wanting to obtain a copy. Good books always seem to be ahead of their time."

In 1989-1990, Jim's second sabbatical involved attending The Ohio State University to take Reading Recovery training at three levels: teacher, teacher leader and university teacher-trainer. He has just completed a pilot year (1990-1991) introducing Reading Recovery to 27 teachers from 26 schools in 14 districts of Michigan. Jim describes the results of this year as "phenomenal."
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Why Is An Inservice Programme For Reading Recovery Teachers Necessary?

Marie M. Clay

Raising the question which has dominated her early studies on emergent literacy, "...how can an education system provide a second chance for young children who have not responded to the literacy program in their first year of instruction at school?" Clay paints a richly detailed picture which answers many of the oft-asked questions at Reading Recovery informational sessions.

She arranges her palette into four bright colors: the teaching of children, the training of teachers, the training of teacher leaders, and the implementation and coordination of the long-term prevention strategy. As a primer coat enables paint to adhere to canvas, inservice education undercoats each element of Reading Recovery critical to providing children with their second chance. Throughout her article, she illustrates a sound program requiring a collaborative relationship of teachers, teacher leaders and teacher trainers, concluding with the suggestion that the Reading Recovery process might best begin by having a [University] "trainer of teacher leaders in a setting with both a university course and an on-going program operating in the schools, and having a senior administrator ...familiar with the preventive thrust of this early intervention program."
The Reading Recovery program was developed in New Zealand to answer the question *how can an education system provide a second chance for young children who have not responded to the literacy programme in their first year of instruction at school?* (It is not a program for teaching beginning reading to 80-90% of school children.) There are four aspects to the program: 1) the teaching of children, 2) the training of teachers, 3) the training of teacher leaders, and 4) implementing the program in an education system and coordinating the long-term prevention strategy. Teachers help children from the lower end of the achievement distribution to participate at or near an average level in their classrooms. Research has demonstrated that the procedures work with children who differ markedly in their prior experience and in their ways of responding (Clay, 1982, 1987, 1990, 1991).

A critical factor in this program is the training of teachers to do what seems impossible — that is, to take the tail off a normal distribution of achievement and put it into the middle of the distribution. The possibility of mounting a highly successful program working only from a published description of the procedures seems unlikely. In our experience when teachers merely read about the procedures, the new ideas merge with their old practices. In training teachers we have had to work very hard to change old ways of teaching. So one important factor in the delivery of a quality Reading Recovery program is the training of the teachers.

**Overview**

Reading Recovery teachers in New Zealand are classroom teachers who are released to teach children with literacy learning problems for part of the day and who attend a year long inservice course. The expectation is that they will develop their understanding of the reading process, become competent in selecting specific Reading Recovery teaching procedures to meet the needs of a child at a particular time, accelerate the progress of six year old children having difficulty in learning to read at the average level of performance in their classes, and be able to evaluate their own teaching efforts critically.
Participation of schools

Suggested requirements for a school which was considering opting into this programme in New Zealand were: 1) full support from the principal, 2) a two and a half hour minimum time allocation for daily individual teaching, 3) regular attendance at the inservice sessions held every two weeks (every week in the United States, where the school year is shorter), 4) Reading Recovery teacher’s time not to be used for other school programs, 5) provision of an area for individual teaching, and 6) provision of story books for the children’s programme.

Two models of delivering Reading Recovery were tried and reported in research: full-time and part-time. Each had its strengths and its difficulties. Teachers working part-time had only two or three hours a day for individual tutoring and taught a class for the rest of the time. They could only teach the most needy children, and other members of their staff helped them with testing and assessment. They had to be given extra time to attend the inservice sessions held every two weeks in a forty-two week year. For these sessions, teachers were divided into small tutorial groups of twelve teachers with one tutor.

The full-time teachers did not have the problems of switching from one job to another. They did, however, feel the loss of reinforcement from not teaching a class of children who were progressing normally, and they found the concentrated individual teaching very demanding. Probably twenty hours of individual teaching should be thought of as a maximum. This means that more than one full-time Reading Recovery position is required in a large school or in a district where children are ill-equipped for reading when they enter first grade.

An important advantage of the part-time model when the Reading Recovery teacher also teaches a normally progressing class is that her keen awareness of normal progress gives her an appropriate sense of the directions and levels of performance to aim for with her Reading Recovery children. This is not the case if she spends her time only with children who have difficulty reading and writing.
Selection of the teachers

The New Zealand program was planned so that it would be implemented by experienced teachers who were informed about reading instruction in the first years of school but who were not specialists. It was suggested that the teachers who volunteer for training should:

- be permanent members of the staff
- be able to commit themselves for at least two years to the program
- be able to work with their peers (i.e., the teachers of the children selected)
- demonstrate good relations with staff members
- be prepared to teach before members of the inservice course.

In addition, some experience with the administration of running records and other aspects of the Diagnostic Survey (Clay, 1985) was considered desirable. Because mobility, and thus job and role changes, are a feature of the professional life of New Zealand teachers we thought that teachers would probably not spend more than three to four years in teaching individual children in this way, but that the teacher's work as an educator in any role would benefit from understandings gained on this course. In practice teachers have stayed with Reading Recovery longer than I predicted and those who have become principals and advisors have taken new insights into children's learning into their new roles.

The experience of training a large number of Reading Recovery teachers over recent years provides strong support for the need to select good classroom teachers who are knowledgeable about teaching five and six year olds in our school system. As Reading Recovery teachers are required to work with children who are having marked difficulty in learning to read (i.e., children who are very poor readers and often non-readers) the experience of teaching successful readers is an essential perspective for the teacher to have. This experience means that they know the behaviours that must be developed and can make accurate predictions about when children can leave the program to ensure that they will continue to gain in skill as a result of a normal classroom program.
Introducing schools to the program

The introduction was guided by several assumptions related to the delivery of a quality intervention. Firstly, school populations are very different and any new program must allow for different solutions in different settings. Secondly, consultation was the key word in our planning. We did not want to prescribe how schools should organize for the program.

We were convinced that the Reading Recovery teacher would not work effectively in isolation, but should be part of a team aiming to raise the lower levels of reading achievement for the school. So an initial meeting was held at the beginning of the school year for all the principals, teachers in charge of first and second year classes, and the Reading Recovery teachers recommended for training in each of the participating schools. Schools which did not think this team approach was important were not permitted by the district administrator to join the scheme.

At the initial meeting that administrator explained the arrangements that allowed for the year-long training course. Teacher leaders for the course gave an historical synopsis of the development of the Reading Recovery program and explained the scope of the teacher's work and the ground rules for participation. These were that children be taught individually, daily, for a minimum of thirty minutes each, and in a suitable teaching space; that the Reading Recovery teacher was not, under any circumstances, to be taken from her work for other school tasks such as relief teaching; and that the teacher would need to bring a child to her inservice sessions two or three times in the year.

At the initial meeting a school could confirm its wish to opt into the program. The Reading Recovery teacher leader outlined the program for the inservice course comprising assessment training, individual teaching in schools, selection of the children, the demonstrations of teaching, the peer discussion of that teaching and the teacher leader visits to schools to see the program on site, and also described how teachers remain in contact with the program after the training year.
Training in assessment

Teachers were first trained to be sensitive observers of reading behaviour. They learned to take running records of text reading and to administer the tests in the Diagnostic Survey. They observed and recorded exactly what the children were doing, and made these observations more explicit by writing a diagnostic summary report. This careful analysis of precisely what a child can do guides the teacher in designing a program for that particular child. Teachers brought these test results to sessions for discussion of perplexing points or alternative interpretations, and they submitted a diagnostic summary of two cases for detailed appraisal by the teacher leader.

Before they began teaching children individually, teachers wrote predictions of what changes they would expect to see in the children's reading behaviours at various stages of their program as they improved. Teachers were given two tasks: to complete a statement such as, *At the end of the individual teaching program the child will be able to...* and, following this analysis of the child's expected achievements, to answer the question, *Are there any priorities among these?* This helped them to specify the program goals for each child and begin to grapple with some of the conceptual issues, although at a rather superficial level.

Selection of children

Children selected for possible admission to the program were the lowest scorers on text reading in that particular school, not excluding any child in regular six year old classrooms for any reason. The lowest scorers in school O might be better than some of the higher scorers in school E. A teacher in each school was trying to raise the performance of the low progress readers in that school. Consequently, the teachers had to learn to make their own decisions about whom to admit to the program. The teachers tested or ranked all children at age 6.0, after one year at school, who were considered not to be making good progress. Information was sought from classroom teachers and supervising teachers also. Admission to the program was not dependent on a specialist's diagnostic testing. The children identified by teachers as the poorest readers in their classes after one year at school were given the Diagnostic
Survey as a basis for planning the individually designed programs of instruction. The results were also used for making final selection decisions on the basis of a profile of scores.

In the field trials of the program we explored how the program could settle into schools of various types and sizes. The numbers of children who entered the program in a school year differed from school to school because of the different sizes of the schools and because of the variations in the needs of the children. The working week of the teacher set limits on the number of children who could be included in her program. Part-time teachers selected four children, full-time teachers began with six and increased this to ten within a short period. The responsiveness of each child to individual tuition determined how long the child remained in tuition. Factors which tended to lengthen time in the program were language problems, family mobility, unsettled family circumstances, sickness or absence, general retardation and unusual learning problems. The children who were admitted to individual teaching had learned very little about reading and writing, and, after more than twelve months at school, were confused about these activities. Sometimes in the smaller schools the children admitted to the program were making progress with learning to read and write but had low scores in particular areas; for example, on one or more of the diagnostic tests.

Selection of the children produces problems to be discussed and solved as the program moves from one culture to another. In the United States, for example, issues that have been discussed are the preparatory programs of kindergarten, transition classes, retention policies, specialist services, bilingual education and attendance problems. However, because teacher judgement is least subject to error when selecting extreme cases, and in order for the program to address reading problems effectively in an education system, the principle of selecting the most extreme cases (i.e., the lowest achievers) should, in my opinion, be adhered to.

Valuing the teacher's experience

We wished to minimize the feelings of insecurity that teachers might initially feel about changing their teaching
patterns and thinking differently about reading instruction. Teachers were invited to teach. They were reminded that they were experienced teachers and were urged to draw on their own experience when working with the children. It was considered economical to move both children and teachers gradually from their existing competencies rather than to demand at the outset new behaviours that might cause confusion and disrupt established and efficient responses.

New concepts and activities were demonstrated and discussed and these gradually became part of the teachers' procedures. As the course continued, it became obvious from the teachers' discussions that their views of the child's task and of their own roles were changing. Teachers had their own theories about the task and the characteristics of their pupils. By the end of the year after the inservice course, they had acquired new theories about how they and their pupils performed and how they should perform. They were now able to question, challenge, discuss, work out courses of action, and explain their decisions in ways that they could all understand because these new theories were shared and explicit.

Beginning the teaching programme
Teacher Leaders then had to support teachers through a brief but difficult period. For two weeks teachers were to devise activities using only what the child could already do. The idea was to develop fluency on things that were easy for the child. By the second week, teachers were keen to introduce new material. However, they were held to the time limit to give them some experience of the value of consolidating what children already knew. The children were allowed time to become fluent with the familiar, to habituate their responses so that they no longer needed attention, and to enjoy the creative and exploratory payoffs of 'roaming around the known.' A teacher's tendency to drag her student into new territory, into harder work, was being challenged. The value of reading quantities of easy material began to be obvious. These are some of the important principles of Reading Recovery instruction which were established in these two weeks. The diagnostic summary report gave the teacher an analysis of the behaviour that should relate directly to her teaching program, and she arranged to see
children once a day for thirty minutes on a flexible timetable so that children would not always miss the same activity in their classrooms.

Records

Teachers were required to keep these program records:

- **Lesson plans.** The individual teaching sessions were planned to last for half-an-hour. Teachers kept a summary for each lesson with the child, detailing the teaching sequences and providing a record of the changes or persistent difficulties in the child's responses. Teachers gain in skill throughout the year, developing the ability to record details more effectively while the lesson is taking place, having less and less to add to the summary after the session.

- **Running records.** A running record of the new text introduced on the previous day is taken during every session. After the teaching sessions some time is required to calculate the accuracy rate and analyze the running record, and to transfer relevant details to the lesson plan record.

- **Book graph.** Once a week the book graph is plotted from the accuracy level information obtained from that day's running record.

- **Writing vocabulary chart.** Once a week any new words written independently by the child during the writing section of the lesson are added to the cumulative chart under the appropriate week.

- **Selection of books.** Selecting new books for the next lesson for each child is a daily task for the Reading Recovery teacher, prior to the session. Reading Recovery teachers are provided with a list of books leveled by many teachers on the basis of their experiences with children's reading of them.

The time required for Reading Recovery preparation can be likened to time required for planning and evaluation of classroom teaching; however, it must be noted that detailed preplanning of teaching sessions is not required. Teachers are trained to respond, within a general framework of possible procedures, to what the child is doing and therefore to make decisions "on the run." Appropriate decision-making is a critical aspect of Reading Recovery teaching. Too much detailed advance planning will actually interfere with responding to
individual needs. Analysis of each child's text reading, writing, and Lesson Record provide the basis for deciding on the most appropriate action and making the most powerful decisions for acceleration in the following lesson.

**Materials**

A vast range of material is not required for Reading Recovery teaching. Schools are asked to arrange for the provision of a magnetic chalkboard, an ample supply of magnetic letters, large blank exercise books, felt pens, and many easy story books providing a gradient of difficulty. A variety of suitable books are already in Reading Recovery schools, but usually, because of the limited skills of children in this program, many texts are needed on the same level of difficulty, and so additional titles are purchased and teacher-made books extend the range available. If Reading Recovery teachers participate in "leveling" the books available, and new books as they come to hand, they can quickly select a book for a particular child at a particular stage of the child's progress. This choosing of texts is an important part of a Reading Recovery teacher's training.

**Discussion of lessons behind the one-way glass**

At inservice sessions throughout the year two teachers give lessons behind the one-way glass, and these lessons are discussed by their peers. These were critical aspects of the training course. We assumed that teachers would come gradually to understand the full implications of programming individually for children with difficulties who needed to learn at accelerated rates if they were to reach normal levels of performance. The inservice course made extensive use of a one-way window between two rooms. Children were taught in one room; in the other, teachers observed and discussed a teaching demonstration while it was in progress. The one-way viewing facility was essential in the inservice training, allowing for discussion of what the child was doing and why the teacher might have responded as she did. Delayed discussion would not have been as effective. Videotaped replays lost the excitement of the on-task question and commentary. The content of a lesson and the focus of each activity is selected very carefully to match the competencies, and meet the learning needs, of an individual child. A teacher who was demonstrating made
decisions one after the other while the observers attended to these decisions and discussed the options as they arose.

During early training sessions, a teacher leader or experienced teacher demonstrated teaching while another teacher leader modeled how the discussion should proceed behind the one-way screen. Demonstrations by teacher leaders were kept to a minimum and the first demonstrations by the teachers themselves began in the third or fourth session. Children were brought to the inservice site, and a typical lesson was conducted for the teacher's peers. This provided several opportunities: the teacher's techniques were evaluated, gently, by her peers; the watching teachers had a chance to observe, from the outside, the tutorial situation which they worked in daily; and the situation induced an objectivity among teachers in evaluating their own work. None enjoyed giving a demonstration lesson but almost all commented on its value. They described their ordeal as "a very nerve-wracking experience," which they dreaded, but a profitable one because "one was reinforced for some things and was shown ways of improving." They felt the sessions made them more aware, as teachers, of their own choices and assumptions, and more self-critical. The discussion among the observers as the child and teacher worked was described by the teachers as "invaluable."

Under such close scrutiny, the teacher was under strong pressure to make sound judgements which had massive payoffs in terms of learning gains for the child. If the children were to return to an effective functioning level near to the average for their class, they had to make accelerated progress; yet they were the very children who should not be pressured. Teachers were asked to take every necessary step forward that was warranted for a particular child. They were to waste no time on instruction that was inappropriate for any one child. Short-cuts were fine; detours away from text reading were highly suspect, were questioned, and a good rationale was expected for making detours from text. The teacher's peers were quick to criticize any indulgent wandering into unnecessary activities once they appreciated the importance of acceleration.
The emphasis in the inservice sessions shifted, in the latter part of the year, to the Reading Recovery children who were proving the most difficult to teach. Teachers taught during their demonstrations in ways which were deliberately chosen to expose the child's peculiar problem to the group, and, in discussion, the resources of the group were directed to exploring the problem and searching for a solution. After two demonstrations, each of which lasted for half-an-hour, the teachers spent a further hour discussing their work. Issues were raised by the teacher leader or by the teachers. New Zealand teachers' comments on these inservice sessions were:

A major percentage of learning takes place here. The inservice sessions extend and consolidate one's understanding of reading processes and recovery procedures.

They kept me thinking about ways to improve my teaching and gave me a good opportunity to discover whether I was approaching the problems in the best way.

Your demonstration of how to increase writing vocabulary suddenly made it all go clear.

Seeing X take a lesson was far more valuable than a video because it was alive and not static.

The one-way window was invaluable and could never have been taken over by videotapes. Being able to see someone working and being able to discuss and question as they went along was really good.

I learned so much by just observing the children at work. Each one is so different and how they operate on print can vary so much.

The most difficult pupils are very interesting to watch.

The last term when we saw people working with very difficult children was extremely helpful.
One of the early demonstrations should be with a child who knows almost nothing. Where do you start? What do you do? How do you build on nothing?

Reading Recovery teachers have no one else at their school to discuss problems with and need to meet other Reading Recovery teachers to air problems and find possible solutions.

At all times, the inservice sessions aimed to enrich the teachers' understanding of their children and to sharpen their use of special teaching procedures in order to maximize their effectiveness. Some of the discussion centered on the difficult problem of finding appropriate resources, especially easy reading books. Throughout the year, teachers were introduced gradually to the new teaching procedures and concepts. The book describing these procedures (Clay, 1985) did not provide a simple set of instructions that could be read and then implemented, but was a reference source and a basis for the discussion and clarification of concepts and rationales behind the procedures. Such rationales provide the basis for the teacher's decisions about how next to work with a child. Some activities were introduced to teachers before others (to reduce the load of newness). First to be introduced were the text and book reading, text writing with cut-up stories, and letter identification. A concept of teaching children to make use of reading strategies was introduced. Within a month procedures for helping children hear the sound sequences in words were introduced.

As the program continued, the teachers became more adept at discussing the children, the teaching they observed, their own programs, and the directions and explanations in the written account of the procedures. Other aspects of reading that were discussed included ideas about the reading process, syntax, semantics, visual analysis, over-learning and habituating responses, word learning, memory, integration and cross-relating of cues, and independence. Topics raised by the teachers in these discussions suggested that their attention to the reading process was shifting from teaching for items of knowledge (letters known, words remembered) and from getting the child to habituate a skill or memorize a new element, to
developing in the child the confidence and willingness to use a variety of strategies. An important feature of teaching was movement away from having the poor reader dependent on the teacher and towards teaching in such a way that the children had many opportunities to teach themselves.

**Teacher leader visits to schools**

The teacher leader paid on-site visits to programs running in the schools. These had three purposes: to communicate with the school about the running of the project; to talk over new techniques recently introduced with the teacher and answer any queries; and to observe the Reading Recovery teacher at work, or to work with a particular child at the teacher's request.

**Discontinuing teaching**

When the teachers judged from the children's work that they were able to work with an appropriate average band group in their classroom, they recommended the children discontinue special teaching sessions. It was not uncommon for a fast learner to be ready to leave the program within three months. Reading Recovery teachers were now faced with a new set of decisions, for which they had been prepared. Initial discussion dealt with what a teacher would look for in a child prior to discontinuing, and what information she would ask for from the child's classroom teacher. The dangers of dependency on the Reading Recovery teacher were emphasized as threatening a child's survival in group work back in the classroom.

Teachers were asked to make recommendations that a child discontinue sessions on the basis of the setting a child would be working in (the teacher, other children, book levels and groups available for placement, classroom teacher's style and demands, etc.); the observed behaviours of the child that would make him or her likely to cope; and the evidence from the child's accumulated running records of book reading. Retesting the child was carried out in order to cross-check the decisions to discontinue, not to initiate them. Decisions to discontinue were always checked by the teacher leader. Occasionally a child was not ready to discontinue the sessions. In most cases, however, the teachers had carried the children for longer and to
higher levels than may have been necessary. They were conservative in their recommendations for discontinuing.

**Continuing support for teachers**

Delivery of a quality program requires contact with teachers beyond the initial training phase. This has been welcomed by the teachers we have trained. Teaching procedures were carefully designed to help children with specific problems make fast progress. Because of this, there was little room for changing the procedures. Innovation was welcomed, but top priority was always given to accelerating the child’s progress, and, in practice, teachers’ suggested variations in procedures were often ineffective because a crucial skill was no longer included. Inservice training usually encourages teachers to innovate, to apply new ideas in creative ways. In this program, strict adherence to most procedures seemed necessary. In the year following the first training course, we watched some of our teachers veer away from appropriate practices in their demonstrations when they were no longer attending regular meetings.

To foster a critical approach to non-productive variations and an open mind on productive changes to the program, it was agreed that some continuing support for teachers might be useful. Teachers met four to six times a year to learn what new things each had discovered, to demonstrate to their colleagues and to discuss their programs. Demonstrations and probing questions tend to prevent practice drifting away from the most accelerating procedure. Over time the teacher evolved new support mechanisms, such as visits from a colleague invited to observe and critique the teaching of a particular child or cluster visits of a group of teachers with questions to share.

**Training the leaders who train the teachers**

Reading Recovery teacher leaders were specially trained as key people in establishing a Reading Recovery program. They have a very complex role that requires a wide range of skills in diverse areas. It is essential that they have a thorough and academic understanding of the theoretical concepts upon which the programme is based, a sensitive awareness of the organizational, professional and child development issues associated with the innovations in the program, and extensive
practical experience of the everyday workings of the first two years of school. They have to act as advocates for whatever cannot be compromised in the interests of an education system getting effective results from the program. Strengths considered in the selection of trainee teacher leaders were effectiveness as teachers of young children, a thorough knowledge of the theoretical basis of the Reading Recovery program, the ability to work supportively with teachers, and the ability to undertake academic study. The course moved through several patterns of organization to meet the changing needs of the trainees throughout the year. It was an intensive course demanding flexibility.

**University courses.** The teacher leaders undertook relevant university studies and in particular a course on theoretical issues and recent research into the reading process and reading acquisition. This was considered essential to sound decision-making in the devising and improving of reading programs. They also completed a focal course on Issues Related to Reading Difficulties, studying the many competing and controversial ideas in the field with particular attention to ideas about prevention, early intervention, individual tutoring and clinical programs, and ways of evaluating such programs.

**Practical coursework.** Teacher leaders had to develop a thorough knowledge of the whole operation of the Reading Recovery program in an education system, and of the development and history of the project. This included a critical appraisal of its strengths and problem spots, and of the competing explanations for its success. Teacher leaders had to teach Reading Recovery children and work through the experiences of being a member of a group learning to do this. It was essential that they participate in the operation of Reading Recovery over the whole year, so that they could become aware of the shifts in teachers' understanding, their questioning and their in-service needs as they became more familiar with the program.

By mid-way through the year the training emphasis shifted for the trainees to observing how a teacher leader worked with teachers. They were given opportunities to develop a role as teacher leader of teachers guiding their observations in
inservice sessions, developing questioning skills, leading teachers to articulate in words what the child was doing and why they thought the teacher responded as she did. A trainer of teacher leaders provided input to increase these skills and feedback on trainee performance, giving them opportunities for self-evaluation of their own performance. The opportunity for trainee teacher leaders to work with inservice courses throughout a whole year enabled them to observe the way program emphasis shifted through several changes as the teachers gained in competence and the pupils improved and were discontinued.

They also had the opportunity to learn sensitively in these settings and become skillful in helping teachers to grow and develop. Small groups of trainees worked with each of the inservice course groups in turn. They met with their trainer to plan for these sessions. Their responsibilities increased as the year progressed and their skills developed. Trainee teacher leaders participated in the continuing contact sessions twice a term with teachers who had been trained in the previous year. These sessions provided for observation of the development of teachers' skills after the inservice year. Trainee teacher leaders visited teachers working in their schools, talked over new techniques recently introduced, answered queries, observed the teacher at work in her school setting, and worked with a child if a teacher requested a demonstration or needed help. The first visits were made with the regular teacher leader; subsequently trainees made visits on an individual basis.

Organizing an inservice course. Organization and administration of the inservice course from the introductory talk through the year's operation was studied in detail. Because variations might occur among districts, trainees moving to districts outside Auckland met with the coordinating administrator for the new district to begin planning for the start of the program in the following year. Each year after teacher leader training a national inservice course (in the United States this is a Teacher Leader Institute) was held for a week just before mid-year bringing the network together in a residential setting to share their experiences, hear of new developments, and use the experience of colleagues and their trainer to solve some of the
problems they had encountered. An important factor in the successful implementation of the program on a national basis was the continuing contact maintained with the fledgling teacher leaders throughout their first year of operation by their trainer, who made many phone calls, kept regular contact by mail and made numerous on-site visits to all parts of the country to coordinate the program.

**Teacher leader training is a necessary first step**

For a small education system of 30 to 100 schools, one teacher leader trained at some national or central training course could run the program. However, to establish Reading Recovery in a larger education system it would be necessary to have a training course for the teacher leaders. (Once an education system has enough well-trained teacher leaders the quality program can be maintained.) In this case the system might begin by having a trainer of teacher leaders in a setting with both a university course and an on-going program operating in the schools, and having a senior administrator become thoroughly familiar with the preventive thrust of this early intervention program.

**References**


Marie M. Clay, originator of Reading Recovery, is professor emeritus at the University of Auckland, New Zealand, and president-elect of the International Reading Association.

The article by Dr. Clay which appears here is an updated version of an article which appeared originally in *Gnosis*, a magazine of the Inner London Remedial Teaching Service, London, in 1984.
In this article, Professor Gaffney suggests a schema for school personnel interested in planning for the implementation of a Reading Recovery program in a local school district or consortium of school districts. Her emphasis that Reading Recovery is a system of intervention, not a bag of tricks or quickie methods, for the purpose of preventing reading failure is an important caution to would-be innovators. She also describes the nature of full implementation, its importance, and how to plan for it. In addition, she joins Professor Clay in cautioning us that the Reading Recovery procedures were not devised for the 80-90% of children who do not need them. Gaffney, a University of Illinois teacher leader trainer, expedites the thinking of any educational staff which desires to plan systematically for Reading Recovery implementation. A district could use this article as a sound basis for planning.

I would like to know how to do Reading Recovery. Please send the dates of future workshops in my area.

Please send me information about the Reading Recovery Program and a current catalog of prices.
I have a sabbatical year coming up in my district and I would like to be trained in Reading Recovery. Please send information and an application.

Our district has some staff-development funds available and would like to offer a series of workshops to our teachers on Reading Recovery.

These are samples of requests frequently made of educators who are trained in Reading Recovery. Though many articles have been published about various aspects of Reading Recovery, requests like these show that the educational community lacks sufficient information about the nature and purpose of Reading Recovery and the way to begin to implement the program in a school system. The purpose of this article is to provide assistance to administrators and teachers who are considering initiating Reading Recovery in their districts.

**What Reading Recovery is and what it is not**

Reading Recovery is an early intervention designed by Clay (1985) to be implemented in an educational system for the purpose of providing a second chance for success for first-grade children who are at risk of failing to learn to read. Reading Recovery is not a method of teaching, an instructional package, a prescriptive program, a commercial kit nor a predetermined sequence of skills or books (Clay, in press). Reading Recovery is a way for a system to intervene for the purpose of preventing reading failure.

Reading Recovery is a preventive rather than a remedial intervention. Teachers of young children are able to identify the children who are most at risk of failing to learn to read after one year at school through the use of systematic observational procedures. Early identification of children who are not making adequate progress allows a school system to implement an intervention early in a child's program before failure ensues. Without early identification of children who might be at risk of failure and an appropriate intervention, these children would fall further and further behind their peers until it was determined that they had failed and a remedial intervention could be implemented. Remediation, understandably, requires long-term
intervention because a larger gap has developed between the performance of the children and their peer group, and the children have practiced inappropriate behaviors for a longer time.

What Reading Recovery purports to do is accelerate the progress of the lowest achieving first-grade children, creating an opportunity for them to be successful that would not have happened otherwise. In order to change the probable path of failure, intervention must not only be early but intensive. Children are tutored on a one-to-one basis for 30 minutes daily by a teacher who has been specially trained to implement a different and individualized program for each child. Research in New Zealand and the United States has demonstrated that through the intervention of Reading Recovery, children are able to perform at levels commensurate with their average peers usually after 12-16 weeks of instruction (Clay, 1985; Pinnell, DeFord, and Lyons, 1988), and these children continue to make progress in their regular classroom instruction and independent reading after Reading Recovery services are discontinued (Pinnell et al., 1988; Slavin and Madden, 1989).

Who's who in Reading Recovery

A key to successful implementation of Reading Recovery is a three-tiered staffing scheme in which Trainers of Teacher Leaders, who are specially trained university faculty members, conduct training for Teacher Leaders, who in turn conduct training for Teachers. Training at each level requires a minimum time commitment of one school year. Training at the upper two levels requires a full-time commitment of the participant at an appropriate training site. If there is not a training site within a reasonable driving distance, individuals who wish to train as trainers of teacher leaders or as teacher leaders will often need to relocate for the training year. Teacher training is always conducted in the proximate area of the schools engaged in Reading Recovery.

In addition to the weekly two-and-a-half to three hour inservice sessions conducted by the teacher leader, teachers begin on-the-job training by teaching a minimum of four children daily in a one-to-one tutorial setting using specialized training procedures. For information about training and training
sites, see the response of Clay and Watson in the Questions and Answers column of a recent issue of *The Reading Teacher* (Jongsma, 1990). By contacting the closest training site listed there, you would be able to find out the current level of implementation in your area.

**We’re interested... what now?**

The first step is to become more knowledgeable about Reading Recovery. The monograph *Reading Recovery: Early Intervention for At-Risk First Graders* (Pinnell et al., 1988) provides a comprehensive overview of the program. As soon as possible, begin to enroll key district personnel in considering Reading Recovery. You may want to talk informally with teachers of young children in your school. Distribution of a brief and informative article by Gaffney and Gillespie (1989) might generate some conversation and questions among interested teachers. Share your interest and that of your colleagues with persons in the positions of principal, curriculum coordinator, reading supervisor, early childhood/elementary coordinator, Chapter 1 coordinator, special education coordinator, assistant superintendent, and superintendent.

Next, consider the proximity of the closest teacher training site (i.e., a site with a teacher leader). Since a component of training requires participants to teach a Reading Recovery lesson with a child from the teacher’s home school behind a one-way mirror three or four times during the year, distance is a consideration. Because of weekly inservice sessions for teachers and periodic transportation of children, it is recommended that travel time from the school to the training site not exceed one and a half hours.

Of primary consideration is the density of the population of first grade children and the proportion of those children who are in jeopardy of not learning to read at a level comparable to their average peers. Research has shown that approximately 10 to 20% of young children are at-risk of reading failure. Depending on factors within school populations, the proportion of children who require an intensive intervention may be less than 10% or may well exceed 20%. The effectiveness of Reading Recovery is partially dependent upon the full implementation of the
program within a system. Full implementation means that every first-grade child who needs Reading Recovery has the opportunity to participate in a complete, individualized program. Full implementation must be planned for and achieved at the classroom, school, and district level within each system.

Listing each school, number of first grade classes, average enrollment per class, and estimating the proportion of children who might be unable to read at average levels, will provide a basis for determining the number of teachers who will need to be trained in Reading Recovery procedures for each school and district. For a rough estimate of the total number of teachers you need to train in your district, consider that two teachers per school, each working half-time (0.5 FTE each, 2.5 hours per day) in Reading Recovery, can serve the 10-20% of children who are most at risk of failure in about four first grade classrooms of average size (approximately 25 children per class) during their training year. Thus, one is able to estimate the number of teachers a district would need to participate in this additional training.

Teachers who volunteer and are selected to participate in Reading Recovery training are experienced in Grade 1 reading instruction. Preferably, applicants have a minimum of three years of experience as a regular first-grade classroom teacher. We recommend that Reading Recovery teachers train in pairs, two per school. Training a minimum of two teachers per school increases the probability that all of the children who need Reading Recovery will have the opportunity to participate and provides a structure of mutual support to enhance teacher growth. The preferred model is that two Grade 1 teachers equally share responsibility for classroom instruction. Each teacher works in the first-grade classroom for half of the day and works in Reading Recovery for the other half day. Other models of augmented staffing are options in which Chapter 1, reading specialists, or resource room teachers allocate half of the day to Reading Recovery teaching.

A teacher leader typically trains a class of 10-12 teachers annually. Given this number of spaces available for training, one is able to develop a multiyear plan that will result in full
implementation of Reading Recovery in each school within a district. Several small districts may want to engage in a cooperative endeavor and support the training of one teacher leader. Small districts may want to request spaces in a training class of a larger district in the area. Alternatively, multiple districts may enlist the support of a college or university in the region in supporting the training of teacher leaders for the area. Given sufficient need, it is recommended that two educators from the same region train as teacher leaders during the same year. The partnership established during training facilitates collaboration during subsequent years of implementation and allows full implementation to occur more quickly throughout a region.

Presentation

Interested individuals have many opportunities to learn more about Reading Recovery. An annual Reading Recovery Conference is held in Columbus, Ohio, usually during the first week in February. Some states are beginning to plan regional conferences on Reading Recovery in various regions of the country. Presentations on Reading Recovery are frequently on the agendas of many state, regional, and national reading conferences. In addition, Reading Recovery personnel often are invited to present at teacher institutes and district conferences.

Both teacher leaders and trainers of teacher leaders will often arrange their schedules to make presentations about Reading Recovery, to increase the audience's awareness or knowledge about the program. Groups that need to be informed about Reading Recovery are parents; school boards; early childhood, elementary, remedial, and special education teachers; reading specialists and supervisors; principals and central administrators. If there are teacher leaders in your area with whom your teachers might train, requests for presentations may be made of them. If a district is considering training teacher leaders in the future, the administration may want to sponsor a presentation by a trainer of teacher leaders jointly with other districts and/or a regional college or university.
Because training at any level requires a commitment of a school year, it is inappropriate to conduct workshops on how to implement Reading Recovery teaching procedures. Clay (1985, in press) cautioned against using these specialized procedures with the 80-90% of children who do not require them or using them in classroom teaching or small group instruction. However, educators may be taught how to administer the diagnostic survey which, although used in Reading Recovery, is separate from the program. Two media presentations on Reading Recovery may be used in a presentation: "Something Extra" (New Zealand Department of Education and University of Auckland), a 20-minute videotape developed in New Zealand which has recently become available in the United States; and "Reading Recovery: Early Intervention for At-Risk First Graders" (Educational Research Service, 1989), purchasable as a slide and/or video presentation.

Visiting: Who, what, where, when and why

Two types of requests for observing different aspects of Reading Recovery are frequently made by district personnel who are interested in future implementation. One may observe a teacher working with an individual child during a Reading Recovery lesson in a school and one may observe the training of teachers at an inservice session.

- **School visits.** Although the program must be protected from too many interruptions, people find observing and talking with experienced Reading Recovery teachers informative. Time must be included in the schedule for discussion of the lesson with the teacher or teacher leader, who might accompany the visitors. This discussion time should be brief so that it does not interfere with the daily tutoring of other children. The principal may also want to discuss the implementation of Reading Recovery at the school level, when appropriate, with visitors. Those seeking a visit will need to contact appropriate staff members in the host district and follow their procedures.

- **Visiting teacher inservice sessions.** If a district is considering implementing Reading Recovery and there is the possibility that a teacher leader, already operating within the area, may be able to include some of their teachers in the next
training class, a visit to a teacher inservice session may be appropriate. A common misconception is that teachers need to observe an inservice session before applying for or undergoing Reading Recovery training. A few key decision-makers from the interested district typically plan to attend an inservice session together. Many teacher leaders designate a few sessions throughout the year that will be available for visitors; it is recommended that visitors not attend inservice sessions during the first few months.

Some teacher leaders prefer to arrange an additional, abbreviated session (e.g., a lesson and discussion of the lesson) for the purpose of giving visitors a sample of an inservice session. Interested parties will need to contact the appropriate staff member at the training site to make necessary arrangements. Time for discussion before and after the session, although difficult to arrange, is necessary. Teacher leaders may assist one another on these rare occasions or the site coordinator may serve in this role.

- **Fact-finding mission.** Once a district, group of districts, college, university, or other administrative unit without a teacher leader is giving serious consideration to system-wide implementation of Reading Recovery, approximately four to six key decision-makers will want to schedule a common visit to a teacher leader training site. Key decision-makers typically include persons in the positions of superintendent; assistant superintendent; curriculum supervisor; early childhood, elementary, Chapter 1, and special education coordinators; principal; Dean of the College of Education; chairs and faculty members of reading, elementary, curriculum and instruction, or special education departments. Teachers are not usually included in this type of visit unless they are candidates for teacher leader training.

One individual could be designated as the contact person to coordinate the arrangements with the teacher leader training site. Visits should be scheduled as early as possible in the academic year because most of the teacher leader sites have a March deadline for teacher leader and site applications. To begin to establish a relationship with the prospective faculty, the
visit ought to be conducted at the teacher leader site at which your candidate will most likely train. The agenda for this visit may include a presentation, school visits, discussions, and observation of an inservice session.

**Role of teacher leader**

Following the decision to implement Reading Recovery in a system, the most important decision is the selection of nominees for teacher leader training. These individuals participate in a rigorous, year-long, full-time training program which prepares them to be experts in implementing Reading Recovery in their districts. Due to the location of the few teacher leader training sites, most trainees are required to relocate during their training year.

As well as being an effective classroom teacher of young children, a candidate will have demonstrated leadership in the district, effective communication skills, knowledge of the theoretical base underlying the program (Clay, 1987) and have completed a master’s degree in a related area. During the training year, teacher leaders learn how to implement the specialized procedures with children, develop knowledge of theoretical and research bases underlying the reading process and reading difficulties, and train teachers in a challenging yet supportive manner. The teacher leader is trained to lead the local education community in the implementation, maintenance, and expansion of this innovative program. Clay stated that the role of teacher leaders is to “act as advocates for whatever cannot be compromised in the interest of effective results” (1987, p. 47). It is the responsibility of the educational community to listen and to support these leaders in whom they have invested so much.

**Role of site coordinator**

Successful implementation of educational programs requires the knowledgeable and enthusiastic support of administrators. Reading Recovery is no exception. In addition to the unqualified support of the principal in each participating school, a central administrator must be involved. Many of the services required are typical of those required for the efficient operation of any educational program: appropriate scheduling, timely
ordering of materials, assuring the assignment of adequate space for teaching children, communicating with parents and the general public, and promoting cooperation and understanding among all of the professional staff.

The nature and intensity of the teacher training associated with Reading Recovery presents unique administrative challenges. The program requires that teacher leaders have the authority to insure the integrity of the services delivered to children. At each teacher training site, an administrator who actively supports implementation of Reading Recovery serves in the role of site coordinator. This person must be willing to become thoroughly acquainted with all aspects of Reading Recovery and must be allowed the time to do so. Strong leadership qualities and communication and problem-solving skills will enable them to provide effective administrative support.

If several districts join together to establish a training site, each district must designate a "contact person" but the group must grant one person the role and responsibilities of site coordinator. The role of the site coordinator is to support the teacher leader in the effective implementation of Reading Recovery. The responsibilities of the site coordinator are to: 1) facilitate and promote the training function; 2) insure the availability of appropriate training facilities, equipment, and office space; 3) provide general administrative support for the teacher leaders associated with the training site; 4) work with district and building administrators to assure understanding of and compliance with training requirements and implementation requirements; and 5) serve as the contact person between the training site and participating universities.

What's next?

Reading Recovery is a way of initiating change in a system for the purpose of increasing success in literacy learning of young children. As such, implementing Reading Recovery in every system, whether the system be a country, state, district, consortium, or school, is a new event. Multiple factors in each of these complex systems continually interact with one another and with the unique nature of this intensive educational
innovation in order to guarantee the integrity of the implementation within each new system. What makes these systemic adaptations worthwhile are the consistent results that Reading Recovery has maintained across systems. To enable first-grade children who are most at-risk of reading failure to perform at levels commensurate with their average peers in a few months time and to have these children continue to progress in reading and writing is an extraordinary accomplishment. Extraordinary results are achieved by extraordinary effort. Where this article ends is where interested personnel begin to investigate the possibility of Reading Recovery for their system.

References

Janet S. Gaffney is a faculty member in the Department of Special Education and the Director of Illinois Reading Recovery, University of Illinois at Urbana-Champaign. Correspondence may be addressed to Dr. Gaffney in care of the Center for the Study of Reading, 51 Gerty Drive, Champaign IL 61820; correspondents should enclose a SASE.
Mrs. Wishy Washy, one of the most popular characters of the little books used in Reading Recovery, sets a Herculean task for herself — to keep the barnyard animals clean. Professor Lyons, too, has taken on a big job — to convince the educational establishment that there must be a better way to cope with the increasing number of children classified as learning disabled. Suggesting that Reading Recovery can be that first net for avoiding the mislabeling of young children as "at-risk" learners, she provides a detailed case study of Mike, once labeled LD. The detailed description of his LD instruction and her specially tailored Reading Recovery program provide the reader with a startling contrast. In addition it provides insights into why the Reading Recovery concept is so powerful. Her recommendations for dealing with the LD crisis must be heard!

Students identified as learning disabled (LD), have increased dramatically over the past 15 years. This has fundamentally changed the identification and instructional practices of not only learning disability teachers, but regular classroom teachers as well. Regular education and learning disability teachers have colluded to relieve classroom teachers of responsibilities for teaching students functioning at the bottom of the class.
With class size increasing and administrative pressures to keep test scores high, regular education teachers are often very willing to hand the low achieving students over to the special education teacher. After all, the special education teacher has learned a particular body of knowledge and acquired a certain expertise for instructing hard to teach students. These students include not only those with the traditional handicapping conditions, but increasing numbers of students labeled as “learning disabled.” Since the term learning disability defies definition (Clay, 1987) and there are no reliable and valid assessments to identify students as learning disabled (Davis and Shepard, 1983; Ysseldyke and Algozzine, 1979), it is estimated that in some urban cities, as many as 80 percent of the general education student body may be classified as learning disabled (Gartner and Lipsky, 1987). If this trend continues, changes in the general education and learning disability education will become more profound and lasting.

In a comprehensive review of a decade’s experience with the implementation of PL 94-142, the Education For All Handicapped Children Act (EHA), Gartner and Lipsky (1987) estimated that 11 percent of the total public school enrollment received services under the provisions of PL 94-142. The number of students classified as emotionally disturbed, mentally retarded, physically handicapped, visually impaired, hearing impaired, or multihandicapped has decreased, while the number of students identified as learning disabled has increased dramatically. From 1976 to 1986, the number of students labeled LD grew from approximately 800,000, representing 22 percent of the special education population, to 1.9 million students, or 43 percent of the special need populations nationally (Singer and Butler, 1987). In spite of the lack of sound technical knowledge and clinical judgment in the diagnosis of learning disabilities (Davis and Shepard, 1983; Ysseldyke, 1983; Keogh, 1986; Gelzheiser, 1987), there has been an increase in the number of private clinics and interdisciplinary teams of school psychologists that identify preschoollers, kindergarteners, and first grade children as learning disabled (Lyons, 1989). Once labeled “LD,” youngsters are often stigmatized as learning disabled for a lifetime (Allington and McGill-Franzen, 1989; 1990).
There is no compelling body of evidence that segregated instructional programs have significant benefits for students designated as learning disabled (Allington and McGill-Franzen, 1989; Gartner and Lipsky, 1987). In a recent article, Pianta (1990) states that current practices on the delivery of special education services have neglected the area of prevention and argues convincingly that initiating a prevention program may not only prevent learning disabilities, but lower the numbers of students who require special remedial programs. This article describes a preventive reading program, Reading Recovery, that not only greatly reduces the number of first grade students identified as LD, but is a proven viable alternative to current practices in traditional reading programs for LD students.

A description of the Reading Recovery program

Reading Recovery, developed by New Zealand educator and psychologist Dr. Marie M. Clay, targets the least able readers in the first-grade class. It is a national program in New Zealand, and by 1991 will be implemented in 32 states in the United States, two Canadian provinces, Australia, and England.

In addition to their regular classroom reading instruction, Reading Recovery students are taught one-to-one for 30 minutes daily by a teacher who has been specifically trained in Reading Recovery techniques. Each lesson includes reading and rereading several little books that are based on natural language patterns, and composing and writing a message generated by the student. There is a heavy emphasis on the reciprocal nature of the reading and writing processes as students are taught to develop and use effective strategies that proficient readers use. A comprehensive description of the Reading Recovery program and research related to its effectiveness is available (Clay, 1985; Pinnell, DeFord and Lyons, 1988; Pinnell, Fried and Estice, 1990).

Program results in New Zealand and the United States showed that most low-progress students made accelerated progress while receiving Reading Recovery tutoring. Results from the Ohio Reading Recovery program revealed that 85% of the least able first-grade children in 289 school districts statewide reached average levels in reading for their respective
classes and were successfully discontinued from the program (Lyons, Pinnell and DeFord, 1989-1990). A four-year longitudinal study in the Columbus Public Schools revealed that children who were successfully discontinued from the Reading Recovery program, as a group, performed within the average range for their grade-level peers at the end of first grade and continued to perform with the average range through fourth grade, the time at which the longitudinal research study concluded (DeFord, Pinnell and Lyons, 1989).

**Identifying students for Reading Recovery**

Students are identified for the program by Reading Recovery teachers. These students are the lowest achievers in the first-grade chart as evidenced on a standardized test and the Diagnostic Survey (Clay, 1985) excluding none. Reading Recovery provides a good "first net" for students who might have reading problems and thus prevents the stereotyping that can come from intensive testing and labeling at early ages. In some school districts, however, students are labeled as learning disabled before they enter or some time during first grade (Lyons, 1989).

Recent research reports that 86% of the 1986-1987 Reading Recovery students further classified by local teams of school professionals or psychologists from private clinics prior to or during first grade as learning disabled were discontinued from the Reading Recovery programs (Lyons, 1989). Furthermore, these "LD" students continued to learn to read with regular classroom reading instruction.

**Characteristics of Reading Recovery students further classified as Learning Disabled**

An analysis of the error behavior of Reading Recovery students further classified as LD compared to Reading Recovery students who were not labeled as LD revealed some startling contrasts (Lyons, 1989). At the beginning of the intervention program, the students classified as learning disabled tended to display different reading behaviors and reading strategies from the other low progress readers. Students diagnosed as LD over-relied on visual/auditory information and ignored the supportive language structure and meaning of the
predictable texts they were reading. Students not diagnosed as LD integrated the meaning and language structure when reading, but tended to ignore visual/auditory information.

The two groups of students became more alike in their use of multiple cueing systems as they progressed through the Reading Recovery program. Both groups increased in competence, with a large percentage discontinued from the program reading within the average reading group in their first-grade classrooms. There were no significant differences between the oral reading error patterns of the two groups at the time of exit from the program. The shift in the reading strategies used by both the LD and the non-LD groups toward multiple cueing systems by the end of the program suggests the effectiveness of Reading Recovery in overcoming the reading difficulties of both types of students. In addition, about equal percentages of both groups exited the program successfully, after receiving 50 to 72 lessons. These results suggest that beginning readers who are classified as learning disabled respond as well to the techniques of Reading Recovery as do other low progress readers. Furthermore the students labeled as LD may have learned to be learning disabled (Clay, 1987). The following longitudinal case study of one first grade boy who was classified as LD and placed in a program illustrates this point.

Intervention decisions in traditional LD programs and in Reading Recovery

To illustrate the identification procedures and subsequent instructional programs designed for a “learning disabled” kindergarten student, I will use examples from one student, Mike. Within this article, I have provided a longitudinal case history describing the early identification of Mike’s learning disability prior to first grade, his experiences attending a learning disability clinic during the summer, his first grade diagnosis for selection into the Reading Recovery program, growth in his competence as a reader shown through reading and writing samples collected during the first 6 weeks of his program, and finally his oral reading scores on basal materials which provided evidence that he could be released from the program reading with the average of his first grade classmates. Mike lost his LD label in 12 weeks and 2 days. I was Mike’s teacher.
Mike's kindergarten experience

The prekindergarten screening tests indicated that Mike demonstrated good listening comprehension skills and was able to follow directions. He recognized 32 letters of the alphabet by name and wrote his first and last name correctly. Mike was characterized as a warm, friendly, articulate five year old who should make average progress in kindergarten.

In late November, the kindergarten teacher was concerned about Mike's slow progress in identifying the sound of the alphabet letters. He was the only student in the class who could not name and provide the corresponding sound for each of the consonants. The parents were asked to reinforce this skill at home using flash cards. By January, Mike was still confused about sound-symbol relationships. He frequently reversed letters and had much difficulty copying the daily news. By March, Mike had problems remembering letter names and high frequency words, and he rarely participated in group discussions. He did not begin and complete tasks on time, he could not follow directions, he demonstrated poor small motor coordination when writing and coloring, he lacked organizational skills and he appeared extremely nervous, crying easily. The parents granted permission to have the kindergarten teacher submit a referral for psychological testing for a learning disability. School policy prohibited processing LD referrals until the middle of first grade and so the parents decided to have Mike tested at a private clinic that specialized in diagnosing learning disabilities.

Private clinic assessment and diagnosis of Mike's learning disability

The clinic report stated that family and medical history, shared by the mother, revealed familial learning problems of both parents and two older siblings. Prenatal and perinatal birth complications, long labor, delayed prenatal care were reported as factors that may have contributed to Mike's lack of achievement. Tests results also indicated that Mike's vision and hearing were adequate and could be ruled out as the primary cause of his learning problems.
The psychologist stated that Mike appeared relaxed during administration of the Wechsler Intelligence Scale for Children-Revised (WISC-R, 1974) with the exception of the timed reading subtest. His gregariousness faded rapidly as the measures of achievement began. He did persist through the subtests on the Woodcock-Johnson Psycho-Educational Battery Test of Achievement (1977) and appeared to make his best effort. He used his right hand to write and displayed labored psychomotor ability. His global resources fell in the high average range as measured by the WISC-R. His full scale IQ was equivalent to the 88th percentile with verbal and performance skills evenly developed in the high average range. Significant relative strengths and weaknesses were apparent in his profile of skills. Strengths were interpreted in his ability to use verbal abstract thinking and his use of social judgment or common sense in verbal and non-verbal situations. Weaknesses were diagnosed in psychomotor speed or ability to copy quickly and accurately. Anxiety was noted during oral reading.

Mike's achievement in reading as measured on the Woodcock-Johnson Psycho-Educational Battery Test of Achievement (1977) showed his skills were relatively evenly distributed in the below average to borderline range. Significant ability-achievement discrepancies were present in each measured academic area. If grade equivalent scores were used, Mike's reading and written language skills would be similar to those of a four year old. The Bender Visual-Motor Gestalt Test (1938) was administered to assess Mike's visual perception. Interpretation of his reproduced designs suggested average to low average visual perception. Although the figures were adequately copied, it was felt that his skills were not commensurate with his cognitive functioning.

The assessment team was of the opinion that Mike met criteria to be certified as learning disabled in the areas of reading and written language, and made a series of recommendations.

- They recommended that a team of educators, including a psychologist, should be convened to determine Mike's
eligibility for special education services and develop an individualized educational program.

• They noted that because Mike had high average cognitive ability he would benefit from a regular classroom curriculum modified to meet his needs. Modified assignments, extra time for completion of tasks, grading on the basis of individual growth and ability/achievement grouping were ways suggested to adjust the pace for him.

• Oral tests, peer tutoring, and individual tutoring were recommended. Taping of written materials in order to help him in the regular or special education setting were also mentioned.

• While retention was not recommended due to his documented learning disabilities, the assessment team did suggest that an intensive summer reading program that specialized in phonics instruction might help Mike learn some beginning reading strategies.

Mike's summer school experiences at a learning disability school

Based on the clinic's test results and consultation with the kindergarten teacher, Mike's parents enrolled him in a private summer school recommended by the clinic. The diagnostic personnel developed a systematic means of using the data derived from the psychoeducational assessment to plan his intervention. One certified teacher was assigned to work with a group of three students, who demonstrated similar weaknesses on the psychometric battery.

The students spent the first 10 minutes of the 45 minute lesson working independently on specific "easy" tasks, while the teacher checked their homework. Then the teacher questioned each student individually to make sure he understood his mistakes. The teacher modeled correct responses until the student could accomplish the tasks quickly with 100% accuracy.

Every Monday a new skill was introduced and demonstrated. The students were required to practice the targeted skill on Wednesday and Friday. For example, during week 2, the targeted skill was automaticity and generalization. The skill packets contained exercises with varying degrees of difficulty to be performed quickly, accurately, and in several milieus. To
insure automaticity, the teacher provided opportunities for supervised practice.

Students worked independently on the skill packet, while the teacher observed their progress and assisted the students if they asked for help. If the student made an error, the teacher corrected the error and required the student to repeat the correct response several times until it was mastered. During the last five minutes of each lesson, the teacher assigned homework and distributed 3 to 5 work sheets to be completed and returned the next class period. Mike's instructional program was organized according to the sequence in Figure 1.

The instruction offered in the private clinic could be characterized as follows: 1) direct skill training focusing on the letter names and letter sounds Mike did not know, 2) direct skill training focusing on words, word families, word meaning, 3) direct skill training focusing on recognizing word parts, prefixes and suffixes, 4) visual and auditory discrimination at the letter and word level, 5) activities to improve visual/motor skills, 6) activities to improve visual memory, and 7) limited amount of time reading very easy texts.

To summarize, the teacher presented, modeled, defined, explained, and taught skills in isolation. While the instruction was systematic (i.e. sequential in nature with extensive modeling) the contingent feedback was not positive. Instead, the teacher corrected Mike's errors and then modeled correct responses for Mike to repeat several times. Approximately 30 minutes of the total nine hours allotted for instruction was specified for reading books. There was almost no instruction that might be classified as involving high level cognitive skills, and little active teaching. Extensive independent seat work was considered one-to-one teaching by the clinic's staff. Mike occasionally received one-on-one instruction, but only when he requested it. His "individualized instruction" appears little more than independent skill drill with periodic teacher supervision. Furthermore, this skill drill and practice did not generalize or translate to new, higher level skills.
Figure 1: Clinic LD Program

1. Drill on letter names and corresponding sound (week 1)

2. Trace letters in sandpaper and in the salt tray (week 1)

3. Timed copying exercises from chalkboard (week 2)

4. Find missing letters from sight word. Use picture to help student know words (week 2)

5. Select words for sight word (flash card) practice that are grouped into meaningful categories such as rhyming words, words that begin and end with the same letter, words with the same medial vowel and a silent "e," category words (e.g., words that have to do with baseball, colors, number words, etc.). (week 3)

6. After drilling on sight word recognition with flash cards, sort the cards into words which begin with the same letter, etc. (week 3)

7. Root word practice or word family practice. Using rhyming words make new root words. (week 4)

8. Circle all the e's or b's (etc.) in a given printed sentence. This exercise focuses student attention on visual discrimination of similar letters. As the student becomes more proficient in this task, he should tell what sound the letter makes in the word and give another word with the same sound. (week 4)

9. In order to focus the student's attention on frequently reversed or inverted letters the following exercises are recommended: use a colored highlighter to indicate visually confused letters; use a cloze procedure when reading sentence or words. (week 5)

10. Visual-motor integration skills may be strengthened through activities such as dot-to-dot books, jigsaw puzzles, copying pictures from printed designs, handwriting practice, wadding paper into balls and practicing throwing them into a wastebasket from increasing distances. (week 5)

11. Activities to improve visual memory skills included looking at a series of objects for about one second per object, covering the objects and asking the student to recall what he saw; playing concentration, using letter, word, or number cards as the stimulus to recall. (week 6)

12. Reading very easy books with one to three words per page. Texts should have a controlled vocabulary that includes preprimer and primer Dolch words. (week 6)
Identification of first grade students for the Reading Recovery Program

Any student who falls in the bottom third of the first grade class is tested for Reading Recovery, even students who are previously classified as learning disabled. Testing involves individual assessment using the Diagnostic Survey (Clay, 1985), and a group administered standardized test. Mike scored in the 4th percentile on the Metropolitan Achievement Test (MAT 6, 1986). The following six subtests of the Diagnostic Survey (Clay, 1985) documented Mike's reading and writing strengths: 1) letter identification — 49 out of a possible 54 letters; 2) sight word test — 0 out of a possible 20 preprimer words; 3) concepts about print — 6 out of a possible 24 items. Mike knew the front of the book and that the print contained a message. He also had control of left to right directionality, and knew that a period meant to stop reading. He could locate the bottom of a picture and upper and lower case letters "m" and "h." 4) Writing vocabulary — Mike wrote his first name in the allotted 10 minutes; 5) Dictation — 9 out of a possible 37 phonemes. The sentence, The bus is coming and it will stop here to let me get on, was dictated. Mike could hear and record 9 of the 37 phonemes. 6) Running record of text reading — Level B out of a range of levels (A, B, 1, 2, 3). Mike was able to read the words No, no, no in the book Where's Spot? (Hill, 1980).

The Reading Recovery lesson framework

The first 10 days of the student's 30-minute daily program is called "roaming around the known." During this period the teacher does not teach, but rather refines and re-evaluates the scores from the Diagnostic Survey (Clay, 1985), by sharing books and writing collaboratively. In this very supportive situation, Mike began to take some risks and attempted to read for meaning. By the end of the 10 day session, Mike was reading three word sentences and writing several high frequency words: I, me, and, the, my. The following week he was ready to begin lessons. Each Reading Recovery lesson includes four major components: the child rereads favorite books, the teacher makes a running record of the child's reading, the child composes and writes a message or story, and the child reads a new book.
Rereading familiar books. Mike read on the average of 3 to 5 favorite books every day. The books ranged from easy reading to more challenging text, and Mike generally read with above 90% accuracy. The texts were easy enough for Mike to use effective strategies, and difficult enough to provide opportunities for independent problem solving. Mike used a balanced set of strategies and cues "on the run" while focusing on the meaning of the text when the material was easy. However, when the materials became more difficult, evidenced during the second week of lessons in the analysis of My Home (Melser, 1984), Mike lost all sense of the meaning and resorted to using visual/auditory information exclusively when trying to figure out an unknown word. Figure 2 presents a running record of Mike's reading during week 2.

After determining that Mike was not using a balanced set of cues (meaning, language structure, and visual/auditory information), I selected the most productive teaching points to make after commenting on Mike's independence in reading the text. I said, "You said, my home is have. That word starts like have, but does that make sense, Mike? Does that sound right? Try that again and think what the bird and all the animals are telling us in this story." Mike reread the first sentence accurately, and this enabled him to read the other sentences that contained the same type of miscue correctly. My discussion with Mike was not an attempt to "correct" his inaccurate response. Instead, I chose to discuss the overall theme of the story and thus provided a catalyst for Mike to focus on the meaning of the story and learn how to use visual/auditory information, which was his strength, to confirm a meaningful prediction.

Taking a running record of text reading. The teacher becomes a neutral observer in order to take a running record of the student's independent reading behavior. The student has read the book once the previous day and he is not expected to read the material with 100% accuracy. If the text is too easy, the student does not have the opportunity to use the repertoire of strategies necessary to become an independent reader.
### Figure 2: Reading Recovery Running Record

#### Week #2 of Mike's Program

<table>
<thead>
<tr>
<th>Page</th>
<th>My home</th>
<th>Level 3</th>
<th>Accuracy 40%</th>
<th>Cues Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>✓ ✓ ✓</td>
<td>have</td>
<td></td>
<td>E SC E SC</td>
</tr>
<tr>
<td></td>
<td>My home is here</td>
<td></td>
<td></td>
<td>MS(✓)</td>
</tr>
<tr>
<td></td>
<td>✓ ✓ baby</td>
<td></td>
<td></td>
<td>MS(✓)</td>
</tr>
<tr>
<td></td>
<td>said the bird</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>✓ ✓ ✓</td>
<td>have</td>
<td></td>
<td>E SC (✓)</td>
</tr>
<tr>
<td></td>
<td>My home is here</td>
<td></td>
<td></td>
<td>MS(✓)</td>
</tr>
<tr>
<td></td>
<td>✓ ✓ from</td>
<td></td>
<td></td>
<td>MS(✓)</td>
</tr>
<tr>
<td></td>
<td>said the frog</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>✓ ✓ ✓</td>
<td>have</td>
<td></td>
<td>E SC (✓)</td>
</tr>
<tr>
<td></td>
<td>My home is here</td>
<td></td>
<td></td>
<td>MS(✓)</td>
</tr>
<tr>
<td></td>
<td>✓ ✓ ✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>said the pig</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>✓ ✓ ✓</td>
<td>have</td>
<td></td>
<td>E SC (✓)</td>
</tr>
<tr>
<td></td>
<td>My home is here</td>
<td></td>
<td></td>
<td>MS(✓)</td>
</tr>
<tr>
<td></td>
<td>✓ ✓ ✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>said the dog</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>✓ ✓ ✓</td>
<td>A dog</td>
<td></td>
<td>E SC (✓)</td>
</tr>
<tr>
<td></td>
<td>ran</td>
<td></td>
<td></td>
<td>MS(✓)</td>
</tr>
<tr>
<td></td>
<td>A rabbit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>✓ ✓ ✓</td>
<td>have</td>
<td></td>
<td>E SC (✓)</td>
</tr>
<tr>
<td></td>
<td>My home is here</td>
<td></td>
<td></td>
<td>MS(✓)</td>
</tr>
<tr>
<td></td>
<td>✓ ✓ ✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>said the dog</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ ✓ ✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and I go</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>✓ ✓ ✓</td>
<td>by dog</td>
<td></td>
<td>E SC (✓)</td>
</tr>
<tr>
<td></td>
<td>Come back dinner</td>
<td></td>
<td></td>
<td>MS(✓)</td>
</tr>
</tbody>
</table>

**Note**: Cueing Systems:
- meaning = M
- Structure (language) = S
- Visual/auditory = V

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Figure 3: Reading Recovery Running Record  
Week #4 of Mike’s Program

<table>
<thead>
<tr>
<th>Page</th>
<th>can</th>
<th>Level</th>
<th>Accuracy 87%</th>
<th>Cues</th>
<th>Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>√</td>
<td>√</td>
<td>E</td>
<td>SC</td>
<td>E</td>
</tr>
<tr>
<td></td>
<td>I can jump</td>
<td>√</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>√</td>
<td>√</td>
<td>E</td>
<td>E</td>
<td>SC</td>
</tr>
<tr>
<td></td>
<td>said the grasshopper.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>√ can</td>
<td>√</td>
<td>1</td>
<td>MSY</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>I can't jump</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>√ worm</td>
<td>√</td>
<td>1</td>
<td>MSY</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>said the snail.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>√ can</td>
<td>√</td>
<td>1</td>
<td>MSY</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>I can run</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>√ worm</td>
<td>√</td>
<td>1</td>
<td>MSY</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>said the spider.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>√ can</td>
<td>√</td>
<td>1</td>
<td>MSY</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>I can't run</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>√ worm</td>
<td>√</td>
<td>1</td>
<td>MSY</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>said the snail.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>√ can</td>
<td>√</td>
<td>1</td>
<td>MSY</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>I can fly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>√ worm</td>
<td>√</td>
<td>1</td>
<td>MSY</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>said the butterfly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>√ can</td>
<td>√</td>
<td>1</td>
<td>MSY</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>I can't fly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>√ worm</td>
<td>√</td>
<td>1</td>
<td>MSY</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>said the snail.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>√ slip</td>
<td>√</td>
<td>1</td>
<td>MSY</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>But I can slide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:  
Cueing Systems:  
meaning = M  
Structure (language) = S  
Visual/auditory = V  
Self Correction = sc  
Rereading = R
The teacher examines the running record closely, analyzing the cues used and cues neglected, paying close attention to self-correction behavior. In this way the teacher is able to discern the strategies and the sources of information the student is using to gain meaning from text. This daily assessment provides an accurate record of the student's reading progress over time. Figure 3 shows a running record taken during Mike's fourth week in Reading Recovery.

Mike independently read *I Can Jump* (Cowley, 1987) while I took a running record. His substitutions indicated that he was reading for meaning. He read *worm* for *snail*. More importantly, unlike his oral reading during the second week of the program, Mike was consistently using meaningful cues to monitor himself and predict what would make sense and then confirming his predictions using visual/auditory information. For example, Mike read *said the worm*, reread the entire sentence and then self-corrected.

After the reading, I decided the most productive teaching points to make were first, to support Mike's rereading of line 5 which led to a self-correction. I said, "*worm* sounds right and makes sense in that sentence, Mike, but what did you notice that made you reread the sentence and change the word to *snail*?" Mike replied that *worm* begins with a "w" and the word did not have a "w" but it did have a "s," and the picture looked like a snail, so the word had to be *snail*. Then, I asked him to reread page 3 and to look carefully to see if what he said matches what he saw. The question was intended to enable Mike to use the same strategies that he used on page 5 to read page 3. Mike reread page 3 accurately and used the same strategy sequence that he had told me he had used on page 5. His earlier behaviors led me to believe that he could use the same process to resolve his other miscues.

**Composing and writing a message or story.** Every day the student composes a brief message, usually one or two sentences long, and, assisted by the teacher, writes it in a blank writing book that is turned sideways. The student and teacher collaboratively write the message or story on the bottom page.
The top page, called the practice page, is used for working out the words. Figure 4 shows a sample of Mike's writing during week 4.

During his fourth week of lessons, Mike independently wrote the words *they, the, that*, and the *f, n, and d* in the word *found*. He asked to have the boxes drawn for the word *map*, so I drew three boxes on the practice page. Mike pushed three counters into the boxes while saying the word slowly. Without my help, he put the correct letter in each box and wrote the word *map* in his story. Mike used the same process for figuring out the word *lost*. I asked him to say the word *lost* slowly, and then asked "What can you hear?" First, Mike put in the *t*, then saying the word again, he independently wrote in the *l and s*. I finished the word inserting the *o*. I then asked Mike to write the familiar word *that* several times on the practice page in order to help him gain complete control of this high utility word. I noted that this was a new behavior for Mike; he had never written the word *that* independently, although he had worked on the word on the practice page several days ago.

When the writing was completed, Mike read the sentence several times while I wrote it on a sentence strip. I then cut the sentence into words and Mike quickly reassembled and read the sentence. The first time he reassembled the sentence it said: "They found the map they that lost." I asked Mike to reread the sentence again paying close attention to the words and to notice if what he read sounded right, made sense, and looked right. Mike reread the sentence and immediately reversed the order of the words *they* and *that*. Mike had not monitored his reading until he was asked to check to see if the words look right and self correct by reversing the word order.

**Reading a new book.** Every day the student is introduced to a more challenging new book which he or she is expected to read without help the following day. Before the new book is attempted, the teacher discusses the main idea of the book while looking at the illustrations. The teacher's role is not to introduce new words, but to provide an oral scaffold that enables the student to focus on the meaning of the entire text.
Figure 4: Mike's Writing
During Week #4 of Reading Recovery

Practice page

that
that
that
that

Story page

They found the map
that they lost.
**Figure 5: Reading Recovery Running Record**  
**Week #6 of Mike's Program**

<table>
<thead>
<tr>
<th>Mouse</th>
<th>Level</th>
<th>Accuracy 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Page 2</td>
<td>E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**Page 3**

Out of the hole
creep creep

"That doesn't make sense"

**Page 4**

Throw the grass
creep creep

**Page 5**

Under the door
creep creep

**Page 6**

Around the floor
creep creep

**Page 7**

Insc into the cupboard
creep creep

**Page 8**

Up to the chesse
creep creep
Nibble nibble nibble

**Note**

Cueing Systems:
- Self Correction = sc
- Meaning = M
- Structure (language) = S
- Visual/auditory = V

Rereading = R
After the brief introduction, the student reads the book with assistance from the teacher as necessary. This first reading of a new book provides opportunities for the teacher to teach the student how to use multiple sources of information and strategies in a strategic and flexible way. Figure 5 shows an analysis of Mike's oral reading of Mouse (Cowley, 1983) taken during week 6, and documents his ability to integrate multiple cueing systems in a flexible, strategic way.

Mike monitored his reading and consistently reread when he thought something was wrong. On page 2, the miscue was meaningful and syntactically accurate but he noticed that home did not look right. Through close visual discrimination, Mike self-corrected. On page 3, he used visual information to read throw, however, after reading throw the grass creep creep," Mike said "that doesn't make sense!" He then reread the entire sentence and self-corrected, this time using meaning and his sense of language structure. I did not have to say anything during this reading. When he finished, I commented and reinforced specific reading strategies that led to successful, accurate reading. I noted that he changed his patterns of behavior based on the demands of the text and his own responses. He was becoming a fluent reader who used information from the text in a flexible, purposeful way. Mike continued to make steady progress throughout the next 6 weeks of the program. He was released from Reading Recovery after 62 lessons, reading at the primer basal level.

Reading Recovery instruction has these features:
- It is based on the student's strengths, not deficits.
- Students are taught strategies that enable them to become independent readers.
- Students develop an internal system for self-improvement.
- The program uses natural language texts of increasing difficulty.
- Students learn to read by composing and writing their own messages.
- Reading Recovery teachers observe, analyze, and record student behaviors that inform their instruction.
The program is very flexible and based on what students demonstrate they know. The student and teacher are both active participants in the learning event. The students are taught how to think, monitor their own reading independently, predict, confirm, and understand what they read. Every element in the Reading Recovery lesson framework is individualized. Teachers select from approximately 2,000 little books using natural language patterns. Students are introduced to a new book of increasing difficulty each day.

To summarize, the experiences Mike had in kindergarten and during the summer program appeared to influence his reading behaviors at the beginning of first grade. It was only when Mike learned how to use the visual/auditory information, reinforced in the summer school program, to support and confirm meaningful language that he began to make accelerated progress in reading. Both the kindergarten and summer school experiences may have reinforced Mike's idea that reading means making the sounds the letters make. That is the response Mike gave when he was asked "What is reading?" at the beginning of first grade.

Barr (1974) and Juel (1985) provide convincing evidence that beginning reading strategies are determined to a significant degree by the instructional methods teachers use. Instructional practices for teaching beginning reading to students classified as learning disabled have traditionally recommended a code-emphasis approach (Clay, 1985; Coles, 1987; Lewis, 1983; Torgesen, 1980). The teacher hired by the private clinic was obviously following the collected wisdom of learning disability experts who base their advice on empirical research that argues that when students experience difficulty with the learning task, teachers need to provide them with learning skills they lack. Introductory materials published by the clinic state that prereading decoding skills necessary to successful reading must be simplified and practiced until mastered. Once mastered, new skills will be introduced.
I would argue that Mike and other Reading Recovery students classified as learning disabled (Lyons, 1989) never figured out what reading is all about during their kindergarten programs. These students never learned appropriate learning patterns. They were operating from incomplete and inappropriate concepts about the reading process. The intervention program specifically tailored to remedy Mike's deficits actually reinforced his inappropriate learning behaviors. The clinic's program was based on the assumption that Mike had to know every set of letter-sound relationships to read. Furthermore, it was believed that visual images of letters and words, pictorial and geometric stimuli, "simpler" materials, puzzles, throwing paper balls into a basket, working with shapes and sounds, etc., would produce gains in reading skill.

Mike and other Reading Recovery students classified as learning disabled prior to Reading Recovery service were instructionally disabled. They learned their way into the learning disability category and — when they participated in the Reading Recovery program — they learned their way out of the category. Their learning disability was environmentally produced. These students were instructionally disabled (ID), not learning disabled (LD).

Conclusions, implications, recommendations

In the 1990's, the public is once again viewing elementary students as raw material for local, regional, state and international competition. American standards of achievement are seen as too low, especially in the area of reading. Schools are being called on to raise reading scores and to test students more rigorously based on increased standards. Newspapers are publishing students' reading scores so that the public can compare reading scores among local districts and within buildings in the same school district. Realtors are now using student's achievement scores to sell homes in selected school districts.

In the past, when standards were raised, failing students from advantaged social groups were defined as learning disabled. With today's standards, the number of students labeled learning disabled is increasing (Allington and McGill-Franzen,
Furthermore, there seems to be an increasing number of students who are identified as learning disabled in preschool and primary school (Martin, 1988). The team decision-making process as currently employed in public school settings for assessing learning disabilities is at best inconsistent. In most instances, the teams function largely to endorse problems first observed by teachers (Martin, 1988; White and Calhoun, 1987; Ysseldyke, 1983). The team process operates with a deficit model which leads to considerable misclassification of students (Clay, 1987; Sleeter, 1986; Ysseldyke, Algozzine, Shinn, and McGue, 1982). It is not surprising that this referral pattern and subsequent placement in a program to improve Mike's "disability" was initiated in kindergarten.

- **Recommendation 1**: Educators, psychologists, parents, researchers, the media and the press need to focus greater attention on how to teach students rather than on how to categorize and label primary students who have not acquired beginning reading skills. Within the last two decades, numerous attempts to develop assessment-intervention links in the field of learning disability (Allington and McGill-Franzen, 1989; Arter and Jenkins, 1977; Bickel and Bickel, 1986; Gelzheiser, 1987; Ysseldyke, 1983; Ysseldyke and Salvia, 1974) have concluded that there is little evidence for effectiveness of the practice. Yet this practice, which is based on a deficit model of identification and instruction, is deeply ingrained in the learning disability programs offered in both private clinics and public schools in America today. Mike and his family were viewed as impaired and the instruction was disability-focused.

- **Recommendation 2**: Instructional programs should be designed around what the student knows. Begin with the student's strengths to teach the student how to use what he knows to learn how to learn. Educators' views of students labeled as learning disabled adversely affect expectations regarding their academic achievement, causing these students to be separated from other students; to be exposed to a watered-down curriculum; to be excused from standards routinely applied to "average" students; to be taught by learning disability teachers who may never take a course on the reading
process or beginning reading instruction, and who generally do not expect LD students to be released from their LD classroom, curriculum, or label.

- **Recommendation 3**: Learning disability teachers should be required to enroll in courses that examine the nature of learning and emergent literacy so that they have a foundation to understand the generic concepts, principles and theories of the learning and reading processes. Some professionals in the learning disability field are arguing that too many students who are simply underachievers are identified by private clinics and public schools as LD and that such identification practices result in both stigma and limitation of the student’s life experiences and opportunities to succeed (Clay, 1987; Coles, 1987; Franklin, 1987). Several researchers (Allington and McGill-Franzen, 1989; Lyons, 1989; Ysseldyke, Algozzine, Shinn, and McGue, 1982) found few psychometric differences between students identified as learning disabled and other low achievers who have not been labeled LD.

- **Recommendation 4**: Do not classify young children as LD in order to get enough funding to support special education programs. Pianta (1990) argues that prevention programs would curb the number of students classified as LD, while offering remedial programs that could address students with more extreme needs. Reading Recovery is a very successful alternative preventive program that has shown great promise in cleaning up the burgeoning population of students diagnosed as LD in the primary grades, thus enabling remedial programs to address the needs of students with more severe learning problems.

**References**


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**READING RECOVERY ANECDOTE**

*When introducing the story, Poor Old Polly, level 10, I asked the student if he knew the word swap. He immediately thought of the word swat. I tried to explain the difference between the words and convey the concept of swapping things. I gave each of us a small book and said we should swap books. He hit me with his book!*  

Pat Johnson
Hypothesizing about Reading Recovery

Michael F. Opitz

Professor Opitz's article is one of two in this special issue not written by a Reading Recovery trained teacher. The author has examined the literature on Reading Recovery and attempted to puzzle out the reason(s) for its success. Trained Reading Recovery teachers will find both points of agreement and disagreement, and many points on which to establish a discussion. Opitz writes, "...we do not, I believe, know why the program works." Yet as Clay suggests in this issue, answers are learned in the year-long and continuing contact training sessions. Our understanding of why the program works does not come from information or research alone, but from reflective practice. Reading Recovery teachers continue to reflect on their learning and practice, and implicit in the whole Reading Recovery process is ongoing research and evaluation. We have chosen the article because it reflects questions raised by those who have searched the literature on Reading Recovery and are contemplating involvement in the program. Professor Opitz's hypothesizing is based on wide reading in the literature about Reading Recovery, and should generate many powerful questions for the dialogue between trained Reading Recovery personnel and educators considering program implementation.
Reading Recovery is an early intervention program designed for young children at risk of failure in learning to read. Participants are first graders in the bottom ten to twenty percent of their classes. The program, developed by Marie Clay of New Zealand, is based on two assumptions. The first is that detailed observation of a given child as s/he reads and writes should be the basis of identifying what the child knows and needs to learn. The second assumption is that the reading behaviors of good readers can be taught to children who are not developing these behaviors on their own (Clay, 1985).

The program has three main components. The first is the Diagnostic Survey. Each child is administered each part of the survey and the examiner then uses the results when working with the child on an individual basis. The second component of the program is the tutoring session. Each child is tutored for thirty minutes daily in an isolated setting apart from the child’s classroom. Although each tutoring session is unique to the individual and continually changes based on how the child performs, each session includes five components: 1) reading known stories, 2) reading a story that was read one time the previous day, 3) writing a story, 4) working with a cut up sentence, and 5) reading a new book (Pinnell, Fried and Estice, 1990). As the child attempts these literacy oriented tasks, the teacher observes very closely to see what the child is doing. Many of these observations are systematically recorded and form the basis of the succeeding lesson. The third component of the program is teacher training. Teachers who provide the tutoring are trained for one year to learn Reading Recovery procedures (Pinnell, Fried and Estice, 1990).

Proponents of Reading Recovery report that young readers having difficulty with learning to read overcome their difficulties after twelve to twenty weeks of instruction in the program (Clay, 1985; Smith, 1986; Pinnell, 1989). They further claim that Reading Recovery children, once released from the program, function within the average range in their classrooms and do not need remedial help again (Boehnlein, 1987; Lyons and Peterson, 1988). Assuming these claims are valid, the question of why this program appears to be successful remain. An analysis of the program and a review of the related literature led me
to generate several hypotheses that might be used to answer this question. The purpose of this article is to state and briefly discuss nine of these hypotheses.

The nine hypotheses

Hypothesis 1: Reading Recovery is successful because it is based on a theory of reading that emphasizes meaning. Clay believes that reading is a meaning seeking, problem solving process; it is a complex behavior (Clay, 1979). She notes that readers should only spend as long on the details as necessary because understanding is the goal. In her words, "...the larger the chunks of printed language the child can work with, the quicker he learns" (Clay, 1985, p. 13). Thus, books used in the program are first viewed as a whole; individual pages are then read; and attention is paid to the smaller parts, i.e., words and letters.

Researchers have long proposed a holistic view of reading. Farnham (1895) developed a sentence method for teaching reading. He theorized that considering the sentence as a whole helped learners to acquire an understanding of the parts. His theory led others to propose a story method in which stories were first viewed as a whole as a way of teaching reading (Smith, 1965). Huey (1908) believed that the reader read in chunks and presented the findings of several studies to support his view. Huey concluded, "Word-pronouncing will therefore always be secondary to getting whole sentence meanings, and this from the very first" (Huey, 1908, p. 380). Gray (1948) and McKee (1966) were other researchers who viewed reading as meaning seeking. Current reading theorists who lend additional support to Clay’s perspective of reading include Smith (1982), Goodman (1986), Durkin (1989), and Weaver (1988).

Hypothesis 2: Reading Recovery is successful because each child’s reading and writing behaviors are thoroughly diagnosed. Clay’s Diagnostic Survey is administered to individual children to determine what each child already knows and what needs to be learned. Clay (1985) provides an explanation of the purpose for each component as well as administration directions.
Figure 1: Essential Elements of the National Diffusion Network Reading Recovery Model

Figure 1 illustrates the components of this survey. It also emphasizes that, regardless of the technique, systematic observation by the teacher/examiner is essential. Although the Diagnostic Survey may appear overwhelming at the onset, Clay believes that each measure is necessary because each provides yet another view of the child's reading and writing behaviors. As much information as possible needs to be used when assessing reading and writing behaviors (Clay, 1985).

The use of several different measures to assess reading has been proposed for at least four decades (Robinson, 1946; Bond and Tinker, 1957; Strang, 1969; Harris and Sipay, 1975; Farr and Carey, 1986; Glazer and Searfoss, 1988). Farr and
Carey (1986) emphasize that a variety of measures, both formal and informal, must be used when assessing reading behaviors because each measure assesses a different set of reading behaviors. Glazer and Searfoss (1988) echo and extend Farr and Carey's view by noting that the effective reading teacher needs to use a variety of measures in several settings.

Hypothesis 3: Reading Recovery is successful because diagnosis is on-going and is part of the instructional process. Each activity completed during a Reading Recovery tutoring session is a "diagnosis" in that the teacher watches how the child responds, taking note of specific strategies the child does and does not use. The results of these observations are systematically recorded and used when planning successive lessons. For example, if the child is relying more on graphophonic cues to the expense of semantic cues, the teacher may plan to ask questions that will help the child to develop a sense for using semantic cues (e.g., "What word makes sense here?")..

The importance of observing children as they perform reading and writing behaviors is advocated by other reading educators. Goodman (1978) states that teachers need to be "kid watchers," constantly watching what children do, and that they need to respond to their actions in a manner that will help children become independent learners. Hammill (1987) notes that continual observation is of value because it can confirm or disconfirm statements or hypotheses made about a given student. McCormick (1987) adds that on-going evaluation is one characteristic of remedial reading programs.

Hypothesis 4: Reading Recovery is successful because it provides children with more time to learn necessary reading strategies. Once the Diagnostic Survey has been administered, a program is designed for each child. The child receives one-to-one instruction with a Reading Recovery teacher for thirty minutes every day. These children receive more instruction in reading than their classmates, giving them the opportunity to accelerate faster so that they can catch up to children making average progress in their classrooms.
The findings of other researchers lend support to this aspect of Reading Recovery. Kiesling (1978) found that the amount of instructional time was positively related to reading gains and that this relationship was strongest for students reading below or at grade level. Berliner’s findings (1981) led him to conclude that student achievement was directly related to the amount of time students were engaged with tasks in which they were successful.

**Hypothesis 5: Reading Recovery is successful because there is an emphasis on having the student read connected or “real” text.** Clay notes that if the child’s reading is to improve, time devoted to reading instruction should be spent on reading related activities using written language rather than on activities such as doing puzzles and writing numbers. Says Clay, “...it is foolish to prepare for reading by painting with large brushes, doing jig-saw puzzles, arranging large building blocks, or writing numbers. Preparation for reading can be done more directly with written language” (Clay, 1985, p. 13). Thus, using text is the emphasis of each tutoring session; the child reads at least two books every session. Many of the books are read more than once.

This use of connected text for teaching reading is empirically supported. Harris and Serwer (1966) found that an important variable positively correlated with reading success was the amount of time spent reading connected text, while Stallings and Kaskowitz (1974) found that higher reading gains were positively related to time spent engaged in reading in first and third grade classrooms.

Findings of studies designed to investigate the importance of using visual and auditory discrimination activities related to written language also support Clay’s view. Barrett’s review of research (1965) led him to conclude that matching pictures and shapes for prereading was virtually useless in predicting reading success in first and second grade. Harris and Sipay’s conclusions supported Barrett’s. As a result of their literature review they concluded “...visual discrimination practice using letters and words is more transferable to reading than discrimination of geometric forms. Auditory discrimination of words and
phonemes is more transferable to reading than discrimination of nonverbal sounds" (Harris and Sipay, 1975, p. 50).

The results of studies designed to investigate the value of using rereading lend support for having the child read a book more than once. Herman (1985) found that rereading significantly increased comprehension as did O'Shea, Sindelar and O'Shea (1985). Dowhower's results (1987) echoed these findings.

**Hypothesis 6: Reading Recovery is successful because all modalities are emphasized.** An examination of the word study teaching techniques reveals Clay's indirect suggestion that a variety of modalities must be used when working with individual children. That is, children's learning styles vary; consequently, their programs must be designed with this in mind. Thus, when teaching sounds or words, teaching suggestions include having the child trace, point, write in the air, and/or use materials such as sandpaper to incorporate use of the tactile sense (Clay, 1985).

The use of several modalities has been advocated at least since 1921 when Fernald and Keller outlined their method for teaching nonreaders. Essentially, they emphasized using a multisensory approach (i.e., visual, auditory, kinesthetic, tactile) with much attention given to tracing and writing words. Fernald (1943) continued to refine and advocate this approach. Harris and Sipay (1975) presented the findings of several studies that supported using this approach. LaShell (1986) designed a study to match instruction with students' learning styles. The majority of the students were identified as having a tactile/kinesthetic/global learning style. Therefore, a multisensory approach was used to teach reading. She reported significant gains within a ten month period.

**Hypothesis 7: Reading Recovery is successful because reading and writing are emphasized.** Clay believes that writing and reading are connected; both processes help the child learn about print. In her words, "...learning to write letters, words, and sentences actually helps the child to make the visual discrimination of detail in print that he will use
in his reading” (Clay, 1985, p. 54). Therefore, the child writes at least one sentence each session and practices writing specific words.

A large body of recent research lends support to this part of Reading Recovery. Blackburn (1984) offers a construct that illustrates possible connections between the two processes as does Durkin (1989). Sternglass (1987) provides an overview of three conceptual models of reading/writing relationships. Stotsky (1983) provides a synthesis of several studies designed to show reading/writing relationships.

Hypothesis 8: Reading Recovery is successful because the child is taught to be aware of the strategies used in reading. The overall goal of Reading Recovery is to have children become dependent on themselves. To accomplish this goal, each child is taught to use specific strategies and the ability to know when to use a given strategy. To learn to rely on themselves, the teacher poses questions to the children such as, “Why did you say ______?” “How do you know?” In other words, the teachers helped the child develop the why and the how of reading.

Findings of studies designed to explore metacognition, knowing about a cognitive process and exercising control over specific cognitive actions, offer support for this component of Reading Recovery. Reciprocal teaching (Palincsar and Brown, 1984) was used successfully to teach students four strategies deemed essential for comprehension. Paris (1983) designed and implemented a curriculum entitled Informed Strategies for Learning (ISL). Findings of his studies indicated that children in the ISL program made significant gains on comprehension tasks and on reading awareness when compared to control groups. After a review of these and other metacognition programs, Opitz (1989) noted that the value of metacognition programs was seen as enabling readers to understand and have control over their own learning.

Hypothesis 9: Reading Recovery is successful because the teacher employs several strategies identified as being characteristic of effective teachers.
Reading Recovery teachers are encouraged to model appropriate behaviors to students and to provide feedback (Clay, 1985). For example, teachers model how they want the children to point under the words as they read. The teachers also provide immediate feedback to the students so they know how well a task has been completed.

Modeling and feedback are but two teaching strategies supported by current research as being effective. Duffy, Roehler and Herrmann (1988) describe a specific modeling process that can be used to help children labeled as “poor readers.” McCormick (1987) notes that feedback to students is positively related to student learning.

**Conclusion**

I have presented nine hypotheses that might be used to explain the apparent success of Reading Recovery. To review, Reading Recovery appears to be successful because: 1) it is based on a theory of reading that emphasizes meaning; 2) reading and writing behaviors are thoroughly diagnosed; 3) diagnosis is on-going and is part of instruction; 4) it provides children with more time to learn necessary reading strategies; 5) there is an emphasis on having the student read connected text; 6) all modalities are emphasized; 7) reading and writing are emphasized; 8) the child is taught to be aware of the strategies used in reading; and 9) the teacher uses strategies identified as being characteristic of effective teachers.

Perhaps these hypotheses are inclusive and provide the explanation for the apparent success of Reading Recovery. Further research would lead us to more than hypothesizing as I have done here. Research designed to discover why this program appears to work is necessary for at least two reasons. First, it would advance our knowledge of Reading Recovery and the children for whom it is designed. That is, it would help us to identify and retain the essential elements. Perhaps each variable is as important as the others and all must exist in concert in order for the program to be a success. On the other hand, it may be that a large percentage of the results stem from activities that consume ten percent of the time. This research might
also reveal missing components that, once added, would help children even more.

A second reason that further research is needed is that awareness of why this program works would empower teachers; it would allow them to control the program rather than being controlled by it. While Reading Recovery teachers are permitted to make decisions about which books to use with individual children and, to some degree, specific teaching techniques, they are controlled by the framework of the program; every lesson includes the five components I listed earlier. Perhaps further research designed to determine the effectiveness of the framework would reveal that the framework could and should be adjusted to individual needs to accelerate reading growth. Regardless of the apparent success of Reading Recovery, much research remains. We appear to know that most children enrolled in Reading Recovery make substantial gains but we do not, I believe, know why. Clearly, our search must continue until we know not only what appears to work, but why.

References


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**READING RECOVERY ANECDOTE**

Adam is a very quiet student. Early in the year he relied on his friends to read while he sat back and listened. In this way he could memorize the text. After about twelve Reading Recovery lessons, his class was taking turns putting on a play from their reading book. Adam came to a word he was having trouble with. A friend who was used to helping him started to tell him the word. Adam looked at his friend and said, "I'm a good reader. I can figure it out myself." He then did figure out the word and went on to do a very good job in reading his part.

David Ross
Helping to Learn: Components and Principles of Reading Recovery Training

Noel K. Jones

Professor Jones, completing his training at The Ohio State University as a Reading Recovery teacher trainer, reflects on the dynamics of Reading Recovery training at the many levels of the program: teacher training, teacher leader training, and the program for university trainers. Jones identifies a set of unifying activities that underlie the training of Reading Recovery personnel at all three training levels. He zeroes in on "the public teaching" behind the glass and characterizes it "as a powerful force toward individual self-improvement." He also explores the tension created because of watching the lesson and attending to the discussion, a sometimes baffling aspect to those who observe their first behind the glass lesson. Jones identifies a set of principles which he believes underlie a teacher's learning in Reading Recovery. His observation that the principles of adult learning are essentially the same as the principles that guide children's learning recognizes a powerful unifying concept in Reading Recovery, and illustrates the theoretical consistency that guided Clay's conception of the program.

Is is possible to prevent reading failure? Is it possible to prevent reading failure consistently — by training teachers and organizing school practices?
Anyone working with reading or early childhood education would be excited to discover a program that represents a significant breakthrough in addressing those questions. Reading Recovery appears to be just such an enterprise. This program — the work of Marie Clay and her colleagues (teachers, teacher trainers, researchers, and theorists) in New Zealand, the United States, Australia, Canada, and Britain — is remarkable in its documented effectiveness in preventing reading failure for the lowest performing first grade children. Reading Recovery is also noteworthy because it has developed systematic ways — including a powerful approach to the development of teachers' skills — to continue effective intervention for at risk children. Finally, Reading Recovery has made significant contributions to our understanding of how young children learn to read.

It is for just such reasons — Reading Recovery's effectiveness with children, with teacher professional development, and with systematic implementation, as well as the depth and richness of its theories and concepts — that I became interested in this program. Having volunteered to help bring Reading Recovery training to the University of North Carolina, Wilmington, I am now in Ohio participating simultaneously in three levels of preparation: training as a teacher, as a teacher leader, and as an instructor (trainer) of teacher leaders (see End Note).

Some of the perceptions and beliefs about Reading Recovery that I held before entering the program have been extended and strengthened — for example, my beliefs about its value. But other preconceptions have changed, especially my understanding of the professional development program for teachers and teacher leaders.

Because increasing numbers of school systems are interested in adopting Reading Recovery, and because Reading Recovery's professional development model holds much promise for teacher education in general, I decided to put into writing my emerging perceptions of the teacher and teacher leader preparation component of Reading Recovery. At the time of this writing, my training is not yet complete, so what I say may not do justice to the curriculum and experiences of the program. On the other hand, there is value in writing about an
experience as it is happening, both for the writer as well as for a general audience.

The strength of the teacher professional development component of Reading Recovery has been well documented (Anderson and Armbruster, 1990; Pinnell, 1987; Pinnell, DeFord and Lyons, 1988); however, this component receives limited explanation in the literature. (An exception is Clay and Watson, 1982.) It is evident that the teacher staff development program is effective because the program has maintained its high rate of success with children in many settings, although more research is needed to demonstrate direct cause and effect relationships (Huck and Pinnell, 1985; Pinnell, Short, Lyons and Young, 1986a and 1986b; Pinnell, DeFord and Lyons, 1988). It seems also that Reading Recovery leaders in New Zealand and at Ohio State University share, at least in broad outlines, an understanding of how to prepare Reading Recovery teachers and teacher leaders; but the beliefs and practices of the professional development program have not been widely disseminated nor extensively analyzed or researched. (Exceptions include Anderson and Armbruster, 1990; Clay and Watson, 1982; Pinnell, 1987; and Pinnell and Woolsey, 1985.)

In this article, the various program components or experiences that support and foster adult learning in the Reading Recovery program are briefly described. Second, the role of behind-the-glass lessons (demonstration lessons which are observed and discussed in progress, see below) in developing teachers' understandings and teaching skills are explored in detail. Included in this discussion is a report of interviews with several of my colleagues in training about how behind-the-glass lessons function in adult learning. Third, several principles are proposed as basic to Reading Recovery's approach to teacher education, and comparisons are made to the maxims for teaching and learning suggested by Anderson and Armbruster (1990). Finally, questions and issues are raised that merit further study, both for the continued evolution of Reading Recovery and in consideration of teacher education in general.
Components of Reading Recovery training

When I arrived in Ohio for Reading Recovery training, I found that information about our training program was specified in terms of times and places of activities, but the understandings to be developed were not mapped out for us in detail. I knew we would learn to teach children, to lead discussions of behind-the-glass lessons, and make visits to teachers in the field, but I did not have a clear sense of the principles and procedures to be learned. Other than *Early Detection of Reading Difficulties* (Clay, 1985), there are no manuals for Reading Recovery implementation. While some of our early experiences were intense and rich in concepts as well as techniques, many of the experiences that were planned for us seemed somewhat open-ended and amorphous. The plan seemed "loose."

Looking back, I see that my expectations were influenced by educational doctrine concerning the prespecification of learnings. After five months in the program, I have decided that the learnings at all levels of Reading Recovery (teachers, teacher leaders, and trainers) are indeed complex, and that the complexity, the depth, and even the effectiveness of the preparation depends largely upon contributions made by the person in training. The professional development process involves continuous practice, reflection, and analysis in the presence of knowledgeable mentors. It is like studying with an accomplished artist who continually presents you with new challenges and engages you in analysis and evaluation of your own ideas and performance as well as the ideas and performance of others. Reading Recovery is not something that someone else does to you or for you, it is something that you are led to do for yourself. The experiences that foster and promote adult learning in the Reading Recovery program are many and varied. Most of these activities continue, sometimes in slightly different form, as long as a person is working with the program in any teaching or training capacity.

**Teaching children.** Until they have worked with four children on a daily basis over a period of one school year and have learned to accelerate children's learning and discontinue them from the program, no one is considered trained in Reading Recovery. (To "discontinue" children means to
develop their ability to learn so that they can independently increase their abilities through reading and writing and can profit from classroom instruction.) Teaching children is also a continuing requirement for everyone working as a teacher, teacher leader, or trainer; it doesn't stop. It seems to take most people more than one year to become skilled in Reading Recovery teaching, and one soon discovers that learning about children and teaching is a never-ending process.

**Attending classes.** Everyone in training enrolls in a year-long course sequence focused on Reading Recovery teaching. This course is simultaneous with the first year of teaching children. Much class time is given to demonstration lessons behind the glass (see below), but large segments of time are also devoted to other activities focused on teaching procedures and the theories on which Reading Recovery teaching is based. After the training year, experienced teachers attend staff development sessions about six times per year. The sessions usually include demonstration lessons behind the glass and other activities. For those in training for the teacher leader and university trainer roles, a theory class and a class that focuses on the role of the teacher leader are additional requirements. Relevant readings, written assignments and extensive field experience projects are a part of these classes.

**Demonstration lessons behind the glass.** Everyone working in Reading Recovery must teach lessons behind the glass at least three times during the training year, and at various intervals thereafter. This means conducting a lesson with a student in a small room separated from a larger room by a one-way mirror. While one person is teaching behind the one-way glass, the teacher leader, or trainer, engages the rest of the class in intense discussion to extend their understandings about teaching in relation to issues raised by the demonstration lesson.

**Visits.** Each teacher in training is observed in the field at least four times per year by the teacher leader who usually observes lessons with two different children and then discusses the lessons with the teacher afterwards. The observations may include a demonstration of techniques by the teacher leader
working with the child at some point during a lesson. These visits are consultative, and teachers are expected to be responsible for learning from them. Visits from teacher leaders begin during the training year and continue as long as a person teaches in Reading Recovery, though they become less frequent.

Reading Recovery personnel are also expected to make colleague visits to observe peers working with students. The purpose of these is collaborative problem-solving to help each other become more effective in teaching children. Teacher leaders and university trainers begin colleague visits during the training year, but teachers usually begin these visits the year following their training. It is important that local conditions support this type of networking on a continuing basis beyond the training year.

Another type of visit is the site visit – an evaluative visit to teacher leaders and university trainers working in the field. Ohio State personnel or their designees observe the teacher leader or trainer in all the functions of their position, gather other relevant data, and make recommendations. Those training for the role of university trainer of teacher leaders observe some of these visits during their preparation year.

Reading Recovery networking. An annual Reading Recovery Conference in Ohio is available to all Reading Recovery personnel, with many sessions also for administrators and others interested in learning more about the program. Since Reading Recovery is spreading to more states and provinces, regional conferences are now springing up as well. Attendance at some conference site on an annual basis is encouraged for all trainees and experienced teachers.

Another important convocation is the teacher leader institute held in Ohio in June. All teacher leaders are expected to attend this institute during at least their first three years. In addition to some general sessions, special project groups and study groups meet to investigate issues common to Reading Recovery sites and operations. University trainers of teacher leaders meet for an additional period of time to deal with issues
related to their roles. In addition to all of the formal networking relationships, a great deal of informal contact occurs between and across levels. Many of these informal professional contacts occur during conferences, but teacher leaders and university personnel usually have fairly substantial phone bills throughout the year.

**Self-study and group study.** During Reading Recovery training a number of techniques for analyzing one's own performance are explored, including analyzing video and/or audio recordings of lessons and studying lesson plans, records, and children's writing samples at regular intervals. Self-analysis is a continuing expectation in Reading Recovery; in fact the "lesson plan" used on a daily basis is really a lesson record designed largely for the purpose of self-analysis.

Several conditions of Reading Recovery professional development promote and foster group study, including group problem-solving tasks, colleague visits, and behind-the-glass lessons and discussions. Those being trained as teacher leaders or university trainers at Ohio State receive in September a set of examination questions that they will be expected to answer orally at the end of the fall and winter quarters. Exam performance includes extemporaneous, ten-minute response to one question drawn at random from a set of twelve questions. No notes are allowed, and each person has only thirty seconds to collect thoughts before beginning to respond. Advised that group collaboration is effective and economical, this year's cohort at Ohio State engaged in productive, bi-weekly study sessions to increase our shared understanding of the theoretical and procedural foundations of the program. It is intended that during the training year, Reading Recovery people learn that they can count on the support of others in making teaching decisions and in understanding theory.

**The role of "behind the glass" lessons.** Teaching behind the glass has become perhaps the characteristic signature of Reading Recovery teacher training; yet the purposes and expectations of behind-the-glass lessons may be misunderstood by newcomers to the program as improvement of teacher performance through evaluation. According to Ohio State
Reading Recovery personnel, the primary purpose of behind the glass lessons is not to provide evaluation or feedback to the teacher but to provide demonstration and focus for the observers, who are colleagues and peers (Pinnell, 1987). The lessons provide vivid examples of children using strategies, of teaching decisions, and of patterns of interaction, thus providing topics for discussion highly relevant to the learner group.

In order to understand better the role of behind-the-glass lessons in Reading Recovery professional development, I interviewed several of my colleagues in the training class about the contributions of these demonstration lessons to their own learning. Eight persons were interviewed individually in sessions ranging from 25 to 35 minutes in length. Each person responded to questions about the relative learning value of teaching behind-the-glass demonstration lessons versus observing and discussing such lessons, and about their thinking processes and their feelings attendant upon each type of activity.

According to the group interviewed, there are clear differences between teaching behind the glass versus the role of observer/discussant of someone else’s teaching. Seven out of eight agreed that one learns more from being in the observer/discussant role than in the teaching role, while one person stated that the learnings were different, but of equal value. All agreed that teaching a lesson behind the glass can produce considerable anxiety. The amount and the effects of anxiety vary by individual: some people use that anxiety to sharpen their preparation for the experience, but for others anxiety may inhibit or restrict performance. Most of my colleagues agreed, however, that the requirement of teaching behind the glass acts as an impetus toward teaching improvement. Most people will take their teaching seriously when they know that they must perform before their peers and that their students’ learning progress will also be on display.

An interesting question is how teaching behind the glass affects teachers’ awareness of their decisions. Seven of eight respondents mentioned an effect on awareness. Some people were less aware of their decisions than in an ordinary lesson; but for others consciousness of options and choices was
heightened. My own early experience was that I couldn’t re-
member or wasn’t aware of many of the things that I or the child
had done, and five of my colleagues reported a similar effect.
Most respondents also experienced an erosion of confidence;
as one respondent noted, “You feel the uncertainty of your de-
cisions much more when you are teaching behind the glass.”
Knowing that others are judging and discussing the basis of
one’s decisions, then, seems to heighten their importance, and
the emotional effect on memory and self-judgment varies per-
haps with individual characteristics and personality.

When asked whether teaching a demonstration lesson
behind the glass produces changes in thinking and new learn-
ing, the answers were varied. Half said no. Some said that
being the teacher for these lessons didn’t produce a shift, but
that the debriefing discussion after the lesson did. Others felt
they did learn something of importance through both the
teaching and the discussion. In contrast, all those interviewed
agreed that new learning and shifts in thinking occur as a result
of observing and discussing someone else’s teaching behind
the glass. One respondent remarked that these sessions
“opened my eyes to different interpretations of what I have
read.” Other comments included:

It changed my beliefs about what children can actually do.
It improved my ability to reflect.
It caused me to reflect on my own teaching.
It has clarified my understanding of things like strategies.
I really became aware of what acceleration means.
I realized things about my own teaching that I don’t think I
would have learned from a colleague visit.

When asked about their thinking processes while observ-
ing and discussing behind-the-glass sessions, responses fo-
cused on two areas: comparisons with one’s own teaching,
and the focus established by the teacher leader’s questions.
Most of those interviewed agreed that, “You relate what you see
to your own children and your own teaching.” In fact our group
was explicitly told to make such comparisons. However, others
commented that they think about how they would respond to the
child they are seeing behind the glass, and that they make
comparisons to their own students only if the children are similar.

The teacher leader's questions also play an important role in the mental processing of those observing and discussing behind-the-glass lessons.

At first, I was concerned with what the teacher leader was going to ask next, and whether she would call on me. I give attention to the teacher leader's questions, and I tend to concentrate more on these as the semester goes along. I try to anticipate what the teacher leader will ask. Toward the end of the semester, I could tell what the teacher leader's focus was and I really looked for evidence consistent with that focus. After about three months, teacher leader questions caused me to project my thinking forward, to examine what I must do to discontinue (graduate) a child from the program.

Being an observer/discussant of behind-the-glass lessons is not without anxiety, primarily because of the dual requirements of watching the lesson and attending to the discussion. Several of those interviewed commented on the tension between these two demands.

I wanted her to be quiet; I wanted to watch the lesson. It made me more than uneasy, it made me feel frustrated. I was afraid I wouldn't know the answer to the questions. I felt like a one-eyed man at a three ring circus.

They went on to tell the various strategies they used to do both things at once.

I jump in when I do know the answer. I learned to shift attention back and forth. I watch the teacher leader, and when she stops talking and watches the lesson, I watch the lesson. I learned to anticipate and predict what was going to be asked.
In summary, although it has taken a period of readjustment and learning, our group seems to have accepted the stated purposes of behind-the-glass lessons as demonstrations of teaching that are an important shared experience for a group working and learning together towards a valued goal. Anxieties still attend preparations for teaching behind the glass, but the experience both of teaching and of observing and discussing lessons is generally understood in relation to the totality of teaching and learning as conceived by Marie Clay and her colleagues, both for children and for adults.

**Principles underlying Reading Recovery**

With the probable exception of behind-the-glass lessons, most of the activities used in Reading Recovery teacher education are in common use not only in the field of education but in many other professions as well. Extensive theoretical and research literature on such topics as clinical supervision, case studies, and peer evaluation, for example, is pertinent to Reading Recovery professional development. What matters in Reading Recovery, however, is the combination of activities. This set of experiences — some traditional activities plus one or two unique to the program — was designed or has evolved on the basis of assumptions and principles which are shared by Reading Recovery leaders, but which have not been well publicized beyond the circle of people involved in that program. An exception is the article by Anderson and Armbruster (1990) who derived a set of maxims for learning and instruction from their observations of Reading Recovery teaching and learning “at the level of educating children and at the level of teacher training” (Anderson and Armbruster, 1990, p. 3). In the following section of this article an attempt is made to articulate some of the principles underlying adult professional development at all levels of Reading Recovery. In this process, comparisons will be made to the maxims suggested by Anderson and Armbruster.

The first principle proposed is that *practice is the basis of concept and theory formation*. This assumption pervades Reading Recovery work for children, teachers, teacher-leaders, and trainers of teacher leaders. Accordingly, children engage in reading and writing activities during every Reading Recovery lesson. Thus, every adult working with the instructional aspects
of Reading Recovery must continue to teach children. Thus, behind-the-glass lessons are the cornerstone of training class sessions. Thus also, those who will guide adults in learning about Reading Recovery must engage during their training year (under guidance) in leading discussions during behind-the-glass lessons and in visiting teachers in the field.

Practice is essential, not because one learns to teach children or adults in the same way that other people do, as in an apprenticeship model. What counts in adult learning (as well as in children's learning) are not items of knowledge or specific techniques and procedures, but strategies, concepts and theories. These can be learned to the point of changes in performance only by engaging in practice so that existing theories and concepts may be tested, challenged, and revised.

Anderson and Armbruster identify another important contribution of practicum requirements. According to these authors, "Learners must be active participants in their own learning, not passive recipients of information." They point out that even when teachers are learning about Reading Recovery in their training class they become active learners through the demands of discussion and questioning as they view behind-the-glass lessons.

It should be apparent from the description of activities given that Reading Recovery training has a strong social and collegial component. A second important principle of learning in Reading Recovery is that interaction with peers (others engaged in the same learning enterprise) is an important support for and source of learning. Interaction with colleagues serves many functions. For me it has served to confirm what I know, to help me articulate ideas, to support my feelings after both exhilarating and frustrating experiences, to assist in problem-solving, to provide alternative perspectives on issues and problems, and to focus and direct my learning. Anderson and Armbruster's maxim of "multiple perspectives" captures an important part of the power of collegial interactions in Reading Recovery.

Because Reading Recovery children do not work with peers during their lessons (teachers work with one child at a
time), Reading Recovery has been criticized for violating this principle of peer interaction as a support for children's learning. Clay, I believe, would defend this tactic as a necessary but temporary measure. Only by having a trained teacher interact directly with an individual child can the learning tangles of high-risk children be unsnarled. Classroom literacy experiences continue for the child (the individual tutoring is additional); however, most at-risk first graders have developed coping strategies to hide the fact that they are unable to participate in literacy tasks and lessons in the classroom. Only when they have established effective learning strategies can they profit from peer interactions within a literate school environment. The goal for all Reading Recovery children is ability to learn in group situations.

A third principle is that teaching and learning are strategic enterprises, and it follows that learning to teach is a strategic enterprise as well. By "strategic" I mean that these enterprises are purposeful and that both the learner and teacher devise or adopt some sort of plan or set of operating rules to guide their activity. Neither the purpose nor the operating rules may be available to conscious reflection by a learner, or sometimes even by a teacher, but their presence can be inferred from consistent patterns of action. A corollary to this principle would be that good teachers tailor their purposes and plans to augment or revise the operating strategies of learners. (For example, a lesson for a word-by-word reader is quite different from a lesson for a child who lapses into flights of invention.) This corollary is central to Reading Recovery; the procedures have been designed to change the ways that a child deals with print. Changing strategies is difficult because habitual ways of operating are strongly resistant to change, but the pay-off is effective independent learning and accelerated progress. This principle applies equally well to adult learning: teaching strategies are a focus of clinic (training) class sessions, and the component activities of the training program require teachers continually to reassess their strategies and their effectiveness in accelerating children's learning.

A fourth principle of the program is that adults learn through close observation of teaching and learning. There are
several levels of observation: teachers observing children reading and writing in everyday lessons; teachers observing each other working with children (during behind the glass lessons and during colleague visits); and teacher leaders observing teachers and observing each other training teachers (on visits and other experiences). Close, objective observation is a difficult skill to learn; however, observation is not an end in itself. Sensitive, skillful observation is the foundation both for concept and theory formation and for learning to make effective teaching decisions. According to Pinnell (1987), “The primary processes of the staff development component are observation, practice, and feedback, with observation furnishing the powerful basis for the other two ...it is explicitly linked to the decision-making, theory-building process” (p. 52).

A fifth principle that underlies Reading Recovery training for adults is that effective learners are independent learners. Clay refers to a self-initiating or self-extending learning system in young children — something that high progress readers develop, but which low progress readers lack. The development of such a system is the goal for those low progress children. But it is also clear that the same goal is intended for adults. For example, the Ohio State trainers have suggested that it is unwise to visit teachers too often in the field because they tend to develop a dependence on their leaders, and teacher leaders are sometimes advised not to give teachers copies of their visitation notes because teachers should be responsible for making and reviewing notes of these visits. Taken together, the expectation that a teacher will accelerate children's learning and discontinue (graduate) students from the program, the variety of group and individual learning activities, and the necessity for independent operation in the field are powerful forces toward the development of independence in learning for adults in the program.

A sixth principle is that learners should be continually stretched by challenge, but not so much so that frustration and anxiety become counterproductive. There are certainly moments of anxiety and self-searching for adults learning to work in Reading Recovery, but when the light finally dawns that you have to dig in and do it yourself, a kind of inner peace reigns,
especially when you finally experience a good lesson or a shift in learning by your students. Learning goes on throughout our working lives and teachers should not become too complacent. Continuing contact (staff development) sessions pose learning challenges for teachers as long as they work in the Reading Recovery program.

A seventh principle that underlies learning in the Reading Recovery program is that learners should frequently reflect upon and express in words where they have been and where they are going. Anderson and Armbruster (1990) suggest the maxim of "reflection and articulation":

> In moving from other-regulation to self-regulation, reflection and articulation are important processes. Both processes help students gain consciousness and control over basic conceptual and procedural knowledge. Reflection involves thinking about one's own conceptual and procedural understandings and comparing them with those of an expert or another student ... Articulation refers to the verbalization of reflective thinking. It is reciprocal reflection, the sharing of knowledge and cognition with others (p. 404).

Discussion both during and after behind-the-glass lessons is one of the primary means through which reflection and articulation are encouraged, but there are other means as well. Writing a summary of the information gleaned from the diagnostic survey, writing predictions of student progress to identify priorities for teaching and learning, writing lesson plans (which are really anecdotal notes recorded during the lesson), reviewing one's lesson plans and running records to reconsider a child's progress, writing case studies, and responding to exam questions — all involve the mental operations of reflection and articulation. This same principle continues to guide teaching practice and staff development activities beyond the training year. For example, teachers continue to be involved in many of the activities discussed above; and teacher leaders are encouraged to write down reflective comments after a teacher-training class and to use those reflections to establish priorities for their field work and their next class. The same principle also
extends to children: during lessons they are asked to express judgments of their own reading and writing performance.

In summary, the principles underlying adult learning in the Reading Recovery program are basically the same as the principles that guide children's learning: learning and teaching are strategic; one learns to do something by doing it, accompanied by skilled coaching that is careful to build, not deprive the learner of independence; close observation informs both practice and concept development; learners should be continually challenged; and reflection and articulation play an important role in learning. One principle that is not directly reflected in the program for children is that peer interaction makes important contributions to learning; however, the argument has been made above that Reading Recovery practice is not inconsistent with this principle. The child remains in the classroom program but has in addition 30 minutes a day of individually tailored lessons until those are no longer needed.

There may be different or additional principles that are equally important, but those themes suggested here are salient in the professional development programs. The training year for Reading Recovery establishes a rich environment that provides opportunities and invitations for learning. But more than that, it establishes a network of interactions and relationships that helps teachers and teacher leaders to become effective and maintain their effectiveness. Some have characterized Reading Recovery as a competency-based program. In a sense it is. But this program is built on a foundation of respect for learners' (and teachers') understandings and strategies and independence in working towards valued goals. Error in performance is tolerated and understood as a result of inappropriate strategies that are subject to change. Not all children and not all teachers grow to become effective in achieving their goals, but the number who do not is greatly reduced by the richness of Reading Recovery's learning environments. The presence of error and ineffectiveness in our schools is never used as an excuse to sacrifice the attitude of respect for children as independent, developing readers and writers, and respect for teachers as professional decision-makers and life-long learners.
Questions for further study

Although Reading Recovery training is recognized as effective and is considered a potential model for teacher education, a number of questions about the training deserve further study. It is not clear, for example, what the effects of individual training components are if they are not supported by the network of activities comprising the total program. This issue is particularly important because many people focus on behind-the-glass lessons as the key element of the training program. Implementers may attempt to use this component in isolation; but if the success of behind-the-glass lessons is dependent upon other supportive activities, those attempts may fail. Other questions meriting further investigation include: What aspects of behind-the-glass lessons make them more or less effective? In what way and to what extent do collegial and group activities produce attitudinal and conceptual shifts? What factors are effective in making teachers sensitive observers of learning and in making them reflective learners? Is teacher selection a key factor in the program’s success, and if so, what selection criteria are most important? Marie Clay and her colleagues have created something excellent, but we must understand it thoroughly so that its quality is not lost and that its contributions are far-reaching.

End Note: The terms professional development, preparation, and training are used synonymously. The term professional development is probably the best fit for Reading Recovery; the term “training” will be used occasionally, however, for ease of expression, but a training model — with emphasis on replication and application of procedures — is not implied.

References

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**READING RECOVERY ANECDOTE**

One of our first grade teachers stopped me in the hall and said, "I have to tell you this — it's really neat. This is the first year the Chapter I kids have wanted to read books to the class. Before they've always felt inadequate, but this year they want to read all of the time. They love to share their Reading Recovery books with the other children and they see themselves as good readers. Reading Recovery has put them on an equal footing with the rest of the class. You should have seen Melissa yesterday. She read *Green Eggs and Ham* to the class and when she was done someone said, 'Wow, that's a big book — 41 pages!' Melissa casually licked her finger, turned the page and proudly said, '42!' It was a great moment for all."

MaryAnn Howe
As We See It; Classroom Teachers View Reading Recovery

Jennifer Hamill
Cynthia Kelly
Jeanne M. Jacobson

This is the second article in this special issue not written by Reading Recovery trained teachers. Hamill and Kelly are first grade teachers in one of the 26 participating schools in the first year of Reading Recovery implementation in Michigan. In response to questions by the editor of Reading Horizons, they explain the program — its impact on the Reading Recovery children and on their classroom teaching.

Clearly the concerted work of the Reading Recovery teacher-in-training and these teachers demonstrates that the Reading Recovery program is an intervention in the education system, as well as a program for children.

It's an early spring morning and three teachers who've known one another for several years are sitting at a low table in Jennifer Hamill's sunny first grade classroom, putting the final touches on an article about how Reading Recovery has touched children, teachers, and first grade classes. We've written, and talked, and written, and this is the time to polish our ideas in the question-answer format we've decided on.
Questions come from Jeanne Jacobson, editor of *Reading Horizons*, and answers come from Jennifer, and her colleague Cynthia Kelly.

Jeanne: Let's talk about history — recent history, since the Reading Recovery program was established at Western Michigan University in 1990, and came to your school last fall. Tell me about your school's involvement, and your own, in the program. Are you the only two classroom teachers in your school who have children in the program?

Cynthia: Yes. The Reading Recovery program began in Plainwell Community Schools in September of 1990. The program has only one Reading Recovery teacher, Mrs. Laura Boyd. It's located only at our school, Starr Elementary, and in this first year, there are two first grade classrooms involved.

Jeanne: Tell me about the students in Reading Recovery. Can you give me a sketch of how you saw the effects of the program reflected in their classroom progress? Is the story the same for each of these students, or did you see different responses, different rates of progress — even differing feelings about the program?

Jennifer: Rick began the program with very limited concepts about print, but a great ability to tell a story according to the pictures. He was easily frustrated in his reading and writing efforts. Several weeks into the Reading Recovery program he understood the one-to-one correspondence between a spoken word and a word in print, and was gaining knowledge of letter names and letter sounds. Now he is excited when he knows he has read something accurately and is proud and eager to share his accomplishments.

Although his reading progress is not as rapid as Ann's, he is really dedicated to learning. It's thrilling to watch his self-confidence become stronger every day, especially since he is a child who faces many difficulties. He spent one year in developmental kindergarten and one year in regular kindergarten, and still came into first grade with one of the
lowest predictions for reading success. He has speech problems, and I think these have interfered with his understanding symbol-sound correspondence. His writing has improved dramatically over the year, but you can see here, for example, that he's used an L to represent TH — that's a sound he can't yet articulate. (Writing and drawing by Rick are shown in Figures 1 and 2, and by Ann, in Figures 3 and 4.)

Figure 1: Rick's writing and drawing in September
In September, Rick pictured himself arms outstretched — the fish was this big! His writing mixes letters and letter-like forms; only by chance do the letter combinations occasionally form words or pronounceable units.
One unexpected aspect of the program is that the children in Reading Recovery tend to become more forceful. One day when the Reading Recovery teacher was working with Rick he was misbehaving and Laura told him he would have to leave if he didn't settle down. He shouted, "But I want to LEARN!" That was a surprise — but it was a pleasure to hear!

**Figure 2: Rick's writing and drawing in April**

In an April story, Rick's pictured self is no longer the most exciting part of his picture — words are the primary focus:

I Wat lis Kat — (I want this kite).

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I Wat lis Kat — (I want this kite).
Ann's academic growth is very evident. When she began the program she had some beginning concepts about print, and about symbol-sound correspondence, but these were quite limited. Now she understands so much more about language, and Laura and I build on these strengths. She knows when she makes an error in reading, and I'm beginning to see in Ann the same self-correcting behavior I see in my skilled readers. Her invented spelling in her classroom journal is becoming closer to transitional and standard spelling.

Figure 3: Ann's writing and drawing in September
In September, Ann's vigorous little self drawing is typical of the products of chronologically younger children. Her writing is composed of capital letters, and she's written some family names: KIM DAD.

Cynthia: In my class, one of the children who began in Reading Recovery was eventually enrolled in an alternative program, and another was accepted rather late in the year. I've seen a positive change in all the children socially, as well as academically, that I don't think would have occurred without Reading Recovery. They've reached personal goals on a weekly basis, and this gives them a new level of confidence. Mary has become confident about her reading. She wants to read to her classmates, and likes to read with them.
During the time he was in Reading Recovery, Tom became more confident in his reading, especially at home. He is still struggling when he reads in the classroom, but his parents have been delighted with his eagerness to read his Reading Recovery books to them. Being able to read entire books is exciting for him. Tom has progressed by making small steps and is beginning to use some reading strategies. I've been particularly impressed with Mary's progress in writing, which was very primitive at the beginning of the year. Now that she's showing understanding of sentence structure and mechanics, her creativity has blossomed and her writing is no longer as constricted. She's using writing to communicate her ideas.

Reading Recovery instills confidence and self-motivation in children. They're no longer afraid to take risks, and this motivates them to think, question and learn.

Figure 4: Ann's writing and drawing in April
In an April piece of writing, her story lets us understand her illustration. She uses capitals and lower case letters; she punctuates correctly—apostrophe, periods. She knows what she doesn't know, for she's left out the word or words to describe what Kelly is, and left a space to fill in later.

I'm the gingerbread man. Kelly is the...
I ran away frm a dar.
(I'm the gingerbread man. Kelly is the...
I ran away from a bear.)

And there's the frightening bear!
Jeanne: Classroom teachers are, rightly, concerned about the integrity of their own programs. What adjustments have you needed to make, now that Reading Recovery is a part of your school? Are there negative as well as positive aspects about having Reading Recovery here?

Jennifer: We recognize that teachers need to adapt classroom procedures to meet the individual needs of their students, and fitting our programs in with the Reading Recovery program is one such adjustment. Before the program began in our school we were aware of the success rate of the program. Now that I've witnessed firsthand the achievements of my two students, having them leave for thirty minutes each day is not a problem. I wish all of my struggling readers could receive this same percentage of individual instruction.

Cynthia: We've adjusted, but so has the Reading Recovery teacher. Laura's efforts to accommodate our schedules have been outstanding. When the program began I had concerns about my students missing the special events that happen during a school day — assemblies, extracurricular activities, special classroom projects. I didn't want participation in Reading Recovery to be a disappointment for my students. Now I've seen that this rarely happens. If efforts are made by all the teachers involved, participation in Reading Recovery can be seen by the children who participate as a gain and not a loss.

An advantage of the program is that we've had a chance to work directly with the Reading Recovery teacher, and I believe this has been a key to the students' success. Together we've defined students' strengths and needs in reading and writing. We've been consistent in encouraging each student to build strategies to apply both in and out of the classroom, and the students know that the skills they're learning are not for use only in the Reading Recovery teaching sessions.

Jennifer: One regret I do have is that it's been difficult to find a good place in our building to house the program, though both the Reading Recovery teacher and the principal have worked to produce a quiet, cheerful and inviting area. Reading
Recovery is such an important service that locating it properly needs to receive high priority before the program even begins.

Jeanne: Are there "spin-offs" from the program that have an effect on other students, and on your teaching?

Jennifer: The information I continue to learn through the Reading Recovery program is very exciting. I'm using that information to improve my own teaching and my ability to judge the reading progress of all my students. I find that I evaluate students now on their individual efforts and base my teaching more directly on their personal reading strengths.

Cynthia: I use my own experience with Reading Recovery on a daily basis in my classroom. I respect the program for being child-based, building on the success and knowledge of each individual — and not based on inappropriate comparisons among children. The philosophy and the diagnostic tools used in Reading Recovery are helping me establish an individualized reading program in my classroom. The short patterned tradebooks used in Reading Recovery are a very effective tool for all young readers. They teach important sight words and their patterned nature and picture clues help insure success for the reader.

Jennifer: I'm glad that Laura showed us how to take and interpret a running record. This has become a valuable tool in my own classroom reading instruction. I find that I can more easily pinpoint what kinds of instruction each of my students needs and teach them that, instead of wasting precious time with instruction they don't need. For example, the first time I took running records, I found three students who were experiencing the same difficulty with the -ed ending. I grouped them together temporarily to teach a skill they needed immediately. The running record is also useful when we discuss with parents a child's strengths and areas of difficulty.

The Reading Recovery program has further strengthened my belief that early readers should be instructed according to their individual needs. We should challenge children to excel,
as well as to celebrate what they know now, and find excitement in their personal accomplishments.

*Cynthia:* Both of us find that we used to talk primarily about teaching stories, and now we think and talk about teaching strategies, which is where we know our attention should be. Reading Recovery supports this focus.

*Jeanne:* We're talking about Reading Recovery in its first year here. What changes do you see already, and what do you see in the future?

*Jennifer and Cynthia:* The focus of the reading teacher is changing. There's more prevention rather than remediation. There's going to be better, faster help for the struggling reader. The program is already having an influence in the classroom both on testing practices and instructional efforts. We're using running records; we use cut up sentences; the little books are wonderful. There's more opportunity for practice with material children can work with and find success with right away.

*Jeanne:* Your audience is a wide one — all of the readers of Reading Horizons. What's your final word to them?

*Jennifer:* I believe that half the battle in becoming a good reader is seeing yourself as a reader, and Reading Recovery has helped my students to view themselves as readers. It's a program that works, by preventing a problem from growing. It won't cure every academic or social struggle but each positive development will help the student.

*Cynthia:* I've studied the research and seen the effects of Reading Recovery. I am excited to see the program here in Michigan, and am eager for its nationwide growth.

*The children are coming! Mrs. Kelly is off to her classroom, a bright setting alive with books — Big Books, little books, books the children have written, drafts of stories in the process of being written and revised. The Reading Recovery teacher will be picking up Mary for her Reading Recovery session.*
In Ms. Hamill's class, children enter talking, and head for the books. Two children select *Frederick* from among the books displayed under the sign, *Our New Author is Leo Lionni*, and settle down to read together. Others head for the bookracks where their own books are stacked and shelved with a wealth of much-thumbed tradebooks. One child picks out Chris Van Allsburg's *The Z was Zapped*, and sits, back to the bookshelf, turning the pages and murmuring. Children's posters are everywhere: *Ways to Help A Environment*. *Plant a new tree every year*. *Do not cut down trees. They give us oxygen*. The bulletin board by Ms. Hamill's desk is a collage of pictures and letters from the children, with pride of place given to a cheery crayoned bookmark: *Read a book. I think you will like it!*

She flicks on a record and children begin to sing. One of them grabs a pointer, and leads the song as they cluster round a poster with stanzas written alternately in blue and green: *Oh, the rain comes down, and it falls to the ground, and it flows down the river to the sea. The great and mighty ocean waves to the sky, as the clouds pass filled with oceans and oceans, oceans of rain. Drip drop drip drop. Drip-a drop-a drip-a drop-a, Drip Drop*. Somewhere in this active group of readers are Ann and Rick, indistinguishable, to a visitor, from their classmates. Reading Recovery has helped to answer Rick's shout: "I want to learn!"

**End Note:** By the time this article went to press, the children described had been discontinued from the program.

Jennifer Hamill and Cynthia Kelly are first grade teachers at Starr Elementary School in Plainwell, Michigan. Jeanne M. Jacobson is a faculty member in the Department of Education and Professional Development at Western Michigan University.
Asmussen and Gaffney have uncovered one of the many rich sources of research data inherent in the Reading Recovery program. The Ohio research studies (already some 13 volumes) have documented the success of Reading Recovery in the United States. Success like this produces a need to unravel the warp and woof to examine the nature of that success. Certainly there are many threads to examine. In this brief research update, they describe a current study to explore reading in the families of a sample of Reading Recovery children in Illinois. It will be interesting to compare their findings with Kathleen Holland's stimulating research exploring the parent and home literacy context of 13 Ohio Reading Recovery children in 1986-87, case studies conducted when Reading Recovery was in its infancy in the US. The Asmussen and Gaffney study explores the important dynamics of becoming literate at a time when Americans have more knowledge of Reading Recovery and a need to understand its impact on family literacy.

The Reading in Families Project is a new study examining the interconnections between school and home in families with a child at risk for reading difficulty. We have been collecting data throughout the 1990-91 school year in order to understand relationships within families and between families and schools as children are involved in Reading Recovery. The rationale for
this project developed out of prior research in the fields of education and family studies. First, previous school-home literacy research was unidirectional. Earlier studies focused largely on the influence that parents, primarily mothers, have on their children's academic performance and attitudes towards school. Missing from this literature was how the child's actions and attitudes might affect other family members or how what happens in the school affects the family. Second, family studies literature based on family systems theory argues that the unit of analysis when studying families must be the entire family system; i.e., all members of the household. In addition, analysis of relationships must be multidirectional. This approach, consistent with general systems theory, is based on the concept that change in one subsystem, for example a child, creates change in other systems (i.e., parents, siblings, the family as a whole). This theory, when applied to family systems, has as a basic premise that family members are interrelated, and an experience affecting one individual will affect all (Carter and McGoldrick, 1982; Goldenberg and Goldenberg, 1980; Minuchin, 1974). Thus, the system is dynamic, in constant flux, and change within the family and between the family and other systems is multidimensional and multidirectional.

In addition, although numerous studies have been conducted to document children's progress as a result of Reading Recovery (Clay, 1985; Clay, 1982; Pinnell, DeFord and Lyons, 1988), and Gaffney and her colleagues at the Center for the Study of Reading are in the process of studying teacher training, there are no studies which use the family as the unit of analysis. Based on the literature cited above, the Reading in Families Project was designed to address these questions:

1. **What is the relationship between a child's participation in Reading Recovery and the literacy environment in the home?** How does involvement in this project influence attitudes towards literacy and reading activities of family members?

2. **What is the relationship between home factors (such as availability of reading materials, attitudes of parents or guardians, and reading activities of family**
members) and a child's level of progress in Reading Recovery?

3. What is the nature of the relationships among family members, relevant to literacy, when a child is having reading difficulty, when a child is being taught in Reading Recovery, and when a child with previous difficulty is able to read at average levels?

To answer these questions requires a collaborative effort from children, parents, and Reading Recovery teachers. The data collection phase of this project began in October 1990 and has continued through April 1991. In October, families were recruited from a local school district implementing Reading Recovery, contacted by phone and invited to participate in the study. All families had a first-grade child identified by the teacher as having reading difficulties early in the year. An initial in-home interview was conducted by graduate and undergraduate research assistants to obtain information about family background, home literacy environment, and child and parent attitudes towards reading, and observe the Reading Recovery child read with parent(s) and sibling(s). Approximately every six weeks throughout the school year, research assistants have returned to the home to observe informal reading sessions with the Reading Recovery child and family members. Reading Recovery teachers also provide information from Reading Recovery lessons — child records of progress, and daily logs for each child on the number of books taken home the previous night and with whom the books were read.

Eighteen families participated in the Reading in Families study. Two-thirds of the first graders in the sample were boys, one-third were girls. Almost half the students in the project were receiving Reading Recovery services in school; the other half might receive Reading Recovery services later in the year. The majority of participants reside in married-parent families (50%), 28% in never-married families, 11% in remarried families, 6% in separated families and 6% in divorced families. The sample is 55% white and 44% African American. The diversity of this preliminary background information illustrates that children at risk for reading failure cross the lines of family structure and race/ethnicity.
This study can contribute to the development of family-systems theory in education and to the methodology used in home-school studies, but more importantly, the findings may help to uncover significant shifts in actions and attitudes among family members that support or hinder a child with reading difficulties. The study may enable us to learn how changes in a child's reading performance and attitudes toward reading affect other members of the family. For example, we will be able to compare the kinds of interactions that may occur when the target child reads with a parent and to a younger or older sibling, and note changes in the reading patterns of family members. Will younger siblings demonstrate increased interest in books? Will there be shifts in the communication system between the home and school? Will more books be purchased or borrowed from the library when the first grader emerges as a competent reader? Since children's progress in Reading Recovery is so accelerated in comparison to remedial programs, we are able to examine changes in a family unit within a concentrated period of time. We look forward to sharing the results of this study with parents, educators, and researchers.

References

Linda Asmussen is a visiting Research Associate at the Center for the Study of Reading, University of Illinois Urbana-Champaign. Janet S. Gaffney is a faculty member and Director of the Illinois Reading Recovery Program at the University of Illinois, Urbana-Champaign.
Reviews

The reviews section for this themed issue on Reading Recovery is combining the Professional Materials and the Books for Children sections into one. Since frequent reading of “little books” is a key element of a Reading Recovery lesson, the editor has asked those most involved with the materials to review them – teachers and children. The reviews by the children are included as they were submitted, with standard spelling following each review.

*The Story Box.* (1990). The Wright Group, 10949 Technology Place, San Diego CA 92127. The Complete Story Box, DSB118, 120 titles. US$399.00.

Reviewed by Stephanie Brinkerhoff
and by first graders from
Green Meadow Elementary, Comstock Public Schools

In addition to implementing Reading Recovery, Comstock Public Schools recognized the concurrent need to build Reading Recovery supportive first grade classrooms. These beginning readers were to be involved in daily writing and immersed in reading books.

The *Story Box* was purchased for each first grade class and the impact of having a *Story Box* in each classroom has been felt by students, teachers and parents. The first graders are enthusiastic about reading a “whole book.” Parents enjoy listening to their child read when a little book comes home as “homework.” Teachers are viewing the collection as basic to the beginning reading program and not to be regarded as enrichment.

The first grade reviewers from Renna Brooks' and Carol Perry's Green Meadow Elementary classes had these comments about some favorite little books:
The Dragon. I like the dragon he is funnes! Sir Tim: I can’t, your majesty. Not that dragon. 4 Mom.
I like the dragon. He is funniest. Sir Tim: I can’t, your majesty. Not that dragon.

Little Brother. I like this book becos it is net and the uauthor did a good job. It is about a grandma and a grandpa and the rest of the faemly and a little brother.
I like this book because it is neat and the author did a good job. It is about a grandma and a grandpa and the rest of the family and a little brother.

What’s that? My favorite little book is What’s That? I like it coas the alene is asceing cwescinds. At the end he ses “What’s that?” The boy sese “That’s you!”
My favorite little book is What’s That? I like it because the alien is asking questions. At the end he says “What’s that?” The boy says “That’s you!”

Birthdays. My favite book is Birthdays. I like it because the wives are foney the peopel are foney to. They are so foney very foney.
My favorite book is Birthdays. I like it because the wives are funny. The people are funny, too. They are so funny, very funny.

Mr. Whisper. My favorite book is Mr. Whisper. I liek Mr. Whispers wan he wispers so saft that the wimin can’t heer him so she givs him big noise porridge. The End.
My favorite book is Mr. Whisper. I like Mr. Whisper when he whispers so soft that the woman can’t hear him, so she gives him big noise porridge. The End.

Clever Mr. Brown. My favorite little book is Clever Mr. Brown. I like it because he is clever. One day he ad a very good iada.
My favorite little book is Clever Mr. Brown. I like it becuase he is clever. One day he had a very good idea.

Silly Mr. Fox. I love it. Big dogs ran after im. Up came the big dogs. He got away.
I love it. Big dogs ran after him. Up came the big dogs. He got away.
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### Thanks to Reviewers

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