The Relationship of Reading Recovery Teachers' Efficacy to Length of Service and School System Support

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THE RELATIONSHIP OF READING RECOVERY TEACHERS’ Efficacy to Length of Service and School System Support

by

M. Louise Moon

A Dissertation
Submitted to the
Faculty of The Graduate College
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THE RELATIONSHIP OF READING RECOVERY TEACHERS’ EFFICACY TO LENGTH OF SERVICE AND SCHOOL SYSTEM SUPPORT

M. Louise Moon, Ed. D.
Western Michigan University, 1998

Existing research results directly relate teachers’ efficacy to student outcomes and to continuing staff development and school context; however, little work has been done to investigate these relationships for Reading Recovery teachers. Reading Recovery (RR) is an early intervention program designed to assist first grade children who are having difficulty learning to read and write. This program requires ongoing staff development and an implementation plan designed to provide appropriate school context; therefore, survey data were collected from Reading Recovery teachers to study relationships between teacher efficacy and (a) their length of service in Reading Recovery and (b) support for RR by the school system.

The study population consisted of 375 Reading Recovery teachers from 12 training sites in two Midwestern states. Of this population, 317 teachers completed surveys and of that group 56 were first-year Reading Recovery teachers; the other teachers had from 2 to 13 years of experience.

In this study a modest direct relationship between years of service in Reading Recovery and teacher efficacy was found. Also, a direct, but modest, relationship was
found between teacher efficacy of Reading Recovery teachers and ten variables of school support: (1) a gestalt of support for Reading Recovery, (2) faithful use of RR procedures, (3) good decision-making processes, (4) classroom teacher support of the RR program, (5) suitable services for children before and after RR, (6) willing facilitation for professional development, (7) resources, (8) administrative commitment to the RR program, (9) an evaluation process that provides feedback and helps set goals for further growth, and (10) similarity/compatibility of the classroom and RR programs. For two variables, Pearson product moment correlations did not support relationships with teacher efficacy at alpha .05. Those variables were implementation rate and scheduling. The third finding was higher personal teaching efficacy than general teaching efficacy in Reading Recovery teachers.

A challenge is noted that highlights the need for a process that provides for a sustained direction while nurturing continuous improvement. Recommendations are also made for research and for operation of the RR program, and for processes to improve teacher efficacy through school system support and training.
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M. Louise Moon
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CHAPTER I

INTRODUCTION

The purpose of this study is to obtain information that may be used to help maintain or increase teacher efficacy in Reading Recovery teachers as a means to develop literacy.

The construct, *teacher efficacy*, has been defined as "the extent to which teachers believe that they have the capacity to affect student performance" (Ashton, 1984, p. 28). Teacher efficacy has two dimensions. The first dimension, personal teacher efficacy, is the confidence a teacher has in his or her own ability to execute appropriate teacher behaviors to positively affect student outcomes; while the second dimension, general teacher efficacy, is a belief that the efforts of the collective of teachers can affect outcomes and that students are capable of learning regardless of home environment, motivation, and other factors (Coladarci & Breton, 1997; Guyton, Fox & Sisk, 1991; Gibson & Dembo, 1984, and Ashton & Webb, 1982). Several other studies have also demonstrated that the constructs of general and personal teaching efficacy are separate sets of beliefs (Gibson & Dembo, 1984; Woolfolk & Hoy, 1993).

Bandura (1986) suggests that beliefs of self-efficacy affect motivation and persistence in carrying out new skills. Self-efficacy can be further defined as one's
ability to generate the necessary motivation, have the necessary cognitive resources, and accomplish the necessary course of action required to meet situational demands (Bandura & Wood, 1989). "Teachers with high levels of efficacy are more likely to initiate new tasks and persist in light of roadblocks, frustrations and difficulties" (Olhausen, Meyerson & Sexton, 1992, p 26).

Olhausen, Meyerson, & Sexton developed an Efficacy-Based Change Model (EBCM) that uses "concepts that help explain the success or failure of an educational innovation as a function of specific psychological processes of the individual teacher" (p. 24).

Teachers' beliefs and attitudes about their students and themselves influence their actions in ways that improve or diminish student outcomes (Rosenthal and Jacobson, 1968; Bandura, Barbaranelli, Caprara, and Pastorelli, 1996). Positive changes in teachers' attitudes are particularly important for improving outcomes of at-risk students (Boyd, 1992).

Therefore, educational leaders must influence beliefs and attitudes of teachers in ways that improve student outcomes. Changes in teachers' beliefs can be influenced by many factors, including staff development, the way in which an innovation is implemented, and the context of that implementation. Regarding staff development, Joyce, Wolf, and Calhoun (1993) indicate that, "We now realize that changing behaviors and attitudes involves effort that requires much support and energy"... and "such support demands a social system that enables people to focus appropriate levels of energy on the change process" (p. 16).
Reading Recovery (RR) is an early intervention program for children having difficulty in literacy learning. The RR program provides continued staff development and has established a social system that enables people to focus energy on the change process (Reading Recovery Council of North America, 1996). Research supports the claim that Reading Recovery brings substantial positive outcomes for many children (Clay, 1982, 1990, 1993b; DeFord, Lyons, & Pinnell, 1991; Lyons, Pinnell & DeFord, 1993; Rowe, 1995; Slavin & Madden, 1989; Smith-Burke & Jaggar, 1995). Reading Recovery staff training is also designed to change teachers' attitudes and beliefs about children's potential, and about the process of becoming literate, and the teacher's role in that process. This program uses extensive professional development and fosters a culture, a type of social system, that is conducive to change (Reading Recovery Council of North America, 1996; Gaffney & Anderson, 1991).

Staff development, however, is not the only variable that relates to successful change. In a systemic consideration of change, many contextual factors in the host system (school system where an innovation such as Reading Recovery is taking place) and its environment have important relationships to teachers' beliefs and practices. "Rand found that effective projects were characterized by a process of mutual adaptation rather than uniform implementation, and that local factors (rather than federal program guidelines or project methods) dominated project outcomes" (McLaughlin, 1990, p. 11).

From her 1984 interviews with teachers, Ashton (1984) found that "conditions in schools—including isolation, difficulty in assessing one's effectiveness as a teacher,
and lack of collegial and administrative support and powerlessness that comes from limited collegial decision-making—made it difficult for teachers to maintain a strong sense of efficacy” (p. 28). Thus, it is expected that, in the case of Reading Recovery teachers (RRT's), the levels of support by classroom teachers and by Reading Recovery colleagues—as well as the levels of support by those in leadership roles—are part of the context of this innovation; and consequently, such behaviors also have important direct relationships with teacher efficacy in Reading Recovery teachers.

Still another important context factor for Reading Recovery is that of the classroom instructional program. Some classrooms use instructional approaches which are consistent with the theory and practices of Reading Recovery, while other classroom programs use approaches that are quite different in theory and practice. Though its developer indicates that Reading Recovery can be used with any classroom program (Clay, 1993b), it is suggested by some educators that the type of program that is used in classrooms can affect the level of progress of RR children and their ability to sustain progress once released from Reading Recovery (Center, et al., 1995; Ohio Department of Education, 1995; Simpkins, 1996).

In summary, the logic behind this study is that teachers' beliefs and attitudes including teaching efficacy may affect student outcomes and that appropriate change in teacher attitudes is often needed, especially by at-risk students. Since research indicates that teachers' efficacy is positively related to student outcomes, understanding what affects efficacy beliefs is of significant educational value. Research also supports the idea that continuing staff support and development affects
teacher efficacy. Ongoing staff development and consultant support are a regular part of the Reading Recovery program; therefore, it was expected that the teacher efficacy of Reading Recovery teachers is directly related to their length of service in Reading Recovery. School context has also been found to relate to teacher efficacy. Consequently, this study also examined support by the school district or host system for Reading Recovery teachers and the RR program.

Hypotheses Examined

The objective of this study was to examine 13 sets of hypotheses with 3 related hypotheses in each set. The hypotheses each stated an expected relationship between (a) length of service or support by the school system for Reading Recovery (as described by one of 12 variables) and (b) one of three related variables labeled Teacher Efficacy, Personal Teaching Efficacy, and General Teaching Efficacy. The variables of support by the school system fit into several categories: the gestalt of support for the RR teacher and program, support through administrative processes, support through various aspects of operation of the RR program, and support for RR by classroom teachers and the classroom instructional program. The hypotheses are outlined in detail near the end of Chapter II.
Background for Study

Research shows direct relationships between teacher efficacy and student achievement (Bandura, Barbaranelli, Caprara, and Pastorelli, 1996; Berman & McLaughlin 1977; and Armor, et al. 1976). According to Michael Fullan—a researcher, trainer, and policy advisor on many educational change projects and founder of the Joint Centre for Teacher Development—"staff development and successful innovation or improvement are intimately related" (Fullan, 1990, p. 3). Fullan cautions, however, that,

... staff development, implementation of innovation, and student outcomes are closely interrelated, but because they require such a sophisticated, persistent effort to coordinate, they are unlikely to succeed in many situations. Any success that does occur is unlikely to be sustained beyond the tenure or energy of the main initiators of the project. (p.3)

As indicated by research comparing instructional models for the literacy education of high-risk first graders, Reading Recovery does change teachers’ beliefs and practices, and also outcomes for children (Lyons, et al. 1993; Pinnell, Lyons, DeFord, Bryk, and Seltzer, 1994). Other research has documented changes in teacher knowledge that were evidenced in their ability to evaluate, describe and explain behavior (Shannon, 1990), and coming to a more positive view of children (Wilson, 1988). According to Marie Clay (1987), hundreds of replications in New Zealand, Central Victoria, and Columbus, Ohio give evidence that cross-national replication is possible. For these reasons, and because it does use long-term professional
development with a collegial culture (Reading Recovery Executive Summary, 1996), the relationship between the length of service with RR and teacher efficacy seems worthy of study. The study by Pinnell, Lyons, DeFord, Bryk, and Seltzer (1994) provides indirect support for the idea of a direct relationship between length of service and teacher efficacy. This study compared Reading Recovery with other treatments, including RR lessons done by teachers who had only short-term training. The researchers concluded that children’s gains were greater and their advantage over time was better for the group taught by fully trained RR teachers (Pinnell, et al. 1994). This study found that teachers with regular Reading Recovery training were more likely to act in response to the behaviors of individual students whereas teachers with less training were more likely to base their actions on procedures alone.

School change research by Huberman and Miles (1984) and Fullan (1990) shows that ongoing assistance is an important factor related to bringing most teachers to increased levels of commitment and effective practice. This also supports the likelihood of a relationship between teacher efficacy and length of service in Reading Recovery.

Both the professional development and implementation processes of Reading Recovery provide a rationale for choosing the focus of this study. The type of professional training and program implementation that is an integral part of Reading Recovery stresses collaboration and collegiality, risk-taking, shared inquiry, and examination of mental models for the reading process and the learning-to-read process. Teachers learn procedures for lesson activities and for choosing appropriate...
materials for reading and writing. However, deeper levels of training involve joint reflection and problem-solving about shared experience as colleagues observe and discuss RR lessons taught behind a one-way glass. In this way, teachers develop keen observation skills and come to think like researchers. The decision-making process requires more than applying a particular teaching move to a particular type of response; it requires ongoing synthesis and analysis related to the specific student (Pinnell, 1995). Powerful decisions that accelerate the child’s learning are the result of this careful ongoing analysis.

The learning process for teachers and their teacher leader is carried out in a manner akin to an apprenticeship. Teacher leaders make visits to teachers on site, model teaching with specific children, coach and observe the teacher during lessons, and assist the teacher in developing the decision-making process. Similarly, the interaction between teacher and child is akin to an apprenticeship. In the early stages of this shared learning process, a more capable or knowledgeable person—either the teacher leader with the teacher or the teacher with the child—takes a larger share of the responsibility for accomplishing a task. S/he then gradually releases that responsibility to the learner as the learner is able to grasp the concept or master the strategy that is to be learned. This process of shared learning with gradual release of responsibility and development of self-regulation in the student is referred to as scaffolding (Bruner, 1975, p. 12). University trainers scaffold the learning of Reading Recovery teacher leaders who in turn scaffold the learning of teachers, just as teachers learn to scaffold the learning of children.
Teaching is aimed at the zone of proximal development, that range of performance where the student is able to perform successfully with the assistance or support of a more capable or knowledgeable other. . . . the focus of teaching is 'at the cutting edge' of the child's [or teacher's] competencies. (Clay & Cazden, 1990, p. 219)

Reading Recovery educators participate in weekly sessions for a ten-month field-based training for which they earn university credit. This is followed by monthly sessions for academic credit for the next three years. After that, teachers continue to meet monthly even when they no longer receive university credit.

The system maintains ongoing professional support and development at the local, regional, and national levels. "Reading Recovery educators, administrators, and institutions form an early literacy network dedicated to making it possible for all children to become literate. Network activities include research, publications, and professional development" (Reading Recovery Council of North America, 1996, p. 4). Networking and professional development activities incorporate a system for dissemination and adoption of changes to the program that make Reading Recovery a system designed for continuous improvement through continuous learning.

For this study, it was hypothesized that teachers who are trained in and work daily in this culture make growth over time in teacher efficacy, including the expectation that all children can learn. "No other remedial program" according to Cunningham and Allington (1994, p. 254), "has even come close to achieving the results demonstrated by Reading Recovery" and "... getting these results with the hardest-to-teach children leads us to conclude that the teacher training is providing the
teachers with extraordinary insight and skills” (Cunningham & Allington, 1994, p. 255).

While it is expected that the professional development model of Reading Recovery may have a strong influence on teacher efficacy in teachers, it is also recognized that several other school context elements will impact teacher efficacy. School context elements that are of particular interest to this study are (a) support of this innovation within the school system, (b) support by classroom teachers for this innovation, and (c) the degree of compatibility between the RR program and the instructional program that is used in the classroom.

Leadership is a major aspect of school system support for a program. Those who carry leadership responsibilities in RR include teacher leaders, RR site coordinators, and RR district liaisons. Also included are principals, Title I administrators, special education administrators, superintendents, and other central office administrators. Reading Recovery teacher leaders are persons who conduct the field-based training of teachers and observe and coach on site during teachers’ lessons with children. A Reading Recovery site coordinator is responsible for administrative matters and support for the local Reading Recovery teacher training site and for networking with others in the larger Reading Recovery support system. A district liaison fills a position similar to that of a site coordinator for a school that uses the services of another district or consortium for training. The support by persons in administrative roles, as well as the support by classroom teachers and the similarity or
compatibility between the classroom program and the Reading program, are important parts of the school context for Reading Recovery.

Insights that might be gained from this study could inform professional development efforts and other leadership efforts in RR and other areas of literacy learning to increase teacher efficacy and thus improve student outcomes.

Fullan (1990) contends that professional development is still an innovation in itself and it needs to be understood in relationship to institutional development, while others (Joyce, et al. 1993) consider that our understanding of staff development as a dimension of school renewal is still evolving:

We now realize that changing behaviors and attitudes involves effort that requires much support and energy. Such support demands a social system that enables people to focus appropriate levels of energy on the change process. Moreover, school improvement involves collective innovative action and constant assessment of this action. We have to make far deeper changes than were previously thought. (Joyce, et al., 1993, p. 16)
CHAPTER II

BACKGROUND LITERATURE FOR STUDY

Introduction

This study focused on (1) the relationship between Reading Recovery teachers' efficacy and teachers' length of service in teaching RR and (2) relationships of teachers' efficacy with teachers' perceptions of level of support for the RR program and RR teacher within those school systems.

Congruent with the focus of the study, the background literature is divided into four major sections: (1) Background Information on Reading Recovery, (2) Teachers' Efficacy, (3) Professional Development in Reading Recovery, and (4) Context of Reading Recovery Innovation.

The four sections have been organized so that where possible there is a flow from descriptive information to evaluative data to literature that support theoretical constructs appropriate to the focus of this study.

The first major section presents background literature about teachers' self efficacy that seems to support the likelihood that teachers who are prepared for and work over time in the Reading Recovery program will have improved self efficacy.

The second section—"Background Information about Reading Recovery"—gives a descriptive overview of the four major dimensions of Reading Recovery: how
the instructional program works with children, the professional development process used to prepare teachers who work with the program, networking procedures used to maintain continuing involvement among the professionals who are working with the program, and research and evaluation procedures that are an ongoing part of the total Reading Recovery program. Included with the descriptive information about the four dimensions are representative evaluative data and information that support the theoretical construct of the program. The overview of the dimensions of Reading Recovery provides a framework for the last part of section one that considers the potential for Reading Recovery to contribute to a reform of literacy instruction.

The sections on teacher efficacy and background of the Reading Recovery program are conceptually linked to the third major section that examines the professional development component of Reading Recovery in greater depth, and examines how it may contribute to the efficacy of Reading Recovery teachers. The final major section of background literature considers the context in which Reading Recovery innovation takes place, with a particular focus on leadership or other human support structures that may contribute positively or negatively to the Reading Recovery teachers' efficacy.

Teacher Efficacy Background Information

The construct, teacher efficacy, has been defined as "the extent to which teachers believe that they have the capacity to affect student performance" (Ashton,
1984, p. 28). Using factor analysis, Gibson and Dembo (1984) identified two factors within teacher efficacy. General teaching efficacy is the degree of belief that any teacher's ability to affect change is bound by external factors while personal teaching efficacy is the perception of one's own ability to influence student performance. These factors are consistent with Bandura's theoretical framework for the construct, self efficacy. Bandura argued that human behavior is influenced by the individual's belief regarding two classes of expectations: an outcome expectation, "a person's estimate that a given behavior will lead to certain outcomes;" and an efficacy expectation, the "conviction that one can successfully execute the behavior required to produce the outcome" (Bandura, 1977, p. 193).

Within the context of RR teaching, for example, an outcome expectation is illustrated by the teacher who believes that skillful instruction can offset the effects of a home with a low literacy background. "Here, efficacy is not expressed for oneself, but for the collective of teachers. A personal teaching efficacy expectation, in contrast, would be reflected by the teachers' confidence that he or she personally is capable of such instruction" (Coladarci & Breton, 1997, p. 2).

Though a difference in the two sub-constructs of teacher efficacy seems clear, the terms themselves can be confusing because the superordinate term teacher efficacy is so similar to the subordinate term teaching efficacy. Therefore some researchers have labeled the first subordinate term outcome expectancy or general teaching efficacy and the second subordinate term personal teaching efficacy (Coladarci &
Breton, 1997). This document will use the terms *general teaching efficacy* and
*personal teaching efficacy*.

Regardless of how the factors are labeled, an understanding of the distinction
between the two types of teacher efficacy is vital. No matter how much an individual
believes that a course of action will produce certain outcomes, if that person entertains
serious doubts about whether s/he can perform the necessary activities, the outcome
expectancy does not influence his or her behavior (Bandura, 1977).

**Consistent Relationship of Teacher Efficacy to Student Outcomes**

Consistently, teacher efficacy has related positively to student achievement and
other variables important to change in education. Teacher efficacy has been
the exception in a pattern where most teacher characteristics show little consistent
relationship to student outcomes (Woolfolk & Hoy, 1990). Further, many studies
have reached the conclusion that teacher efficacy is related to student achievement and
motivation, teachers' classroom management strategies (Woolfolk & Hoy, 1990), and
teachers' adoption of innovation (Guskey, 1988; Olhausen, 1992).

The Rand Change Agent Study, a study of federally funded programs
designed to introduce and spread innovative practices in public schools, found that
"teacher sense of efficacy was positively related to the percent of project goals
achieved, the amount of teacher change, total improved student performance, and the
continuation of both project methods and materials" (McLaughlin & Marsh, 1978,
p.70). "Teachers' attitudes about their own professional competence, in short, appear
to have major influence on what happens to change-agent projects and how effective they are" (McLaughlin & Marsh, 1978, p. 85).

The next two sections of this chapter cite research about origins and consequences of teacher efficacy; however, it is quite likely that there is a recursive loop relationship in which some variables cause greater efficacy, and then greater efficacy in turn causes increases in the other variables. For example, knowledge of positive student outcomes can increase personal teaching efficacy, which in turn may cause the teacher to carry out the behavior that results in further student outcomes, resulting in increased efficacy beliefs. Further, the attributional processes identified by Schunk (1982) and factors which influence attribution by the individual (Ohlhausen, et al., 1992) seem to function as intervening variables. Thus, determining simple causal relationships may be difficult or impossible.

Origins of Teacher Efficacy

Origins of teacher efficacy seem to involve many factors: formal learning experiences, psychological processes, social structures, and school context.

Formal Learning Experiences

Several researchers have studied the relationship of teacher education to the formation of pre-service teachers' sense of efficacy. Spector (1990) found that personal efficacy among undergraduates increased linearly during the 4-year undergraduate program, culminating in student teaching. Perhaps consistent with this
finding, Hoy and Woolfolk (1993) observed that personal efficacy was higher among in-service teachers who had taken extra graduate courses in education. Spector also found a significant trend for general, but not personal, efficacy. That is, general efficacy increased linearly for the first three years of the undergraduate experience but, unlike personal efficacy, declined after student teaching. A similar decline in general efficacy was reported by Hoy and Woolfolk (1990), also see Dembo and Gibson (1985).

Learning a greater variety of methods and indirect strategies for teaching science related to higher teacher efficacy (Czerniak, 1989). Burton (1995) found that seventh and eighth grade science teachers with higher efficacy used constructivist approaches more frequently than traditional-absorptionist practices. Through comparing use of cooperative learning, Wax and Dutton (1991) found that teachers using the highest levels of cooperative learning experienced the greatest level of efficacy.

Not only does acquiring teaching methods and strategies contribute to efficacy, but content courses appear to play a part. Enochs and Sharmann (1995) found that the number of high-school and college science courses taken was related to personal teaching efficacy of preservice science teachers. However, Moore and Esselman (1992) found in a study of Kansas City teachers that personal teaching efficacy was higher for those with less education. Because of seemingly inconsistent results related
to the relationships between efficacy and the amount or type of education, further
study of these relationships is needed.

**Psychological Processes That Influence Formation of Efficacy Beliefs**

The Efficacy-Based Change Model (EBCM) provides a way to conceptualize
the success or failure of an innovation as a function of specific psychological processes
of the individual teacher (Ohlhausen, Meyerson, and Sexton, 1992). This model is
based on the notion that change is a highly idiosyncratic process. The model
incorporates stages of concern, the interaction of attributional processes with self
efficacy, and stages of implementation of an innovation. Participants in an innovation
express concerns that follow stages beginning with self-concerns, and progressing
through task concerns and impact concerns. The model says that the concerns that
are expressed by an individual reflect the states of implementation of a change
(initiation, implementation, and refinement) and the level of self efficacy of the
participant.

Further, in the EBCM model, teacher efficacy is closely related to attributional
processes (Schunck, 1982). If success is attributed to external factors, the self efficacy
goes down; but if success is attributed to internal factors, the efficacy increases.
Many influencing factors are given personal meaning through the attribution process.
Four major categories of influence include

professional controls (e.g., school district guidelines, class size), significant
others (e.g., student needs/interests, former teacher), teacher uniqueness (e.g.,
personal philosophy of education, own reading success), and professional
development (e.g., professional readings, teaching experience). (Ohlhausen, 1992 p. 24)

Several circumstances surrounding the learning experiences influence formation of efficacy beliefs. Reassurance of worth was found to influence development of self-efficacy with respect to problem solving and planning and evaluating interventions for students with behavior problems (Kruger, 1997).

Bandura and Jourden (1991) also found that self efficacy was influenced by progressive mastery and strongly related to social comparisons. Conversely, unfavorable social comparison was demoralizing. Those who construed ability as an acquirable attribute rather than an inherent, fixed aptitude were better able to sustain a sense of self efficacy. Further, for tasks using heavy cognitive demands, one's satisfaction with personal progress was crucial to positive development.

Guskey (1986), in reporting on a study of teacher change, indicated that a time of successful experience is a crucial element. A temporal sequence of events in staff development also has implications for positive change (Guskey, 1986). The Guskey model places change in practices first, followed by evidence of positive change in students' learning, which results in changes in beliefs and attitudes of teachers. Guskey found that without such evidence, no substantive change in teachers' beliefs or attitudes was found to occur.

Johnson, Baldwin, and Wiley (1969) found that unless teachers saw a dramatic change in student performance they did not assume responsibility for the change in performance. Johnson, et. al (1969) attributed this to the rapid flux of classroom
situations that make it difficult to identify relationships between specific instructional activities and student achievement (Ashton, 1984).

**Social Structures and Processes Influence Formation of Efficacy Beliefs**

Several social structures and processes have all been related to formation of efficacy beliefs. These include task-relevant teacher interaction when starting a new curriculum (Poole & Okeafor, 1989), joint planning at the middle school level (Warren & Payne, 1997), mentoring of new teachers (Guyton, Fox, & Sisk, 1991), and collaboration, coaching, and reflection regarding field-based practice during preservice teacher preparation (Low, 1989; Volkman, Scheffler & Dana, 1992). Also, teacher efficacy was related to supervision perceived by teachers to have high utility, even though frequency of supervision was not related (Coladarci & Breton, 1997).

**School Context and the Formation of Efficacy Beliefs**

Other researchers have examined the effects of school context variables on teacher efficacy. Smylie (1988) reported that the proportion of low-achieving students in a teacher's classroom had a negative direct effect on personal efficacy. Smylie (1988) found, too, that interactions with one's colleagues about instructional matters carried a positive indirect effect on personal efficacy through the intervening variable "certainty of practice." In their study of teacher efficacy and school climate, Hoy and
Woolfolk (1993), in a study of elementary teachers in New Jersey schools, found that a healthy school climate—one with a strong academic emphasis and a principal who has influence with superiors and is willing to use it on behalf of teachers—was conducive to the development of teachers' beliefs that they can influence student learning (personal teaching efficacy). Thus teachers' confidence was supported by organizational factors that help teachers manage and teach students. (p. 355)

The school climate factors in this study which influenced general teaching efficacy were “institutional integrity (ability of the school to protect faculty from unreasonable outside demands)” (p. 355) and teacher morale. In this study a relationship between resources and teacher efficacy was not supported; however, it was noted that a majority of the schools were above average in financial resources.

Cotton (1995) studied 510 elementary teachers from a large urban district in an attempt to identify variables that accounted for differences in teacher efficacy. Cotton found that “teachers primarily attributed student failure to external variables;” however, “teachers who experienced a great deal of support from administrators, parents, and family members were more likely to assume responsibility for academic outcomes” (p. 1).

In Chester and Beaudin’s (1996) study of efficacy beliefs of newly hired teachers in urban schools, resources showed an interaction with age and level of efficacy. For novice teachers, both collaboration and supervisor observation caused higher increased in teacher efficacy, with greater increases as age was greater. However neither collaboration nor supervisor observation made a difference to efficacy in experienced teachers. Also more experienced teachers showed an increase in efficacy with increased resources; however, less experienced teachers and novice
teachers showed a decrease in efficacy in situations with greater resources, perhaps because too many resources caused "overload."

Moore and Esselman (1992) studied relationships of school context factors to teacher efficacy and empowerment. They concluded that (a) efficacy, empowerment, and instructional climate factors differ significantly among schools, levels, and grades; (b) personal and teaching efficacies were highly, although inversely, related; (c) school atmosphere tended to be related to lack of impediments to effective instruction and collegiality among teachers; and (d) efficacy was strongly related to both classroom and school decision-making.

Both personal and general teaching efficacies also have been found to be higher among elementary-level teachers when compared with high-school teachers (Fink, 1988). However, it is not clear whether this difference can be attributed to a school effect or whether it merely reflects existing differences between those who select elementary versus secondary level teaching. Evans and Tribble reported an analogous difference between elementary and secondary level preservice teachers (Coladarci & Breton, 1997).

A group of special education teachers showed higher teacher efficacy than a group of regular classroom teachers from the same state (Coladarci & Breton, 1997). This difference may be due to the special education context and the way instruction is planned and carried out, or it may be due to the entering characteristics of persons who chose to work in special education.
Considerable evidence shows that teacher efficacy is related to academic achievement and teacher behaviors known to foster academic achievement (Ashton & Webb, 1986; Berman & McLaughlin, 1977; Gibson & Dembo, 1984; Anderson, Greene, & Loewen, 1988; Hoy & Woolfolk, 1993; also see Ashton, 1984; Dembo & Gibson, 1985) and efficacy for achievement (Greene et al., 1988). More efficacious teachers, relative to their less-efficacious colleagues, also show a preference for collaborative work relationships (Morrison, Walker, Wakefield, & Solberg, 1994) and are more likely to adopt change proposals associated with formal innovations and staff development programs (Berman & McLaughlin, 1978; Fritz, Miller-Heyl, Kreutzer, & MacPhee, 1995; Guskey, 1988; Poole & Okeafor, 1989; Smylie, 1988).

High general teacher efficacy was associated with higher math achievement, while higher personal teacher efficacy was associated with higher reading achievement (Tracz & Gibson, 1986). More efficacious teachers tended to maintain a strong academic focus and were more likely to persist when a student was having difficulty. Such teachers kept on questioning the student, leading him or her to correct responses; whereas less efficacious teachers would simply go on, or go to another student (Gibson & Dembo, 1984). Enochs, Scharmann & Riggs (1995) found that in preservice science teachers, higher personal teaching efficacy was associated with a more humanistic orientation to pupil control.

The responsibility assumed by teachers for students' failure varied with grade levels they taught; teachers holding kindergarten and early childhood certificates were
more likely than those at other levels to assume responsibility for student failure (Cotton, 1995). Reporting a related finding, Coladarci (1992) found that teacher efficacy, when compared with such factors as income and school climate, was the strongest predictor of a teacher's commitment to the teaching profession. Coladarci and Breton (1997) found that perceived utility of instructional supervision was associated with personal teaching efficacy.

Teacher efficacy has been linked to teachers' judgments about the effectiveness of consultant support and acceptability of the negotiated intervention by the teacher (DeForest & Hughes, 1992). Teacher efficacy has also shown a positive relationship to parent involvement in school activities. Hoover-Dempsey, Bassler, and Brissie (1987) found that teacher efficacy, aggregated at the school level, was the strongest or among the strongest predictors of five dimensions of parent involvement. Perhaps consistent with this is the finding that more-efficacious teachers, relative to their less-efficacious colleagues, are less likely to regard teacher-parent relations as a source of stress (Parkay et al., 1986). Further, the more-efficacious teachers experience less stress related to teaching and have a more internal locus of control (Greenwood, Olejnik, & Parkay, 1990).

These important relationships between teacher self efficacy and other variables make it important to understand how this self efficacy operates to make a difference in student outcomes. According to Weiner (1979), people who see events as within their control are more motivated than those who see causes of events to be things over which they have no power or influence. This idea is closely related to that of the
attribution theory. Ohlhausen, et al. (1992) explain that internal attributions perceive individual effort and ability as the basis for success or failure in a situation while external attributions see forces outside the person as the basis of success or failure. In studying the change process in several whole language teachers, Ohlhausen, et al. (1992) found that greater perceptions of efficacy supported greater interest and commitment to implementation of innovations. As teachers try new methods and gain skills, this in turn increases self efficacy and willingness to continue to expend greater efforts to help students learn (Fritz et al., 1995). Good (1987) believed that a teacher's willingness to stay with a student in a failure situation shows a teacher's confidence in his or her teaching ability and/or the student's ability to learn. It was also noted that low-efficacy teachers spent less time teaching the whole group than did high-efficacy teachers; perhaps this was due to lack of belief by low-efficacy teachers in their ability to help all students learn within the group instructional situation.

Increasing Efficacy in Teachers

Because of the relationships of teacher self efficacy with positive outcomes, some have attempted to determine ways to develop that self efficacy. Fritz, et al. (1995) found that Dare to Be You training for teachers showed evidence of an increase in feelings of personal competence and a decrease in perceived external constraints. This training emphasized an increase in personal efficacy, strategies to establish positive learning environments and to improve social role models, and a wide variety of age-graded, developmentally based activities. While teacher efficacy
increased, the increases were larger for those who began with the higher scores.

Personal teacher efficacy showed greater increases than did general teaching efficacy (Fritz, et al., 1995).

Without a doubt, efficacy beliefs in teachers relate closely to student outcomes (Bandura, Barbrananelli, Caprara, & Pastorelli, 1996). However, the efficacy of teachers seems to be not so much a character trait to use in our selection process as it is a sense that is negotiated daily in teachers' myriad transactions with students, parents, peers, and administrators. It is situation specific, dependent on the individuals and interactions involved in each transaction (Ashton, Webb & Doda, 1983). Ashton, et al. (1983) concluded that teacher efficacy is not so much an internal characteristic of teachers to be used to select the most capable; rather, "future research should explore the processes by which teacher education and socialization practices, organizational structures, instructional techniques, administrative strategies and home-school relations can reduce the threats and increase the support of teachers' sense of efficacy" (p. 28).

Teacher efficacy and self efficacy have been the focus of many studies over the last decade and a half; however, very little research has explored the meaning of this construct in the work of Reading Recovery. Since this study was designed to explore the relationships between teacher efficacy and length of experience with Reading Recovery and support for the RR program, the next section will describe the RR program.
Four Components of the Reading Recovery Program

Reading Recovery is an innovation that combines four components: (1) programs for children, (2) programs for educators, (3) network activities, and (4) research and evaluation (Reading Recovery Council of North America, 1995). Each of these components is described in the subsections that follow.

Gay Su Pinnell (1995) introduced the program and its impact in this way:

Reading Recovery demonstrates what is possible when we put into action what we know about how young children learn literacy; in doing so, it challenges present systems and prompts both visionary thinking and problem solving. Briefly defined, Reading Recovery is a tutorial for children who are having difficulty learning to read and write after approximately one year of school. It is usually described as an early intervention program; however, Reading Recovery defies a simple definition. There are layers of intersecting variables, many of which are not obvious even to those who teach in the program and/or have studied it intensively. Teaching procedures, adjustment of instruction to learners, instructional decision-making, training and self-reflection on the part of teachers, ongoing evaluation and research all contribute to Reading Recovery’s success. (Pinnell, 1995, p. 1)

Programs for Children

Children Served. The program serves children who are at-risk for reading failure as they begin first grade. The children are selected for the program based on authentic measures and teacher judgment. Selection does not require identification of any specific type of disability or category for service except that they are among the
lowest students in the class. Where there is full implementation of the program, about twenty percent of the age cohort is served (Pinnell, 1995).

The Lesson. Individual lessons are provided daily for 30 minutes. The teacher plans a lesson around a routine pattern of activities tailored to the child based on daily analysis of the child's progress. While

the parts of the lesson are the same on most days . . . the particular books read, the messages written, and interactions the teacher has with the child are individually crafted to meet the needs of the particular student. Thus each lesson and the paths of progress for each child are different. (Lyons et al., 1993, p. 5)

Each lesson is tailored to the individual child, generally within the framework of the following specific parts (Clay, 1993b; Swartz & Klein, 1994, 1997; Reading Recovery Executive Summary, 1996):

1. The child rereads familiar books. Books come from many publishers and include both narrative and expository content of varying levels of difficulty.

2. The teacher observes and records the child's reading behaviors while the child reads a book that was new at the previous lesson. This is called taking a running record.

3. The child does some letter identification and uses magnetic letters in activities designed to help the child see how words work and to use what is known about words to help read or write other words.
4. The child writes a "story" (usually one sentence) with the teacher providing opportunities for the child to hear and record sounds in words, learn new high-frequency words, and learn basic writing conventions.

5. The child rearranges his or her "story" from a cut-up sentence strip provided by the teacher.

6. The teacher introduces a new book that has been carefully chosen for its learning opportunities.


8. Homework is selected. The child takes one or more familiar books and the cut-up sentence home to read. Some children paste the cut-up sentence on a page and then illustrate it after they practice reassembling and reading the sentence.

**Programs for Educators**

Teacher training begins with a year-long curriculum that integrates theory and practice and is characterized by intensive interaction with colleagues. Following the training year, teachers continue to develop professionally through ongoing interaction with their colleagues and instructors. Teachers in training teach a child while colleagues observe and analyze practice. Thus, they reflect on their professional tasks in light of literacy theory and peer critique over an extended period of time. Reading Recovery teachers in training become literacy experts with keen observational skills and a repertoire of interventions that can be tailored to meet the individual needs of at-risk children. (Reading Recovery Council of North America, 1995, p. 3)

The training of educators to implement the program and teach children depends on a multilevel structure. Program developer Marie Clay and her associates...
have prepared university-level trainers. University trainers prepare teacher leaders who conduct training for teachers at field-based sites. All educators involved in Reading Recovery continue to teach Reading Recovery children daily (Smith-Burke & Jaggar, 1993). Later in this chapter the professional development component of Reading Recovery is explained in greater detail. Included are research findings about changes in teachers that accompany this type of professional development, and the ways that these findings relate to expected gains in teachers' efficacy.

**Research and Evaluation**

“Reading Recovery is a data-based intervention. . . . ongoing data collection for every child served in North America ensures program integrity” (Reading Recovery Council of North America, 1995). Swartz and Klein (1994, 1997) summarize findings from this research:

1. Approximately 75-85 percent of the lowest 20 percent of children served by Reading Recovery achieved reading and writing scores in the average range of their class and received no additional supplemental instruction (Pinnell, DeFord, & Lyons, 1988; National Diffusion Network, 1993; Swartz, Shook, & Hoffman, 1993).

2. The progress in reading and writing made by children in Reading Recovery is sustained and their performance in the average band has been measured up to three years after the children were discontinued from the program (Pinnell, 1989; Smith-Burke, Jaggar, & Ashdown, 1993).

3. Studies have shown Reading Recovery to be more effective in achieving short-term and sustained progress in reading and writing than other intervention programs, both one-to-one tutorial and small group methods (Pinnell, Lyons, DeFord, Bryk, & Seltzer, 1994; Gregory, Earl, & O'Donoghue, 1993).
4. Reading Recovery has been found to be cost-effective when compared to remedial reading programs, special education placement, and primary grade retention (Dyer, 1992; Swartz, 1992). (Swartz & Klein, 1997, p. 3)

The third conclusion was based largely on a study by Pinnell, et al. (1994) that was carried out in ten schools—a study funded by the McArthur Foundation that compared several forms of intervention, including (1) the use of RR language and procedures with only short-term training as well as (2) a direct instruction tutoring method and (3) the regular Reading Recovery program with its extensive training and on-going consultation and staff development.

Cost effectiveness has been claimed by others such as Dyer (1992), Gage (1995), and Assad and Condon (1996), based on the experience of school districts in Ohio, Michigan, and Massachusetts.

**Network Activities**

"Reading Recovery educators, administrators, and institutions form an early literacy network dedicated to making it possible for all children to become literate. . . . Network activities include research, publications, and professional development" (Reading Recovery Council of North America, 1995).

During the program's early years, research was supported by the National Diffusion Network (NDN). When funding was reduced for NDN, the Reading Recovery Council of North America (RRCNA) was formed, and has continued the research and evaluation component of the program. A national data evaluation center operated by RRCNA supervises collection of data used to compile a report for all of
North America. The data center also processes data collected from the local sites and returns it ready for use in writing local yearly reports.

Publications include three newsletters and a research journal. *The Running Record* is a newsletter for Reading Recovery teachers. *Network News* is for teacher leaders, and *Council Connections* is for RRCNA members. RRCNA also publishes *Literacy, Teaching and Learning, an International Journal of Early Literacy*.

Another function of RRCNA is to administer the guidelines for implementation. Because Reading Recovery is more than a set of materials or a philosophy or a method of instruction, guidelines for implementation are stipulated. Each site is expected to abide by these conditions of implementation in order to be allowed to operate the program and use the royalty-free trademarked title (Pinnell, 1995). The guidelines have been established to protect the integrity of the program from shifts or substitutions that might limit its outcomes. Exceptions to the guidelines are logged with university trainers and monitored by an exception committee of the RRCNA.

The implementation requirements from the RRCNA Guidelines include these elements:

1. Intensive daily one-to-one instruction for children who are at risk of reading failure.

2. An in-service program through which educators are instructed in proven Reading Recovery techniques.
3. A research program to monitor program results continuously and provide support for participating teachers and institutions.

The guidelines also specify: (a) how to select and refer students for the program, (b) how to select and train teachers and teacher leaders, and (c) responsibilities of trained teachers and teacher leaders.

Requirements for Reading Recovery training sites are also detailed. Among the requirements are the development of a long range plan, and the designation of a site coordinator to handle administrative matters (Reading Recovery Council of North America, 1993). (See Appendix I for the Guidelines and Standards of RRCNA.)

The network influences continuing professional development through its publications, through conferences sponsored by Reading Recovery programs and the Reading Recovery Council of North America (RRCNA), and through the required ongoing sessions where RR educators meet. Educators at each level of the training structure participate in ongoing professional development sessions as stipulated in the guidelines.

**Potential for Reading Recovery to Reform Literacy Instruction**

The program provides an important opportunity to reform how we teach young children to read and write: Below is a paraphrased list of the elements that Swartz and Klein (1994, 1997) believe make it such an opportunity.

1. Reading Recovery focuses on *early* intervention, rather than waiting for failure. Only acceleration can catch children up with peers.
2. The lowest children are served, and children are not denied the program due to likely special education status or lack of parental support, etc.

3. Diverse populations are served and results are comparable with those from different ethnic, language, or economic backgrounds. Data from children receiving Reading Recovery in Spanish, Descubriendo La Lectura, are also similar to children receiving the English program.

4. Most children who complete Reading Recovery will not need further remedial instruction. Good classroom instruction will meet that child’s needs.

5. Outcomes are sustained over time.

6. Reading Recovery teachers in training teach children even during the training year.

7. Reading Recovery has ongoing in-service activities designed to maintain teaching effectiveness.

8. All teachers, staff developers, and university professors teach children daily.

9. Success and accountability for the program and teachers are related to student outcomes.

10. Though Reading Recovery is a supplemental program, it remains cost-effective because of its short-term nature.

11. RR is a non profit program (Pinnell, 1995). It has “no royalties, sells no materials, and makes no profits” (Swartz & Klein, 1994, p. 6; 1997, p. 4). The
“name is trademarked only to protect the integrity of the program” (Swartz & Klein, 1994, p. 6; 1997, p. 4).

Swartz and Klein conclude that,

Those of us involved with Reading Recovery do so because its success with children has been continually demonstrated. Reading Recovery is a children-first-and-foremost view of the educational system. As such, the strength of its results with children, both short-term and long range, and its teacher professional development component provide avenues of much needed reform. (Swartz & Klein, 1994, p. 6; 1997, p. 4)

The next major sections of this chapter will present background findings about (a) professional development in Reading Recovery, and (b) school context factors that influence the implementation of Reading Recovery as an innovation. Portions of these sections will describe the rationale for studying how professional development and school context relate to teacher efficacy.

Professional Development in Reading Recovery

Goals of Reading Recovery Professional Development

The primary goal of staff development is the growth of “professionals who are skilled observers and can articulate the teaching decisions they have made and the rationale for making them” (Smith-Burke & Jaggar, 1993, p. 67).

The principles of constructivism and an enhanced repertoire of teaching alternatives are new to most Reading Recovery teachers when they begin training. They need to become interactive experts who support children who are constructing a literacy system. (Clay, 1996, p. 222)
Any prescribed sequence leaves some children behind early in that sequence, without providing a way to catch up. For this reason, Clay emphasizes an escape from notions of stepwise progressions of learning new concepts in set sequences.

Theoretical Bases and Processes of Staff Development

The theory that informs the processes used in staff development in Reading Recovery involves several key elements: (a) a collaborative inquiry mode that uses discussion of lessons being taught behind a one-way glass, (b) decision-making in response to the child, (c) scaffolded learning, and (d) an emphasis on continued learning.

Collaborative Inquiry Mode With Behind-the-Glass Teaching and Discussion

The teacher leader supports teachers’ learning by encouraging them to hypothesize about what the student has learned and controls, to challenge one another, and to provide alternative explanations for the student’s behavior with supporting evidence for their hypotheses. By acting and reacting to colleagues’ inferences about a student’s processing as it occurs and by discussing how the teacher is creating (or not creating) opportunities for the student to develop a self-extending system, teachers begin to collectively construct chains of reasoning to help each other better understand how beginning readers learn how to learn (Lyons, 1994).
Responsive teaching is an ongoing, dynamic process between child and teacher. The teacher’s evaluation of her own teaching and decision making is checked by additional observations. These observations sustain engagement in the generative process of responsive teaching, once again directing the teacher’s attention to observations of the child’s reading and writing behaviors. (Elliott, 1996, p. 88)

Engagement in responsive teaching appears to be the essence of what Clay called the magic of Reading Recovery. The decision-making process requires more than applying a particular teaching move to a particular type of response; it requires ongoing synthesis and analysis related to the specific student (Pinnell, 1995).

Pinnell (1995) stresses that the power of the program also lies in the teacher’s ability to carry out Clay’s advice to, “in the context of continuous text, direct the child’s attention to the clearest, easiest, most memorable examples with which to establish a new response, skill, principle or procedure” (Clay, 1993b, p. 8). Teachers must learn to “select examples that are very productive. That means they occur often or relate easily to many other things. Productive examples lead to further reading or writing control in a number of different ways” (Clay, 1993b, p. 9).

Teachers learn to choose authentic materials; when such materials are used, the “probability increases that children will acquire strategies that are broadly adaptive,

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1Authentic texts are “real” children’s literature or are similar to the natural language of the child; whereas, some texts used for instruction are contrived around phonics patterns or stories written to intentionally repeat certain vocabulary with controlled frequencies.
rather than strategies that are skewed to accommodate an artificially constrained range of features" (Gaffney & Anderson, 1991, p. 186).

**Scaffolding**

Scaffolding is a metaphor for the form of social interaction that leads to self-regulation in the learner. Scaffolding is structured by a more capable person to assist the growth of the learner's intra-psychological processing as described by Russian psychologist, Lev Vygotsky (Clay & Cazden, 1990). In shared conversations and actions, the teacher is interacting with unseen processes—in the head strategies used by the child to learn to construct meaning in both reading and writing. Gaffney and Anderson (1991) use a mountain-climbing metaphor where the teacher places the next piton so the child can secure her next strategic move. The Reading Recovery program as a whole is a form of scaffolding (Clay & Cazden, 1990); however, on a micro level, children come to function independently on some strategies and tasks. And meanwhile, the teacher's support continues, always at the leading edge of the child's competencies in the changing zone of proximal development. Language is a form of mediation to assist performance. Major points of development are connected with new forms of mediation. This assisted performance occurs in the presence of stimuli created by the child (self-composed sentences) as well as those given to the children in teacher-selected texts (Clay & Cazden, 1990). The goal of the instruction is child-driven at all tiers of the scaffolded process. This goal is accomplished during training.
sessions largely through the observation and discussion carried out during lessons observed through one-way glass and by the frequent visits between teacher leaders and local teachers during lessons with children. The observed child’s strengths, needs, and response patterns are always a large part of the impetus and evidence for discussion about teaching theory and procedures.

The interaction between teacher leaders and their teachers-in-training can also be characterized as social interaction or scaffolded learning, especially in the early months of training. The demonstrations, prompts, and questions of the teacher leader during training sessions assist learning for teachers in much the same way as the demonstrations, prompts, and questions of the Reading Recovery teacher assist the child.

**Continuous Learning**

Learning is a continuous process; teachers must continually observe in order to challenge and test their own theories about children’s learning (Clay, 1991). The continuing contact sessions (Pinnell, 1995), which are required (for university credit) for three years following the initial training year, are also continued without credit throughout one’s career in Reading Recovery. Reading Recovery leaders recognize the need for continuing contact to incorporate new findings of research and/or adjustments that meet the needs of societal changes:

It [Reading Recovery] is a dynamic theory open to change as new information becomes available and it is used as a tool until better tools become available. If new ideas can establish their credibility (1) in
practice, (2) under research conditions, and (3) among the professional networks, they may be accepted among the alternative routes for Reading Recovery teaching. (Clay, 1996, p. 219)

Continuing contact and professional development opportunities for teacher leaders furnish a means to disseminate such changes and support teachers in their continuous learning and change process. The implementation guidelines and the ongoing evaluation help to provide a context that aids continued learning based on clear goals and on knowledge of results. Continuing contact also provides a forum for the teacher leader in the role of a redirecting system that preserves the integrity of the innovation.

Organizational Structure for Training

Reading Recovery uses a three-tiered organizational structure to prepare teachers in a novel manner. The unique feature is the potential for multilevel observation and for learning embedded in that multilevel situation (Clay & Watson, 1982). Three important roles in this model are (1) university-based trainers of teacher leaders, (2) field-based teacher leaders (i.e., teacher trainers), and (3) Reading Recovery teachers (RRT’s) (Smith-Burke & Jaggar, 1993). This three-tiered system is essentially an old tradition of teachers teaching other teachers cast in a new form. The decision to work in Reading Recovery must be voluntary, because to learn and carry out Reading Recovery requires, at every level, a shift in thinking and a major commitment of time and energy (Smith-Burke & Jaggar, 1993). Another significant feature of the training is site visits made by the teacher leader to coach the RRT.
RRT’s also make colleague visits as part of their professional development. In pairs or small groups they observe each other teaching and then discuss implications of the child’s literacy behaviors and ways they can accelerate learning.

Teaching children regularly is required of all persons in all three tiers (Smith-Burke & Jaggar, 1993). This provides for shared experiences including colleague visits and behind-the-glass sessions even for groups of teacher leaders. These experiences provide the collaborative inquiry-based continuous learning that is at the heart of Reading Recovery. Trainers scaffold the learning of teacher leaders who scaffold Reading Recovery teachers and all scaffold the learning of children. As new ideas are adopted into the Reading Recovery program, persons at all levels of the training structure are able to apply them with children.

**Changes Due to Reading Recovery Professional Development**

This section describes findings of studies about (a) changes in teachers' beliefs and thinking, (b) changes in behaviors and teacher/student interactions, and (c) increases in Reading Recovery teachers' outcomes over time.

**Changes in Beliefs and Thinking**

Several studies report change in Reading Recovery teachers over the year-long (ten-month) training and/or beyond. Hansell and Traynelis-Yurek (1993) found that teachers who had completed the year-long inservice viewed children differently than teachers who were in the eighth month of their training year. The more
experienced teachers rated students higher in beginning reading strategies when both
groups were asked to rate children based on a list of strategies and behaviors.

Pinnell and Woolsey found definite shifts in teachers’ focus of attention over a
year-long training period. This study supported the idea of long-term training to help
teachers develop their own theoretical ideas (Pinnell, 1991).

At the beginning of training, teacher language centered on the logistics
of implementing a new program. They wanted to know “how to do it”
and to be told “the right way.” . . . This surface-level focus continued
for several months . . . Then, as teachers became comfortable with their
teaching, they began to focus on their own discoveries and insights.
They reported detailed observations of children; they created and
shared metaphors, they learned about each others’ students and told
“stories” about their work. Then toward the end of their training year,
. . . they began to generalize and make theoretical statements and
hypotheses. . . and teachers began to link their ideas into more cohesive
statements. (Pinnell, 1991, p. 178-180)

This study suggests that “staff developers and teachers must be prepared to invest time
and unusual effort in the learning process” (Pinnell, 1991).

Similar changes were identified by Hansell (1989). Gaffney (1991) as reported
by Hansell (1993) “measured teachers comments and prompts to children in both
individual and group settings within the teachers’ own school.” (p. 43). This study
showed that teachers, during their class discussions of lessons behind the glass, began
using language to describe the strategies students were using. Later they began using
the prompts for those strategies with individual students, and still later began using the
same types of prompts with their small groups of children.

Lyons (1994), in a study of 13 teachers participating in the year-long training
course for RR teacher leaders, documented changes in teachers’ ability to construct
chains of reasoning collectively and to do so with far less of the conversation being guided by the teacher leader. Lyons made observations while the teachers-in-training engaged in discussions of the lessons observed through a one-way glass. At three months into training only one chain of reasoning was formed, and the teacher leader had initiated that conversation. The teacher leader also constructed the connecting links between teachers' comments and extended teachers' responses and kept the talk going. After six months, discussions that formed chains of reasoning were found during each part of the lesson; four to six teachers contributed to these chains. Teachers themselves started most of the discussion at this time and the teacher leader only contributed two comments.

Teachers, themselves, have recognized changes in their views of the reading process and expectations for children. Some have shifted dramatically away from an isolated skills approach to emphasis on skills in context or a more holistic orientation; others felt their understanding was deepened; others gained insights about the reading-writing connection and importance of teaching for strategies and a self-extending system. Some said they would never teach the same way again because of the influence of learning to observe children systematically. Others commented on how they learned to focus on children's strengths and grew in belief in the potential for all children to learn (Smith-Burke & Jaggar, 1993).

When teachers found that their teaching was responsible for the accelerated learning, they assumed responsibility for the results with these children. The response was not "this is a good program, but 'I can teach anyone to read'" (Gaffney &
Paynter, 1997, p. 25). Such a comment seems highly indicative of a strong sense of teacher efficacy. The sequence of events found by Gaffney and Paynter—teachers learn a different approach, children make greater achievement, teachers believe “I can teach anyone to read”—seems consistent with Guskey’s model. That model places change in practices first, followed by evidence of positive change in students’ learning, which results in changes in beliefs and attitudes of teachers.

**Changes in Behaviors and Teacher/Student Interactions**

Hansell (1993) reported that Walker (1992) described changes in a teacher with nearly 20 years of experience. An October observation showed “Mary Anne” helping the student do things he could do for himself. That behavior gradually diminished over the year. By March, book choices had shifted from the easy category to an instructional level where the student reached 90-95% accuracy as expected for the program. This required more problem-solving by the student, further evidence that the teacher was better facilitating the student in helping himself. “Mary Anne” was also surprised to see children make such rapid progress by reading books without much skill instruction. She felt she had learned firsthand that slow starters can surprise us in how fast they can go.

Hansell (1993) noted that changes in teachers’ behaviors and thinking take relatively long time periods (6 to 10 months) and that “anecdotal evidence suggests that some teachers consolidate learning still further, when faced with the same task, after a summer vacation” (p. 43).
Lyons (1993) followed the growth of one teacher over a three-year period. "Over this period the teacher continued to grow in her understanding of how to prompt and/or ask questions that enabled a student to construct learning" (p. 34). Lyons (1993) identified three phrases: (1) trying out the prompts and questions suggested by the training, (2) using questions and prompts to test out hypotheses about the child's behavior and then support problem-solving, and (3) responding to the student's moves.

DeFord (1994) in her analysis of writing instruction found that higher outcomes were related to teachers' supporting efforts at independent problem solving. These teachers made strong decisions about how to use tools to structure learning—such as using Elkonin boxes for hearing sounds in words and using analogies to known words to help in writing new words.

Wong, Groth, and O'Flahavan (1994) analyzed five Reading Recovery teachers' interactions with children. They characterized the interactions in categories of telling, modeling, prompting, coaching, and discussing. They also noted that teachers were less directive, like coaches, when students reread known stories; however, during new books, there were increased modeling, prompting, and discussing to assist children in problem-solving. Askew (1993), who studied teacher intervention during familiar reading, also found that teachers' intervention decreased as students' fluency increased.
Dorn (1994) analyzed lessons known as “Roaming in the Known”\(^2\). She found three types of talk: (1) child talk, (2) teacher talk that provided feedback on results, and (3) teacher talk that provided feed forward used to activate the child’s prior knowledge. Dorn concluded that responses to the child’s demonstrations of literacy were of greater importance than the child’s ability to articulate his or her knowledge. Dorn also noted that as the child took over self-regulation, the teacher’s regulation decreased.

Increase in Reading Recovery Teacher Outcomes Over Time

The expected relationship between RRT’s teacher efficacy and length of service is based on a rationale that the long-term scaffolded learning in professional development does impact the teaching effectiveness that in turn has a close relationship with teachers’ attitudes and beliefs including their teacher efficacy.

Changes in Reading Recovery teachers’ effectiveness over time were found in a 1994 national monitoring exercise for Reading Recovery in England (Hobsbaum, 1995, 1997). Three kinds of evidence show increased outcomes over time: (1) more students completed the program (80% versus 70%) for experienced versus in-training teachers, (2) fewer children had to be referred for further testing (10% versus 25-30%) for experienced versus in-training teachers, and (3) experienced teachers helped children finish the program five to six weeks sooner than in-training teachers (20-21

\(^2\)“Roaming in the Known” is the term used to describe ten earliest lessons given to Reading Recovery children. These lessons focus on working with what the child already knows as a means to develop confidence, ease, fluent responding, and flexibility with what is known.
weeks versus 26 weeks). Table 1 shows that “as teachers become more experienced and move children faster through the programme, this enables them to get a faster throughput, so that more children can receive the programme” (Hobsbaum, 1995, p. 26). In this study, it was hypothesized that the type and duration of professional development are primary reasons for expecting that Reading Recovery teachers' self efficacy will increase over time as the RRT's grow in confidence as a result of seeing the gains their children are making.

Table 1

<table>
<thead>
<tr>
<th>Year Trained</th>
<th>Mode</th>
<th>Mean</th>
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<tr>
<td>trained in 1991</td>
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<td>6.70</td>
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<tr>
<td>trained in 1993</td>
<td>4</td>
<td>5.75</td>
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(Hobsbaum, 1995, 1997).

Critiques of Reading Recovery Teacher Training

Though there seems to be considerable evidence that Reading Recovery training and program implementation may work to increase teacher efficacy of Reading Recovery teachers, there are persons who have critiqued the training and
describe what they perceive as problems. Barnes (1997) described her personal feelings of uneasiness (a) about what she felt was not a natural way to learn, (b) about time pressures which limited dialogue, (c) about what she felt was lack of respect for what teachers brought to the training experience, and (d) about copious amounts of paperwork. Further, she believed that Reading Recovery training for her class was a skills-based model. Browne, Fitts, McLaughlin, McNamara, and Williams (1997) responded in the same journal to the Barnes critique, indicating that their own experiences were qualitatively different from those Barnes described. Browne and her colleagues responded to the concern about limited dialogue with the idea that some self-discipline is required in teacher talk, and that it is "primarily through conversation that we scaffold learning" (Browne, et al., 1997, p. 296). They also stressed the importance of "commitment to children." The responding teachers indicated that "they [teacher leaders – persons who conduct the training] did not so much discard our repertoire as we realized that we had to use different approaches with different children" (Browne, et al., 1997, p. 297). One respondent described her training as a diagnostic learning atmosphere, an environment safe for taking risks and sharing strengths and weaknesses in teaching practices. . . .We were active learners who could draw from prior knowledge while learning how to observe children’s strengths in new and exciting ways. (Browne, et al., 1997, p. 298)

In a dissertation study of Reading Recovery teachers, Kathryn Calabrese (1994) indicated some of the same concerns as Barnes (1997) about the pressure of time and other stresses endured by Reading Recovery teachers in training. Calabrese...
seemed to interpret her findings with a feeling that there was not enough freedom during Reading Recovery training for teachers to construct their own knowledge.

It has been this researcher's experience that Reading Recovery teachers seem readily to express that their training year is a big challenge and is stressful for some of the same reasons that Barnes used in expressing her dissatisfaction; however, it is often with an admission that it was worth it to be able to make a significant difference in the success of children.

Even though several studies trace professional growth that might be expected to increase the teacher efficacy of Reading Recovery teachers, the opposing viewpoints of Barnes and Calabrese suggest that there is a need for further study of the relationship between teacher efficacy and training and length of service in teaching Reading Recovery.

**Relationship Between Reading Recovery Staff Development and Teacher Efficacy**

Reading Recovery is a program for children; however, the results for children are due in large part to Reading Recovery's staff development model. This aspect of the Reading Recovery program is congruent with findings of research on change and staff development. For example, Reading Recovery's emphasis on staff development is congruent with findings of the Rand Change Agent Study of federally funded programs of the 70's.

"Teachers having a high sense of efficacy tended to be part of projects that placed heavy emphasis on the staff-support activities" (McLaughlin & Marsh, 1978,
p. 86), and project training-support activities functioned to enhance teacher efficacy. Such support activities included timely assistance by consultants, project meetings, and collaborative decision-making. These activities allowed teachers to share experience and concerns, and provided peer encouragement. They also developed a sense of ownership and crucial collegial support. Administrators conveyed the message to teachers that they were viewed as competent professionals.

The Rand study found strong and positive relationships between teachers’ sense of efficacy and all project outcomes (McLaughlin & Marsh, 1978), including outcomes for students, teacher change, and continuation of program methods and materials.

Interestingly, the teachers’ sense of efficacy in the Rand Study was not significantly related to years of experience or to verbal ability. However, there was a negative relationship between years of experience and most of the dependent variables. “The more experienced was the teacher, the less likely the project was to achieve its goals” (McLaughlin & Marsh, 1978, p. 84). The researchers attributed this to the fact that more experienced teachers were less likely to change their practices because of project participation. They said that teachers seemed to “peak out” after five to seven years of teaching. However, they concluded that “this ‘calcifying effect’ was probably due to the way schools are managed and the way professional development activities are provided for staff” (McLaughlin & Marsh, 1978, p. 84). Tenured staff are “less likely to see value in activities that only elaborate on present practice” (McLaughlin &
Few schools or districts explicitly address the professional development needs of their tenured staff.

The Reading Recovery model with its ongoing network, including professional development and support, may help such tenured staff to make significant changes and engage in continuous learning. One Michigan Reading Recovery teacher near retirement said that she believed Reading Recovery had completely revitalized her teaching, though when first given the opportunity she had declined the offer to be trained. It would be useful to examine student achievement over a period of years for teachers with long experience before they enter Reading Recovery training.

The Reading Recovery professional development model is congruent with findings of the Rand Study in that it provides assistance by a consultant (teacher leader or trainer) and peer support through training and networking. Also, the year-long intensive professional development program for RR teachers runs concurrently with their first year of working individually with hard-to-teach children. Support meetings known as “continuing contact” sessions continue throughout one’s career in Reading Recovery. Teacher-leader visits are also made on an ongoing basis, though less frequently for more experienced teachers.

**Summary of Professional Development in Reading Recovery**

This section has described the congruence of Reading Recovery’s emphasis on a professional development model with other research on educational change. It has provided information about the three-tiered organizational structure, the theoretical
base, and the processes used in Reading Recovery professional development. It has also presented the findings of studies on teacher change in Reading Recovery and described the plan for continuous learning and means for incorporating new ideas through the continuing contact sessions that are part of the Reading Recovery program.

All educators in the Reading Recovery program continue to teach children daily. The theoretical base emphasizes constructivism, social interaction, scaffolding, and an inquiry-mode. The process relies heavily on discussions during and after lessons taught behind a one-way glass. Teachers learn to become keen observers and develop a repertoire of teaching strategies. Teachers come to view their hypotheses and conclusions as tentative. They learn to use the strategies as determined by their moment-by-moment decisions based on (a) the deepening understanding of the reading and learning-to-read process, and (b) their practice of following the child rather than a predetermined sequence of steps or specific actions linked to certain responses. Teachers form a strong commitment to continuous learning for themselves and also commitment to accelerate learning for their students.

Studies of teachers' learning found a number of changes in the beliefs and kinds of thinking and behaviors of teachers. Teachers came to rate students higher in beginning reading strategies; as training progressed, the teachers discussed higher levels of concepts. Teachers progressed from trying out prompts and methods to responding to the student's moves based on a continuing analysis of the child's cognitive processing. Studies of teacher/student interactions and teacher behaviors
noted progression toward less teacher support as the child’s self-regulation in literacy behaviors increased.

Evidence has been presented to support a positive relationship between the staff development model used in RR and changes in teachers’ attitudes, beliefs, and performance. Background has been presented for the likelihood that the major emphasis on continuing training, networking, and professional support brings a greater level of expertise and therefore increases student outcomes and teacher efficacy for teachers.

Discussion has included concerns of those who have critiqued the effect of Reading Recovery training on teachers’ identities and attitudes. It will be important to determine whether or not these concerns have a continued negative effect on a significant number of teachers who have taken Reading Recovery training.

The next section of this chapter addresses the school context for innovation. School context provides another set of variables that relate in important ways to teacher attitudes and outcomes.

Context of Reading Recovery Innovation

Importance of Context of Innovation

Though professional development has played a major role in innovation, it is also recognized that with any planned change for innovation, other factors in both the internal and external contexts of the organization have important implications for
success. Clay (1994) stressed the need for a systemic plan because she knew that "an innovation cannot move into an education system merely on the merits of what it can do for children" (p. 128).

Therefore, this next section is a description of contextual factors for RR in both New Zealand (N.Z.) and the United States (U.S.) with some references also to England and Australia. It seems important here to compare the New Zealand context for Reading Recovery with its context here in the U.S. Understanding these contextual differences brings recognition of some important challenges to leadership for RR programs in other countries.

Contrasts Between New Zealand and U.S. Contexts

In several fundamental ways, the educational systems in these two countries are different. Compared with the United States, New Zealand children may be more homogeneous at entry to school. Apparent reasons include (a) the classroom programs in New Zealand are more homogeneous due to the governance system and the nationwide similarity of teacher training programs (Frater & Staniland, 1994), and (b) almost all children begin school on their fifth birthdays.

In New Zealand children enter school on their fifth birthday and encounter a print-rich environment in classrooms. By their sixth birthday, they have had a year of literacy experience. In the U.S. and Canada, children enter kindergarten anywhere between age 4 and 7, and kindergartens vary widely. This circumstance prompts continuous problem-solving. (Pinnell, 1995, p. 14)
Another difference that is favorable to RR in New Zealand is the strong emphasis placed on early literacy instruction, including a full-day program that includes reading and writing for five-year-olds. Further, all schools use the Ready to Read series of books as a benchmark series for reading instruction. In the U.S. there are many options for basal series of reading texts or for using literature in lieu of a basal series. Thus, there is not the same opportunity for in-depth teacher training to develop a shared understanding and a shared language about given philosophies, procedures, and sets of materials. Clay recognized that teachers in the U.S. context, where classroom instruction tends to be based on instructional packages, would need more frequent interactive sessions to make the necessary shifts in thinking. Thus, she designed inservice for RRT’s to be weekly rather than every two weeks as in New Zealand (Smith-Burke & Jaggar, 1993).

Another contrast is in the scope of RR implementation. The N.Z. Ministry of Education supports Reading Recovery on a nationwide basis. This results in a broader scope of implementation than in the U.S. N.Z., therefore, seems to have more collegial support for teachers and provides opportunities for RRT’s to teach not only children whose needs are the most acute, but also to teach some children who reach the goals of the intervention more quickly. Further, both policy support and outcomes for children in N.Z. have led to a respect for the program and its teachers that may be more consistent than in this country.

The classroom approach to instruction is also more similar to Reading Recovery than here in the U.S. That is, the theoretical base and much of the
methodology and materials used in the classroom are the same as the instruction used in Reading Recovery except that RR is tailored to each individual child. While there are important differences, there are also important similarities between the classroom program and the Reading Recovery program in the types of cognitive processes taught. Both programs have children reading and writing real texts and working to develop a range of strategies that use several cue sources from meaning, grammar, and print of the text.

Frater and Staniland’s (1994) HMSO Report, from the Office of Her Majesty’s Chief Inspector of Schools, also describes the New Zealand context of Reading Recovery. The report says there is strong emphasis on literacy instruction and a fairly unified and shared approach to beliefs and practices in literacy instruction from teacher to teacher and school to school.

According to Frater and Staniland’s (1994) HMSO report,

Reading Recovery can be readily viewed as the logical consequence of much that was already happening about literacy in the New Zealand education system. In particular, it exists in the context of:

- a high priority given to literacy matters over a sustained period in teaching training, both initial and inservice;

- widely shared professional skills and procedures in diagnosis;

- a primary school curriculum in which early literacy has a strongly marked emphasis and relatively little competition for time and resources;

- widespread professional understandings about progression in reading deriving, in part, from the specific characteristics and nationwide use of the Ready to Read initial reading scheme” (Frater & Staniland, 1994, p. 162).
In such circumstances it can be no surprise that the target group of clients for Reading Recovery was identified and a programme devised for their aid. (Frater & Staniland, 1994, p. 162)

Another context factor according to Frater and Staniland (1994) is the careful structure of and the time devoted to initial reading and language instruction in the training offered to prospective teachers in New Zealand's colleges of education.

There is also a structure for quality control.

Responsibility for education policy is exercised by the Ministry of Education, and for its delivery, by a number of freestanding agencies, recently established by the Government and, in particular by the Boards of Trustees of the individual schools. No local education authorities stand at an intermediate point between government and school, as in the United Kingdom [or United States], but the recently established Educational Review Office is charged with quality control, inspecting schools on a three-year cycle. (Frater & Staniland, 1994, p. 143-145)

Thus, governing structures of N.Z. schools seem less complex than for many schools in this country.

It is evident to those familiar with primary education in the United States that there is greater variability here in a number of factors that relate to the success of an innovation such as Reading Recovery. In this country, while most children who attend kindergarten begin at age five, they may enter at an age range that covers a year or more. The U.S. instructional programs, materials, and teacher training have wide variability. The U.S. system of education seems to be the scene of more pendulum swings from one approach to another, be it the phonics vs. sight word controversy of the 50's and 60's or the whole language versus phonological awareness controversy of the 90's (Klein, 1997; Routman, 1996).
Not only is there evidence of differences in context between New Zealand and the United States, but also within the States as well. For example, in a report on a longitudinal study in Ohio, Simpkins of Battelle Research Institute found that students had not maintained their gains over time to the extent usually associated with reports on Reading Recovery. This report suggested that

inadequate integration of remedial and compensatory reading services with other classroom reading instruction in the early elementary years is suspected of limiting the longitudinal benefits of Reading Recovery as well as the other compensatory reading services. (Ohio Board of Education, 1995, p. 2)

It was also suggested that “the regular classroom activities for many at-risk students who achieved their Reading Recovery goals did not effectively sustain the achievement levels beyond the first grade” (Ohio Board of Education, 1995, p. 73).

Concerns for Implementing Reading Recovery in New Settings

Clay recognized the importance of issues of implementation of innovation during her work in both New Zealand and other countries. Implementation and leadership factors are perhaps even more crucial in a country where there is such variability from one district to another or even from one classroom to another in the same building. Because of the added complexity in the U.S., issues of leadership for change and successful implementation of innovation are of particular interest to a study of Reading Recovery teachers’ development in this country. Implementation issues were recognized by Clay (1994) in her article, Reading Recovery: The Wider
Implications of an Educational Innovation. Issues reported by Clay (1994, p. 128-129) are listed below:

Educational programs are designed for particular settings, historical times, and cultures. They are not expected to transplant readily to other educational systems. . . . Organized systems maintain their integrity through a strategic balance of vital processes. They are not free to learn, adapt, or change in any way. They can only be modified in some way that is consistent with that vital strategic balance. Achieving a policy change may be hard, but it is harder to achieve and sustain a change to the operating system itself . . . . My personal orientation in developing Reading Recovery was to take account of the complex interdependence among parts of the system . . . . In an effective intervention . . . an innovation cannot move into an education system merely on the merits of what it can do for children.

Clay, influenced by Dalin, recognized that program developers must view change as a problem of institutional linkage and must expect conflict about issues that will affect the survival of innovative programs.

Stakeholders' interests had to be considered and developed. As the program was exported to Australia, the U.S., and Canada, some acceptable adaptations were made: (a) before innovation in a new country, the alignment of local programs with Reading Recovery was hypothesized; (b) assessment procedures of both schemes were compared and potential scores were predicted as well as differences in scores due to different program emphases; (c) word tests were prepared based on instructional texts used locally; (d) each country worked out how to help the child make the transition from RR back to the classroom; and (e) age of entry to the program had to be adapted (Clay, 1994).
Incentive structures for training were considered. Ohio teachers had to train outside school hours while N.Z. and Australian teachers trained during school time with paid substitutes covering the classrooms.

It is usual in the U.S. for some teachers to find lack of respect coming from colleagues. Those colleagues sometimes believe that any one-to-one instruction is bound to get better results, so they do not believe there is anything unique about Reading Recovery. Early on, N.Z. Reading Recovery teachers were sometimes treated with less respect because others thought they’d been “given a soft option to work having to teach only one child at a time...” (Clay, 1994, p. 129). Later by combining part-time RR work and part-time classroom work RRT’s seemed to have less difficulty maintaining respect of classroom teachers (Clay, 1994).

Dealing with competing programs such as compensatory education or learning disabilities programs has been a challenge because the RR program has not been adopted nationally in the U.S. as it has been in New Zealand.

Clay (1994) says, in summary, that

because of such systemic relationships an innovation likely to survive will be one that is cohesive both internally (in terms of theory, training, program design, and evaluation) and with the host system (i.e., it must be workable, contributing, cost-effective, and a winner with the stakeholders). (Clay, 1994, p. 130)

Dynamic processes of societal change also affect survival of innovation. Clay (1994) cautions that changes in economy, political stability, social expectations, labor market, unions, and the state of technological change and educational development are some of these factors. School system factors include financing, decision-making,
support structures, size of the system, the relation of the individual school to the system at large, and the goals of the innovation. Such societal factors require the innovation to adjust through problem-solving in a continuous pattern of change (Clay, 1994).

The education system is designed to maintain itself and . . . taking an innovation aboard involves . . . problem-solving as each new response to the innovation appears in the system. The art of the change process is that changes should not distort or diminish payoff from the innovation and any changes made should be explicitly referred to theories of what is occurring. Compromise, or unthinking adaptations can readily change the impact of the innovation and reduce its capacity to deliver effective results. During periods of expansion every effort should be made to ensure that the parts of the program retain their cohesion and links with other parts of the program. (Clay, 1994, p. 136)

Five key factors in the implementation required for Reading Recovery are designed to stress informed leadership as a means to maintain the integrity of the program.

1. "A university-level training program to train tutors and staff who will act as consultants to the educational systems and who can explain the implications of compromises and modifications for the expected outcomes" (Clay, 1994, p. 136).

2. "Persons at the highest level of administrative decision-making who understand the instructional features of the program. Expansion should only proceed after such an administrator has been appropriately briefed on-site with a fully operational program" (Clay, 1994, p. 136).

3. The tutors (in the U.S. termed Teacher Leaders) "have been expected to learn to explain the program to those who need to know about it, to answer criticisms,
to argue for retention of its basic principles,” and to communicate through media.

“They have an important role in their districts to deal with the public and with professional education at the district level” (Clay, 1994, p. 136).

4. “In the RR program, child learning, teacher learning, system learning, and community learning made up effective maintenance systems” (Clay, 1994, p. 137).

5. “There is a continuing need for RR to explain itself to new audiences as persons who fill various roles move in and out of positions” (Clay, 1994, p. 137).

Clay also has discussed the issue that some refer to as “shift” when a program is not carried out in the way it was designed. She says that one main reason for innovations becoming rejected was the creation of substitutes in either theory or practice:

Substitutes may arise when attention to detail and training of teachers have been insufficient to sustain the original advocacies. Care must be taken to minimize the vague and ambiguous corners or theory and practice so that alternative and drastically varied interpretations of how to teach are not made unwittingly. (Clay, 1994, p. 137)

Substitutes can arise for several reasons (Clay, 1994): (a) teaching appears easy and is copied superficially, (b) shortcuts in training due to attempts at economy, and (c) extensions to theory or opposing theoretical positions.

Control of substitutes comes through training and through having teachers bring new ideas to the teacher leader or tutor to consider before making them part of the program (Clay, 1994).
A strong challenge to Reading Recovery in its early history was the need to serve sufficient children. Funding determines the percentage of children who can be helped. The proportion of children discontinued from the program at average levels is affected by the percentage of low achievers provided for and the vitality of the application (Clay, 1994).

Another challenge is that the “bulk of advocacy about reading and writing instruction will come from theorists who are not familiar with the extreme difficulties of the special population of children” (Clay, 1994, p. 138) which concerns Reading Recovery. Any changes to the program need to be made only after research has been done with the same unrestricted special population of children to document any positive effects plus any unanticipated negative effects or ‘trade-offs’ that may occur because of a change to the program (Clay, 1994, p. 138).

Clay (1994) warns that the biggest threat occurs after the success of the new intervention program. This is because the need for it seems to disappear, as folks forget what it was like without it.

The provision for systematic ongoing professional development and networking illustrate the importance placed by Clay and other key leaders in the Reading Recovery program on managing stages of change.

Jean Bussell, Executive director of Reading Recovery Council of North America (RRCNA), has reported on Full Implementation: Teacher Leaders’
Recommendations for RRCNA in the Spring '97 issue of RRCNA's Network News

Bussell’s report states many recommendations for the Council according to the stages of initiation, implementation, and institutionalization grouped according to forces of change: purpose, passion, politics, culture, structure, and learning (Hargreaves & Rolheiser, 1996). The recommendations on culture include this statement: “Assist teacher leaders in dealing with issues of how, at the site level, energies need to be channeled toward high quality teaching in Reading Recovery lessons and in classrooms (Bussell, 1997, p. 12). The current political arena with its battles between reading philosophies and approaches has caused teacher leaders to recommend that we create a new jargon to help develop a new culture separate from phonics and whole language. Under the recommendation titled “passion” there is a plea to reignite passion with all stakeholders so the message is clear: there are no “throw away” children! (Bussell, 1997).

This section, Concerns for Implementing Reading Recovery in New Settings, has presented three types of information that relate to the school context of Reading Recovery as an innovation: (a) the differences between the U.S. and New Zealand contexts for Reading Recovery, (b) Clay’s concerns for the implementation issues for Reading Recovery in several countries outside New Zealand, and (c) a report of current Reading Recovery implementation issues in the United States.
Summary of Problem and Background

Teacher attitudes need to change in order to improve outcomes for at-risk students. Thus, it becomes important for educational leadership processes to be able to effect changes in teacher attitudes. Teacher efficacy is an important attitude that has shown direct relationships with student outcomes.

Reading Recovery is a program that has improved literacy achievement outcomes for several thousand at-risk children (Clay 1990, 1992, 1993b; DeFord, Lyons, & Pinnell, 1991; Lyons, Pinnell & DeFord, 1993; Rowe, 1995; Slavin & Madden, 1989; Smith-Burke & Jaggar, 1995). Research that compared the Reading Recovery Program with other forms of tutorial instruction and group instruction (Pinnell, et al., 1994) showed an advantage for the full Reading Recovery Training. This advantage seems consistent with findings that long term staff development, which includes coaching or a study group component, helps more teachers to accomplish changes and carry out a program without shifts in the program (Joyce, et al., 1993). In spite of some critiques to the contrary (Barnes, 1997; Calabrese, 1994), it appears that this advantage for Reading Recovery is at least in part due to a long-term professional development and ongoing technical assistance similar to that recommended by various studies of school change (Hargreaves, 1991; Hargreaves & Rollheiser, 1996; Rosenholtz, 1989). It has been hypothesized that there is a positive relationship between the teachers’ efficacy of Reading Recovery teachers and both collegiality and leadership support as school context factors.
It is anticipated that Reading Recovery training can be an important factor in increasing self efficacy of teachers, but that it cannot be taken for granted that this is the only factor that will affect teacher efficacy. Other school context factors also have been found to correlate with teacher efficacy. Leadership certainly can affect the success of an implementation such as Reading Recovery, either with positive or negative consequences. The Rand Change Agent studies have highlighted the importance of leadership for change. Marsh and McLaughlin (1978) indicated institutional motivation as critical, "the attitudes of district administration were a 'signal' to teachers about how seriously they should take a special project" (p. 72). Planning and the scope of change, as well as intrinsic professional rewards, were important. Both staff-training and staff-support activities accounted for a substantial portion of the variation in project success. Other school change literature continues to support the same conclusions (Fullan, 1990, 1993; Joyce, et al., 1993; Sarason, 1990).

Thus, evidence about the kinds of relationships that exist among school context variables, including those involving leadership, might lead to understandings that can aid in developing teacher efficacy and lead to further study about factors that might bring improvements in teacher efficacy.

This study was designed to examine expected relationships between efficacy and length of service and between efficacy and support in the school context by using the hypotheses outlined in the following section.
Hypotheses

Length of Reading Recovery teachers' service (as an indicator of training and experience) and each of the 12 variables dealing with school support for RR were hypothesized to have a direct relationship to the overall teacher efficacy, personal teaching efficacy, and general teaching efficacy as described in Figure 1. Each cell in the matrix in Figure 1 represents a hypothesis that was tested. The personal teacher efficacy and general teaching efficacy are subvariables of overall teacher efficacy.

Chapter III that follows provides a description of the methodology used to select the participants, and to collect and analyze the data to test these hypotheses.
Each cell of this matrix represents a hypothesis that states that a direct relationship is expected between the row variable, Length of Service or School Support, and the column variable, (Efficacy).

<table>
<thead>
<tr>
<th>Variables of Support for RR by School System</th>
<th>Length of RR Service</th>
<th>Efficacy Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Support Through Gestalt</em></td>
<td></td>
<td>H1</td>
</tr>
<tr>
<td>Gestalt of Support for Reading Recovery</td>
<td></td>
<td>H1p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H1g</td>
</tr>
<tr>
<td><em>Support Through General Administrative Practices</em></td>
<td></td>
<td>H2</td>
</tr>
<tr>
<td>Good Decision-Making Process</td>
<td></td>
<td>H2p</td>
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<td></td>
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<td>H2g</td>
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<tr>
<td><em>Evaluation</em></td>
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<td>H3</td>
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<tr>
<td></td>
<td></td>
<td>H3p</td>
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<tr>
<td></td>
<td></td>
<td>H3g</td>
</tr>
<tr>
<td><em>Support Through Operation of the RR Program</em></td>
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<td>H4</td>
</tr>
<tr>
<td>Administrative Commitment</td>
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<td>H4p</td>
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<td></td>
<td></td>
<td>H4g</td>
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<tr>
<td><em>Implementation Rate</em></td>
<td></td>
<td>H5</td>
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<tr>
<td></td>
<td></td>
<td>H5p</td>
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<td></td>
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<td>H5g</td>
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<tr>
<td><em>Scheduling</em></td>
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<td></td>
<td></td>
<td>H6p</td>
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<td>H6g</td>
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<tr>
<td><em>Faithful Use of RR Procedures</em></td>
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<td>H7</td>
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<td></td>
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<td>H7p</td>
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<tr>
<td><em>Services Before and After RR</em></td>
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<td>H8</td>
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<tr>
<td></td>
<td></td>
<td>H8p</td>
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<td>H8g</td>
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<tr>
<td><em>Facilitation for Professional Development</em></td>
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<td>H9</td>
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<tr>
<td></td>
<td></td>
<td>H9p</td>
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<td></td>
<td></td>
<td>H9g</td>
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<tr>
<td><em>Resources</em></td>
<td></td>
<td>H10</td>
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<tr>
<td></td>
<td></td>
<td>H10p</td>
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<tr>
<td></td>
<td></td>
<td>H10g</td>
</tr>
<tr>
<td><em>Support From Other Teachers</em></td>
<td></td>
<td>H11</td>
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<tr>
<td>Classroom Similarity to RR</td>
<td></td>
<td>H11p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H11g</td>
</tr>
<tr>
<td>Classroom Teacher Support of the Program</td>
<td></td>
<td>H12</td>
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<td></td>
<td></td>
<td>H12p</td>
</tr>
<tr>
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<td></td>
<td>H12g</td>
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<td></td>
<td></td>
<td>H13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H13p</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H13g</td>
</tr>
</tbody>
</table>

H = Hypothesis  p = personal teaching efficacy  g = general teaching efficacy

Figure 1. Hypotheses—Direct Relationships Were Expected Between Variables of Teacher Efficacy and Variables of Support for RR by the School.
CHAPTER III

METHODOLOGY

Introduction

This study examined the relationship of Reading Recovery teachers' efficacy to length of service and school system support. Data were collected by a three-part survey. This chapter describes the study population, instrumentation, administration of the surveys, and data analysis for testing the hypotheses.

Population

The study used, as its population, Reading Recovery teachers in two Midwestern states. Twelve training sites were selected which had at least 15 Reading Recovery Teachers associated with the site. It was determined, based upon the type of analysis to be done, that at least 200 teachers would be desirable for the study. The sites invited to participate had 375 RR teachers, 175 more than the minimum needed. Chapter IV describes the survey respondents.

Though a random sample provides the most control for extraneous variables, it was believed that in this study better data would be collected from a purposive sample for two reasons. First, it was believed that a better response rate would be obtained by
going in person to the sites where this was possible rather than by mailing surveys to individual teachers. Getting a higher response rate seemed likely to result in data from a more representative cross section of teachers. Second, a purposive sample made it possible to collect data within a shorter time than was possible with a random sample. A shorter time span also permitted a more meaningful comparison by length of service. Data were collected within a three-month time span. To do this it was necessary to keep the travel distance manageable and to allow for a schedule that permitted collection of data when the classes were held. Continuing contact classes meet monthly, so constraints on being able to meet appointments affected which sites were chosen.

Since the group was not a random sample of RR teachers in the U.S., it has been considered a specific population for purposes of data analysis and any conclusions drawn from the findings.

Instrumentation

Survey Development

Surveys were developed to gather four types of data from RRT’s. (See surveys in appendix B): (1) Demographic data including description of the school district, (2) Length of service in teaching RR, (3) Teacher efficacy of Reading Recovery teachers, and (4) Support by the school system for the RR program and RR teachers.
The Teacher Efficacy Scale for Reading Recovery Teachers was adapted with permission (see letter in Appendix A) from the Teacher Efficacy Scale by Sherri Gibson (1984). All 30 items were used to obtain a composite score for teacher efficacy. To obtain a score for Personal Teaching Efficacy, a subset of nine items identified by Gibson and Dembo's (1984) factor analysis were used. Similarly, a subset of seven items identified by Gibson and Dembo were used for General Teacher Efficacy. All items used a 7-point scale intended to yield interval data with only the end points labeled as strongly disagree and strongly agree.

Some statements in the scale are positive; that is, a strongly agree response shows high teacher efficacy. However, other statements are worded negatively—that is, a strongly agree response shows low teacher efficacy. For example, a response that disagrees with the statement, “If students aren’t disciplined at home, they aren’t likely to accept any discipline,” shows a stronger efficacy belief than does a response that agrees. When a lower value (stronger disagreement) shows stronger efficacy, it was reverse scaled after the fact. For example, 1 was mapped to 7, 2 to 6, 3 to 5, and 4 remained 4, 5 to 3, 6 to 2, and 7 to 1. Three scores for RRT's were computed: One by summing all 30 items, a second by summing the 9 items related to Personal Teaching Efficacy, and a third by summing the 7 items related to General Teaching Efficacy.
Survey of School Support for Reading Recovery (SSSRR)

An initial version of the Survey of School Support for Reading Recovery (SSSRR) was developed to gain data about the teachers' perceived levels of support for Reading Recovery by their school system. Such support included the level of similarity/compatibility between RR and classroom instruction for literacy. This instrument used the same 1 to 7 response scale and format as the Teacher Efficacy Scale for Reading Recovery Teachers in order to make a reader-friendly instrument. The items in this instrument were based on several sources of background information. These background sources include descriptions of the roles of principals and site coordinators or district liaisons as described in three key documents: (1) the Site Coordinator’s Handbook published by the Reading Recovery Council of North America (1996); (2) a pamphlet on the Role of the Principal compiled by Teacher Leaders trained at Oakland University (Cobb, et al., 1996); and (3) the Reading Recovery Guidelines (RRCNA, 1993). Background sources also included school context support factors indicated in literature on school change (Rosenholtz, 1989; Fullan, 1993). The background for items related to similarity/compatibility of RR and classroom instruction included references in the literature to those factors (Ohio Board of Education, 1995) and frequent references to the importance of classroom instruction when groups of teacher leaders meet.

Items were categorized to represent variables that correspond to the 12 hypotheses about support to be tested. Table 2 lists the numbers of the survey items
which relate to each variable (see Appendix C for a complete list of variables, with related item numbers and item text). The survey asked respondents to indicate their perception about the items representing support provided by the school system for the Reading Recovery program and for the participant as a Reading Recovery teacher. The score for each variable is the sum of the rankings for all items related to that variable.

A space to add comments was placed at the end of the Survey of School Support for Reading Recovery (SSSRR). There were no instructions beyond the label “comments.” These open-ended comments have been examined to identify suggestions that may provide insights on how to improve RR programs or provide better RR teacher support that may assist in developing teacher efficacy.

Refinement of Instruments

To make sure that the items as adapted were clear to respondents, a preliminary draft of all sections of the survey (demographic and school context data, TESRRT, and SSSRR) was sent to three Reading Recovery teachers, three teacher leaders, and a trainer. These persons were asked these questions: “are the sentences clear, or do you wonder what is being asked?” “Are there any typos you found?” “Is the survey format easy to use; if not, how might it be improved?” Regarding the SSSRR they were asked these questions: “Are there any of these items that you think have little relevance as support factors for the Reading Recovery teacher or program?”
Table 2

Survey of School Support for Reading Recovery (SSSRR)
Items Categorized by Variables for Hypotheses 1-13

<table>
<thead>
<tr>
<th>Hypothesis Number and Variable</th>
<th>Item Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Length of service</td>
<td>Item A of demographic data.</td>
</tr>
<tr>
<td><strong>School Support for Reading Recovery /Items on Survey of School Support for RR Support Through Gestalt</strong></td>
<td></td>
</tr>
<tr>
<td>2. Gestalt of strong support for Reading Recovery</td>
<td>41, 42</td>
</tr>
<tr>
<td><strong>Support Through General Administrative Practices</strong></td>
<td></td>
</tr>
<tr>
<td>3. Good decision-making processes</td>
<td>5, 6, 7</td>
</tr>
<tr>
<td>4. Evaluation</td>
<td>8, 9</td>
</tr>
<tr>
<td><strong>Support Through Operation of the RR Program</strong></td>
<td></td>
</tr>
<tr>
<td>5. Administrative commitment to RR</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>6. Degree to which all eligible children are served—Implementation rate</td>
<td>35, 36</td>
</tr>
<tr>
<td>7. Optimal scheduling for RR</td>
<td>12, 13, 14, 15</td>
</tr>
<tr>
<td>8. Faithful use of RR procedures/guidelines</td>
<td>25, 26, 27, 28</td>
</tr>
<tr>
<td>9. Suitable services provided for children before and after RR program</td>
<td>10, 11</td>
</tr>
<tr>
<td>10. Facilitation for professional development for RR teachers</td>
<td>21, 22, 23, 24</td>
</tr>
</tbody>
</table>
Table 2—Continued

<table>
<thead>
<tr>
<th>Hypothesis Number and Variable</th>
<th>Item Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Provision for physical resources to operate the program</td>
<td>16, 17, 18, 19, 20,</td>
</tr>
<tr>
<td><strong>Support From Other Teachers</strong></td>
<td></td>
</tr>
<tr>
<td>12. Similarity/compatibility between RR and classroom programs</td>
<td>29, 30, 31, 32, 33, 34</td>
</tr>
<tr>
<td>13. Classroom teachers' support of RR</td>
<td>37, 38, 39, 40</td>
</tr>
</tbody>
</table>

"Are there any of these items that you think are trivial when considering support factors for the Reading Recovery teacher or program?" "Are there some items for which you or other Reading Recovery teachers probably do not have enough information to answer or do not have a sufficient basis for an opinion?" These persons were asked to consider and give feedback about these questions. Where they found some items difficult to respond to or believed that Reading Recovery teachers would find some items difficult to respond to, those questions were used to improve the items. It was expected that, if several parties shared the opinion that certain items were trivial, those items might be omitted from the final survey. The reviewers' comments did not show a need for any substantial changes in the meaning of the items, however, typing and format errors were corrected and there were a few instances of clarification of wording and adding another response category. No items were omitted.
The Teacher Efficacy Scale for Reading Recovery Teachers was “piloted;” that is, data from 40 surveys obtained from the first site were entered into a data base and analyzed via Statistical Package for Social Science (SPSS) program by frequencies and descriptive statistics to check for errors. The surveys were read for comments and any likely problems were noted so that further work could consider such needs. This did not result in further changes. Thus, because the same instruments and data collection techniques were used, the data from the potential “pilot” were included in the overall data analyzed.

Demographic data and school description data were gathered to furnish a description of the population. (See Appendix B for a copy of the Demographic and School Description Data questionnaire.)

Administration of the Surveys

Before administering surveys, permission was obtained from the appropriate administrators at the Reading Recovery training sites. A script was prepared to use in introducing the survey to the teachers (see copy in Appendix F). The script explained the purpose of the study and that the teachers’ perceptions about support for RR in their school were important to the study. Teachers were informed that their responses were to be kept confidential, and neither the names of schools nor names of teachers would be reported. They were also informed that their participation was voluntary. The script indicated that, by completing the survey, they showed a form of implied
consent to participate in the study. Participants were given a small token of thanks—a reading strategy reminder sheet for use with children.

To make sure that even teachers who were absent had an opportunity to complete the survey, the list of persons who completed questionnaires was compared with the class roll so that absentees were identified. Surveys were mailed to absentees in an attempt to get a complete response rate. A second mailing was sent about a week after the returns from earlier mailings appeared to result in no additional returns.

The written surveys were administered to RRT's from 12 sites in two Midwestern states during a regular class meeting of either initial training or continuing contact sessions for the particular site. Surveys were mailed to persons at two sites where scheduling time to administer them in a class was impossible.

Data Analysis

Data entry and analysis to accomplish each of the study objectives are described in this section. In preparation for analysis, the responses for all items were entered on spreadsheets in Corel Quatro Pro. The spreadsheets were used to recode the negatively worded items of the TESRRT. Then missing data were replaced by an average of the other item responses for a given variable except when more than a third of the responses for that variable were missing. The N for analyses reported in Chapter IV is the number of cases that had no more than a third of responses missing for the variables used in that particular analysis. When N is less than 317, it is because of missing data unless the number refers to a designated subgroup of the respondents.
The spreadsheet was also used to compute averages of items for each of the study variables. Scores for items and variables were then brought into a data editor for the Statistical Package for Social Science (SPSS) program. In order to check for errors, frequencies and descriptive statistics were done using SPSS. To test the null hypotheses that the Pearson product moment correlation coefficients were equal to zero, an alpha of .05 was used.

**Analysis for Objective One**

1. The first objective was to examine the set of hypotheses that there is a direct relationship between length of service in Reading Recovery and:

   H1 - Teacher efficacy of RRT's

   H1p - Personal Teaching Efficacy of RRT's, and

   H1g - General Teaching Efficacy of RRT's.

   Operationally these hypotheses stated that a Pearson Product moment correlation was greater than zero. An alpha of .05 was used to test the corresponding null hypotheses that the Pearson product moment correlation coefficients were equal to zero.

   Data used to study the relationships between the teacher efficacy measures of Reading Recovery teachers (RRT's) and length of service in teaching Reading Recovery were the composite score from the Teacher Efficacy Scale for Reading Recovery Teachers and subscale scores for Personal Teaching Efficacy and General Teaching Efficacy. These scores were the mean of responses to all items pertaining to
the particular efficacy measure. Using the mean of responses as the score for the efficacy measure placed total scores on a 1-7 response scale to facilitate comparisons among variables and with single items. Years of service was operationalized as the number of years of service reported in Item A on the Demographic and School Context portion of the survey.

Analysis for Objectives Two Through Thirteen

For each of the hypotheses that relate to teacher efficacy and school context support variables, a direct relationship was expected. These hypotheses were operationalized by using a Pearson Product moment correlation greater than zero as evidence of a direct relationship. An alpha level of .05 was used to test a related series of null hypotheses. The list of operationalized hypotheses for objectives 2 through 13 follows:

School Support for Reading Recovery and Teacher Efficacy - Hypotheses

Gestalt of Support for RR

2. There is a Pearson Product moment correlation greater than zero for a gestalt of support for Reading Recovery and:

   H2 - the Teacher Efficacy of Reading Recovery teachers (RRT’s),
   H2p - the Personal Teaching Efficacy of RRT’s, and
   H2g - the General Teaching Efficacy of RRT’s.
Support Through General Administrative Practices

3. There is a Pearson Product moment correlation greater than zero for good decision-making processes and:

H3 - the Teacher Efficacy of Reading Recovery teachers (RRT’s),
H3p - the Personal Teaching Efficacy of RRT’s, and
H3g - the General Teaching Efficacy of RRT’s.

4. There is a Pearson Product moment correlation greater than zero for a teacher evaluation process that facilitates professional improvement and:

H4 - the Teacher Efficacy of Reading Recovery teachers (RRT’s),
H4p - the Personal Teaching Efficacy of RRT’s, and
H4g - the General Teaching Efficacy of RRT’s.

Support Through Operation of the RR Program

5. There is a Pearson Product moment correlation greater than zero for administrative commitment to RR and:

H5 - the Teacher Efficacy of Reading Recovery teachers (RRT’s),
H5p - the Personal Teaching Efficacy of RRT’s, and
H5g - the General Teaching Efficacy of RRT’s.

6. There is a Pearson Product moment correlation greater than zero for support for the RR program through rate of implementation (proportion of eligible children served) and:
H6 - the Teacher Efficacy of Reading Recovery teachers (RRT's),
H6p - the Personal Teaching Efficacy of RRT's, and
H6g - the General Teaching Efficacy of RRT's.

7. There is a Pearson Product moment correlation greater than zero for scheduling for RR and:

H7 - the Teacher Efficacy of Reading Recovery teachers (RRT's),
H7p - the Personal Teaching Efficacy of RRT's, and
H7g - the General Teaching Efficacy of RRT's.

8. There is a Pearson Product moment correlation greater than zero for commitment to faithful use of Reading Recovery procedures/guidelines and:

H8 - the Teacher Efficacy of Reading Recovery teachers (RRT's),
H8p - the Personal Teaching Efficacy of RRT's, and
H8g - the General Teaching Efficacy of RRT's.

9. There is a Pearson Product moment correlation greater than zero for provision of suitable supplementary services for children before and after their RR programs and:

H9 - the Teacher Efficacy of Reading Recovery teachers (RRT's),
H9p - the Personal Teaching Efficacy of RRT's, and
H9g - the General Teaching Efficacy of RRT's.

10. There is a Pearson Product moment correlation greater than zero for the facilitation of professional development for RR teachers and:

H10 - the Teacher Efficacy of Reading Recovery teachers (RRT's),
H10p - the Personal Teaching Efficacy of RRT’s, and
H10g - the General Teaching Efficacy of RRT’s.

11. There is a Pearson Product moment correlation greater than zero for the provision of appropriate physical resources to operate the program and:
H11 - the Teacher Efficacy of Reading Recovery teachers (RRT’s),
H11p - the Personal Teaching Efficacy of RRT’s, and
H11g - the General Teaching Efficacy of RRT’s.

Support From Other Teachers

12. There is a Pearson Product moment correlation greater than zero for the similarity/compatibility between the RR program and classroom literacy instruction and
H12 - the Teacher Efficacy of Reading Recovery teachers (RRT’s),
H12p - the Personal Teaching Efficacy of RRT’s, and
H12g - the General Teaching Efficacy of RRT’s.

13. There is a Pearson Product moment correlation greater than zero for support for RR by classroom teachers and:
H13 - the Teacher Efficacy of Reading Recovery teachers (RRT’s),
H13p - the Personal Teaching Efficacy of RRT’s, and
H13g - the General Teaching Efficacy of RRT’s.
Analysis of Survey Items

For each of the Surveys, TESRRT and SSSRR, all items were analyzed to provide descriptive statistics and Pearson product moment correlation coefficients with Teacher Efficacy. The purpose of this analysis was to examine items as a means to understanding and interpreting the results of the study. Tables that display these results are found in Appendix H.

While some may question the value of statistics based on single items and of correlations with an item on a 1-7 scale, this is not wholly unlike the work done with the Rand studies that used only two Teacher Efficacy items with a 1-5 response scale. There are at least two reasons why this analysis seemed useful. First, some items received fairly uniformly high scores, and therefore they contribute less to a correlation on a variable made up of multiple items; yet they may be substantial factors as contributors to a variable such as Teacher Efficacy. Second, if one simply examines a raw score, it may not imply that an item would contribute to correlations with other variables. Examining items, however, may reveal insights about what may be contributing to overall variation from variables that were or were not correlated as expected. There may be items which have a meaningful contribution to efficacy, for example, yet do not show a correlation due to lack of variance.
Analysis of Comments

Space was provided for open-ended comments. Comments were offered by 51 respondents. The comments were each assigned to a category based on the concern or opinion expressed. Comments will be discussed in Chapter IV in the presentation of results.

Summary of Methodology

The description of methodology has included four major sections: (1) the population invited to participate; (2) the data collection instruments, how the instruments were selected or developed, and how the instruments and their administration were refined through review and pilot testing; (3) the statistical data analysis procedures used to test the research hypotheses and help interpret results; and (4) a brief description of how open-ended comments were handled. The 13 sets of research hypotheses stated in Chapter II were operationalized by using a Pearson product moment correlation coefficient greater than zero as the indicator of direct relationship. An alpha level of .05 was used for testing all of the related null hypotheses.
CHAPTER IV

PRESENTATION OF FINDINGS

Introduction

This study used data collected from surveys to examine 13 sets of 3 hypotheses each related to the teacher efficacy of Reading Recovery Teachers (RRT’s). The first hypothesis set was used to investigate the relationship between three measures of RRT’s teacher efficacy and their years of service as RRT’s. Hypotheses sets 2 through 13 were used to investigate the relationship between three measures of RRT’s teacher efficacy and their perception of support for Reading Recovery (RR) in their school system as measured by their scores for 12 school support variables.

The remainder of this chapter is divided into four major subsections: Population, Response Rates, and Respondents; Relationships Between Teacher Efficacy and Years of Service in Reading Recovery; Relationships Between Teacher Efficacy and School Support for Reading Recovery, and Open-ended Comments.
Population and Response Rate

A total of 375 teachers from twelve RR sites was invited to participate in the study. The prestudy intent to obtain data from about ten sites in two Midwestern states was exceeded, with 12 sites included in the study. The prestudy goal of 200 returns was exceeded, with a total of 317 received. This resulted in a gross return rate of 85% of the 375 teachers invited to participate in the study. Table 3 shows the breakdown of returns by site and the method of collection of data. Survey respondents included 56 teachers in first-year RR training classes and 261 teachers who had taught RR from 2 to 13 years.

Data collection on site during in-service training classes was preferred. Of the 317 surveys collected, 244 (77%) were collected in this manner. The secondary method for collecting the data was by mail. This was done for teachers who were absent at the time surveys were administered in a class and for sites where a time to administer the survey in class could not be scheduled. In total, surveys were mailed to 131 teachers and 73 (56%) were returned. A second mailing was done in an attempt to increase the response rate. This resulted in the return of 29 surveys that are included in the count of 73.
Table 3

Survey Response by Site and Methods of Data Collection

<table>
<thead>
<tr>
<th>Site</th>
<th>N Returned</th>
<th>Possible</th>
<th>% Returned</th>
<th>Collection Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>50</td>
<td>51</td>
<td>98.00</td>
<td>On Site &amp; Mail</td>
</tr>
<tr>
<td>Site B</td>
<td>2</td>
<td>3</td>
<td>66.00</td>
<td>On Site</td>
</tr>
<tr>
<td>Site C</td>
<td>19</td>
<td>27</td>
<td>70.00</td>
<td>On Site</td>
</tr>
<tr>
<td>Site D</td>
<td>22</td>
<td>23</td>
<td>97.00</td>
<td>On Site &amp; Mail</td>
</tr>
<tr>
<td>Site E</td>
<td>16</td>
<td>20</td>
<td>75.00</td>
<td>On Site &amp; Mail</td>
</tr>
<tr>
<td>Site F</td>
<td>31</td>
<td>31</td>
<td>100.00</td>
<td>On Site &amp; Mail</td>
</tr>
<tr>
<td>Site G</td>
<td>45</td>
<td>53</td>
<td>84.00</td>
<td>Mail</td>
</tr>
<tr>
<td>Site H</td>
<td>21</td>
<td>21</td>
<td>100.00</td>
<td>On Site</td>
</tr>
<tr>
<td>Site I</td>
<td>31</td>
<td>35</td>
<td>89.00</td>
<td>On Site</td>
</tr>
<tr>
<td>Site J</td>
<td>11</td>
<td>16</td>
<td>69.00</td>
<td>Mail</td>
</tr>
<tr>
<td>Site K</td>
<td>45</td>
<td>67</td>
<td>67.00</td>
<td>On Site &amp; Mail</td>
</tr>
<tr>
<td>Site L</td>
<td>24</td>
<td>28</td>
<td>86.00</td>
<td>On Site</td>
</tr>
<tr>
<td>Totals</td>
<td>317</td>
<td>375</td>
<td>84.50</td>
<td></td>
</tr>
</tbody>
</table>

Non-Respondents

From the population of 375 teachers, 58 were non-respondents (15%). The design of the study did not facilitate any direct or detailed comparison of non-respondents with respondents. However, making some conjectures about possible
assumptions seems reasonable, both about differences and similarities between respondents and non-respondents. Known differences between sites include the rate of RR implementation, the age of the sites, and the kinds of jobs held by RRT's in addition to RR. Another difference is the number of RR children served per teacher. Some teach a full-time classroom assignment plus one RR student, while others have a half- and-half split in job assignment between the RR job and a part-time classroom job. From conversations with teacher leaders, it appeared that the proportion of teachers who teach only one RR child was higher in one of the sites where most of the surveys were collected by mail when compared with sites where most data were collected on-site. These differences suggest caution in assuming that the non-responding teachers are like the responding teachers.

On the other hand, the comparison of descriptive statistics and t test for means of some key variables from two subgroups of sites might suggest that the responding teachers and non-responding teachers are not substantially different if one can make such a judgment from comparing sites where (a) most surveys were done on site and the response rate is high to (b) sites where all surveys were done by mail and the response rate is about half. The following similarities between two of these subgroups of respondents seem pertinent. Analysis was done for some key variables in the study to compare two subgroups of sites. For the first subgroup, data were collected either on site or a combination of on site and mail to absent teachers; group two was made up of sites where data were collected by mail only. Analysis by t test was made for means of school support for RR variables and teacher efficacy variables.
For scores of the school support for RR, the mean was 5.40 (SD = .859) for the on-site or mostly on-site group, and the mean was 5.33 (SD = .675) for the mail-only group. A t test for the difference between these means shows that a difference was not supported (p = .583 for equal variances not assumed). A similar comparison by t test was done for the means for the Teacher Efficacy Scale for Reading Recovery Teachers. Means were 5.25 (SD = .535) for the on-site or mostly on-site group and 5.24 (SD = .443) for the mail-only group. A difference was not supported on a t test (p = .953 for equal variances not assumed). Differences were not supported by t test (p = .602 for equal variances not assumed) in the subgroup means for Personal Teacher Efficacy. The same was true for General Teacher Efficacy, differences for subgroup means for General Teacher Efficacy were not supported by t test (p = .857 for equal variances not assumed).

Given the diversity between sites, the 85% overall return that is reasonably high, and that means for several key variables were not found to be different, it seems reasonable to accept that the lack of data from non-respondents likely had little effect on conclusions drawn from the study.

Report of Demographic and School Context Data

In the following sections, the respondent group is described by data collected in the first part of the survey: (a) years of service in RR; (b) the proportion of a full-time position dedicated to RR; (c) the other job assignment/s filled by the teacher; (d) the number of RR children taught by each teacher; (e) the number of children who
achieved the requirements to complete the RR program and discontinue, (i.e., “graduate”); (f) non-RR children served by the teacher; (g) length and type of experience before entering RR; (h) highest educational degree held; (i) size and type of school system; and (j) other RRT’s in the same building.

**Length of Reading Recovery Service**

Years of service in RR ranged from first year to thirteenth year with a mean of 3.52 years and standard deviation of 2.22 years. Table 4 shows the percentages of teachers for number of years given in RR service.

**Proportion of Full-Time Equivalent (FTE) Position Devoted to Reading Recovery**

Most RRT’s (86%) spend half time in RR work, while about 6% report full time in RR, and about 7% other; most generally other represented classroom teachers who taught only one RR child. Approximately 2% of cases had missing data.

**Other Job Responsibilities Held by Reading Recovery Teachers**

The jobs that comprise the other part of RR teachers’ positions are shown in Table 5. These jobs include Title I positions for 27%, regular classroom for 26%, special education for 4%, and 23% for other job assignments. The response “No other job assignment” was reported by about 1%, usually RRT’s in part-time employment; or teacher leaders in full-time RR positions. Mixed assignments of the above
categories were claimed by about 15%. Percentages do not equal exactly 100% due to rounding and about 3% missing data.

Table 4

Percentages of Teachers for Years of Service in Reading Recovery

<table>
<thead>
<tr>
<th>Number of Years</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>56</td>
<td>17.7</td>
</tr>
<tr>
<td>2</td>
<td>70</td>
<td>22.1</td>
</tr>
<tr>
<td>3</td>
<td>57</td>
<td>18.0</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
<td>12.6</td>
</tr>
<tr>
<td>5</td>
<td>33</td>
<td>10.4</td>
</tr>
<tr>
<td>6</td>
<td>20</td>
<td>6.3</td>
</tr>
<tr>
<td>7</td>
<td>20</td>
<td>6.3</td>
</tr>
<tr>
<td>8</td>
<td>12</td>
<td>3.8</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>.3</td>
</tr>
<tr>
<td>13</td>
<td>3</td>
<td>.9</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>312</strong></td>
<td><strong>98.4</strong></td>
</tr>
<tr>
<td><strong>Missing Data</strong></td>
<td><strong>5</strong></td>
<td><strong>1.6</strong></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td><strong>317</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Jobs specified in other included the following: administrator, art teacher, assistant principal, at-risk coordinator, bilingual resource teacher, counselor, coordinator for HOST, K-8 math chair, language arts coordinator, literacy specialist, learning specialist, literacy group teacher, MEAP coordinator, music & motion teacher, reading consultant, and social studies coordinator.
Table 5

Distribution of Other Job Assignments of RR Teachers

<table>
<thead>
<tr>
<th>Other Job Assignments</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title I</td>
<td>84</td>
<td>26.5</td>
</tr>
<tr>
<td>Classroom</td>
<td>82</td>
<td>25.9</td>
</tr>
<tr>
<td>Special Educ</td>
<td>13</td>
<td>4.1</td>
</tr>
<tr>
<td>Other</td>
<td>73</td>
<td>23.0</td>
</tr>
<tr>
<td>Mixed</td>
<td>47</td>
<td>14.8</td>
</tr>
<tr>
<td>Subtotal</td>
<td>307</td>
<td>96.8</td>
</tr>
<tr>
<td>Missing Data</td>
<td>10</td>
<td>3.1</td>
</tr>
<tr>
<td>N</td>
<td>317</td>
<td>100</td>
</tr>
</tbody>
</table>

RR Children Served Per Teacher

The survey asked all teachers except those in their first year of RR training how many RR children were taught last year, how many RR children were discontinued from the program, and how many non-RR children were also taught by the RR teacher. Teachers in the first year of training were not asked these questions because the school year was not yet complete; it could not yet be known how many children first-year RRT’s would serve or discontinue for that year.
The survey participants included 258 teachers who were asked to indicate the number of Reading Recovery children whom they served. Seven teachers (2.7%) omitted the response. The 251 teachers who responded with this data each served from 0 to 12 RR children (M 7.84, SD = 2.17). This group of teachers served 1,967 Reading Recovery children. It is typical for RRT's to work one-half time at RR and this was true of 215 of the 251 (86%) responding teachers. These half-time teachers each served from 0 to 12 RR students (M 7.96, SD = 1.73). Most teachers served from 6 to 10 Reading Recovery students during the 1996-1997 school year.

RR Students Discontinued Per Teacher

Participants were also asked to indicate the number of RR children discontinued. This number ranged from 0 to 12 per teacher (M 5.63, SD = 2.54, N = 258, missing data 6, net N = 252). The total number of RR children discontinued by all 258 teachers was 1,420. Most teachers worked with 3 to 8 students who were discontinued during the 1996-1997 school year. About 2% had missing data.

Other Children Served by RRT's

Since most RRT's are involved half-time in RR and half-time in other work, it is frequently a spin-off of the RR program that its teachers adapt--applying what they have learned in RR to the other facets of their work. About 5,000 to 6,500 children besides RR children were served during the last school year by 223 of the RRT's who participated in this study. The estimate was made by using the low and high points of
the number ranges given as response choices in the demographic survey. Based on the same estimate, these RRT's served about 23 to 29 other children per teacher. This estimate does not include first year RRT's and their students.

Length and Type of Experience Before Teachers Entered Reading Recovery

Years of Prior Experience

The item related to length of experience prior to entering RR allowed for responses of 0, 1, 2 to 3, 4 to 5, 6 to 10, 11 to 15, and 16 or more. Several persons volunteered responses of 30 to 35 years. About 43% of teachers had 16 or more years of experience. About 19% of teachers had 6 to 10 years of experience. About 9 to 10% of teachers fell into each of the categories of 2 to 3, 4 to 5, and 11 to 15 years' experience. About 5% of teachers had only one year of teaching experience before they entered Reading Recovery and about 2% of teachers had no prior experience.

Prior Experience in Primary Grades

Most teachers had substantial experience in primary grades before beginning RR work. About 5%, however, had no primary teaching experience and about 6% had only one year. Each of the categories for 2 to 3, 4 to 5, and 11 to 15 years of experience had about 12 to 15% of teachers. About 19% of teachers had 6 to 10 years of primary experience. About 27% of the teachers had 16 or more years of experience in primary grades.
Kinds of Prior Experience

Table 6 shows the kinds of experience teachers had before entering RR. These experiences included special education for 6%, reading specialist for 4%, Title I for 4%, regular classroom positions for 45%, and other for 4% with 35% reporting mixed and 2% omitting that response. The category mixed was used when a person indicated more than one of the listed categories. Mixed experience included classroom work, computer specialist, gifted education, adult literacy, school psychologist, speech and hearing, swim instruction, and writing specialist.

Education of Respondents

Education of the RRT’s was at the bachelors degree level for 29% and at masters level for 67%, 3% had a specialist degree and one person had a doctorate.

Type and Size of Schools Where Study Participants Are Employed

Most of the study participants were employed in public schools, including three teachers from charter schools, one from a private non-church related school, and one from a church-related school. The size of district was 1,000 students or less and usually rural for 14% of the participants; another 53% served in districts with 1001 to 10,000, usually suburban; and 34% worked in districts of more than 10,000 students, usually urban. Five percent of cases omitted this item.
Table 6
Frequencies of Kinds of Experience Before Reading Recovery

<table>
<thead>
<tr>
<th>Job Experience</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education</td>
<td>20</td>
<td>6.3</td>
</tr>
<tr>
<td>Reading Specialist</td>
<td>12</td>
<td>3.8</td>
</tr>
<tr>
<td>Title I</td>
<td>12</td>
<td>3.8</td>
</tr>
<tr>
<td>Classroom</td>
<td>144</td>
<td>45.4</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>4.1</td>
</tr>
<tr>
<td>Combination of Above Categories</td>
<td>110</td>
<td>34.7</td>
</tr>
<tr>
<td>Subtotal</td>
<td>311</td>
<td>98.1</td>
</tr>
<tr>
<td>Missing Data</td>
<td>6</td>
<td>1.9</td>
</tr>
<tr>
<td>Total</td>
<td>317</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Other RRT’s in Teachers’ Buildings

Teachers were asked how many other RRT’s were in their own school building; since that can influence opportunities for collaboration and collegiality. Those who were the only RRT in the building made up 37% of this population. Of the remaining teachers, 35% reported one other RRT in the same building, 11% had two other RRT’s, 10% had 3 other RRT’s, 4% had 4 other RRT’s, approximately 1/2% had 6 other RRT’s, and 1% had 7 or more other RRT’s in the same building. In several instances of more than 1 or 2 other RRT’s per building, the other RRT’s were full-time classroom teachers who taught one RR child in addition to their classroom responsibilities.
Teacher Efficacy Data

The second section of the survey instrument contained the Teacher Efficacy Scale for Reading Recovery Teachers (TESRRT). This thirty-item instrument was adapted from Gibson’s (1983) Teacher Efficacy Scale. The TESRRT includes subsets of items that are used to indicate Personal Teaching Efficacy (9 items) and General Teaching Efficacy (7 items).

In responding to the items of the TESRRT, subjects indicated agreement or disagreement using a scale of 1 through 7, with 7 used to indicate strongest agreement. Responses to items with negative phrasing were reverse scaled to make them score highest for disagreement, since disagreement indicated stronger efficacy belief. Reverse scaling means that 1 was mapped to 7, 2 to 6, 3 to 5, 4 remained 4, 5 to 3, 6 to 2, and 7 to 1. All references to scores and related statistics in this presentation of results are based on item responses summed after reverse scaling of responses for negatively phrased items.

After reverse scaling was completed, the item responses for each efficacy measure were averaged to place scores on a 1 to 7 scale. The recoded and averaged scores simplify comparisons among scores.
Scores for Teacher Efficacy

Table 7 presents means for the TESRRT (30 items) and subscales, Personal Teaching Efficacy (9 items), and General Teaching Efficacy (7 items). The TESRRT showed a recoded score range of 3.97 to 6.97 and yielded a mean of 5.25 for the recoded scores on the full scale (SD = .518, N = 312). For Personal Teaching Efficacy, the recoded score range was 3.67 to 7.00 and the mean was 5.52 (SD = .645, N = 314); General Teaching Efficacy response range was 2.29 to 7.00 with a mean of 4.99 (SD = .845, N = 314). Table 10 in Appendix H lists means and standard deviations for each TESRRT item. The N in each analysis represents the cases whose data were complete enough that they could be included for the particular analysis done. When a respondent omitted responses for more than one third of the items for a

<table>
<thead>
<tr>
<th>Scale or Subscale</th>
<th>Number of Cases</th>
<th>Minimum &amp; Maximum Values</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TESRRT Full Scale</td>
<td>312</td>
<td>3.97 - 6.97</td>
<td>5.25</td>
<td>.518</td>
</tr>
<tr>
<td>Personal Teacher Efficacy Subscale</td>
<td>314</td>
<td>3.67 - 7.00</td>
<td>5.52</td>
<td>.645</td>
</tr>
<tr>
<td>General Teacher Efficacy Subscale</td>
<td>314</td>
<td>2.29 - 7.00</td>
<td>4.99</td>
<td>.845</td>
</tr>
</tbody>
</table>

N < 317 is due to missing data.
variable, data for that variable were considered missing and that case was excluded from the analyses involving that variable. Other missing item responses were assigned a value equal to the average of other item responses for that variable and the resulting variable score was included in the analysis.

Comparisons Between Personal Teacher Efficacy and General Teacher Efficacy

Both the mean and the minimum value of item responses were higher for the Personal Teacher Efficacy Subscale than for the General Teaching Efficacy Subscale. To see if a real difference was supported, the means were analyzed using a paired samples t test for two measures on the same group. The difference between the mean of Personal Teaching Efficacy, 5.52 (SD = .65), and the mean of General Teaching Efficacy, 4.97 (SD = .85), was supported with an alpha level below .01 (p = .000).

Length of RR Service is Correlated With Teacher Efficacy

Table 8 shows that support was found for the expected direct relationships between length of service in RR and the three types of teacher efficacy. Pearson product moment correlation coefficients greater than zero between the three types of teacher efficacy and length of RR service were supported at the .05 alpha level. However, correlation coefficients are small, between .107 and .235. This means that length of service in RR would account for only about 5% of overall teacher efficacy.
Table 8
Pearson Correlations for Years of Service in Reading Recovery
With Teacher Efficacy

<table>
<thead>
<tr>
<th>Type of Teacher Efficacy</th>
<th>Correlation with Length of RR</th>
<th>p</th>
<th>N</th>
<th>Research Hypothesis Accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Teacher Efficacy Scale (30 items)</td>
<td>.227</td>
<td>.000*</td>
<td>307</td>
<td>Yes</td>
</tr>
<tr>
<td>H1p Personal Teaching Efficacy (9 items)</td>
<td>.235</td>
<td>.000*</td>
<td>309</td>
<td>Yes</td>
</tr>
<tr>
<td>H1g General Teaching Efficacy (7 items)</td>
<td>.107</td>
<td>.030*</td>
<td>309</td>
<td>Yes</td>
</tr>
</tbody>
</table>

N < 317 is due to missing data
*p < .05 (1-tailed)

and personal teacher efficacy, and about 1% of the variance in general teaching efficacy.

Relationships Between Teacher Efficacy and School Support for Reading Recovery

Data on Survey of School Support for Reading Recovery (SSSRR)

The Survey of School Support for Reading Recovery has 42 items related to the variables used in hypotheses 2 through 13. Table 2 in Chapter III displays the variables with related item numbers, and the SSSRR instrument is found in Appendix C.

The possible responses ranged from “Strongly Disagree” to “Strongly Agree” over a numeric range of 1 through 7, with 7 used to indicate strongest support. None

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of the items needed to be scaled in reverse. A total raw score for the Survey of School Support for Reading Recovery (SSSRR) was computed by summing the responses to individual items; raw scores were recoded as the average of responses to the relevant single items. This recoding procedure placed scores on a 1 to 7 response range to simplify comparisons among items or among variables. Scores that are the means of item responses were also computed for each of the support variables. Table 11 in Appendix H shows the Pearson product moment correlations between SSSRR items and length of RR service. Table 12 in Appendix H shows the number of cases, means, and SD for each of the SSSRR items. Throughout this section the N shown for each analysis represents the number of cases that had sufficiently complete data for the variables to be included in that analysis ("sufficiently complete" means that less than one-third of item responses were missing for a given variable).

Recoded total scores ranged from 3.47 to 6.92 with a mean of 5.39 (SD = .83, N = 280). The z-score distribution for this measure ranges from -2.30 through 1.84.

Report of Correlations Between School Support for Reading Recovery and Teacher Efficacy

Hypotheses sets 2 through 13 each state an expectation of a direct relationship between (a) teacher efficacy as measured by the Teacher Efficacy Survey for Reading Recovery Teachers (TESRRT) and (b) one of the following support variables as measured by the Survey of School Support for Reading Recovery (SSSRR): Gestalt of Support, Good Decision Making Process, Evaluation, Administrative Commitment,
Implementation Rate, Scheduling, Faithful Use of Procedures, Services Before and After RR, Facilitation for Professional Development, Resources, Classroom Program Similarity, and Classroom Teachers' Support for RR. The list of variables with specific survey items is found in Appendix D.

The matrix in Table 9 shows the results for these sets of hypotheses. The rows in Figure 9 list support ten support variables and the columns list three efficacy variables: teacher efficacy (all 30 items of the TESRRT) and two subconstructs—personal teaching efficacy (9 items) and general teaching efficacy (7 items). The hypotheses are represented on the matrix by intersecting pairs of support and efficacy variables. Cells provide the Pearson product moment correlations, probability, and number of cases for these hypotheses. All hypotheses are operationalized as Pearson product moment correlation coefficients being greater than zero, and the null hypotheses were tested using an alpha of .05. Probabilities for the correlations where alpha is less than .05 are marked by an asterisk. The asterisks indicate the pairs of efficacy and school-support variables for which a direct relationship was supported. The length of service variable, though reported in the previous part of the chapter, is also included in Table 9 to facilitate consideration of all hypotheses as a group.

**Relationships Found for Teacher Efficacy and Support Variables**

Direct relationships between teacher efficacy, personal teaching efficacy, and general teaching efficacy were supported at .05 alpha for the following support
<table>
<thead>
<tr>
<th>Length of Service and School Support Variables with Hypothesis Number</th>
<th>Teacher Efficacy 30-item scale</th>
<th>Personal Teaching Efficacy</th>
<th>General Teaching Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
<td>p</td>
<td>N</td>
</tr>
<tr>
<td><strong>Length of RR Service</strong> - H1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.227</td>
<td>.000*</td>
<td>307</td>
</tr>
<tr>
<td><strong>School Support for RR</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Support Through Gestalt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gestalt of Support - H2</td>
<td>.287</td>
<td>.000*</td>
<td>306</td>
</tr>
<tr>
<td>- Support Through General Administrative Practices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good Decision-Making Procedures - H3</td>
<td>.180</td>
<td>.001*</td>
<td>308</td>
</tr>
<tr>
<td>Evaluation - H4</td>
<td>.123</td>
<td>.016*</td>
<td>304</td>
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</tbody>
</table>
Table 9—Continued

<table>
<thead>
<tr>
<th>Support Variables with Hypothesis Number</th>
<th>Teacher Efficacy 30-item scale</th>
<th>Personal Teaching Efficacy</th>
<th>General Teaching Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$r$</td>
<td>$p$</td>
<td>$N$</td>
</tr>
<tr>
<td>Administrative Commitment - H5</td>
<td>.127</td>
<td>.013*</td>
<td>306</td>
</tr>
<tr>
<td>Support Through Operation of the RR Program</td>
<td>.015</td>
<td>.453</td>
<td>300</td>
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* N < 317 is due to missing data

* p < .05 (1-tailed)

Direct relationships between teacher efficacy and personal teaching efficacy (but not for general teaching efficacy) were supported at .05 alpha for the following support variables: Evaluation, Resources, and Classroom Similarity to Reading Recovery. A direct relationship between both teacher efficacy and general teaching efficacy (but not personal teaching efficacy) was supported at .05 alpha for the support variable, Services for Children Before and After Their RR programs. A direct relationship for personal teaching efficacy (but not teacher efficacy or general teaching efficacy) was supported at .05 alpha for the support variable, Facilitation for Professional Development.

**Summary and Discussion of Results Related to School Support Variables**

Ten of the support variables and length of service show modest direct relationships with teacher efficacy, several with all three efficacy constructs. Pearson correlations range from .104 to .287. This degree of correlation can be expected to account for about 1% to 8% of the variance in the relationships between these teachers’ efficacy beliefs and support for RR in the school system or length of RR service. The only variables for which a relationship was not supported were Rate of Implementation and Scheduling.

The fact that all of the correlations found are low, and yet a number of variables do show direct relationships, suggests that there is a complex set of
relationships that are either signs of teacher efficacy, have influence on teacher efficacy, or bear some other relationship. That correlations found in this study are modest is consistent with the statement of Coladarci (1992) that correlations found in studies of teacher efficacy "tend to be modest—typically ranging from +.10 to +.40—noteworthy is the consistency of findings across different studies and investigators" (p. 326).

Open-ended Comments

The responses to open-ended comments were each assigned a topic heading. The most frequently mentioned topic was some description of the classroom program and its relationship to the RR program. The comments included some that expressed a high similarity between the classroom program and RR. However, many of these comments expressed contrasts from one classroom to another or one grade level to another where some classrooms have a very similar and compatible program and others do not. One person expressed lack of connection: "There is not any connection among RR teachers, classroom teachers, and administration. The district feels RR should be the sole solution for early literacy difficulties."

Five respondents' comments indicated that the RR program was either being cut or scaled down. Five respondents showed concerns for the implementation rate of RR (such as, "Under implementation is the biggest problem"). Four persons expressed concerns with the survey items that they felt did not apply to them as an RRT; one
wished survey items had included mention of second language learners, and another
wanted items to deal with “the child’s language development.”

Several comments expressed views of RR as a positive program. A statement
typical of these said, “The best program ever! (So far) RR really teaches staff and
children how to read and to teach reading with strategies that are understandable and
able to follow a child all the way through school. I use my strategies not only for
reading but for other academic subjects. Training was a lot but well worth the
outcome.” Another respondent volunteered her comment on a second mailing
reminder sheet: “Best thing that’s happened in my whole career.”

Two persons expressed frustration that different sites don’t use the same
procedures. Several others expressed frustration over low support by administrators
or other teachers, such as “One of the four classroom teachers comments in front of
adults/students that RR is a waste of time because it does not service enough children.
She doesn’t recognize a child’s progress once she has decided the child is in need of
services.”
CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS, AND CHALLENGES

Introduction

This chapter contains a summary of the purposes and objectives of the study, its methodology, a summary and discussion of findings, conclusions, and recommendations for (a) leadership, administration, and system support; (b) operation of Reading Recovery and other programs; and (c) further research followed by a presentation of related challenges.

Purpose and Objectives of the Study

The purpose of this study was to obtain information that might be used to help maintain or increase the teacher efficacy of Reading Recovery teachers as a means of helping to develop literacy of children, especially those at-risk. It is anticipated that the findings might be used by those concerned with administration and operation of Reading Recovery programs. Further, it is hoped that findings might be generalized in ways that help inform other teacher training and development efforts. To meet study objectives, data were collected to permit testing of 13 sets of 3 hypotheses about teacher efficacy. The first set of hypotheses dealt with (a) relationships between
Teacher Efficacy, Personal Teaching Efficacy, or General Teaching Efficacy; and (b) Years of Service in Reading Recovery Teaching (an indicator of both amount of training and RR teaching experience). The other twelve sets of hypotheses were used to test for direct relationships between the same three types of Teacher Efficacy and 12 variables of School Support for the Reading Recovery program.

Methodology

This was a correlational study that analyzed data collected with a survey instrument. The three sections of the instrument were (1) Demographic and School Context data, (2) the Teacher Efficacy Survey for Reading Recovery Teachers, and (3) the Survey of School Support for Reading Recovery. The hypotheses were operationalized by using Pearson product moment correlation coefficients greater than zero and alpha .05 as the indicator of a direct relationship between variables.

The study population consisted of 375 Reading Recovery teachers from 12 training sites in two Midwestern states. Of this population, 317 teachers completed surveys and of that group 56 were first-year Reading Recovery teachers; the other teachers had from 2 to 13 years of experience.

Summary and Discussion of Findings

As used in this study, “major finding” refers to a result or cluster of results with conceptual meaning. This section highlights the overall results of the study, succinctly states four major findings, and then—for each major finding—discusses the
specific result(s) from the study which support the finding followed by an overview of related literature which adds meaning to the finding or suggests potential implications.

The overall result of this study is that both length of service (an indicator used to represent RR professional development and RR teaching experience) and 10 of the 12 variables of school system support for RR have a modest direct relationship with teachers’ efficacy. While 27 of the 39 correlations examined were significant at p<.05, the amount of variance explained by any specific correlation was small. With the diversity of sites and number of variables related to efficacy, it is not unexpected that correlations were small. Within this overall pattern, four major findings are supported by the data and analysis of this study.

The first major finding is that, for most RRT’s, Personal Teaching Efficacy is higher than General Teaching Efficacy. The second major finding is a direct relation between teacher efficacy and the length of service as an RR teacher. The third major finding is a direct relationship between RR teacher efficacy and 10 of the 12 variables of support by the educational system for the RR teachers and program (see Figure 2); direct relationships were not supported for implementation rate and scheduling.

Figure 2, provides an overview of results obtained from testing the hypotheses and provides a convenient reference for the discussions which follow in the remainder of this chapter.
Each cell of this matrix represents a hypothesis that states that a direct relationship is expected between the row variable, Length of Service or School Support, and the column variable, (Efficacy).

\[
X = \text{Pairs of Variables for Which Existence of Relationships Were Supported at .05 alpha}
\]

\[
- = \text{Pairs of Variables for Which Existence of Relationships Were Not Supported at .05 alpha}
\]

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Figure 2. Summary of Results About Relationships Between Teacher Efficacy Variables and (a) Length of RR Service or (b) Variables of School Support.
Discussion of the Overall Result in Light of Related Literature

The overall result of the study—that both length of service (used as an indicator of training and experience) and support by the school system relate to efficacy—seems consistent with the call of Sparks and Hirsh (1997) for a paradigm shift in staff development so that it focuses not only on teachers’ technical growth but also on the culture and structure of the organization.

Research and experience have taught us that widespread, sustained implementation of new practices . . . requires a new form of professional development. This staff development not only must affect the knowledge, attitudes, and practices of individual teachers . . . But it also must alter the cultures and structures of the organizations in which those individuals work. While the need to help individual teachers and administrators do their jobs better is generally recognized, it is also essential that educational leaders pay attention to organizational change—if for no other reason than to bring a sense of coherence to the reform process. (Sparks & Hirsh, 1997, p. 2)

It is also important to note that many variables have relationships with teachers’ efficacy and each of them explains only a small portion of the variance in efficacy. This is consistent with the understanding of teacher change as a complex process. “Participants in the change process should be aware that they face multiple challenges, each involving determinations of self-efficacy and ability” (Olhausen, Meyerson & Sexton, 1992).

Discussion of the First Major Finding in Light of Related Literature

The first major finding—that for the majority of this group of RRT’s Personal Teaching Efficacy was higher than General Teaching Efficacy—is consistent with
existing research which indicated that these two dimensions of efficacy were indeed referring to separate types of beliefs (Coladarci & Breton, 1997; Fritz, Miller-Heyl, Kreutzer, & MacPhee, 1995; Guyton, Fox & Sisk, 1991; Gibson & Dembo; 1984, and Hoy & Woolfolk, 1993).

By definition, general teaching efficacy is to a considerable degree an outcome expectancy for students; and it is also partly a teacher’s belief in the efficacy for teaching across the profession or a “they can” belief. Personal teaching efficacy is a teacher’s belief in personal competence and capacity to affect outcomes, an “I can” belief. Both forms of efficacy are important. For example, teachers who believe “I can/they can” experience less stress (Fritz, Miller-Heyl, Kreutzer, & MacPhee, 1995).

A great deal of research has shown substantial relationships between teacher/student interactions and outcome expectancies. This suggests that it is vital to consider ways to maintain and/or increase not only personal teaching efficacy but also outcome expectancies.

Rosenholtz (1989) concluded, from her study of social organization of schools, that in some schools there was a “conspiracy of tolerance” in which educators tacitly agree that there will always be a group of children for whom reading and writing at average levels are unattainable. A key difference in teacher talk was found between schools. In schools with shared goals, teacher talk centered around the substance of teaching and student learning; whereas in schools without the shared goals, teacher talk focused on student conduct and students’ limitations.
Perhaps a key reason that general teaching efficacy is lower than personal teaching efficacy for many RRT's is that they work directly with the children least likely to succeed. According to Ashton & Webb (1986), the lower the achievement level of students in class, the less teachers are likely to believe they can influence student learning despite their confidence in the knowledge and skills they have for teaching. According to RR trainers Jan Gaffney & Susan Paynter (1997), "a shift of this normative agreement, the conspiracy of tolerance, comes only after the experience of seeing "unexpected" children excel frequently enough to question the conventional consensus model" (p. 104). It would appear that the Reading Recovery program is a meaningful way to help teachers make this shift, but there is still room for a greater shift.

Perhaps another possible reason that General Teaching Efficacy is lower for RRT's is that the part of this construct that represents the belief in the ability of the teaching profession in general may not be raised by their experience. Even if RRT's develop a belief that it is possible for most children to learn, they realize that not all teachers are equipped to deliver the kind of teaching that will bring about this learning.

Discussion of the Second Major Finding in Light of Related Literature

The second major finding is that Teacher Efficacy and both sub-constructs—Personal Teaching Efficacy and General Teaching Efficacy—in this group of Reading Recovery teachers do have a direct relationship with length of RR service (an indicator of both RR training and RR teaching experience) (p < .05). This finding seems to
suggest that RRTs' efficacy is likely to be maintained and increased over time. However, this study did not do repeated measures of efficacy, and neither did it obtain efficacy measures for any of the teachers before they began RR. Therefore, it is not possible on the basis of this study alone to establish whether or not characteristics of those going into Reading Recovery account for this finding or whether teachers' efficacy changes over time. It seems relevant to discuss related findings from other research. This discussion includes (a) efficacy and selection factors and (b) efficacy and other factors associated with possible change over time during service in the RR program.

**Teacher Efficacy and Selection Scenarios**

There are two selection scenarios which might contribute to the positive correlation between teacher efficacy and length of service in RR programs. The first scenario is that persons who were selected into the program earliest (by themselves or by others) might have been those with higher efficacy. This seems possible because teacher efficacy has been associated in many studies with interest in an innovation, and a willingness to adopt, commit to, and maintain an innovation (Berman & McLaughlin, 1978; Fritz, Miller-Heyl, Kreutzer, & MacPhee, 1995; Guskey, 1988; Olhausen, 1992; Poole, Okeafor, & Sloan, 1989; Smylie, 1988). The second scenario is that there may be a type of Matthew effect wherein the rich get richer and the poor get poorer, or at least the weaker teachers' efficacy does not increase as a much as the
stronger ones’ efficacy does. Fritz, et al., (1995) found that their Dare to be You training kept low efficacy from decline and increased the efficacy of people who were initially higher.

For either of these scenarios or a combination of the two to contribute to the positive correlation between length of service and teacher efficacy would also require other assumptions to be met. The first scenario would require that the RR program maintain initial entrance teacher efficacy in a status quo condition. The second scenario would require the selection of teachers with the right efficacy mix combined with the appropriate training conditions so that the “rich got richer and the poor got poorer” or that, over time those with lower efficacy dropped out of the RR program.

Possible Involvement of the RR Program With the Positive Correlation Between Teacher Efficacy and the Length of Service in the RR Program

There are reasons to believe that much that occurs over time in the RR program might account for maintaining or increasing teacher efficacy rather than the special selection scenarios presented.

Since this research is correlational only, and not experimental, making claims about cause is impossible. However, discussing some plausible factors in light of other research on teacher efficacy is still reasonable. Other research in combination with selected correlational outcomes and descriptive information from this study seem to suggest two likely contributing factors to the finding that teacher efficacy for this population was slightly higher in those with more years of service. These factors are
(a) the continuing support by leadership, administration, and the school system; and
(b) the continuing instructional support and positive student outcomes.

Continuing Support by Leadership, Administration, and the School System
is a planned part of Reading Recovery implementations. The many high responses on
items concerning this type of support suggest it is strong in the sites where the
responding RRT's worked.

After Reading Recovery is selected by someone in a school system, an
implementation plan from administrators is required before the district begins to
operate the program; however, for optimal success to follow, ongoing commitment
and support are necessary. Marie Clay has recognized this and worked to both
establish and monitor implementation of RR. The results of this study support the
importance of the host system and its leadership, administrative roles, and
organizational structures in the success of an RR implementation.

Continuing Instructional Support and Positive Student Outcomes also seem
to be plausible contributing factors to maintaining or improving over time the teacher
efficacy of those who participated in this study. The RR program has many procedures
related to this type of support that are consistent with what the literature says is
needed to provide for continuing and improved teacher efficacy. These procedures
include (a) good initial training, (b) ongoing professional development, (c) colleague
interaction and consultation/guidance from teacher leaders, (d) the experience of
continued teaching practice with reflection as a basis for further lessons, (e)
knowledge of results for children, (f) the practice of discontinuing children from the
program because they have reached an adequate reading level and set of strategic behaviors, and (g) the process of the Reading Recovery innovation becoming more integrated with the host system in the school.

The above RR program procedures are congruent with many already existing findings about teacher efficacy. For example, researchers have linked efficacy beliefs to social structure and processes that support professional development (Poole & Okeafor, 1989; Low, 1989; Volkman, Scheffler & Dana, 1992; Coladarci & Breton, 1997). These processes include task-relevant teacher interaction, joint planning, mentoring of new teachers, and collaboration and coaching with reflection regarding field-based practice. Smylie (1988) found that interactions with ones' colleagues about instructional matters carried a positive indirect effect on personal efficacy through the intervening variable, “certainty of practice.” Within the Reading Recovery training and the program operation, there are processes that include very similar support and features of professional development. Certainly the lessons behind the one-way glass and related discussions as well as colleague visits and yearly institutes promote certainty of practice; RR also promotes learning a process for problem-solving and taking action to meet needs of individual children.

Gibson and Dembo (1984) found that more efficacious teachers would, at points of difficulty, keep on questioning a student and leading him or her to correct responses. This questioning behavior is analogous to the practice in Reading Recovery of using a series of questions and prompts which provide least to most help (Clay, 1993).
Johnson, Baldwin & Wiley (1969) indicated that teachers need to see change in student performance in order to assume responsibility for that change. The system of record keeping, analysis, and data collection for RR research keeps student results continually before the teacher. This type of feedback from results acts both as a stimulus for more focused and intentional teaching effort and a reinforcer of effort.

The background information about Reading Recovery in Chapter 2 provides in greater detail the ways that Reading Recovery’s program uses training, networking, and research in ways that are consistent with others’ findings about formation of teacher efficacy.

The author believes this finding—that length of service in RR is directly related to teachers’ efficacy—very likely adds evidence to strengthen the conclusion drawn by others concerning the strength of Reading Recovery as an innovation that has staying power (Pinnell, 1995). It is not merely an up-front “flash;” it is a program with stability and continuous improvement for teachers and children. One might ask this question: “In light of the Rand Study (McLaughlin & Marsh, 1978), what is the likelihood that teacher efficacy simply improves with time and experience without planned intervention?” The conclusions of the Rand Study suggest that efficacy is not likely to increase with just time and experience. “The more experienced was the teacher, the less likely the project was to achieve its goals” (McLaughlin & Marsh, 1978, p. 84). The researchers attributed this to the fact that more experienced teachers were less likely to change their practices because of project participation. This study found that teachers seemed to “peak out” after five to seven years of
teaching. However, they concluded that "this 'calcifying effect' was probably due to the way schools are managed and the way professional development activities are provided for staff" (McLaughlin & Marsh, 1978, p. 84). Tenured staff are "less likely to see value in activities that only elaborate on present practice" (McLaughlin & Marsh, 1978, p. 85). They concluded that few schools or districts explicitly addressed the professional development needs of their tenured staff. It appears, however, from the results of RR programs in a number of places that the professional development needs of tenured staff in this program are better met. For most teachers who go into RR in this country, it is not simply an activity that "elaborates on present practice." According to Jan Gaffney and Susan Paynter (1997), "Reading Recovery and teaching for acceleration is not about teaching harder or doing more; it is about teaching differently."

**Discussion of the Third Major Finding in Light of Related Literature**

The **third major finding** is that the efficacy of RRT's is directly related to support of leadership, administration, and the overall educational system. This finding is based on the acceptance of some or all of the research hypotheses for 10 out of the 12 support variables examined. All support variables are shown in Figure 2 with X's that indicate the pairs of variables for which relationships were supported (p<.05) and dashes to indicate those pairs for which relationships were not supported.

A summary with the Pearson correlation values, probability levels, and number of valid cases for each of the hypotheses in sets 2 through 13 is found near the end of...
the previous chapter in Table 9. The amount of variance explained by single variables is not large. Part of the explanation for this may be the relatively high values reported on the 1 to 7 point scale for teacher efficacy.

A practice might be felt by most of the participants to be very supportive with an average score of 6 or more, but it may contribute little to a high correlation because responses are clustered together despite variance in participants' overall scores on the efficacy scale. Therefore, as the discussion continues, these descriptive statistics and, as appropriate, ideas from related research and literature will be used to help bring plausible interpretations to the findings that support conclusions and help shape recommendations. The fact that correlations are low or not supported may not be an indication that the variables have no meaningful relationship.

The finding of relationship between efficacy and support from the school system is not unique considering the number of other studies which have found similar relationships. The relationships between efficacy and support in the school are consistent with several reports of previous research about school support described variously as school context, school climate, and school atmosphere. For example, in 1984, Ashton reported conditions in schools that made it difficult to maintain the sense of efficacy. She found that conditions of isolation, difficulty in assessing one's effectiveness as a teacher, lack of collegial and administrative support, and sense of powerlessness that comes from limited collegial decision-making made it difficult for teachers to maintain a strong sense of efficacy. This study found that support of classroom teachers (less isolation perhaps), an evaluation process that provided clear
feedback and helped the teacher set goals, a good decision-making process, and a
gestalt of support as well as administrative commitment to the RR program and
teacher were each correlated with scores for both personal teaching efficacy and
general teaching efficacy as well as the scores for the overall efficacy scale.

Another example is Cotton's (1995) finding that teachers who experienced a
great deal of support from administrators, parents, and family members were more
likely to assume responsibility for academic outcomes. "Assuming responsibility" is a
behavior that comes from a degree of personal teaching efficacy.

This third finding is also consistent with Ohlhausen, Meyerson, and Sexton's
(1992) report that "professional controls" (i.e., ways a school program is operated--
such as class size) made up a category of influence on efficacy and attributions for
success or failure.

Hoy and Woolfolk (1993) found that a healthy school climate--one that has
strong academic emphasis and has principals who use influence with the district on
behalf of teachers--was related to personal teaching efficacy. The same study also
found that school climate in the form of "institutional integrity" (i.e., the ability of the
school to protect teachers from unreasonable outside demands) was related to general
teaching efficacy.

Moore and Esselman (1992), in a study of Kansas City, Missouri teachers,
found that efficacy, empowerment, and instructional climate factors differed
significantly across the schools studied. Empowerment in this study was defined as a
teacher's perception that s/he had influence on decisions. Results indicated that school
atmosphere was related to all other variables studied, and that atmosphere tended to be related to collegiality among teachers. Also, efficacy was strongly related to both classroom and school decision-making.

While there seems to be consistency between findings of the present study and previous studies, it is perhaps a limitation of this study that the measures are not independent. That is, the relationships between variables which have been examined in this study are all operationalized by surveying the same people. It could be that people with higher efficacy tend to have higher perceptions of support even in the same circumstances in which someone with lower efficacy would have a lower perception of support. This is another reason why caution should be used in interpreting these results.

Discussion of Responses to Particular Variables on the Survey of School Support for Reading Recovery

The variable *Gestalt of Strong Support for RR* had the highest correlation with teacher efficacy, Personal Teaching Efficacy, and General Teaching Efficacy. This suggests that any factors which increase the gestalt of support may contribute to teacher efficacy or be a sign of teacher efficacy.

The variable, *Facilitation of Professional Development*, correlated only with personal teaching efficacy in this study. Scores were generally high (item means of 5.46, 6.39, 6.53, and 6.71 on a scale of 1-7) which suggests that school districts consistently provide willingly for the training. Existing experimental research points
to the training as a major factor in the success of the program. A study by Pinnell, Lyons, DeFord, Bryk & Seltzer, (1994)

was designed to address specific questions by comparing Reading Recovery with (1) other one-on-one interventions; (2) traditional Reading Recovery teaching training with a condensed program that did not utilize key teacher training procedures; and (3) group instruction based on Reading Recovery principles. The study . . . confirmed the program’s successful instruction with effect sizes of 1.5 in the first year and .75 in the second year when groups were compared on text reading level. The analysis provided evidence that success was related to several interacting factors . . . The nature of training provided teachers emerged as a factor of critical importance. (Pinnell, 1995. p. 7)

It should be noted that the survey items for this variable asked about willing facilitation of professional development, not about the value of the professional development itself. All districts that use the trademarked Reading Recovery program must ensure that their teachers get the training and are involved in on-going RR professional development as long as they participate in RR. This probably explains the lack of variability in responses to these items.

The variable mean for Similar Classroom Program was 4.65, the lowest of the support variable means. Both the open-ended comments of this study and contacts with RRT’s give evidence that many seem to believe more children will be more successful if they are taught in the classroom in ways that (a) emphasize the same reading strategies, (b) place emphasis on writing for meaning and learning skills in context, and (c) emphasize problem-solving as well as fluency. RRT’s also want classroom teachers to value as strengths the behaviors the child learns to use in RR,
such as rereading to monitor and search for cues, cross checking of cue sources, and self-correction of errors.

Some teachers describe working relationships where the classroom teacher and Reading Recovery teacher are able to help more children reach success because they know each other’s program very well and the programs are compatible to a degree that allows the classroom teacher to say, “This child is struggling a bit, but I know how I can help him continue to progress in the group and he’ll make it, but this other child really needs your one-to-one work.” In other words, it is not simply a set of scores or a text reading level that determines who gets RR, but a closely coordinated decision by teachers who both share a similar understanding about the reading process and the learning-to-read process that allows them to coordinate efforts more fully. It is a situation in which RR is simply an intensification on an individualized basis tailored to a particular child, of an approach that is otherwise highly similar to what goes on in the classroom. This type of coordination also can make it possible for an RR teacher to discontinue a student sooner because s/he knows that child will continue to receive practice in the same type of reading and writing strategies that were emphasized in Reading Recovery. On the other hand, if a child is going to be “on his own” in a classroom with quite different processes being emphasized, it may require the RR teacher to work with the student longer to habituate behaviors that might be vulnerable to the competing processes used in the classroom.
The variable **Support for RR from Classroom Teachers** had a positive correlation of .223 (p < .002, N = 302) with RRT’s length of service in Reading Recovery as well as with Teacher Efficacy. This may mean that, as collaborative relationships develop over time and/or results of the program are realized, the perception of support grows.

The variable **Scheduling** was represented by items that referred to support for “optimal scheduling” for RR which makes it possible for children to do their best work, for teachers’ time to be protected from unrelated assignments that would take time away from daily lessons, assessment/selection to begin when school opens, and maintaining student records during the teachers’ work day (see survey in Appendix C).

It seems likely that the reason this variable did not show a correlation with efficacy is that administrators may not hold the view that it is “optimal scheduling” to provide time during the teacher’s work day for maintaining students’ records because that likely means seeing fewer students during the school day.

Regarding the variable **Implementation Rate**, results vary considerably from district to district. The mean for implementation rate was next to the bottom in the ranked list of means for support variables. Implementation rate of RR in schools served by this group of RRT’s is less than complete in many districts. For items 35 and 36—"In my school system there is adequate Reading Recovery service provided to eligible first grade students in (35) my building and (36) other applicable buildings in my district"—33% indicated a rating of 1, 2, 3, or 4 on a scale of 1-7 where 1 means "strongly disagree." Only 19% of respondents rated both items a "7," indicating
strong agreement that adequate service was provided to all eligible first-grade children.

To the extent that Reading Recovery makes a difference for teachers and children, it is important for districts to work toward full implementation, and it is one of the major goals of the Reading Recovery Council of North America to help provide the RR services to all children who need them.

Conclusions

Educational leaders seek conclusions that can help them make wise decisions which have a reasonable degree of certainty that the results will help improve student outcomes. The broader the rationale and sources of support for a conclusion, the more comfortable they are in using it as part of a decision-making process. Based on the above rationale, the following guidelines have influenced the selection of conclusions reported in this study: (a) the conclusion likely has meaning to an educational leader who is considering a decision about a related question, (b) the conclusion has meaningful support from the results of the study, (c) the conclusion seems reasonable based on synthesis of evidence from this study and, as available, other related research.

The American Setting in Which Conclusions Have Special Meaning

American Education has a dimension that is both a strength and a weakness. This dimension is its de-centralized control where much of the governance is carried out at the district or building level. This type of control allows for a quick response
to changing conditions, a supportive environment for research, and the ability to implement change in one school system without having to obtain regional or national consent.

This dimension also contributes to a weakness. This weakness is exhibited in many ways. Due to the possibility of localized change, school systems are very susceptible to political pressures, slick curriculum promotions designed to sell publishers’ materials, and the resulting instability. This characteristic of American education too frequently contributes to partial implementations of programs which have proved to be excellent at other locations. Too often American education spins its wheels—moving from one promising approach to another while failing to recognize that a good system well implemented is better than the best system only partially implemented or never discovered. It is against this backdrop of a readily changeable education system that the conclusions from this study have the greatest meaning.

The first conclusion is that the Reading Recovery program and process is sustainable over time in ways that seem to support the maintenance and growth of teacher efficacy.

Support for the first conclusion comes from both results of the study and other related research. There are two dimensions of support for this conclusion. The first relates to the sustainability of the RR program over time; the second relates to this being accomplished in a manner in which teacher efficacy is maintained or enhanced.

Support from this study for the first dimension that “the RR program is sustainable over time” comes from the distribution of the number of years in which
teachers in this study have been involved in the RR program. About 28 percent of the teachers have been involved five or more years, and the program continues to grow and recruit new teachers and schools in Michigan. This evidence from the study is further strengthened from more widely based systems which show the program growth since 1984-85 (from a few students and teachers to about 14,000 teachers who have served over 300,000 children) and the results of the study by Pinnell and colleagues which compared several intervention models showed that the regular trademarked RR program got better results with students than an intervention model which used only a few weeks of teaching training (Pinnell, Lyons, DeFord, Bryk, & Seltzer, 1994). Also, it seems reasonable to assume that if the program were not working well, efficacy would be likely to decline.

Support from this study for the second dimension that the program is "sustainable over time in a way that maintains or enhances teacher efficacy" is supported by the positive correlations between measures of RR teacher efficacy and length of involvement with the program. The plausible support from the results of this study are further strengthened when compared with results of the Rand Study (McLaughlin & Marsh, 1978). Teachers' sense of efficacy in the Rand Study was not positively related to years of experience. In fact, there was a negative relationship between years of experience and most of the dependent variables (McLaughlin & Marsh, 1978). This would suggest that longer time or more experience is not in and of itself responsible for the relationship between greater efficacy and longer
involvement in RR. Thus it seems plausible that some other factors about RR must account for the direct relationship between length of service and teachers' efficacy.

Further, it seems logical that if RR teachers were not perceiving success with students and/or receiving continuing system support, they could easily become discouraged over time. Based on the results of the Rand Study (McLaughlin & Marsh, 1978), it seems reasonable that such a scenario would most likely result in negative correlations between measures on teacher efficacy and length of RR service rather than the positive ones obtained.

The second conclusion is that the Reading Recovery program has used strategies of leadership, administration, and overall system implementation in ways that support Reading Recovery teachers. That perceived support contributes to the efficacy of RRT's.

Support for conclusion two comes from both the results of the Survey of School Support for RR where ten of twelve variables were found to have a direct relationship with efficacy. Since the survey of School Support for Reading Recovery was constructed to include factors found in the literature about school context and in key RR program sources, the many ratings that indicated support for the RR program validate this conclusion. The three key RR sources were (1) the Site Coordinator's Handbook published by the Reading Recovery Council of North America, (1996); (2) a pamphlet on the Role of the Principal compiled by Teacher Leaders trained at Oakland University (Cobb, et al., 1996); and (3) the Reading Recovery Guidelines
(RRCNA, 1993). As discussed under major finding three, there is also consistency between this finding and similar findings from other research.

The third conclusion is that, for many sites, the Reading Recovery program could be more successful and Reading Recovery teachers might have a greater sense of efficacy if RR implementation included training and motivating of regular classroom teachers so that there will be better instructional continuity between the RR program and the regular classroom program.

Support for conclusion three is the level of concern expressed by open-ended comments in this study, as well as the finding of relationship between RR teachers’ efficacy and their perceptions of this type of support. This author sees these findings as consistent with frequent discussions of this nature among RR teacher leaders. This type of implementation should help improve student outcomes as well as the teaching efficacy of both regular and RR teachers who participate in such programs.

The fourth conclusion is that outcomes of staff development efforts depend not only on training teachers and providing appropriate experiences, but also on influencing the system as a whole to provide the organizational structure and climate that will foster efficacy and success in school change.

The support for the fourth conclusion is the finding that not only length of service (as an indicator of training and experience) but school support factors were related to teachers’ efficacy. This conclusion is not a novel one. The conclusion is also consistent with the very recent call of Sparks and Hirsh (1997) for a paradigm
shift in staff development so that it focuses both on teachers' technical growth and on the structure of the organization.

Recommendations

Recommendations are made against the backdrop of the current findings, as well as existing research, and broad conclusions. They are divided into three major categories: (1) Leadership, Administration, and System Support; (2) Operation of Reading Recovery and Other Programs; and (3) Further Research.

Recommendations for Leadership, Administration and System Support

**Recommendation one** is to foster social interactions and organizational structures which balance pressure and accountability with support throughout the programs of a school system.

The finding from this study that school support has a relationship to efficacy seems to give evidence that pressure can be productive when the appropriate supports are also present. While these findings are in the context of Reading Recovery, it seems reasonable to generalize these approaches to a school system-wide basis. While teacher accountability as it relates to student outcomes may be desirable, there has been only limited success in implementation of such strategies. Reading Recovery is an example of a program which has accountability that is accepted by teachers. Perhaps its acceptance is due to support structures also included in the program. Part of this support should be organizational structures which provide teachers opportunity
to influence decisions and program improvements. The Reading Recovery program with its constant data collection and requirement to select and teach the lowest achieving children—but to keep no child beyond 100 lessons, coupled with administrative pressure to serve as many children as possible, guarantees that no RR teacher is without pressure for accountability. Pressure may set gears in motion, but support is the lubrication that allows smooth operation. This recommendation is also consistent with Fullan’s concept of the need to balance pressure and support (1993).

Recommendations for Operation of Reading Recovery and Other Programs

**Recommendation two** is to study the relationship of classroom programs to the Reading Recovery program. To the extent that similar or compatible programs of instruction in the classroom and RR are beneficial to student outcomes, there is considerable work to be done in bringing greater alignment or coordination between programs and the teachers who use them.

**Recommendation three** is to work to bring about a full implementation rate of RR with full support of administration and classroom teachers. As more children are served, a greater percentage of them should be successful, thereby giving teachers more evidence of success and thus maintaining or increasing their efficacy. And full implementation will place more RRT’s in the same system or building, thereby providing for more collaboration and networking among teachers.

**Recommendation four** is to encourage and support teachers’ efforts to involve parents in helping their children, or, when that is impossible, arranging other ways for
children to get help with homework and additional reading practice. This recommendation comes both from personal experience in teaching RR and from teachers' strong agreement with this efficacy scale item: "If parents would do more with their children, I could do more."

**Recommendations for Further Research**

**Recommendation five** is to do a study of the results of RR as well as efficacy variables which compares two or more groups with different classroom programs: (a) a group where classroom programs and RR are quite similar/compatible, and (b) a group where classroom programs and RR are quite different.

The study should include follow-up over three to four years with students from both settings to examine their continued improvement in reading, their attitudes toward reading, and their problem-solving approaches when reading challenging material.

**Recommendation six** is to do a longitudinal study of RRT's to trace changes in efficacy (if any) beginning when a teacher is originally selected for RR training, at the end of their training year, and periodically while s/he functions as an RR teacher. Such a study would help to answer the question of whether the greater efficacy with greater length of service is due to being in the RR program or to other factors.

**Recommendation seven** is to refine the Teacher Efficacy Scale for Reading Recovery Teachers using both qualitative and quantitative methods to (a) find out the areas in which teachers feel the most need, and (b) find out the thinking of RRT's as
they respond to items through a think-aloud qualitative data collection process. A greater sense of the needs of RRT's should become evident through this process; and because there is some evidence that efficacy is situation specific or task specific, this understanding should lead to building or maintaining efficacy.

Conclusions and recommendations based on research help provide a basis for decisions that can lead to improvements; however, the real challenge is making such improvements happen.

The Challenge - Making It Happen

A major challenge faced by leaders in education is the need to make decisions in light of the available evidence rather than waiting until all the evidence is in. So, even though this study has not established beyond any doubt that Reading Recovery is responsible for the efficacy being stronger for teachers with longer service, it does seem quite likely that—if the program were not successful—efficacy would decline over time, especially given the Rand Study (McLaughlin & Marsh, 1978) results about length of experience and given the record of innovations which do not last beyond about three years.

American education has several very pressing challenges. About 20% of the adult population is functionally illiterate (Educational Testing Service, 1994). Studies that rank achievement in industrialized countries (National Center for Education Statistics, 1994) are frequently reported over the news and suggest that, in areas of
science and mathematics, the United States is at or near the bottom of the industrialized nations studied.

One major challenge American education faces is the preoccupation with native ability and excuses for why things don't work. Pointing out what is wrong with education almost seems to be a national pastime enjoyed by the media and others. It is far easier to blame than to fix. Coladarci & Bretton (1997) express the need to avoid the sources of disenchantment with teaching: excessive non-teaching responsibilities, lack of job autonomy and discretion, sense of isolation from colleagues and supervisors, insufficient administrative support, and powerlessness regarding decision-making processes.

The Coleman report (Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld, & York, 1966), one of the most comprehensive educational studies ever done, attempted to find out what made a difference in relation to student outcomes, and particularly what school factors have the greatest influence on positive student achievement. At the time of the study, the most controversial finding was that the greatest amount of variance in student outcomes was explained by the type of home from which they came. While this was a very important finding, it made it too easy for teachers to place blame for student failure on the home. Too often in teachers' lounges, a question can be heard: "What chance does the kid have coming from a home like that?" The media, teacher education, and in-service education need to spend much more time stressing and examining the examples of programs that make a positive difference for "kids that come from a home like that." More success stories
are needed of persons such as Marva Collins (1982) or Jaime Escalante (1990), who provide educational heroes and examples of what works.

Fullan (1997) emphasizes a focus on hope versus pessimism: “Hope is not a native, sunny view of life. It is the capacity not to panic in tight situations, to find ways and resources to address difficult problems” (p. 221). He then stresses the importance of listening to both enthusiasts and resisters. Real collaboration must engender and use such hope. Fullan also stresses the fact that we must abandon the idea of the quick fix and understand the role of emotion as well as hope.

We write about collaborative work attitudes and professional learning communities, but it is too easy for these to become abstract phrases. Once again, I believe that if we dig deeper into roles of emotion and hope in interpersonal relationships, we will gain a lasting understanding of how to deal with change more constructively. (p. 226)

We must, says Fullan, help ourselves and other people manage the upsetting feelings of change, and asserts that “the best way to deal with change may be “to improve relationships” (p. 226).

One marked difference between American education and countries that seem to be doing better at the elementary and secondary level is the stronger centralized curriculum (National Center for Education Statistics, 1998b) that discourages fragmentation and partially implemented programs, while making it more possible to integrate teacher training across a system that includes both inservice and preservice education. This difference is a second major challenge for American education.
This third major challenge faced by American education is to retain the good qualities of our highly flexible system, but simultaneously to find ways to achieve greater stability and more complete and successful implementation of good programs. Long-term consistency of a process that allows for change that is sensible and sustains an overall direction while it nurtures continuous improvement is much overdue in this country.

Our country's educational system is known for its pendulum swings from one extreme to another. The field of literacy education is no exception with its leaps from Phonics to Whole Language and back to Phonics (Strickland, 1998) or whatever these terms are called at a given point in time. There is growing recognition that there is no quick fix. For teachers to apply a continually growing knowledge and skills base, there must be leadership, organizational structure, and culture that "makes it happen." To simply mandate it, however, does not make it happen. The system needs to provide an appropriate balance between the competing forces identified by Fullan (1993) who calls for a balance between pressure and support. Fullan also asserts that change is a journey, not a blueprint. What is needed is a process that sustains the journey.

It is not enough to be concerned merely with teachers' attitudes and skills; a harmonious system must provide for students to be given optimal opportunity regardless of the particular locality where they attend school. To accomplish this will take leadership and administrative commitment. A sometimes ambiguous and changing educational gestalt in the U.S. makes it difficult to carry out long-term
commitment. New Zealand's educational system may help to provide a model for the journey we need to take. With considerable consistency, New Zealand's educational system articulates and coordinates its teacher training, its regular classroom programs, and its "safety net" program, Reading Recovery (Frater & Staniland, 1994). In that country, the rate of illiteracy is only about 1% (National Foreign Assessment Center (U.S.), 1995).

The current study is just one of many that point to the need for appropriate leadership support, organizational structure, and sustained professional development, and conclude that these relate to teacher efficacy (Hoy & Woolfolk, 1993; Smylie, 1988; Berman & McLaughlin, 1977; Poole & Okeafor, 1989; Low, 1989; Volkman, Scheffler, & Dana, 1992; Coladarci & Breton, 1997). Reading Recovery provides a curriculum/instructional alternative that, if implemented on a wide scale, holds promise of bringing meaningful improvements to our country's rate of literacy. Reading Recovery also provides educational leaders, administrators, and innovators with a well-documented and researched model that has demonstrated approaches for sustaining and enhancing successful changes. Correctly implemented, it has succeeded in improving reading outcomes of the most challenging students, providing for quality teacher preparation, and continuing professional development to maintain change, enlisting the support of leadership and administration, while marshaling community support.

There is more long-term continuity of professional development and support as part of Reading Recovery than in nearly any other system in use in this country. RR
builds not only on theory that is research-based, but also on practice that has been thoroughly researched both in its means of instruction and in its plan for implementation and operation of the program. However, for this system to make a broad scale difference for children and teachers, committed leadership and administration and; indeed, the educational system, must “make it happen.”

Reading Recovery in several countries where it is being implemented has a remarkable record (Clay, 1987; Reading Recovery Council of North America, 1996) of sustainability. It is suggested that a major contribution to this is the quality of teacher training for those going into RR, the continuing in-service training, and professional development for those who are participating in RR and the support system which has been designed to involve leaders, administrators, and non-Reading Recovery teachers.
Appendix A

Permission to Use Copyrighted Materials
November 27, 1998

Ms. Louise Moon

Re: Teacher Efficacy Scale

Dear Ms. Moon:

I am pleased to grant you permission to utilize the Teacher Efficacy Scale also permission to reproduce or reprint; and permission that UMI may supply copies on demand.

Good luck in your efforts.

Sincerely,

Sherri Gibson, Ph. D.

SG: gb
November 19, 1998

Louise Moon
Director/AU Reading Center
Andrews University
Berrien Springs MI 40104-0110

Dear Ms. Moon:

This letter grants you permission to use the Guidelines and Standards document of the Reading Recovery Council of North America as an appendix to your dissertation. This permission includes permission to reproduce or reprint and to supply copies on demand through UMI. Please attribute the source as in all dissertation citations.

The Council recently published new Standards and Guidelines, and I am enclosing a copy for your convenience.

We will appreciate receiving a complimentary copy of your dissertation.

Thank you.

Sincerely,

Jean F. Bussell
Executive Director

Encl.
Appendix B

Correspondence Regarding Data Collection
September 27, 1997

FIELD(3) FIELD(2) FIELD(1)
FIELD(4)
FIELD(5)
FIELD(6)
FIELD(7)

Dear FIELD(2):

I'm writing to ask permission to gather information at your site. I'd like give a 15-20 minute survey to your teachers. Let me explain.

Reading Recovery is powerful for teachers and children. We also know many variables can influence our outcomes, and it seems vital that we can expand our understanding of such influences.

For my dissertation I am studying self-efficacy of Reading Recovery teachers — the belief that they really can teach the at-risk student. Teacher self-efficacy has been highly correlated with student outcomes. I'll be looking at how several factors relate to self-efficacy in Reading Recovery teachers. Information will be kept confidential and the report will not identify persons or schools.

My visit will be even more helpful if I can observe you teach a child or go with you on a school visit to a teacher.

If you are willing for me to visit and give the survey during a class session, please complete the attached form. Then I'll contact you to arrange a visit. Please either mail back the form included here, or fax to 616-471-6374 or phone me (616) 471-3479 (office & voice mail) or 616-471-7359 (home), or email lmoon@andrews.edu. Once I have your permission I'll contact the appropriate administrator to arrange for that permission as well.

Sincerely yours,

Louise Moon, Teacher Leader

P.S. Please send a map or directions to reach your site.
First Name Last Name
Address 1
Address 2
Address 3

Training Site Address (if different than listed above) ____________________________________________

I will be willing to have you come to visit my training class and continuing contact class to gather data for your research on self-efficacy in Reading Recovery Teachers.

(CIRCLE ONE)   YES   NO

**Training Class**
How many teachers are in your Training Class? ____________________
What day of the week and time of day does your class meet? ____________________

*Please supply all dates below which would be possible times that I might come to your class. I would be making one visit or possible two--to get both training class and continuing contact. I will be attempting to get the data during Fall if possible, but in case of delay, would appreciate getting the other dates as well.*

**Dates for First Year Training Class 1997-98**

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**Continuing Contact**
How many continuing contact groups do you have? _____________
How many teachers per group? _____________

**Dates for Continuing Contact Class 1997-98**

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Administrator (and address) to contact for permission: _________________________________________

Signature of Teacher Leader: ___________________________ Date _________________

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Appendix C

Survey Instruments
Demographic Data and School Context Data

Please circle (or check) one response for each item except where indicated otherwise.

A. My number of year/s teaching Reading Recovery:
   I am in Year: 1 2 3 4 5
   6 7 8 9 10 11 12 12+

B. The Reading Recovery part of my job is:
   Full time  Half time
   Other: (Please specify) _______________________________

C. My other job assignment is:
   Title I Classroom: Gr. _______
   Special Ed  Other: ____________

D. Last year I served ____ RR children.
   1 2 3 4 5 6
   7 8 9 10 11 12 12+

E. Last year I discontinued ____ RR children.
   1 2 3 4 5 6
   7 8 9 10 11 12 12+

F. Last year I taught ____ children in addition to my RR children.
   0 1-4 5-8 9-12 12-16
   17-20 21-30 31-40 41-50 50+

G. I taught for ____ years before going into Reading Recovery.
   0 1 2-3 4-5 6-10
   11-15 16 or more

H. I taught primary grades for ____ years before going into Reading Recovery.
   0 1 2-3 4-5 6-10
   11-15 16 or more

I. My experience before I entered Reading Recovery was:
   Special Ed  Reading Specialist
   Title I  Classroom (grade__)
   Other (specify________________)
   (Circle all that apply)

J. My highest degree is:
   BA or BS  MA or MAT
   Ed.S.  Doctorate

K. The size of my district is:
   ____Urban - (10,000 or more students)
   ____Suburban (1,001 to 9,999)
   ____Rural (1,000 or less)

L. The school where I teach is:
   ____Public  ____Church-related
   ____Charter  ____Private (non-church-related)

M. There is/are ____ other Reading Recovery teacher/s in my building:
   0 1 2 3 4 5
   6 7 or more
Teacher Efficacy Scale for Reading Recovery Teachers
Adapted from the Teacher Efficacy Scale by Sherri Gibson, Ph.D. 1983.

Please use the following rating scale to indicate your degree of agreement with each statement below. Please write in the appropriate numeral to the left of each statement. Think of yourself in your role as a Reading Recovery teacher when you respond to these items.

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<th>Strongly Disagree</th>
<th>Rating Scale</th>
<th>Strongly Agree</th>
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1. When a student does better than usual, many times it is because I exerted a little extra effort.

2. The time in my Reading Recovery sessions has little influence on students literacy compared to the influence of their home environment.

3. If parents comment to me that their child behaves much better during my lessons than he/she does at home, this would likely indicate that would probably be because I have some specific techniques of managing his/her behavior which the parents may lack.

4. Generally the amount that a student can learn is primarily related to family background.

5. If a teacher has adequate skills and motivation, she/he can get through to the most difficult students.

6. If students aren’t disciplined at home, they aren’t likely to accept any discipline.

7. I have enough training to deal with almost any early literacy learning problem.

8. My Reading Recovery training and/or experience has given me the necessary skills to be an effective Reading Recovery teacher.

9. Many teachers’ attempts to help students are stymied by lack of support from the community.

10. Students need to be placed by ability so that slower children are not subjected to unrealistic expectations.

11. Individual differences among teachers account for the wide variations in student achievement.

12. When a student reaches a plateau in learning I am usually able to work out a way to help the student accelerate progress.

13. If one of my new students cannot remain on task for a part of the lesson, there is little that I can do to increase his/her attention until he/she is ready.

14. When a student shows better use of strategies than he has previously, it is usually because I found better ways of teaching that student.

15. When I really try, I can get through to most difficult students.

16. A teacher is very limited in what he/she can achieve because a student’s home environment is a large influence on his/her achievement.
### Teacher Efficacy Scale for RR Teachers -- continued

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17. Teachers are not a very powerful influence on student achievement when all factors are considered.

18. If one of my students is particularly disruptive one day, I ask myself what I have been doing differently.

19. When my students become independent in use of strategies, it is usually because I used effective teaching interactions.

20. If my teacher leader suggested that I change some of my teaching responses, I would feel confident that I have the necessary skills to implement the recommended responses.

21. If a student masters a new reading strategy quickly, this is likely because I knew how to model, question for, and prompt for that strategy.

22. Parent conferences can help a teacher judge how much to expect from a student by giving the teacher an idea of the parents' values toward education, discipline, etc.

23. If parents would do more with their children, I could do more.

24. If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.

25. If a student becomes disruptive and noisy in a session with me, I know some techniques to redirect him quickly.

26. School rules and policies hinder my doing the job I was hired to do.

27. Influences of a student's lack of literacy experiences at home can be overcome by good teaching.

28. When a child progresses after being placed in an intervention program, it is usually because the teacher has provided tailored instruction to that child.

29. If one of my students was unsuccessful with a particular book, I would be able to accurately assess the factors that made the book too difficult for the student.

30. Even a teacher with good teaching abilities may not reach many students.
Survey of Support for Reading Recovery

The purpose of this survey is to find out your opinion about the level of support your school system provides for Reading Recovery. Please indicate your degree of agreement with each statement below by writing the appropriate numeral to the left of each statement. Use the rating scale where 1 means Strongly Disagree and 7 means Strongly Agree.

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In my school system there is/are:

A good decision-making process which:

- 1. involves appropriate persons concerned with early literacy instruction
- 2. gives me a voice in decisions that affect my work
- 3. involves a Reading Recovery management team in working with me
- 4. gives me freedom to make independent decisions when appropriate

Administrative commitment to the Reading Recovery program which is demonstrated by:

- 5. supportive communication about RR
- 6. upholding RR guidelines
- 7. networking among RR administrators

A teacher evaluation process which facilitates my professional growth by:

- 8. providing clear feedback
- 9. helping me to set goals for further growth

Suitable services for children before and after the RR program in the form of:

- 10. supplementary instruction to children on the waiting list
- 11. progress monitoring of children who have completed RR

Optimal scheduling for RR which makes it possible for:

- 12. children to do their best work
- 13. my time to be protected from other unrelated assignments that would take time away from daily lessons
- 14. assessment/selection of RR children to begin when school opens
- 15. maintaining student records during my work day

Adequate provision of resources needed to provide Reading Recovery lessons:

- 16. required RR books
- 17. additional little books
- 18. work space
- 19. furniture
- 20. supplies/consumables

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In my school system there is/are:

**Facilitation for professional development for RR teachers through:**

_21._ provision for my full participation in training sessions

_22._ facilitation for site visits by the university trainer

_23._ willing provision for my attendance at the state or national RR conference

_24._ arrangements for transportation for children who come to “behind-the-glass” lessons

**Faithful use of Reading Recovery procedures for:**

_25._ selection of children

_26._ discontinuing children

_27._ withdrawal of children

_28._ heterogeneous grouping of first grade children in classrooms

**There is a parallel instructional approach in the classroom which is supportive to Reading Recovery due to its similarity in philosophy, methods, and materials:** This parallel is evident in:

_29._ focus of staff inservice for early literacy

_30._ assessment practices

_31._ kindergarten literacy instruction

_32._ writing instruction

**Adequate Reading Recovery service provided to eligible first grade students in:**

_33._ reading instruction

_34._ phonics & word work instruction

**Classroom teacher support for Reading Recovery which is evident by:**

_35._ my building

_36._ other applicable buildings in my district

_37._ teachers' communication that they value Reading Recovery

_38._ a history of involvement during initial planning and decision-making about implementing RR

_39._ a history of continuing involvement in matters related to RR

_40._ teachers' enthusiastic collaboration with me

**A gestalt (general climate) of strong support for:**

_41._ the Reading Recovery Program

_42._ me as a Reading Recovery teacher

COMMENTS:

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Appendix D

Items Used to Collect Data for Specific Variables
Appendix D

Items Used to Collect Data for Specific Variables

**Dependent Variable:**

**Teacher Efficacy Scale for Reading Recovery Teachers (TESRRT)**

Self-efficacy of Reading Recovery teachers--Items (entire TESRRT in Appendix B)

**Independent Variables:**

**Demographic Data**

Variable H1  Length of service

My number of year/s teaching Reading Recovery:

I am in Year: 1  2  3  4  5

6  7  8  9  10  11  12  12+

**Survey of Support for Reading Recovery (SSRR) Items**

Variable H2  Gestalt of strong support for Reading Recovery--Items 41, 42

*A gestalt (general climate) of strong support for:*

____ 41. The Reading Recovery Program
____ 42. Me as a Reading Recovery teacher

Variable H3  Good decision making process--Items 1, 2, 3, 4

*A good decision-making process which:*

____ 1. involves appropriate persons concerned with early literacy instruction.

____ 2. gives me a voice in decisions that affect my work.

____ 3. involves a Reading Recovery management team in working with me.

____ 4. Gives me freedom to make independent decisions when appropriate.
Variable H4  Support through teacher evaluation—Items 8, 9
*A teacher evaluation process which facilitates my professional growth by:
   ___  8. providing clear feedback.
   ___  9. helping me to set goals for further growth.

Variable H5  Administrative Commitment to the Reading Recovery Program—Items 5, 6, 7
*Administrative commitment to the Reading Recovery program which is demonstrated by:
   ___  5. supportive communication about RR
   ___  6. upholding RR guidelines
   ___  7. networking among RR administrators

Variable H6  Degree to which all eligible children are served—Items 35, 36
*Adequate Reading Recovery service provided to eligible first grade students in:
   ___  35. My building
   ___  36. Other applicable buildings in my district

Variable H7  Optimal scheduling for RR—Items 12, 13, 14, 15
*Optimal scheduling for RR which makes it possible for:
   ___  12. children to do their best work.
   ___  13. my time to be protected from other unrelated assignments that would take time away from daily lessons.
   ___  14. assessment/selection of RR children to begin when school opens.
   ___  15. maintaining student records during my work day.

Variable H8  Faithful use of procedures/guidelines in conducting the program—Items 25, 26, 27, 28
*Faithful use of Reading Recovery guidelines for:
   ___  25. Selection of children.
   ___  27. Withdrawal of children.

Variable H9  Services provided for children before and after RR program—Items 10, 11
*Suitable services for children before and after the RR program in the form of:
   ___  10. supplementary instruction to children on the waiting list
   ___  11. progress monitoring of children who have completed RR
Variable H10  Facilitation for professional development for RR teachers—Items 21, 22, 23, 24

*Facilitation for professional development for RR teachers through:*

___ 21. Provision for my full participation in training sessions
___ 22. Facilitation for site visits by the university trainer.
___ 23. Willing provision for my attendance at the state or national RR conference
___ 24. Arrangements for transportation for children who come to behind the glass lessons.

Variable H11  Provision for physical resources to operate the program—Items 16, 17, 18, 19, 20

*Adequate Provision of the following resources needed to provide Reading Recovery lessons:*

___ 16. Required RR Books
___ 17. Additional Little Books
___ 18. Work Space
___ 19. Furniture
___ 20. Supplies/Consumables

Variable H12  Similarity/compatibility between RR and classroom programs—Items 29, 30, 31, 32, 33, 34

*Similarity/compatibility between RR and classroom programs occurs in:

___ 29. Focus of staff inservice for early literacy
___ 30. Assessment practices
___ 31. Kindergarten literacy instruction

*Similarity/compatibility between RR and classroom programs occurs for primary grade instruction in:*

___ 32. Writing instruction
___ 33. Reading instruction
___ 34. Phonics & word work instruction

Variable H13  Classroom teachers' support of RR—Items 37, 38, 39, 40

*Classroom teacher support for Reading Recovery that is evident by:*

___ 37. Their communication that they value Reading Recovery.
___ 38. A history of involvement during initial planning and decision-making about implementing RR.
___ 39. A history of continuing involvement in matters related to RR.
___ 40. Their enthusiastic collaboration with me.
Appendix E

Human Subjects Board Approval Form
Date: 13 April 1998

To: Uldis Smidchens, Principal Investigator
Louise Moon, Student Investigator

From: Richard Wright, Chair

Re: HSIRB Project Number 98-02-14

This letter will serve as confirmation that your research project entitled “Reading Recovery Teachers’ Self-Efficacy for Teaching Reading Related to Length of Reading Recovery Service and School System Support” has been approved under the exempt category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: 13 April 1999
Date: February - April, 1998

Re: YOUR HELP IS NEEDED TO COMPLETE THE ENCLOSED SURVEYS

I'd like to explain briefly why I want to take some of your very valuable time to fill out some surveys. As you know, the success of Reading Recovery has a great deal to do with its teacher training and ongoing staff development. However, there are many other things that also influence our level of success.

You are invited to participate in a research project entitled “Reading Recovery Teachers’ Self-efficacy for Teaching Reading Related to Length of Reading Recovery Service and School System Support.” This project is designed to study factors which may maintain or improve a positive level of teacher self-efficacy in Reading Recovery teachers. The study is being conducted by Louise Moon as part of her doctoral dissertation under the direction of Uldis Smidchens, professor in the Department of Educational Leadership. There are two surveys involved in this study. The first is a Teacher Self-efficacy Scale for Reading Recovery Teachers. The second is a survey of support for Reading Recovery. There is also a questionnaire for demographic and school context data. Completing these surveys should take about 15 minutes. Your replies will be completely anonymous, so do not put your name anywhere on any of the forms. You may choose to not answer any question and simply leave it blank. If you choose to not participate in this survey, you may either return the blank survey or you may discard it. Returning the survey indicates your consent for use of the answers you supply. If you have any questions, you may contact either Louise Moon at 616-471-3479 or Uldis Smidchens at 616-387-3889. You may also contact the Chair of Human Subjects Institutional Review Board at 616-387-8293 or the Vice President for Research at 616-387-8298.

Please do not discuss the survey items or your responses with each other before or during the time that any of you is completing the survey, since I need to obtain your individual perception about the items you will respond to. Please complete the survey and hand it to me as you finish it.

As a thank you for participating, I have for you a copy of a strategy reminder page which some of my teachers have found helpful.

Thank you for your help!

Louise Moon, RR Teacher Leader
Andrews University Reading Recovery Site
YOUR HELP IS NEEDED TO COMPLETE THE ENCLOSED SURVEYS

I'd like to explain briefly why I want to take some of your very valuable time to fill out some surveys. As you know, the success of Reading Recovery has a great deal to do with its teacher training and ongoing staff development. However, there are many other things that also influence our level of success.

You are invited to participate in a research project entitled "Reading Recovery Teachers' Self-efficacy for Teaching Reading Related to Length of Reading Recovery Service and School System Support." This project is designed to study factors which may maintain or improve a positive level of teacher self-efficacy in Reading Recovery teachers. The study is being conducted by Louise Moon as part of her doctoral dissertation under the direction of Uldis Smidchens, professor in the Department of Educational Leadership. There are two surveys involved in this study. The first is a Teacher Self-efficacy Scale for Reading Recovery Teachers. The second is a survey of support for Reading Recovery. There is also a questionnaire for demographic and school context data. Completing these surveys should take about 15 minutes. Your replies will be completely anonymous, so do not put your name anywhere on any of the forms. You may choose to not answer any question and simply leave it blank. If you choose to not participate in this survey, you may either return the blank survey or you may discard it. Returning the survey indicates your consent for use of the answers you supply. If you have any questions, you may contact either Louise Moon at 616-471-3479 or Uldis Smidchens at 616-387-3889. You may also contact the Chair of Human Subjects Institutional Review Board at 616-387-8293 or the Vice President for Research at 616-387-8298.

Please do not discuss the survey items or your responses with others before or during the time that you are completing the survey, since I need to obtain your individual perception about the items you will respond to. Please complete the survey and mail it back to me in the enclosed self-addressed stamped envelope within one week.

As a thank you for participating, I have for you a copy of a strategy reminder page which some of my teachers have found helpful.

Thank you for your help!

Louise Moon, RR Teacher Leader
Andrews University Reading Recovery Site
Appendix F

Script for Administering Surveys on Site
SCRIPT FOR PRESENTING SURVEYS ON SITE

I'd like to explain briefly why I want to take some of your valuable time to fill out some surveys. As you know, the success of Reading Recovery has a great deal to do with its teacher training and ongoing staff development. However, there are many other things that also influence our level of success.

As part of my doctoral program I am studying some of these factors. Especially I am studying the relationship of teacher efficacy with length of service in RR and with various elements of support by your school system for the Reading Recovery program. So your perceptions about support in your school system are important to this study.

Though I really need responses from all of you, your participation is voluntary, and won't affect your grade. Please read the statement of consent to use which explains that you give implied consent to if you complete the survey. All responses will be kept confidential and no names of persons or sites will be reported or passed on to anyone else.

Please read each item carefully, but do not ponder long over any one item, before you indicate your response. This will probably take about 15 minutes. Since I need to know your individual perceptions about the items you will respond to, please do not discuss the survey items or your responses with each other during the time that any of you is still completing the survey. We will complete the demographic data portion first, allowing chances for questions. [go through this with them].

[after demo data is done]
Please complete all items on all sections of the Survey of School Support for Reading Recovery and all items on the Teacher-efficacy Scale for Reading Recovery teachers, including the demographic data section and return these to me as soon as you finish them.

As a small thank you for participating, I have copies for you of a strategy reminder page for children which some of my teachers have found helpful and a pattern for a portable easel to use with the reminder page.

When you finish, please bring me your pages and pick a copy of the Strategy Reminder Page and pattern for a portable stand for the reminder sheet.
Survey Administration Plan

1. Use colored paper so that each site can be identified by color. However, sites will be given a code in order to maintain confidentiality, not named in any of the reporting any records that will be kept. Prepare copies and staple together in the following order: Self Efficacy Scale for RRT's, the School System Support for RR Survey, the Demographic and School Context Data sheets.

2. Prepare and take along enough copies of the survey and statement of consent to use data for respondents plus several extra in case someone spoils a copy or some sets have missing pages or problems from duplicating process, and so I have one to refer to.

3. Check with the teacher leader upon arrival to see when during the schedule the survey will be given to make sure enough time is to be allowed. Make sure they understand that it is to be fully completed there and that respondents should not be unduly rushed.

4. Use the script to introduce what respondents are to do. Distribute survey pages.

5. If respondents ask questions, attempt to explain those which may be asking for definition of terms (although efforts will be made to see that this is unnecessary by piloting and revising the survey.) If such questions are answered, make a record of the response, so that the same response can be used in another similar situation. If questions are asked about items that can be interpreted more than one way and have no one specific definition, the response will indicate the respondent should interpret it in the way that makes most sense to them.

6. Take envelopes, labels, and copy of cover letter to send to those who are absent. Get address or phone from teacher leader or RR directory for those persons and get the survey ready to go out - if possible do this while the others are completing the survey - if not do within two days time.

7. As respondents bring up finished surveys, ask them to double check if they have filled in all parts of it.
Appendix G

Strategy Reminder Sheet Used to Thank Participants
Strategy Reminder - I CAN...

Check the
Think about the story
Get ready
Go back

Find a chunk
Try Other Vowel
Try it
EASEL FOR STRATEGY PROMPTS

Placing the prompts in easy view while you work makes using them easy to use and learn.

You can make an easel from a file folder as shown in the illustrations that follow.

Cut file folder as shown by dotted lines.

Open folder and use as an easel.

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Appendix H

Tables With Item Statistics
Table 10
Means and Standard Deviations for Items of the Teacher Efficacy Scale
for Reading Recovery Teachers

<table>
<thead>
<tr>
<th>Item</th>
<th>Phrasing</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>When a student does better than usual, many times it is because I exerted a little extra effort.</td>
<td>315</td>
<td>4.82</td>
<td>1.34</td>
</tr>
<tr>
<td>12</td>
<td>When a student reaches a plateau in learning I am usually able to work out a way to help the student accelerate progress.</td>
<td>315</td>
<td>5.31</td>
<td>1.00</td>
</tr>
<tr>
<td>14</td>
<td>When a student shows better use of strategies than he has previously, it is usually because I found better ways of teaching that student.</td>
<td>314</td>
<td>5.44</td>
<td>1.17</td>
</tr>
<tr>
<td>15</td>
<td>When I really try, I can get through to most difficult students</td>
<td>314</td>
<td>5.35</td>
<td>1.25</td>
</tr>
<tr>
<td>19</td>
<td>When my students become independent in use of strategies, it is usually because I used effective teaching interactions.</td>
<td>316</td>
<td>5.85</td>
<td>91</td>
</tr>
<tr>
<td>21</td>
<td>If a student masters a new reading strategy quickly, this is likely because I knew how to model, question for, and prompt for that strategy.</td>
<td>315</td>
<td>5.82</td>
<td>.90</td>
</tr>
<tr>
<td>24</td>
<td>If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.</td>
<td>315</td>
<td>5.04</td>
<td>1.23</td>
</tr>
<tr>
<td>25</td>
<td>If a student becomes disruptive and noisy in a session with me, I know some techniques to redirect him quickly.</td>
<td>316</td>
<td>5.98</td>
<td>.87</td>
</tr>
<tr>
<td>29</td>
<td>If one of my students was unsuccessful with a particular book, I would be able to accurately assess the factors that made the book too difficult for the student.</td>
<td>315</td>
<td>6.05</td>
<td>.88</td>
</tr>
</tbody>
</table>

Total Scores for Personal Teacher Efficacy Subscale | 314 | 5.51 | .645 |

Note: * N < 317 is due to missing data

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<table>
<thead>
<tr>
<th>Item</th>
<th>Phrasing</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The time in my Reading Recovery sessions has little influence on students' literacy compared to the influence of their home environment.*</td>
<td>314</td>
<td>5.59</td>
<td>1.36</td>
</tr>
<tr>
<td>4</td>
<td>Generally the amount that a student can learn is primarily related to family background.*</td>
<td>315</td>
<td>5.43</td>
<td>1.41</td>
</tr>
<tr>
<td>6</td>
<td>If students aren't disciplined at home, they aren't likely to accept any discipline.*</td>
<td>315</td>
<td>5.34</td>
<td>1.54</td>
</tr>
<tr>
<td>16</td>
<td>A teacher is very limited in what he/she can achieve because a student's home environment is a large influence on his/her achievement.*</td>
<td>315</td>
<td>5.14</td>
<td>1.41</td>
</tr>
<tr>
<td>23</td>
<td>If parents would do more with their children, I could do more.*</td>
<td>315</td>
<td>3.22</td>
<td>1.55</td>
</tr>
<tr>
<td>27</td>
<td>Influences of a student's lack of literacy experiences at home can be overcome by good teaching.</td>
<td>315</td>
<td>5.59</td>
<td>1.27</td>
</tr>
<tr>
<td>30</td>
<td>Even a teacher with good teaching abilities may not reach many students.*</td>
<td>316</td>
<td>4.66</td>
<td>1.84</td>
</tr>
</tbody>
</table>

Total Scores for Teacher Efficacy Subscale  
314 4.99 .845

*These negatively phrased items were scored in reverse. A low score resulted from agreement with the item.
Note: * N < 317 is due to missing data
Table 10—Continued

<table>
<thead>
<tr>
<th>Item</th>
<th>Phrasing</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>If parents comment to me that their child behaves much better during my lessons than he/she does at home, this would likely indicate that would probably be because I have some specific techniques of managing his/her behavior which the parents may lack.</td>
<td>314</td>
<td>4.67</td>
<td>1.67</td>
</tr>
<tr>
<td>5</td>
<td>If a teacher has adequate skills and motivation, she/he can get through to the most difficult students.</td>
<td>314</td>
<td>4.93</td>
<td>1.59</td>
</tr>
<tr>
<td>7</td>
<td>I have enough training to deal with almost any early literacy learning problem.</td>
<td>315</td>
<td>4.56</td>
<td>1.59</td>
</tr>
<tr>
<td>8</td>
<td>My Reading Recovery training and/or experience has given me the necessary skills to be an effective Reading Recovery teacher.</td>
<td>315</td>
<td>6.17</td>
<td>1.08</td>
</tr>
<tr>
<td>9</td>
<td>Many teachers' attempts to help students are stymied by lack of support from the community.*</td>
<td>313</td>
<td>4.21</td>
<td>1.49</td>
</tr>
<tr>
<td>10</td>
<td>Students need to be placed by ability so that slower children are not subjected to unrealistic expectations.*</td>
<td>312</td>
<td>5.07</td>
<td>1.78</td>
</tr>
<tr>
<td>11</td>
<td>Individual differences among teachers account for the wide variations in student achievement.</td>
<td>313</td>
<td>4.25</td>
<td>1.55</td>
</tr>
<tr>
<td>13</td>
<td>If one of my new students cannot remain on task for a part of the lesson, there is little that I can do to increase his/her attention until he/she is ready.*</td>
<td>315</td>
<td>5.77</td>
<td>1.24</td>
</tr>
<tr>
<td>17</td>
<td>Teachers are not a very powerful influence on student achievement when all factors are considered.*</td>
<td>316</td>
<td>6.12</td>
<td>1.15</td>
</tr>
<tr>
<td>18</td>
<td>If one of my students is particularly disruptive one day, I ask myself what I have been doing differently.</td>
<td>315</td>
<td>4.61</td>
<td>1.50</td>
</tr>
</tbody>
</table>

Remaining Items in 30-Item Scale
Table 10–Continued

<table>
<thead>
<tr>
<th>Item</th>
<th>Phrasing</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>If my teacher leader suggested that I change some of my teaching responses, I would feel confident that I have the necessary skills to implement the recommended responses.</td>
<td>315</td>
<td>6.28</td>
<td>.80</td>
</tr>
<tr>
<td>22</td>
<td>Parent conferences can help a teacher judge how much to expect from a student by giving the teacher an idea of the parents’ values toward education, discipline, etc.*</td>
<td>315</td>
<td>4.05</td>
<td>1.86</td>
</tr>
<tr>
<td>26</td>
<td>School rules and policies hinder my doing the job I was hired to do.*</td>
<td>316</td>
<td>6.06</td>
<td>1.36</td>
</tr>
<tr>
<td>28</td>
<td>When a child progresses after being placed in an intervention program, it is usually because the teacher has provided tailored instruction to that child.</td>
<td>315</td>
<td>6.19</td>
<td>.99</td>
</tr>
<tr>
<td></td>
<td>30-Item Scale Total</td>
<td>312</td>
<td>5.25</td>
<td>.518</td>
</tr>
</tbody>
</table>

*These negatively phrased items were scored in reverse. A low score resulted from agreement with the item.

Note: * N < 317 is due to missing data
Table 11

Correlations Between Years of Service in Reading Recovery and Items on Survey of School Support for Reading Recovery

<table>
<thead>
<tr>
<th>Item No.</th>
<th>r</th>
<th>p</th>
<th>N</th>
<th>Item No.</th>
<th>r</th>
<th>p</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.053</td>
<td>.176</td>
<td>306</td>
<td>22</td>
<td>-.105</td>
<td>.032*</td>
<td>311</td>
</tr>
<tr>
<td>2</td>
<td>.094</td>
<td>.050</td>
<td>305</td>
<td>23</td>
<td>.128</td>
<td>.012*</td>
<td>311</td>
</tr>
<tr>
<td>3</td>
<td>.079</td>
<td>.086</td>
<td>305</td>
<td>24</td>
<td>-.124</td>
<td>.014*</td>
<td>311</td>
</tr>
<tr>
<td>4</td>
<td>.030</td>
<td>.303</td>
<td>306</td>
<td>25</td>
<td>.043</td>
<td>.228</td>
<td>306</td>
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<tr>
<td>5</td>
<td>.065</td>
<td>.130</td>
<td>307</td>
<td>26</td>
<td>.055</td>
<td>.168</td>
<td>306</td>
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<tr>
<td>6</td>
<td>.005</td>
<td>.464</td>
<td>306</td>
<td>27</td>
<td>.008</td>
<td>.443</td>
<td>302</td>
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<tr>
<td>7</td>
<td>.049</td>
<td>.195</td>
<td>306</td>
<td>28</td>
<td>.077</td>
<td>.092</td>
<td>300</td>
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<tr>
<td>8</td>
<td>-.010</td>
<td>.433</td>
<td>301</td>
<td>29</td>
<td>.162</td>
<td>.002*</td>
<td>303</td>
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<td>9</td>
<td>-.009</td>
<td>.438</td>
<td>301</td>
<td>30</td>
<td>.255</td>
<td>.000*</td>
<td>301</td>
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<td>10</td>
<td>.156</td>
<td>.003*</td>
<td>309</td>
<td>31</td>
<td>.188</td>
<td>.001*</td>
<td>303</td>
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<tr>
<td>11</td>
<td>.172</td>
<td>.001*</td>
<td>307</td>
<td>32</td>
<td>.140</td>
<td>.008*</td>
<td>302</td>
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<tr>
<td>12</td>
<td>.012</td>
<td>.413</td>
<td>310</td>
<td>33</td>
<td>.232</td>
<td>.000*</td>
<td>303</td>
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<tr>
<td>13</td>
<td>-.030</td>
<td>.301</td>
<td>310</td>
<td>34</td>
<td>.199</td>
<td>.000*</td>
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Table 12
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Appendix I

Guidelines and Standards of Reading Recovery Council of North America
What is Reading Recovery?

INTRODUCTION

Reading Recovery is an early intervention program designed to help the lowest achieving first-grade children develop effective strategies for reading and reach average classroom levels. The goal of Reading Recovery is to help children become independent readers with internal self-extending systems.

Reading Recovery operates within education systems through three key programs:

1. Intensive daily one-to-one instruction for children who are at risk of reading failure;
2. An inservice program through which educators are instructed in proven Reading Recovery techniques;
3. A research program to continuously monitor program results and provide support for participating teachers and institutions.

These programs are supported by a network of Reading Recovery sites that spans North America. Personnel at sites within this network provide training and continuing contact, coordinate the collection of research data on Reading Recovery children, disseminate awareness information, and develop program guidelines.

The Reading Recovery Network

The Reading Recovery network operates on three levels. In schools, specially trained teachers work with children. At the district level, teacher leaders work with children, train teachers, and maintain training sites with the help of a site administrator. In universities and colleges, trainers work with children, train teacher leaders and maintain regional centers.
GLOSSARY OF READING RECOVERY TERMS

Reading Recovery Teachers: Teachers teach four or more children each day in their home site, monitor children's progress, and report to the site Teacher Leaders(s).

Reading Recovery Teacher Leaders: Teacher Leaders work daily with children, train and provide continuing contact for Reading Recovery teachers, lead demonstration sessions and discussions, make teacher visits, and monitor child and teacher progress.

Clinical Trainers of Teacher Leaders: Clinical trainers are certified teacher leaders who work as a team with trainers of teacher leaders. They contribute to all aspects of the teacher leader clinical class.

Reading Recovery Trainers of Teacher Leaders: Trainers plan and supervise coursework, lead demonstration sessions and discussions, teach theory classes, and carry out site visits to oversee the training of teachers and children as they progress in the program. Trainers also work with children as an integral part of their research and development process.

Site Coordinators: Site coordinators are responsible for site maintenance and assume all fiscal responsibilities for establishing a site.

District Liaisons: District liaisons are administrators in school district having Reading Recovery teachers trained by Teacher Leaders at a training site. They are responsible for implementation and maintenance of Reading Recovery in their district.

Continuing Contact: Three-hour sessions for Reading Recovery teachers by teacher leaders to further develop knowledge and skills in implementing the Reading Recovery program.

GUIDELINES FOR THE SELECTION AND REFERRAL OF STUDENTS

The North American Reading Recovery Council is also developing a set of guidelines for the selection and referral of Reading Recovery students. The selection of children for Reading Recovery is based upon the following rational given by Marie Clay:

Rationale

Reading Recovery is designed for children who are the lowest achievers in the class/age group. What is used is an inclusive definition. Principals have sometimes argued to exclude this or that category of children or to save places for children who might seem to "benefit the most," but that is not using the full power of the program. It has been one of the surprises of Reading Recovery that all kinds of children with all kinds of difficulties can be included, can learn, and can reach average-band performance for their class in both reading and writing achievement. Exceptions are not made for children of lower intelligence, for second-language children, for children with low language skills, for children with poor motor coordination, for children who seem immature, for children who score poorly on readiness measures, or for children who have already been categorized by someone else as learning disabled.1


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Reading Recovery Teachers

SELECTION AND TRAINING OF READING RECOVERY TEACHERS

A Reading Recovery Teacher’s primary responsibility is working with children. The teacher also works closely with the building administration and faculty as well as parents to support the program for children.

Requirements for Selection of Teachers

- Successful teaching experience (recommended at least 3 years at primary levels).
- Evidence of adaptability and problem solving.
- Willingness to learn, acquire, and apply new skills and knowledge.
- Evidence of good interpersonal skills with colleagues.
- Selection by screening committee in consultation with Teacher Leader, if possible.

Requirements for Training of Teachers

Training as a Teacher requires participation in a university Reading Recovery course taught by a certified Teacher Leader for a fully academic year. Concurrent with the training, the Teacher works with children and fulfills other duties as prescribed by the school district. The components of the training and the implementation criteria are outlined below.

Coursework

- Attend assessment training for a minimum of 24 hours to learn how to administer and score the Observation Survey and to select children for the program.
- Attend all training class sessions.
- Meet all requirements for Teacher training (including successful completion of assignments and readings).
- Teach a child behind the one-way glass at least three times during the training year.
- Receive school visits from the Teacher Leader for guidance and clarification of appropriate procedures.

Teaching Children

- Teach four children individually for 30 minutes daily in a school setting.
- Receive school visits from a Teacher Leader.
- Communicate with school personnel and parents of children.
- Maintain careful records on each child as a basis for instruction.
- Complete data forms as specified.

School Implementation

- Administer Observation Surveys to select children for services.
- Keep complete records on each child (lesson plans, running records, record of writing vocabulary, record of book level).
- Monitor the progress of children who have been discontinued from the program.
- Work with classroom teachers on behalf of each child.
- Administer Observation Surveys as prescribed throughout the year.
- Complete data forms as required.
- Communicate with parents, first-grade teachers, and other appropriate school personnel.
GUIDELINES FOR TRAINED TEACHERS

The following guidelines pertain to the activities of teachers after the training year.

Teaching Children

- Teach four first-grade children individually for 30 minutes daily in a school setting.

School Implementation

- Administer Observation Surveys to select children for services by the second week of school and begin instruction immediately.
- Keep complete records on each child (lesson plans, running records, record of writing vocabulary, record of book level).
- Monitor progress of children who have been discontinued from the program.
- Work with classroom teachers on behalf of each child.
- Administer Observation Surveys as prescribed throughout the year.
- Complete and submit data forms as required.
- Communicate with parents, first-grade teachers, and other appropriate school personnel.

Continuing Contact

- Attend continuing contact sessions for trained Teachers annually.
- Teach a child behind the glass for colleagues as scheduled.
- Make and receive a school visit with other teachers at least annually.
- Receive a minimum of one school visit from the Teacher Leader.
- Attend a Reading Recovery Conference.
Reading Recovery Teacher Leaders

SELECTION AND TRAINING OF TEACHER LEADERS

A Reading Recovery Teacher Leader has the primary responsibility for preparing and providing continued support for Teachers. The Teacher Leader also works closely with district administrators in program implementation.

Requirements for Selection of Teacher Leaders

- Master’s Degree
- Successful recent teaching experience (recommended 5 years, preferably with three years of primary experience).
- Evidence of leadership within district, showing exceptional competence in working with both colleagues and administrators.
- Nomination by administrative agency making a Reading Recovery commitment (school district, university, consortium).
- Completion of application and personal or telephone interview by trainer(s) at a Teacher Leader Training Site.

Requirements for Training of Teacher Leaders

Training as a Teacher Leader requires full-time participation in a residential program for an academic year at an accredited Reading Recovery Teacher Leader Training Site. The major components of the training are:

(a) procedures for teaching children,
(b) theory and research,
(c) teacher education, and
(d) management of the implementation system.

The components are described below.

Teaching Children

- Teach four children individually on a daily basis in a school setting.
- Receive school visits from a Trainer, Clinical Trainer, and/or designated Teacher Leader.
- Communicate with school personnel and parents of children.
- Maintain careful records on each child and complete data forms as specified.

Academic Coursework

- Attend weekly sessions and seminars (clinical, leadership, theory).
- Meet all requirements for Teacher Leader training as prescribed by the syllabus content outline.
- Teach a child behind the one-way glass a minimum of three times during the training year.

Field Requirements

- Participate in Teacher training conducted by trained Teacher Leaders (i.e., attend weekly class, observe and assist Teacher Leader(s); assume responsibility for planning, implementing, and evaluating Teacher sessions as specified by Trainer).
- Conduct colleague visits to Teacher Leaders-in-Training.
- Participate with Teacher Leaders and/or independently conduct school visits to Reading Recovery Teachers.
- Visit other Reading Recovery sites to gain an appreciation for a variety of settings/approaches.
- Observe continuing contact sessions conducted by a Teacher Leader.
- Take opportunities to observe Reading Recovery activities in school districts (i.e. attend school board meetings, planning sessions).
- Participate in research and evaluation including writing a site report.
Prepare for Implementation

- Work with the site coordinator to plan and initiate activities related to the implementation of Reading Recovery at the site:
  - Communication with appropriate personnel.
  - Inform appropriate groups about Reading Recovery.
  - Plan and provide for appropriate site preparation for Teacher training class (including room with one-way glass and suitable office space).
  - Prepare a budget.
  - Order materials for Teacher training.
  - Develop a plan for clerical support.
  - Assist in the identification of appropriate teachers for the training class.

Professional Development

- Attend annual Reading Recovery conference at an accredited Training Site for Teacher Leaders.
- Attend an annual Reading Recovery Teacher Leader Institute.
- Attend related meetings of Reading Recovery personnel within the area and/or the state.

GUIDELINES FOR TRAINED TEACHER LEADERS

Teaching Children

During Year 1 of implementation, teacher leaders teach four Reading Recovery children daily; during Year 2 of implementation, teacher leaders teach a minimum of three children daily; and during Year 3 of implementation and subsequent years teacher leaders teach a minimum of two children daily.

Training Teachers

- Teach a training class of approximately 8-12 Reading Recovery Teachers, serving as an adjunct faculty member in selected university. The class should meet weekly for 2-3 hours for 25-34 sessions beyond assessment training, receiving university credit. (In the first year of implementation, the Teacher Leader should teach only one class).
- Conduct assessment training (including practice with children) for a minimum of 24 hours.
- Develop and follow a course syllabus which includes content and up-to-date training material to comply with Reading Recovery and university/college guidelines.
- Ensure that teachers teach behind-the-glass at least three times during the year.
- Ensure that there are a minimum of 18 weeks of behind-the-glass sessions during the year.
- Visit Teachers-in-Training 4-6 times during the year to provide guidance and to clarify appropriate procedures.
- Monitor the selection and progress of children using Teachers’ records.
- Provide each trained teacher with 4-6 Continuing Contact sessions annually (including a minimum of 4 BTG sessions per year).
- Visit trained Reading Recovery Teacher at least once each year to insure quality control of the program with additional visits based on need or request.

Research

- Collect initial, discontinuing, and end-of-year data on Reading Recovery children.
- Prepare an annual site report.
Project Implementation and Site Maintenance

- Communicate with appropriate personnel
- Work with the Site Coordinator to plan and initiate the activities related to the implementation of Reading Recovery at the site.
- Plan itineraries for visitors to the program.
- Order materials for teacher training
- Inform appropriate groups about Reading Recovery.
- Assist in recruiting and identifying appropriate teachers for the training class.
- Work with site coordinator to develop a plan for early literacy curriculum and staff development.

Professional Development

- Attend ongoing professional development meetings for Teacher Leaders.
- Annually conduct and receive a colleague visit with other trained Teacher Leaders.
- Receive a minimum of two Site Visits by a Trainer, Clinical Trainer, or mentor Teacher Leader in Year 1. (Site Visits in subsequent years are based on need or request.)
- Attend an annual Reading Recovery Conference sponsored by one of the training sites.
- Attend an annual Teacher Leader Institute.
- Participate in opportunities for interaction with other Reading Recovery Trainers, Clinical Trainers, Teacher Leaders/Tutors, and Teachers including international personnel.
REQUIREMENTS FOR READING RECOVERY SITES

Reading Recovery implementation requires careful study and strong commitment from the agency (school district, university, or consortium). The following requirements should be carefully examined prior to initiation of a local training site for Teachers:

- Study the program carefully and arrange for awareness sessions for key personnel, including visitation to an existing site.

- Develop a long-term plan for your site which follows and honors the guidelines:
  
  - Prepare for staffing the program. Decisions must be made about the model(s) to be used (i.e., first-grade classroom model, Chapter 1 model, etc.).
  
  - Develop a long-range budget to support the role of a Teacher Leader including additional responsibilities of the Teacher Leader position and professional development requirements. The budget should include staffing, materials, travel for staff, travel for students to behind-the-glass sessions, training and tuition costs and facilities.
  
  - Work toward the goal of full implementation (i.e., 20% or more as needed in high-impact schools). Full implementation may apply to building, area, or district levels. At the building level, a minimum of two half-time Reading Recovery Teachers may be able to serve a cohort of 100 first-grade children, with expanded services needed for high-impact schools. (It is more productive to have full implementation in fewer schools than to attempt to provide wide coverage without adequate staffing.)
  
  - Obtain long-term commitment to implementation.

- Designate a site coordinator.

- Make necessary staff allocations so that one or two experienced individuals can attend a full-time Teacher Leader training program for one academic year at an accredited university. Allocate funds for training costs. (See materials from each university training site for requirements and fees.)

- Negotiate with a local college or university to establish graduate credit for courses (taught by Teacher Leader) for Teachers to be trained.

- Provide an appropriate training site for teacher training classes (including construction of room with one-way glass, a suitable sound system, and meeting and office space).

- Select 8-12 Teachers for training class.
  
  - Select only certified experienced teachers with a record of good practice. Teachers should be currently employed in a school district that has made a commitment to implementation.
  
  - If possible, use a screening committee to assure selection of the strongest candidates. (It is recommended that teachers have at least three years of teaching experience with primary children.)

- The Teacher Leader will monitor and support the progress of trained teachers. The number of teachers to be monitored (not to exceed 50 per Teacher Leader) is negotiated. Considerations should include distance, the number of teachers per school, the number of districts and the number of other responsibilities the Teacher Leader has within the district.

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• Provide a means for supporting and interfacing with other programs in the school or district.

• Support the Teacher Leaders and Teachers in the execution of duties that comply with program guidelines.

• Assure that the Reading Recovery Teachers are not pulled from the teaching of students or their training class to fulfill other duties.

• Support guidelines for student selection (see separate document). It is essential that children are from heterogeneously assigned classrooms that include daily reading of text by children within the classroom as well as in Reading Recovery.
BIBLIOGRAPHY


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Hargreaves, A., & Rolheiser, C. (1996). *Understanding and managing change.* Presentation at annual Reading Recovery Teacher Leader Institute, Columbus, OH.


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