THE IMPLEMENTATION OF AN ADAPTATION OF CLAY'S (1985) READING RECOVERY PROGRAM IN A REGULAR GRADE ONE CLASSROOM BY A REGULAR GRADE ONE TEACHER

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by

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ABSTRACT

This study was designed to determine the success of an adaptation of Clay's (1985) Reading Recovery Program within the confinements of a regular grade one classroom environment by a regular grade one teacher who had received no formal training in Reading Recovery procedures. Program implementation was designed around a review of the currently existing literature on Reading Recovery. The students, who were selected for Reading Recovery procedures, were determined to be at risk of failing to effectively learn how to read and write. The researcher, who was also the classroom teacher, used her knowledge of the reading process and her years of experience in early education to interpret and apply the strategies of Reading Recovery as outlined by Clay (1985). Reading Recovery lessons were usually conducted at an individual level but, when instruction warranted, children were grouped for short lessons. All lessons took place in the selected students' grade one classroom. The anticipated outcomes of the program were that each student who appeared at risk of not learning how to read and write would benefit from the tutorial sessions they had received and, consequently, be able to function within the average group in their grade one classroom.

A number of formal and informal assessment procedures were administered before and after program intervention. The test and measurement procedures included Teacher-Student

Interaction, The Gates-MacGinitie Reading Test, and the Diagnostic Survey, as designed by Clay (1985). Pretest and posttest results were computed and recorded. Pretest results for informal assessments (i.e., Student Teacher Interaction), indicated that the four students who had been selected for program intervention were all performing below the average of their class in reading, writing and oral language development. Posttest results indicated that three of the students had made considerable gains in all three areas. Pretest results on the Gates-MacGinitie Reading Test revealed that the program students had scored below the class mean on both raw and percentile rank scores for the class. Posttest scores indicated that two of the program students had made considerable gains with one surpassing the class mean on both the mean raw score and the mean percentile rank score. One other student had made some progress, and one indicated no regression, but did not move beyond the 2nd percentile rank. The Diagnostic Survey was administered to each student in the Reading Recovery group before and after program intervention. The Diagnostic Survey was an effective measure of individual growth. Each student's posttest scores were compared with his/her pretest scores. All students made measurable progress.

Based on the results of this study it was concluded that the students who participated benefitted from a modified version of the Reading Recovery Program.

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CHAPTER I

THE NATURE OF THE STUDY

Introduction

The development of literacy encompasses the major part of most school programs. Readers and writers develop effectiveness, efficiency and flexibility in using literacy for a variety of purposes (Goodman,1986). When children achieve literacy it acts as a positive drive that frees them to acquire knowledge and understanding throughout their lives. It is, therefore,essential that children have access to literacy from a very early age (Pinnell, 1988). Literacy is acquired when everyone obtains a "foundation control" from which achievement can expand (Clay,1990). Regardless of the program of instruction, most children, by the end of grade one, will see print as a natural representation of language. Through effective program implementation, most grade one children will be able to coordinate their use of graphic and contextual information to become independent, functional readers (Lyons, 1989).

There has been almost a century of debate on what approaches should be taken toward initial instruction in reading. The debates are always polemical (Johnson & Louis, 1990). Teachers need a coherent theory of language and learning. When teachers undertake language and learning activities in the absence of a coherent theory, inconsistencies and contradictions in children's literacy experiences often occur (Pace,1991). Furthermore, Tierney and

Pearson (cited in Singer & Ruddell, 1987), maintain that if teachers understand the nature of reading comprehension and learning they will more effectively facilitate the learner in a supportive learning environment.

Current Perspective on Literacy Development

What then, is the model of reading that teachers should adopt? There can be little doubt that "the major impetus towards a revision of many ideas about reading has come from the field of psycholinguistics" (Wray, 1989, p. 3) and the work of Kenneth Goodman. Goodman (cited in Singer & Ruddell,1987) defines reading as "receptive written language" (p. 84). Through the transaction of reader and text, assimilation and accommodation occur causing the reader's schema to be transformed through the process.

A tentative evaluation of existing evidence seems to favour a meaning-based approach. The evidence suggests that reading approaches that focus on elements other than meaning tend to pull children away from meaning. A popular analogy is the likening of learning to read to learning to talk (Wray, 1989). Psycholinguists maintain that oral language is learned through a process of progressive discrimination (Johnson & Louis,1990). Children learn language with an immature but whole idea of how to talk. This is gradually refined. Work by such well known authors as Clay and Holdaway (cited in Johnson & Louis, 1990) maintain that learning to read follows

a similar pattern. According to Clay (1991), the young child does not learn all of his/her phonemes before he/she utilizes words, nor does he/she use many words before he/she uses sentences. Although his/her control of language is immature, he/she gradually improves control as he/she is actually involved in the process of focusing, maintaining and refining. Pace (1991) supports this perspective. She maintains that the pragmatic context of which the language user is a part influences purpose and meaning. Furthermore, "language learners must invent and try the rules of language for themselves through social interaction as they move toward control of language for meaning" (p. 13). Every time adults use language around a child, they demonstrate the natural functions of language (Cullinan, Greene & Jaggar, 1990). Language is best learned when these demonstrations occur within a meaningful context.

Holdaway (1982) conducted a study to examine the preschool learning environment of children who were already reading and writing when they entered school at age five years. The studies indicated that "under suitable motivation and in a favourable learning environment children would master literacy skills in a way very similar to that in which they master other developmental tasks, especially those of spoken language" (p. 294). With these new understandings on literacy development, a multidimensional perspective has been applied to literacy learning. Researchers are now studying literacy

from a child's perspective as he/she engages in social, linguistic and cognitive activities. Strickland and Morrow (1988) maintain that reading and writing develop concurrently with oral language. Therefore, the notion that children must be orally fluent before literacy, has been replaced by a view that all languages processes, including reading and writing, develop concurrently in an interrelated manner.

Reading and writing are learned through active use. "All learners attempt to reproduce the skilled demonstrations they observe" (Cullinan et al., 1990, p. 752). Their first attempts at reading and writing are approximations; if children's early attempts to read and write are met with enthusiasm, approximations will more closely match the text and a clearer developmental pattern emerges (Cullinan et al., 1990). Authentic literacy events are necessary if children are to "make sense of texts written by others and to discover what they know and mean as they create written text" (Pace, 1991, p. 15). Rosenblatt (1982) maintains that if reading is to be meaningful and purposive for the child then one cannot deny "the importance of text in the transaction" (p. 269). What texts, then, should teachers use for literacy instruction?

Children's Literature vs. Publishers' Programs

Routman (1988), in her evaluation of how children become literate, has stated that in order for children "to become actively literate the school curriculum must move beyond the

facilitation of active involved and evaluative thinking" (p. 16). She maintains that the way we teach reading and writing "is critical to the development of active literacy" (p. 16). A supporting view is held by Strickland and Morrow (1988). They compared curriculum planning from two perspectives - emergent literacy vs. readiness. Emergent literacy is seen as the "the ongoing development of skill in reading and writing" (p.11). They concluded that children must actively engage in literacy activities that are meaningful and functional and that immersion in books and functional print are more effective in literacy growth than publisher prescribed texts in helping children extend function and meaning. Freeman (cited in Harp, 1988), reports that a teacher's guide to basals (i.e. publishers' programs) tends to focus on "product rather than process" (p. 74). Short sentences, simple vocabulary and repetition of ideas place restrictions on the readers' use of prediction and sense of meaning. Holdaway (1982) states that such an instructional reading program motivates children artificially and rewards them extrinsically. Furthermore Pace (1991) argues that books with repeated language patterns that often resemble workbook style tend to "dilute the focus of meaning, wrest control from the language user and short circuit the important inventive and constructive processes that occur when children initiate language to represent experiences" (p.13).

Literacy learning does not proceed in a prescribed, linear manner. This theory has been largely ignored by publishers' programs. "Programs that arrange instructional activities in rigid predetermined sequences are in conflict with the natural learning proclivities of children" (Johnson & Louis, 1990, p. 1). If children are to become actively literate, school curriculum must move beyond "correct responding to the facilitation of active involved and evaluative thinking" (Routman, 1988, p. 16). Studies have shown (Holdaway, 1982; Routman, 1988; Tunnell & Jacobs, 1989; and Clay, 1991) that the use of quality children's literature is more effective than publishers' programs and has had a positive effect on students' attitude and achievement in reading.

Goodman (cited in Singer and Ruddell, 1987) states that reading is goal oriented and that the goal of reading is to find meaning. Thus the literacy quality of text is very significant. Literature has a quality and depth that is accessible to a variety of learners at varying intellectual levels. Furthermore, it has educational value for the ongoing development of language, reading and writing (Hickman & Cullinan, 1989). Real books lead children to clearer concepts about print and reading and thus extend these concepts. Children will learn to form connections between known language and written language. Through literature, children can experience the richness and variety of meaningful activities.

Such experiences enhance children's abilities. Children learn not only how to read but to want to read (Tunnell & Jacobs, 1989). Trade books provide many lessons about reading print, style, and most importantly about life (Roberts, 1989). They offer an anchor from which children can extend themselves in a multitude of learning experiences.

Statement of the Problem

The primary purpose of this study was to investigate the effectiveness of an adaptation of Marie Clay's Reading Recovery Program within the confinements of a regular grade one classroom environment. Certain modifications to the program were necessary because of the unique nature of implementation. A control group was used as a comparison group. The Gates MacGinitie Reading Test was administered to both the experimental and control groups. The Raw, Stanine, Percentile Rank, and Grade Equivalent scores were computed and recorded for both pretest and posttest scores. The mean raw score and mean percentile rank score were computed for both pretest and posttest situations. In this investigation the following questions were addressed:

1. Can an adaptation of Clay's "Reading Recovery Program" be effective?
2. Can an adaptation of Clay's "Reading Recovery Program" be effectively implemented within the confinements of a grade one classroom?

3. Can an adaptation of Clay's " Reading Recovery Program" be effectively implemented by a grade one teacher who has not completed the required teacher-training program?

Rationale for the Study

Children come to school at varying developmental levels. Even when emersed in a literacy rich school environment by age five, if home environments have been literacy impoverished, not all children will achieve a foundation control of literacy. Research indicates that at-risk children can be identified as early as age six or after one year of classroom instruction (Clay, 1985; Lyons, 1989, Pinnell, Fried & Estic, 1990). The natural response has been to place these troubled readers in supplemental reading programs, the effectiveness of which has been an issue of critical concern (Lyons, 1989).

Family mobility, unsettled family circumstances and absenteeism contribute to an ever changing school population. Coupled with present circumstances of limited resources, a higher number of school children appear to be potentially at risk of academic failure (Lyons, 1989). Prescriptive remedies have been too uniform with the curriculum and not the child as the center of focus. Also, instructional programs for the troubled reader have tended to focus on bits and pieces of print (Lyons, 1989). The natural function of language as an avenue of communication of ideas has been reconstructed into a set of abstractions which have little relevance for the

child (Goodman, 1986). Furthermore, since the nature of instruction determines the strategies that children form when learning to read, early intervention is essential to insure that children do not apply ineffective strategies to the learning process. These children have an immediate need for a reading intervention program in order that they may acquire the skills that are necessary to become productive learners (Pinnell, 1987).

Children are expected to achieve literacy by constructing meaning through the perceptions and interpretations of patterns or relationships. Literacy develops after children learn a system for orchestrating a multiplicity of skills and insights related to the reading process (Pinnell, 1987). Research has shown that there are ways of instructing or learning which may foster or inhibit autonomy in learning. The long standing debates that focus on theory and applied methodology focus on the learner and the teacher and the role each plays in the learning process. Holdaway (1982); Clay (1984); Goodman (1986); Routman (1988) and Clay (1991) see the learner as autonomous. Teachers facilitate literacy growth by motivating children to express themselves. Holdaway (1982) maintains that when children are "motivated to express themselves under the influence of a rich and highly familiar literature" (p.299), the results are extremely satisfying.

Purpose of the Study

Clay (1984;1985;1990;1991) has designed an early intervention program to help first graders who appear to their classroom teachers to be at risk of failing to learn how to read and write. The program provides a framework within which children can learn how to read and write in a holistic environment. Children are selected for the "Reading Recovery Program" based on a standardized assessment (Clay, 1985). The children who are selected for tutoring sessions are the lowest scorers on text reading (i.e., the lowest 20% of their class). These children are then assigned to daily 30 minute lessons (Pinnell et al., 1990). These lessons operate within a specific framework and variance within that framework is dependent on the specific needs of each individual child.

Children are discontinued from the program when their tutor- teachers feel that they can function independently with the average group in their class. Field studies have shown the time frame to be an approximate period of 15 weeks (Dunkeld, 1990). Children who have gone through the program and have not met the criteria for discontinuance may require extra tutoring sessions, or may have to be referred to a reading specialist for further diagnostic procedures (Clay, 1985; Pinnell et al., 1990).

Pinnell (1988) claims that there are specific features of Clay's "Reading Recovery Program" that make it unique. These features have been summarized and listed below:

1. Reading Recovery is an early intervention program, not a remediation program.
2. The program is intended to be temporary and is focused on a child-developed, self-generating system.
3. Children are encouraged to build on strengths.
4. The program fosters independence and emphasizes learning "how to" rather than memorization.
5. Children are active learners. They are encouraged to think and solve problems while interacting with the text.
6. Instruction is not based on any set of prescribed materials but rather on a wide range of children's literature that is suited to the child's specific needs and interests.
7. The aim of the program is to have the child reach the average range for the instructional setting within the grade one classroom.
8. Children are expected to make accelerated progress to "catch up" with their peers.
9. Reading and writing are the two major instructional components of the program.
10. The lesson provides a framework but within that framework the lesson varies from child to child.
11. Children are always expected to read for meaning.
12. Sound-letter relationships are directly taught.

13. During a year-long staff development program, teachers and teacher-leaders immediately begin to work with children.
14. The program is a designed set of interlocking principles and actions that require commitment and consistency from the children involved.

Clay (1984) maintains that the effective implementation of a Reading Recovery Program is dependent on a number of factors. The program requires specially trained teachers, parental interest and involvement and necessary funding for teacher training, teacher salaries and an expansive selection of high quality children's literature. The program was first implemented in five New Zealand schools during the 1978 school year, in an attempt to insure that the program procedures would work in a practical school setting. During that year 122 children from five different schools, who met the selection criteria, were given individual tutoring sessions in Reading Recovery. At the end of 1978 they were retested. Final results showed that 80 of the 122 children were successfully discontinued from the program (Clay, 1985). In 1985-86 a pilot study in Ohio attempted to implement a Reading Recovery Program. During this first year students were not identified until January. However, final results showed that children in a Reading Recovery Program performed better than comparison groups and also performed comparably with average first grade readers. A further study in 1986-87 identified "at-risk"

children in September. Results showed that 73% of the children who received at least 20 lessons were successfully discontinued from the program (Pinnell et al., 1990).

Lyons (1989) did a study on 60 children who had scored on the 19th percentile on the Metropolitan Reading Diagnostic Reading Test in 1986. Thirty of the children had been classified as learning disabled and the remaining 30 were unlabelled. Initially, the learning disabled were more dependent on visual information. However close examination of the means showed a definite shift to a multiple cueing system upon exit from the program. Lyons concluded that the Reading Recovery Program helped children to "unlearn" ineffective behaviors. Lyons' study suggests that Reading Recovery may be an effective method to undo instructional disabilities.

Reading Recovery is a literature-based approach to reading and writing. Although the program has been designed for children who are at-risk of failing to learn how to read and write, its philosophy and guidelines with certain modifications may be applied to any literature-based language arts program. These modifications will be dependent on each child's specific needs. The current trend is towards individualized programming in reading and writing instruction. Although Clay's (1985) program follows a controlled outline, variations within that outline are dependent on the unique needs of each individual child. As Clay suggests, however, the target group is the lowest scorers on text reading according

to a standardized assessment (i.e. the lowest 20% of the class).

Significance of the Study

The process of education is in a transitional stage. The movement from a skills-oriented to a meaning-oriented language arts program calls for changes in teacher training, programming and educational environments. The goal of any language program is to foster within the child the appropriate "operations and strategies" that lead to independence in reading (Clay, 1984). The model of literacy used should capitalize on the child's ability to build a self-extending system for reading and writing. Children who experience reading difficulties quickly fall behind in school. They experience failure repeatedly and require expensive and continuous help that may extend over a period of years (Pinnell, 1988). Most children who have had a literacy-rich environment at home and in grade kindergarten do not require special attention. However, irregardless of home and school environment, 10 to 20 percent of children do experience difficulties when learning how to read (Pinnell, 1991). The most common methods for dealing with troubled readers are inadequate. Remediation is often too late and ineffective. It "slows down instruction and although children feel supported and although remedial teachers have their best

interests at heart, they never do catch up" (Pinnell, 1991 p. 11).

Changing the educational prospects for at-risk children will require an enormous investment of resources. Much has already been invested in remedial programs that have proven ineffective in bringing about the fundamental changes that are necessary to increase the educational level of an increasing proportion of school children who are at risk of school failure. Reading Recovery has demonstrated its potential for improving the reading success of individual children and consequently the production of the educational system (Pinnell,1988).

Limitations of the Study

Clay, (1985) has determined that Reading Recovery procedures must be administered by specially-trained Reading Recovery teachers. The researcher has not received any formal training or education in Reading Recovery procedures. Knowledge of such procedures have come solely from current readings on the topic and years of classroom experience with primary school children. Only two grade one classes were used in the investigation. These classes were from two different schools but from the same school district. Random selection was not used. Therefore, transference cannot be extended to include a global population.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The long standing debates that focus on theory and applied methodology focus on the learner and the teacher and the role that each plays in the learning process. Holdaway (1982), Clay (1984), Goodman (1986), and Routman (1988), see the learner as autonomous. Teachers facilitate growth by motivating children to express themselves. Holdaway (1982) maintains that when children are motivated to express themselves the outcomes of that process are extremely satisfying. In order for children to achieve "mastery of literacy within the environment" (p. 299), educators must focus on how children learn, what learning is appropriate and when it is best learned (Hosteler, 1991).

It is essential that children have access to literacy from a very early age (Pinnell, 1988). The child's early literacy experiences must enable him/her to become literate through the construction of inner control and thus reach a conceptual understanding of the written code (Clay, 1991). When children achieve literacy it acts as a "positive drive" that frees them to acquire knowledge throughout their lives (Pinnell, 1988). Literacy is acquired when everyone gets a "foundation control" from which achievement can expand (Clay,1991).

There continues to be a debate as to how literacy is best achieved. The debate is polemic. Early cognitive theorists saw information processing as a series of discrete stages involving input and output. They believed that new information was received at the input level, processed and recorded. They viewed learning as a hierarchial arrangement of steps (Stanovich, 1986). Gough's model of reading is a good example of this bottom-up learning process. He believed in a letter-by-letter model of reading. As reading began, the initial fixation of the eye would set into motion a series of events that began with abstract phonemic representation, across a chain of ordered events, until contact was made with previously learned knowledge (cited in Singer & Ruddell, 1987). Such serial stage models ran into difficulty because they did not account for stages within which higher-level processes affected lower-level processing. For example many children learn how to read before they can identify the letters of the alphabet and hearing-impaired children learn how to read without any knowledge of how to process letter/sound relationships.

Top-down theoreticians approach language in meaningful units. Stanovich (1986), defines top-down models as "higher level processes that interact with and direct the flow of information through lower-level processes. Several exist but they all have in common a view of the fluent reader as being actively engaged in hypothesis-testing as he proceeds through

text" (p. 34). Kintsch, Goodman, and Tierney (cited in Singer & Ruddel, 1987) have devised theories based on reading for meaning through acquisition and activation of prior knowledge. Reading is hypothesis-testing. Stanovich (1986), claims that higher-level processes need not wait the completion of lower-level processes.

Interactive models of reading differ from top-down and bottom-up models of reading "primarily in terms of the relative independence of processes at different levels. ...Each level of processing seeks to synthesize the stimulus, based on its own analysis and the constraints imposed both by higher and lower level processes" (Stanovich, 1986, p. 34). According to Rumelhart and Ruddel (cited in Singer & Ruddel, 1987), top-down and bottom-up processing are occurring at all levels simultaneously. They maintain that there are five interactions that occur simultaneously during the reading process. They include: environment interaction; knowledge interaction; product construction and evaluation interaction; affective/cognitive/metacognitive control interaction and new knowledge interaction (Singer & Ruddel, 1987). Ruddel (cited in Singer & Ruddel, 1987), claims that "the learner should be actively involved in the processing of text if affect is to remain high" (p. 786) and that "the boosting of affect and the development of cognitive and metacognitive strategies are important instructional goals which foster a learner who pays

greater attention, has greater perseverance and interacts with text, teacher and peers" (p. 786).

"Genuine literacy implies using reading, writing, thinking and speaking in the real world, with options, appreciation and meaningful purposes in various settings and with other people" (Routman, 1988, p. 15). Routman (1988) maintains that an actively literate person is constantly thinking, learning and reflecting and by so doing is assuming responsibility for his/her own learning. Divergent open-ended activities that are directly related to the reading experience place responsibility on the learner, thus promoting growth of autonomy in learning (Johnson & Louis, 1990).

The early years are crucial to the process of becoming literate (Pinnell, 1988). First grade is seen as the critical year for the learning of reading and writing and students in the first grade are expected to make accelerated progress (Wasik & Slavin, 1993). Good readers access a range of information as they construct meaning from text. They predict according to what makes sense based on their implicit knowledge of language patterns. Although beginning readers are unaware of their cognitive activities, they are constantly checking or selecting between possibilities using their knowledge of the visual features of words and the relationships between sound and letters (Pinnell, 1991). Through effective program implementation, most grade one children will be able to coordinate their use of graphic and

contextual information to become independent, functional readers (Lyons, 1989). However, children differ widely and in any school district regardless of the teaching method, the problem of poor readers in the primary grades is pervasive (Clay, 1990; Pinnell, 1991).

Family trends are forever changing and are significantly different from what was common two decades ago. A higher divorce rate, more single-parent households, and more career-oriented parents are only some of the demographic trends that have created disruptions in many children's lives. In addition, child care is often mediocre with low pay causing high staff turnover. Children, who thrive on consistency and stability, are frequently exposed to varied expectations and styles from a variety of care-givers during the first years of life (Sanacore, 1987).

Clay, (1985); Lyons, (1989); Pinnell, Fried & Estic, (1990), maintain that at-risk readers can be identified as early as age six, or after one year of classroom instruction. Children who are at risk are vulnerable to the school experience (Pinnell, 1988). Failing to learn to read in the early grades has severe consequences. One outcome of reading failure is a high rate of retention. In many large urban districts 20% of all first graders repeat first grade and more than half of all students repeat at least one grade before leaving elementary school (Slavin, Karweit, & Wasik, 1991). The literate society we live in and our current educational

system demands that children achieve literacy early in their lives. Pressure from peers and the classroom community has an impact on the child and his/her self-concept. Success in the early grades does not guarantee continued success through the school years and beyond, but failure in the early grades virtually guarantees failure in later schooling (Stavin, et al, 1991). If it is possible to prevent the negative spiral that comes with reading failure then educators have an obligation to do so. Therefore when children first show signs of difficulty it is time to intervene (Pinnell, 1991).

Many attempts to raise standards by intensive remediation have produced favorable early results. However, such gains are not usually maintained after the remedial support has ended (Clay, 1985; Pinnell, 1991; Wade, 1992). Low-achieving students differ greatly from each other and have different strengths and needs (Clay, 1988). Reading acquisition involves the learning of various interacting strategies. The reader uses these strategies to process the many levels of information in a text. Low achievers demonstrate fewer and less efficient use of such strategies resulting in a number of outcome deficits (Clay,1988). In many remediation programs, strategy instruction has become a decontextualized learning process. The task has become a recipe that describes a strategy rather than acquiring functional control over a strategy (Gaffney & Anderson, 1991). Children are active learners who learn language in natural surroundings and strive

for meaning at all times (Cullinan et al., 1990). Approaches to reading that focus on elements other than meaning tend to isolate children from what is naturally instinctive to them (Wray, 1989). The reader must develop independent processing skills which increase reading by reading. Meaning should be the external guidance mechanism that empowers the child in error detection. Reading instruction must develop complex learning with reciprocal relationships, feedback systems, self-correction processes and anticipatory systems (Clay, 1988).

Literacy and the Curriculum

A Historical Perspective

Literacy has profoundly affected the history of individuals and nations (Kelly, 1987). Conscious trends towards a more effective process have been expanded only during the last thirty to forty years (Doll, 1974).

Several trends are evident in the evolution of schooling. The first of these began with Plato's theory of education which had a fixed knowledge base. Knowledge and values were not subject to disagreement and the purpose of education was to indoctrinate the young. Prior to the nineteenth century these notions remained fixed. The assumption had been made that subject matter should be organized and logically dispensed to the young under the close supervision of the adult (Doll, 1974). The belief was in a fixed curriculum and

that the learner by nature was pliable and therefore must become accommodating to a preset standard.

With the twentieth century came John Dewey who laid the theoretical groundwork for an "inquiry approach" to learning. He believed that intelligence developed when an individual interacted with his/her environment through problem-solving activities. Dewey maintained that knowledge was related to experience and that the child was not a passive receptor but rather an active participant who tested out ideas and hypotheses. Dewey believed that learning should not be directed by the teacher but rather that the teacher's role should be that of a facilitator of learning (Miller & Sellar, 1990).

The Debate

Educators have long been divided into two major groups - tradionalists and progressivists. The tradionalists have remained product-oriented while relying on a fixed knowledge base of the ancient and modern world. The progressivists have remained more process-oriented relying on a student-generated knowledge base. The most fundamental difference between the theories is in their view of human knowledge. The traditional view sees education primarily in terms of the transmission of knowledge and regards the curriculum as the starting point of that process. The progressivist sees education as a process of development through which children acquire their own knowledge

and values. The focus is on the processes of development rather than on the transmission of knowledge (Kelly, 1987).

A child's mind is not a vacuum. Neither is it a miniature model of the adult's mind. From infancy, children are continually acting on and organizing their experiences. The child's active experimentation with his/her world is analogous with spontaneous research. Children need to form their own hypotheses and keep trying them out through mental and physical manipulations. Curriculum should identify content that arouses in children a need and desire to learn (Hostetler, 1991). Activities that are based on children's interests provide intrinsic motivation. Internal motivation "fosters desirable dispositions and feelings such as initiative, curiosity, attention, self-direction, industry, competence and love of learning" (Hostetler, 1991, p. 27).

Publishers' Programs vs. Children's Literature

Project Literacy U.S. revealed that in 1987 more than 23,000,000 Americans were unable to read and write sufficiently. The study has also revealed that one-third of all adult Americans lack "the communication skills they need to function productively" (Routman, 1988, p. 15). Furthermore, the National Assessment of Educational Progress has found that although reading scores are steadily increasing, African Americans and Hispanic students still fall behind Anglo-American students. On the 1988 assessment, 62% of all nine-year-olds could read at what is called the "basic level", but

only 39% of African American nine year olds could do so (Slavin et al., 1991). According to Routman (1988), American schools are turning out students who can read and write within the school context only. She concluded that these students lack insight into the meanings that words convey. Huck (1982) reports that the teaching of reading within classrooms has changed very little over the past 25 to 30 years and that although educators know more about the process of learning to read, they have not incorporated this knowledge into changing teaching practices. Most teachers still follow a prescribed publisher's program. Although content and format have undergone revisions, recommended practices for teaching resemble those of the traditional basal series. "These new series sometimes succeed only in basalizing literature by asking children to respond by filling in blanks and answering adult questions" (Huck, 1982, p. 5)

Tunnell & Jacobs (1989), evaluated a variety of studies that support a literature-based approach to literacy. The studies involved a variety of subjects and employed a variety of topics and employed different elements of instruction. They noted, however, that there were commonalities "overtly" and "subtly" implied in all of the literature-based programs. These basic elements have been summarized and listed below.

1. Natural readers emerge from a variety of racial and socioeconomic backgrounds. However, all children need to

be exposed to and read to from a variety of children's literature at a very early age.

2. It is essential to use quality children's literature written in natural and uncontrolled language.
3. Neurological impress method should be used in a variety of ways - big books, tape/book, paired reading, etc..
4. Teachers should read daily to their students from a variety of trade books.
5. Children should be allowed to be alone with books when they could reread favourite books, reread taped books, or read new books.
6. Teachers must act as effective role models. They should read and share their enjoyment of books with children.
7. Teachers should employ an "effective" approach thereby insuring that children develop a love for reading.
8. Children should be allowed to select their own reading materials. Autonomy improves attitude.
9. All reading is meaning oriented. Reading skills should be focused on but only in direct relationship to the books and writings of the students.
10. Process writing and other output activities are directly related to the reading experience.

Through the self-selection of reading materials, children shape their own learning. Approximations in reading and writing activities help the learner develop strategic control over his/her own learning. Huck (1982) summarizes the

potential of literature to enrich and extend children as life-long learners. And so literature records the depths of the human experience:

> It can develop compassion by educating the mind.
>
> It can help children entertain new ideas, develop insights they never had before.
>
> It can stretch the imagination, creating new experiences, enriching old ones.
>
> It can develop a sense of what is true and just and beautiful (p. 317).

Real books touch their readers and teach them in a self-regulated way. They provide many lessons about print, style, and most importantly about life (Roberts, 1989). They offer an anchor from which children can extend themselves in a multitude of learning experiences. This makes the use of real books an essential investment in both time and resources. "The risk is almost non-existent and the potential for growth limitless" (Roberts, 1989, p. 15).

The Reading/Writing Connection

Reading and writing are interconnected reciprocal processes. As children read and write they make the connections that form their basic understandings about both processes (Pinnell, 1988). Writing provides the opportunity for children to examine the details of written language, sort out letter/sound relationships search for information, analyze words and cross-check their own work.

Over the past twenty years writing development has become a more controversial issue than ever before. Until the 1960's writing development was considered to be the mastery of a series of skills which could be practised by exercises that were separate from one another and from any particular context (Rivalland, 1991). In the 1969's the personal growth model was explicated. This model emphasizes the development of the individual. Skills were acquired incidently through the processes of reading and writing. Well known relevant researchers of that period included: James Moffett (cited in Petrosky & Bartholomae, 1986) and his theory of cognitive growth; James Britton (1980) and his functional model of writing; Donald Graves (1983) and a process approach to writing development; Holdaway (1979) and Cambourne (1984) who looked at "natural conditions" that promote writing development. Christie (1991), has moved away from personal growth model and suggested the facilitation of children's writing development through the teaching of explicit knowledge about the genres of written language (Rivalland, 1991). In many ways, current thinking about writing development includes some insight from most of the research previously discussed. The past two decades have produced three major holistic developments in the language and learning field. These were language experience, process writing and whole language approaches. These have been listed and summarized below in an

attempt to outline their relationship to trends in early writing and reading development:

Language Experience

Language experience arose out of two developments, children's lived experiences and the language associated with these experiences. An experiential base was believed to be a major contributing factor in linking oral and written language. Initial writing experiences were to trace and copy the adult form provided by the teacher. Although the language of the student dominated, the teacher through dictation, still maintained control of the written product (Petrosky & Bartholomae, 1986). This problem was addressed by the process movement.

Process Writing

In the process approach to writing children still wrote about their own experiences. However, contrary to the language experience approach, they were increasingly given control of the writing process. The teacher became a support person with interactive conferencing (Petrosky & Bartholomae, 1986).

Whole Language

The whole language movement responded to the growing awareness of the connections between reading, writing, listening and speaking. The focus on writing was enhanced by

an increased emphasis on reading and analysis of text (Pidgeon & Wooley, 1989).

Holdaway (1982); Danielson (1992); and Morrow (1993), determined that young children's writing will flourish in a literacy rich environment. Rich reading environments that include books and other reading material from which children are free to select, encourage book handling activities that expand the child's knowledge of special forms of language and special types of language processes. Holdaway (1982) concluded that reading development is strongly correlated to writing development. One of the critical factors in the development of children's writing is the number and variety of books to which they have been exposed. Literature and other factual texts provide a "bank of written texts on which children can draw" (Rivalland, 1991, p. 294). Explicit discussion and reflection on what is read will positively influence children's writing development. Similarly Clarke (1976); Durkin (1966); Morrow (1983); Plessas & Oakes (cited in Morrow, 1993), found that children who have adequate to excessive exposure to books are apt to spend more time in paper and pencil activities.

A fundamental purpose of an education is that children learn to read and write as a necessary part of becoming literate. The years of primary school are crucial in laying the foundation for successful control of literacy. Teacher intervention aimed at students' developing control of the patterns of reading and writing is desirable even from the

first years of schooling (Christie, 1991). The perceived role of the teacher in setting up the school context for reading and writing has a definite impact on the success of the child's early literacy experiences. It is very difficult for teachers to take their student's point of view and to realize what a student comprehends, finds difficult, finds irrelevant or finds fascinating. Yet if teachers teach in a way that allows students to learn, it becomes a tripartite process in which the teacher is an active learner, lets children explore and inform, and provides the support, instruction and context that is necessary (Schroeder & Hunsberger, 1989).

The teacher must set the context and framework for learning. They should "provide stimulation, pick up cues and give appropriate responses and suggestions" (Schroeder & Hunsberger, 1989, p. 11). Learning calls for active involvement and very skilled teaching. For the child can only be set free to learn "If the teacher neither abdicates responsibility nor rules absolutely, but counsels wisely and perceptively" (p. 11).

Reading and writing are qualitative processes. What learners take away from their reading and writing experiences represents meaning potential. Meaning potential does not evolve from text propositions but rather from understanding (Bintz, 1989). Early literacy experiences in reading and writing demand a view that is active and personal. Children interact with and produce written text based on their previous

experiences and acquired ownership. This process of developing ownership is enhanced when children are permitted to explore using the concepts they have mastered. Rather than learning through memorizing, transcribing and reciting, children become apprentices who construct meaning and explore structure in a risk-free, supportive environment (Wason-Ellam, 1987).

As previously indicated the instructional program provided for troubled readers and writers is suboptimal (Lyons, 1989; Goodman, 1986; & Pinnell, 1988). The child who is poorly equipped to develop his/her reading and writing potential may be further inhibited by the environment into which he/she is placed (Stanovich, 1986). These children have an immediate need for an intervention program that will enable them to acquire the skills that are necessary to becoming productive learners (Pinnell, 1987). Reading Recovery is an early intervention program which if properly implemented has the potential to reduce what might become a pattern of school failure for children who are at risk of failing to learn how to read and write (Pinnell, 1987). The Reading Recovery framework stipulates that children must be involved in whole text reading and writing tasks rather than isolated teaching or drill on items (Pinnell, 1988). Reading Recovery children engage in activities that lead to reading - writing connections. They are placed in situations within which they make spontaneous links between what they have read and how they will write (Pinnell, 1988).

Reading Recovery

Program Description

Reading Recovery is a short term intervention program intended for children who are experiencing difficulty in their first year of reading instruction (Pinnell, et al., 1990). The program is designed to help the lowest achieving first grade readers. It is not intended to replace regular program instruction but rather to provide students with daily, thirty minute lessons, that focus intensely on reading and writing instruction (Clay, 1988). The program was designed and first implemented by New Zealand psychologist and educator, Marie Clay (Pinnell, 1987). The program provides a framework within which children can learn how to read and write in a holistic environment. Texts are carefully selected for independent and instructional readability. Children are expected to achieve literacy by constructing meaning through the perceptions and interpretations of patterns and relationships (Pinnell, 1987).

Every activity in Reading Recovery takes place at the level of intact messages. The program is designed to help the learner develop independent processing skills which increase reading by reading and writing by writing. Any attention given to letter/sound analysis is temporary. The primary focus is on meaning (Clay, 1988). The goal of Reading Recovery is for the "recovered" children to reach average reading levels for their specific groups and maintain their gains, requiring no further reading assistance during their school years (Zajano, 1989).

As stated in Chapter I, there are specific aspects of Clay's Reading Recovery that distinguih it from other programs which have been designed to help children who are at risk of failing to learn how to read and write. Pinnell (1988) has identified 15 aspects of Clay's program that contribute to its uniqueness. These are listed and discussed below:

1. Early Intervention

   Reading Recovery provides the child with intensive and focused intervention while he/she is in the process of learning the early stages of reading and writing. The program takes place before the confusion of failure occurs.

2. Short-Term Extra Help

   The program provides the temporary help that enables the child to develop the self- generating system he/she needs to continue learning independently.

3. Building on Strengths

   Reading Recovery supports the development of reading strategies by recognizing and building on the child's immediate strengths and abilities.

4. Independence

   Children learn how to be independent. They are taught how to problem solve using specific strategies. These include self-monitoring, cross-checking, predicting, and confirming. They learn how to apply these concepts within the context of meaning.

5. Flexibility and Responsiveness

Reading Recovery does not depend on a particular set of prescribed materials. Teachers are expected to use a systematic knowledge of the reading-writing process and respond appropriately to each child's unique needs.

6. Action-Oriented

The program is based on the premise that children are active learners. They bring meaning to text based on their prior interaction with various texts.

7. Enabled-Participation

The Reading Recovery Program is not tailored to match the child's classroom program. Rather, the program is intended to accelerate the child until he/she can read and write texts that are equal to the average of the specific group within which the child is participating.

8. Accelerated Progress

Intense, individual tutoring by specially trained teachers supports the child as he/she accelerates at using various strategies that support text reading and writing.

9. Reading-Writing Connection

Every Reading Recovery lesson has both reading and writing components. The relationship between the two is reciprocal. Writing is used as a support for developing reading strategies. Writing allows the child to pay particular attention to the details of print and by so

doing develop his/her awareness of letter/sound relationships.

10. Individual Tailoring of Instruction

The program provides a framework within which the lessondiffers for each child. The difference takes place in the moment to moment interactions between teacher and child as they interact with a variety of reading and writing texts.

11. Teacher Expertise and Judgement

Children are identified for the program by their classroom teacher. These children are the lowest achievers in the first grade cohort.

12. Focus on Meaning

Children read for meaning from the beginning of their individualized sessions. Books are selected based on what is appropriate and appealing to the child. The books should be at a level that the child can read with fluency, meaning and enjoyment.

14. Staff Development

The initial training for Reading Recovery teachers is one year. During the training year Reading Recovery teachers immediately begin to work with children. Teachers in training learn to observe and draw inferences from their observations. A key feature is a one way glass through which teachers watch and analyze each other.

15. System Intervention

Reading Recovery is a carefully designed set of interlocking principles and actions. The program requires the long term commitment of an entire school system. Children are selected for the program based on the Diagnostic Survey and the Diagnostic Survey report (Clay,1985). The children who are selected for tutoring sessions are the lowest scorers on text reading (i.e., the lowest 20% of their class). A typical Reading Recovery lesson would include the following five components (Pinnell et al., 1990):

1. Reading familiar stories - aimed at developing fluency.
2. Taking a running record of text reading from a book that had been read once the previous day.
3. Working with letters.
4. Story writing.
5. Reading a new book.

Children are discontinued from the program when their tutor teachers feel that they can function independently with the average of the class. Field studies have shown the time frame to be an approximate period of 15 weeks (Dunkeld, 1990). Children who have gone through the program and have not met the criteria for discontinuance may require extra tutoring sessions, or may have to be referred to a reading specialist for further diagnostic procedures (Clay, 1985; Pinnell et al., 1990).

Theoretical Framework

Goodman (1986) and Tunnell and Jacobs (1989) have indicated that children who have been exposed within their classroom, to a literature based reading program for a period of one year make significant measurable progress. Stanovich (1986) has also proven that a child of any ability will make better progress when placed in a school with a large number of children who demonstrate high cognitive performance. Children who are experiencing reading difficulties are often removed from a literature based reading program and are further isolated from peers who are potential process models (Stanovich, 1986; Goodman,1986; and Lyons, 1989). When Clay (1985) examined the many studies that measured children's progress in reading, she found that children had made very little progress after they had been removed from the clinical remediation program. She suspected that children were left too long before intervention and that "the difficulties of the young child might be more easily overcome if he/she had practised error behaviour less often, had less to unlearn and relearn and still had reasonable confidence in his/her own ability" (Clay, 1985 p. 51). Clay (1985), then examined her own success with remedial students and decided that she could not account for success by explanations in books. Based on these findings she decided to remove herself from a teaching role and reinstate herself in a more scientific context (i.e. that of neutral observer). She set up specific situations

involving children and teachers interacting in a learning-teaching environment. She hoped to study children's strengths and weaknesses and teachers' effective and ineffective teaching strategies. From these observations she had hoped to develop a model of self-improving strategies for both children and teachers within the context of an actual learning-teaching environment.

An observational research project was begun in 1962 and continued through until 1966. Follow-up workshops and discussion sessions with teachers led to the publication of materials that better enabled teachers to identify children who were experiencing reading difficulty (Clay, 1985). In 1976-77 a project was begun to explore the variability of reading behaviors in children with marked difficulty in beginning reading and who were about 6.0 years old (Clay, 1985). The program observed and evaluated a variety of teaching responses made to these children by teachers during individual tuition sessions. Some responses were rejected and others were expanded. A process of evolution and refinement continued for three years and only the most effective techniques were retained (Clay, 1985).

Clay and her colleagues worked with a theory grounded in field possibilities and field data. There was a continuous reciprocal relationship between theory and practice. She believed that intransigent educational problems might find better solutions in a grounded approach which brings a variety

of possibilities from a variety of sources (Clay, 1990). The use of a model of diversity and complexity grounded in field research on successful learners determined the following features of instruction:

1. The teacher would need to make maximum use of any existing response repertoire.
2. The teacher would support the development of a read-write action system. Selection and sharing of tasks, variance in time and difficulty, content interest and method of instruction, and type and amount of conversation would all be closely monitored by the teacher as teacher and student proceed through daily lessons.
3. The teacher would foster and support process variables - how to get and use information. The teacher would support problem solving strategies rather than correct outcomes.
4. The teacher would set task difficulty to ensure high rates correct responding so that the child would develop an active processing system. (Clay, 1988).

Reading Recovery reinforces the idea of Vygotsky's notion of the zone of proximal development (Gaffney & Anderson, 1991). The width of this zone is "the distance between the actual developmental level as determined by independent problem solving under adult guidance or capable peers" (p.4). Vygotsky (cited in Gaffney & Anderson, 1991) contends that higher mental functions are developed on an interpsychological plane

through social interactions. The social level not only precedes the development of higher mental functions but the organized features of the social context are internalized and reflected in the student's performance (Gaffney & Anderson, 1991). In a Reading Recovery lesson the Reading Recovery teacher responds to the evidence and information presented by the student. Thus instruction is child-driven. The child is the catalyst for interactions on the first level and the determining force for interactions on the next level. Reading Recovery is instructionally sensitive to the child's needs and must be constantly recalibrated to take into account, the new learnings of the child. Reading Recovery teachers operate on an implicit theory of steps within which the teacher tries to anticipate the child's next step and support him/her through each step/stage until the child has learned strategic control of the use of semantic, syntactic, orthographic and phonological cues. The goal is for student and teacher to function independently at increasingly higher levels on more difficult tasks (Gaffney & Anderson, 1991).

Implementation

Actual reform is proceeding at a remarkable rate in the area of early education. Most policy makers and educators now agree that effective interventions in preschool, kindergarten and/or first grade will reduce the long term need for remedial and special education programs (Slavin et al., 1991). Maintaining reading success after it has been established is

easier and cheaper then trying to remediate deficits (Slavin et al., 1991).

During the 1970's and early 1980's Clay tested and refined Reading Recovery procedures. The success of a pilot study and the positive results of further research led to a nationwide implementation of Reading Recovery in New Zealand in 1985. Reading Recovery programs have now been implemented in Australia, England, and in 42 states in the United States. The first Canadian site was established in Scarborough, Ontario in 1988 (Engisch & Syer, 1992). The response was enthusiastic and over 55 Reading Recovery programs have been implemented in Scarborough since that year.

Reading Recovery must be implemented with a coherent plan and effective resources. Failure to adhere to the complex components may lead to inconclusive results (Simmons, 1991). Clay (1991) has identified four aspects that are crucial to the implementation of a Reading Recovery Program: (1)the selection and teaching of children, (2)the training of teachers, (3)the training of teacher leaders, and (4)implementing and coordinating the program in an educational district.

The Selection and Teaching of Children

Students are referred for Reading Recovery by their classroom teachers. These students have been identified by their teachers as being at risk of failing to learn how to read and write. Developing a selection procedure which

complies with the law and accurately identifies students, suggests the need for a screening device with a percentile criterion. In districts where Reading Recovery is funded by Chapter 1 funds, only those children who qualify under Chapter 1 criteria can be admitted for program assessment (Pinnell, 1988). Chapter 1 policy provides financial assistance to meet the special needs of educationally deprived children. The purpose of Chapter 1 assistance is to improve the educational opportunities of preschool, elementary, and secondary level students. The goal of Chapter 1 is for educationally deprived children to achieve grade level proficiency (Zajano, 1989).

Once a "pool" of eligible first graders has been identified, precise selection of the children should be based on all available evidence. This would include classroom work, reading performance, diagnostic test results and the judgement of teachers who have worked on actual learning tasks with their students (Zajano, 1989). Once identified by the school for the Reading Recovery program, the student is thoroughly assessed. The assessment process is detailed and systematic. The student is tested on the following items:

(1) Text reading

(2) Letter identification

(3) Concepts about print

(4) Writing vocabulary

(5) Writing Dictation

After completing the initial diagnosis the Reading Recovery teacher uses the information to develop an individualized program for each student (Simmons, 1991).

The student stays on the Reading Recovery Program for a period of 12 to 16 weeks. During this time, sessions in Reading Recovery procedures are scheduled for 30 minutes every school day. During each lesson the child reads natural language stories and writes stories using his/her own store of language and ideas. The child's progress is continually reviewed until he/she has reached an active level that is parallel to the average group in his/her class. Children who do not reach this level in the prescribed time frame may be continued for extra weeks. Usually, however, when children fail to reach the discontinuation point within reasonable range of the prescribed time frame, they may be referred for further assessment and placed with a special reading teacher. As soon as a child has been discontinued from the program another child is admitted (Simmons, 1991).

There is a continuing need to investigate ways to integrate more children into the Reading Recovery Program. Attendance and family mobility will still continue to be a problem until coverage is extended to include more educational facilities and larger geographical areas. Classroom teachers also need higher quality staff development in order that they may be better able to understand and assess children's abilities. Teachers' perceptions of children and definitions

of competency are difficult to change (Pinnell, 1988). Effective innovations must become incorporated into the policies and ongoing practices of the whole school. Among the possibilities of fostering coordination of reading instruction is the encouragement of classroom teachers to become Reading Recovery teachers. Exposure to the program enables classroom teachers to apply insights gained from the Reading Recovery program to all their students and to the reading tasks relevant to other subject areas (Zajano, 1989).

The Training of Teachers

One of the most significant components of the Reading Recovery program is the selection and training of teachers (Simmons. 1991). Training teachers in instructional and observational techniques does not necessarily produce expert learning facilitators (Pinnell, 1987). The program requires an experienced teacher who is trained to think incisively about the reading process and who is sensitive to individual differences (Clay, 1985). The role of the Reading Recovery teacher is that of an active decision maker who must be capable of making rapid choices based on "a professional understanding of the reading process, the components of the Reading Recovery lesson, the individual characteristics and capabilities of each young reader and the materials available for instructional purposes" (Scharer & Zajano, 1992, p. 16).

The National Evaluation Panel for Ohio believed that "intensive teacher training was an essential feature of

Reading Recovery and thought that the program would receive less favorable results if teacher training were attenuated" (Pollock, 1990, p.11). In response to this need, a staff development program was designed at Ohio State University which was modelled after the staff development component of Clay's (1985) Reading Recovery Program. The Ohio State University's staff development program for Reading Recovery teachers will be used as a model of how teacher training is supposed to be implemented. The primary focus of the program was to train teachers to become more accurate observers of children. Trainees worked in practical settings where they were viewed and offered supportive criticism by their peers (Pinnell, 1987). Since ongoing evaluation of the child's progress is necessary for effective and timely intervention, such training is crucial prior to program implementation.

Teachers who volunteer and are selected to participate in Reading Recovery training should preferably be experienced in grade 1 reading instruction and have a minimum of three years experience as a regular grade 1 classroom teacher (Gaffney, 1991). Gaffney & Anderson (1991) recommends that Reading Recovery teachers train in pairs. Not only does this increase the possibility that all children in need will have the opportunity to participate in a Reading Recovery program but will also provide a structure of mutual support to enhance teacher growth.

Training at any level requires a commitment of at least one school year (Clay, 1985). Teachers begin their training by attending a 30-hour workshop before the beginning of the school year. The classes are usually held at a school based training center. During this time teachers are trained to administer and analyze the Diagnostic Survey Test. Throughout the school year, teachers attend weekly 2 ½-hour classes held after school. Teachers are taught the basic components and procedures of the Reading Recovery Program. Three times during the training year the teacher brings a child to the training sight and teaches a lesson behind a one way glass in a sound-proofed room. Other teachers in training observe and discuss the teacher and child with special emphasis on the effectiveness of the teacher's instructional decisions. A teacher-leader is present and he/she is responsible for guiding and challenging the observers with questions that require analysis (Pinnell et al., 1990). The lessons behind the glass are intended to be authentic experiences for teacher learning (Clay, 1985). Teachers use these behind the glass lessons to help the training teachers "understand the procedures, observe the immediate effects of a teacher's decisions when teaching a child, analyze what might be happening, provide specific evidence to back up their assumptions, and relate what they are observing and learning to their own teaching" (Pinnell et al., 1990, p. 289).

Teachers have to learn to be expert decision makers. They must choose the most appropriate books and select the most powerful procedures for each child. The ability to effectively individualize procedures for each child is probably one of the most important aspects of teacher training. This individualizing aspect is initially difficult for some teachers. However, as they develop in their ability to observe and apply their observations more effectively they begin to develop a more refined theory of how children learn (Pinnell et al., 1990).

A pilot project on Reading Recovery between Portland Public Schools and Portland State University in Oregon examined the effectiveness of a pilot reading program (Dunkeld, 1990). Forty first grade students were identified as at-risk of failing to learn how to read and write. These children were given 7-12 weeks in a Reading Recovery Program. The teachers, administrators and university professor involved with program implementation had no practical knowledge but had a good understanding of the program guidelines as outlined by Clay (1985). They knew of the work at Ohio State University, but had no immediate plans for teacher leader training. Feeling an immediate need for program implementation they attempted to establish their own carefully monitored program (Dunkeld, 1990). As the program progressed the investigators encountered specific problems. They had difficulty determining the reading level of the literature they used,

they had difficulty in accurately gauging the children's rate of progress and they noticed that children were being taught decoding skills in isolation and that contextual cues were not being applied to the reading process (Dunkeld ,1990). In an attempt to overcome these difficulties, some of the investigators attended training sessions at Ohio State Public Schools and Ohio State University. This exposure was thought to have had a positive influence on the final outcome of the project. Although the students made some gains, the investigators concluded that knowledge of program was not sufficient and that proper implementation required effective teacher training programs (Dunkeld, 1990). "There is no substitute for the sensitive, informed teacher who can investigate, hypothesize and make quality decisions about how to respond to each child, how to select and use materials and how to design effective class activities" (Pinnell, 1988, p. 5).

Training Teacher Leaders

Reading Recovery teacher leaders have a complex role that requires a wide range of skills in diverse areas (Clay, 1991). It is essential that they have a thorough understanding of the theoretical concepts upon which the program is based. Teacher leaders must also be sensitive to the organizational, professional and child development issues associated with the innovations in the program. Extensive and practical experience in early education (i.e. kindergarten and grade 1) is also

essential (Clay, 1991). During their training year, teacher leaders must learn how to implement the specialized procedures with children, develop knowledge of theoretical and research bases underlying the reading process, and train teachers in a challenging and supportive manner (Gaffney & Anderson, 1991). Teacher leaders have to develop a critical appraisal of the program's strengths and problem spots. Teacher leaders have to teach children and work through the experiences of learning to do this. It is therefore essential that teacher leaders work through the process by participating in the operation of Reading Recovery over a period of one year (Clay, 1991). The professional development process involves continuous practice, reflection and analysis. Until a teacher has worked with four children on a daily basis for the one year period and has successfully discontinued them from the program, he/she is not considered to be trained in Reading Recovery (Jones, 1991).

Everyone who enrols in the teacher leader training program is required to begin teaching children from the start. Each teacher leader in training is observed by the teacher leader trainer through a one way glass, at various intervals during the training year as he/she is teaching children. The purpose of these sessions is to provide demonstration and focus for the observers who are other teachers in teacher leader training. Practice is essential. Teacher leaders are expected to learn strategies , concepts and theories. Teachers are expected to become active learners through the demands of

discussion and questioning as they view their colleagues in teaching situations (Jones, 1991).

Discussion both during and after the behind-the-glass sessions encourage teacher leaders to reflect and articulate their observations. Teachers are required to write summaries on information gleaned from assessment techniques, write predictions of student progress in an attempt to identify teaching priorities, write and review lesson plans for each student, write case studies and respond to exam questions (Jones, 1991). These practices are intended to involve teachers in reflective and analytical mental operations.

When teachers move into the field, they continue to be involved in reflective and analytical thinking. Teacher leaders are encouraged to write reflective comments as they work with a training class. This helps them establish priorities for their next field work and next class (Jones, 1991). Teacher leaders also assist school administrators with program implementation in their districts as well as educate the community in the nature and function of the program (Jongsma, 1990; Jones, 1991).

It is a feature of Reading Recovery that teachers, teacher leaders, and teacher leader trainers continue to work with hard-to-teach children on a regular basis. The intent of this requirement is that all teachers involved in Reading Recovery training will maintain program quality. There will never be a description in print that will enable a practising

teacher to do what a Reading Recovery teacher is trained to do.

> Text cannot portray the responsiveness of the interactions between teacher and students, the fine-tuning of questioning, the support in risk-taking, and the slight but constant pressure of not doing for children what they can be helped to do for themselves. Nor can the text of a teacher's manual really convey how to use children's strengths to support the things they find difficult (Jongsma, 1990, p. 273).

Reading Recovery requires a new way of thinking about literacy for low achievers. Without an effective training structure, most of the program achievements will not occur. Effective teacher training is essential to the program's success (Jongsma, 1990; Clay, 1991; Jones, 1991).

Implementation and Coordination of a Reading Recovery Program in an Educational District

Innovations such as Reading Recovery must have school system support to be successful (Clay, 1988). Zajano (1989), has identified five implementation issues that are of probable concern to school districts that are considering implementing Reading recovery. These are: (1) Evaluation of effectiveness; (2) Selection of students; (3) Number of students served; (4) Coordination of reading instruction; and (5) Funding. With positive trends towards more direct parent involvement in

children's early schooling, a sixth issue is worth considering - that of parental involvement and support (Holland, 1987; Clay, 1991).

The researcher has already addressed the issue of how children are selected for Reading Recovery under the heading "Selection and Teaching of Children". Program effectiveness will be discussed in the next section marked "Program Effectiveness". The remaining school district implementation issues will be discussed in this section.

Number of Students Served

Reading Recovery instruction takes place with one child at a time. Other special education services such as Chapter 1 usually provides instruction for up to eight children at one time. Using a group approach, a Chapter 1 teacher might serve from 28- 56 children during one school year (Zajano, 1989). Similarly, a Reading Recovery teacher would serve eight children for 30 minutes per each school day. These children would likely require up to 60 or more lessons until they are discontinued from the program. Throughout a typical school year, a Reading Recovery teacher might successfully discontinue eight to ten students and have picked up another eight to ten students. A realistic estimate would be that approximately 20 first graders could receive 60 or more Reading Recovery lessons from a trained Reading Recovery teacher, working full time, in one year (Zajano, 1989). The difference in the number served may present some difficulties

for some districts. Pinnell (1988) argues that although the number of students served is less, the sustained improvements reduce the long term needs for compensatory programs. Furthermore, Allington, (1992), evaluated the cost effectiveness of Reading Recovery compared with other programs that claim to accelerate the progress for low-achieving children. He determined that although Reading recovery was an expensive program, the short term intervention combined with the reduction in the number of first grade repeaters and referrals to special education, made it more cost effective than many other tried options.

Coordination of Reading Instruction

The nature of classroom reading instruction in grades prior to and after program intervention is a concern for school districts intending to implement Reading Recovery. Contradictory methods of instruction might impede student performance once they had been discontinued from the program. The range between whole language and traditional language instruction may vary with teachers (Zajano, 1989). Children need continuous classroom literacy experiences with knowledgeable teachers. Once discontinued from Reading Recovery, children need to continue to work in a literacy rich environment with highly observant teachers who can support children in further developing their competencies (Pinnell et al, (1990).

Among the possibilities for fostering coordination of reading instruction is to have first grade teachers train within their districts as Reading Recovery teachers. In order to insure that coordination of literacy instruction continues into second grade, Zajano (1989), suggests that students who have not met discontinuance requirements be assigned to Chapter 1 teachers who have received training in Reading Recovery procedures. She further suggests that non-discontinued students be allowed to complete their Reading Recovery lessons after they have entered second grade.

Teacher leaders are the key to implementing a successful Reading Recovery program. They need to be aware of the practices of classroom teachers and to keep the traditional system from transforming the innovation back into old practices (Pinnell, 1991).

Funding

Auckland Department of Education helped fund the 1976-77 Reading Recovery Research Project by paying the salary of part-time teacher Susan Robinson and Barbara Watson. A research grant from the University of Auckland paid for a research assistant (Clay, 1985). Three years of fund seeking preceded Ohio's first Reading Recovery pilot test in 1984. Clay and Watson, who was now National Director of Reading Recovery in New Zealand, spent most of that school year in Ohio helping with planning and implementation issues. Watson's salary was paid by The Marta Holden Foundation and the

Columbus Foundation. Clay was awarded a distinguished professorship (Pinnell et al., 1990). Because program implementation required funding and because the availability of funds was limited, Zajano (1989) attempted to develop a proposal whereby Reading Recovery might qualify for funding under the federal compensatory education Chapter 1 funds. Zajano (1989) suggested that Reading Recovery students were part of the target population for Federal funds. She suggested a restructuring of the ways that Federal programs had been organized. She maintained that Federal funds could be used to provide Reading Recovery instruction by classroom teachers. Given the overall purpose of the two programs, the changes suggested by Zajano (1989) appear to be in the best interest of the students and educators involved. These suggestions have already been discussed in a previous section. Her suggestions offer realistic solutions to an immediate problem and may be adapted to meet the requirements of other compensatory programs throughout the United States and Canada.

Parent Involvement

A study by Holland (1987) involving 13 Columbus, Ohio urban black and Appalachian parents of first graders " ...investigated home-school communication patterns between special reading teachers and parents of the children they served with attention given to teachers' and parents' views of each other as literacy supporters" (p. 87). Holland identified the great contribution made to literacy by parents and

siblings prior to the young child's schooling. Although literacy lessons are informal and unplanned, family members constantly teach literacy knowledge within the context of their day-to-day interactions. Once a child comes to school, parents often adopt a more peripheral role and view the teacher and school as the experts and the only legitimate source of literacy training for their children (Holland, 1987). Parents and teachers often attach rigid stereotypes to each other and erect invisible boundaries. These factors tend to come between parents and teachers and indirectly interferes with the child's potential growth and development.

Holland (1987) studied seven Reading Recovery teachers on the basis of their communication with parents. Four teachers were identified as using an "active" style of communication and three were identified as using a "passive style" of communication. The "active" teachers were persistent in making contact with parents. They phoned, they sent letters, they left messages and they set up meetings at the parents' convenience. The "passive" teachers initiated very little parent contact and meetings were confined to formal parent-teacher interviews. "Active" teachers took a further step and invited parents to come into their classrooms and observe a Reading Recovery session in progress. This collaborative effort acted as positive reinforcement for teachers, parents, and children. Holland (1987), identified five factors that resulted from parent involvement and that

had contributed positively to a Reading Recovery program. These have been summarized and listed below:

(1) Teachers demonstrated supportive literacy behaviors to parents.

(2) Teachers modeled proper use of literacy materials.

(3) Teachers were able to answer parents' questions and concerns about reading and writing concerns at home.

(4) Teachers were able to establish an alliance of trust with parents.

(5) Reading Recovery students felt that parents and teachers shared a caring attitude and were working together to help them become successful readers and writers.

Parental involvement in program implementation may have a supportive effect on the child's continuous success after Reading Recovery lessons have been discontinued. The invisible boundary that Holland (1987) referred to may become partially removed and literacy development become a shared responsibility between the home and school when parents and school work cooperatively together. Furthermore, by participating as critical observers in a Reading Recovery Program, parents become more aware of the processes through which their children become productive learners. Although this has not been a formally stated component of the Reading Recovery Program, in her 1976-77 field study, Clay (1985), maintained close contact with parents. Parents frequently joined with teachers in watching their children through a one-

way glass. Clay (1985), hoped that schools would continue to approach parents but contacts were found to be minimal.

Parents and teachers have expressed concerns regarding continuous progress once the child had been discontinued from the Reading Recovery Program. Research has indicated that the child continues to make average progress for at least two years after program discontinuance (Clay, 1985; Pinnell, 1988; Leitner, 1990; Hamil, Kelly & Jacobson, 1991; Earl, 1992; Jones, 1992; Wasik & Slavin, 1993).

Program Effectiveness

As Clay (1985) has suggested, experienced teachers can see the reading process go wrong in the first year of school. Young children must learn to orchestrate their knowledge of language and print and how each works if they are to become readers and writers who can function effectively with the average of their class (Pinnell, 1991). Reading Recovery is a promising way to prevent reading disabilities and to undo some instructional disabilities that have occurred (Lyons,1989). The program was designed as a solution to the institutional problem of how to undercut the incidence of reading failure in the educational system (Clay, 1985).

The project began with an observational research base that lasted from 1962 to 1966. During the research period, 100 New Zealand children were observed on reading behaviors. The project was successful in establishing a criteria for detecting early difficulties but provided no guidance for the

remediation of these difficulties. In response to this need, a project set out to explore and describe the "range and variability of reading behaviors in children with marked difficulty in beginning reading and who were about 6.0" (Clay, 1985, p. 67). The project also set how to "explore and describe the variability of teaching responses made to these children in individual tuition by a group of teachers" (p.67). In four teaching terms from 1976-77, six tutor teachers worked with selected children for two 40 minute periods each week. A follow-up check in 1978, seven to eleven months after tutoring had finished, revealed that the children who went furthest in the program maintained their progress in the classroom and that the lowest scoring children at the end of tutoring made minimal progress. These results implied that children need intensive help in order to gain satisfactory reading skills and that two sessions weekly were not enough. The results established the need for one 30 minute session daily (Clay, 1985).

In 1978, Reading Recovery was tested in five different New Zealand schools. The schools were chosen because of their differences in size, organizational structure, population and location (Clay, 1985). At the end of 1978 the children in the pilot study were tested. The 122 children were classified into three subgroups (Clay, 1985):

(1) D - the discontinued children who were surviving in their classroom for an average of 12 weeks.

(2) Dd - children who were still receiving tuition but who did not meet the criteria for discontinuance.

(3) P - program children who were still receiving tuition.

An analysis of the test results showed that D and Dd children scored equally as well so they were combined. Over 90% of the children served were able to reach the average levels for their classmates (Clay, 1985; Pinnell, 1988). Three years later a high percentage continued to do well. Based on these results, Reading Recovery was made a national program in New Zealand (Pinnell, 1988). The New Zealand studies provided evidence that the lowest achievers in a first grade classroom can learn effective reading strategies that enable them to reach the average levels for their class or school. Since that time, these studies have been replicated in Australia, the United States, and Canada.

The Ohio State group has conducted two longitudinal studies, one of which compared Reading Recovery to traditional Chapter 1 pullout programs. Three years of fund seeking preceded Ohio's first pilot test of Reading Recovery which began in the fall of 1984. During that year Marie Clay and Barbara Watson conducted a preparation program within which they taught a class of teacher leaders, Reading Recovery teachers and one professor to train teacher leaders (Pinnell et al., 1990). The first study involved 21 teachers who worked in six inner-city Columbus, Ohio schools. Each school had one Reading Recovery class and one comparison class. The lowest

20% in each class were selected for both groups. Students were pretested in September and December and tutoring began in the spring. The second study involved 32 teachers in twelve schools in Columbus. Contrary to the research design there was no distinction made between Reading Recovery trained versus non-Reading Recovery trained teachers. The analysis focused on tutored versus untutored children (Wasik & Slavin, 1993).

The results at the end of the two studies indicated that the Reading Recovery students substantially outperformed the comparison groups on almost all measures. Follow-up studies over the next two years assessed these children's progress on text reading. These results showed that those students who had succeeded in Reading Recovery (i.e. had been discontinued from the program) were still performing on the average level of their classes. However, those students who had not been successfully discontinued from the program but who had received 60 tutoring sessions were still performing below the average of their group and were substantially lower than the control group (Wasik & Slavin, 1993).

The study also evaluated the effects of Reading Recovery on grade retention. It was determined that students who participated in Reading Recovery were much less likely to be retained in grade 1 than were students who participated in the comparison group. These effects did not appear to be sustained after third grade (Wasik & Slavin, 1993). Clay (1990), maintains that follow - up studies beyond grade three would

not be reliable because of the effects of school variables. Changes in classroom teachers, placement in different classes, personal life circumstances, and sickness are all factors that place steady progress at risk on a daily basis .

Another study conducted in four Chicago elementary schools compared Reading Recovery to control treatments in first grade. Standard deviations and statistical tests were not computed so comparative measures were not available. However, measures on text reading indicated that Reading Recovery program effects were substantially higher than comparison groups (Wasik & Slavin, 1993). A further study at Portland by the Portland Public School Research Evaluation Department during 1989-90 assessed the success and effectiveness of Reading Recovery in their area. They determined that Reading Recovery Programs had been successfully implemented and that results were significant enough to warrant continuing with the program. An evaluation of results revealed that 43% of the students receiving tuition were successfully discontinued (39 out of 91 students). Also, when comparing the performance of Reading Recovery students with a random sample of first grade students on three test measures, program students scored comparatively with the random sample on all test scores (Leitner, 1990).

A Reading Recovery Program was initiated in Scarborough, Ontario in 1988. By June of 1992, 56 teachers from 53 Scarborough schools had been trained in Reading Recovery.

Approximately 225 students had received program intervention (Earl, 1992). In September of 1990, The Scarborough Board of Education Research Center, Scarborough, Ontario initiated a study to determine the outcomes of Reading Recovery in that district. The study sample consisted of two cohorts. 42 students were drawn from nine Scarborough schools and constituted Cohort 1. 228 students were drawn from 32 Scarborough schools and three North York schools and constituted Cohort 2. Students were alternately assigned to one of two conditions. Reading Recovery students received Reading Recovery instruction and the other group received any assistance that might normally be offered to children who appear at risk of learning how to read and write. Both at-risk groups were also compared to a reference group which was made up of their average achieving peers (Earl, 1992).

Pretest and posttest results were compared on all measures of assessment. The final results indicated that Reading Recovery students scored higher than the comparison students on end-of-year measures. Although Reading Recovery did not always succeed in accelerating students to the average of their classes, they improved at a faster rate than students in the comparison group. The study also determined that Reading Recovery students made greater gains over time than did comparison students (Earl, 1992).

Preventive tutoring deserves an important place in discussions of reform in compensatory educational programs. It

appears that one-to-one tutoring is effective in minimizing the incidence of early failure in reading (Wasik & Slavin, 1993). Studies in New Zealand, the United States and Canada support Reading Recovery as an effective tutoring program. Each site represents a replication of the processes adapted by Clay (1985). In 1990-91, an average of 87% of students who participated in Reading Recovery were successfully discontinued at United States and Canadian sites. The 9,486 students who received Reading Recovery lessons were used as the basis for that figure (Jones, 1992).

Innovations such as Reading Recovery must have system-wide school support to insure success. The gains from Reading Recovery are hard won. The work calls for tremendous teaching and learning. The program demands quality teaching and decision-making. The target population for Reading Recovery is very difficult to teach. According to Clay (1990), putting emphasis on the wrong aspect will cause the acceleration to disappear (Clay, 1990).

CHAPTER III

METHODOLOGY

Introduction

The focus of this chapter is to provide a description of the subjects, the procedure followed in the selection of the subjects, the tests and measurement procedures used in the collection and treatment of the data and the procedure used in the implementation of an adapted Reading Recovery Program. The procedure will be discussed according to the following characteristics: (a) overview; (b) parent volunteers; (c) scheduling of sessions (whole class and individual tutorials); (d) planning the sessions; (e) running the sessions; (f) take-home work and (g) discontinuance from the program.

Subjects

The study was implemented in a grade one classroom, in an all grade school, in a rural Newfoundland setting. The class consisted of 18 children, 12 boys and 6 girls. The average age of each child at the beginning of the study was 6 years. A second grade one class was used as a control group. This class was from another school which was located in another town, but within the same school district. The control group consisted of 16 children, 9 boys and 7 girls.The average age of each child at the beginning of the study was 6 years. The control group received no intervention from the researcher. Rather,

it was used as a comparison group for pretest and posttest scores on the Gates-MacGinitie Reading Tests.

Four children were selected from the experimental group as suitable subjects for program intervention. These children were identified as the lowest scorers on the Gates-MacGinitie Reading Test. These children have been given the pseudonyms Robert, Aaron, Rebecca and Anne. At the start of the study, the children were of the approximate ages (years:months): Robert (6:3), Aaron (6:2), Rebecca (6:5), and Anne (6:4). The researcher, who was also the school's grade one teacher interacted with and observed these students during the study. The parents of the children were encouraged to support and assist with take-home reading and writing programs.

Basis of Selection

The grade one classes used as the foci of study were similar to most grade one classes found in the province of Newfoundland and Labrador. The experimental class was the only grade one class in a one stream school. The control group was suggested by the school district's language arts coordinator as the most suitably comparative group with regard to language arts programming. All students participated in their respective classroom language arts program as a heterogeneous group. The classroom programs followed the guidelines as outlined by the Minister of Education and presented to the schools by the Division of Program Development within the

Department of Education. The authorized texts for the primary language arts program as indicated in the Program of Studies 1992-93 developed by the Government of Newfoundland and Labrador and the Department of Education are Experiencing Language and the Nelson Networks program, grades 1-3. All students participated in a range of language arts activities for approximately twelve 40 minute periods per 6-day administrative cycle. However, as in most primary classroom situations, language experiences extended across all curriculum areas. Within the control group, the program was taught cooperatively by the classroom and resource room teachers. Within the experimental group the program was taught solely by the classroom teacher. The researcher did however, enlist the support of parent volunteers to assist in supervising classroom activities.

Tests and Measurement Procedures

Teacher-Student Interaction

Clay (1985) maintains that school programs should be organized to insure that provision is made for the observation and recording of what children are doing. Subsequent to the implementation of a Reading Recovery Program all teachers should check the provisions made to accommodate the range of reading achievement that was recorded. Reading programs should be flexible enough to respect the individuality of students.

She further maintains that special provisions must be made for the lowest reading and writing group in the class.

Prior to the administering of the Gates-MacGinitie Reading Tests in February of 1993, the researcher made detailed recordings of all students' progress within her classroom. Evaluation was based on the researcher's interaction with individual students in both group and tutorial situations. The students were monitored on both reading and writing behaviors. Special attention was given to the student's knowledge of: (a) letter/sound relations; (b) directional awareness when reading and writing; (c) sight vocabulary for writing; (d) sight vocabulary for reading; (e) independent behaviour in writing; (f) independent behaviour in reading; and (g) cueing strategies on text reading of selected trade books. Personal, social and emotional attributes were all subject to observation and anecdotal recording. The collected information was revised at the end of each month and a monthly comprehensive summary was used to evaluate a student's progress. This summary was used to support the researcher in effecting credible program changes to accommodate the unique needs of each student. By January of 1993, seven students were identified as performing below the expectations for grade one at mid-year.

The parents of all students were encouraged to become actively involved in their children's schooling . They were encouraged to attend curriculum awareness meetings, assist

with take-home reading and writing assignments and attend special classroom events. Parents were also encouraged to participate in a Parent Volunteer Program . Those who participated were encouraged to assist and participate in day-to-day classroom activities. More formal contact was made with those parents whose children appeared to be at-risk of failing to learn how to read and write.

Gates-MacGinitie Reading Tests

The Gates-MacGinitie Reading Tests are group administered, normatively referenced tests, developed by Arthur Gates and Walter MacGinitie in 1926. Since then, both Gates and MacGinitie have improved and revised the tests. Walter macGinitie is the author of the First Canadian Edition. A Second Canadian Edition was developed in 1990-1991, based on new Canadian norms. Standardization was based on more than 40,000 Canadian students in the fall of 1990 and the spring of 1991. The basic premise of the test is that it is useful for teachers and schools to know the general level of reading achievement of individual students. The objective information obtained from the test, complemented by teacher observation and evaluation is a credible reference for selecting students for further individual diagnosis and instructional effectiveness (Gates-MacGinitie Reading Tests: Teacher's Manual,1992).

Test Level R, forms 3 and 4 were used in the study. Form 3 was used as a pretest measure. Level R was chosen because it

was believed by the researcher to be the most accurate measure of reading achievement for both mid-year and year-end assessments. The test is also useful for measuring a wide range of reading skills at variant levels. The four subtests included in Level R tests are: (1) Initial Consonants; (2) Final Consonants; (3) Vowels; and (4) Use of Sentence Context. Children are to be paced through the test and allowed adequate time to do the best they can with each question.

The tests were administered to both grade one classes on the same day and at the same approximate time. The testing manual instructions were followed and adhered to during the testing situation. Level R, Form 3 was administered on February 3, 1993. Level R, Form 4 was administered on May 31, 1993. The following scores were computed and recorded: (1) Raw; (2) Stanine; (3) Percentile Rank; and (4) Grade Equivalent. The mean raw score and mean percentile rank score were recorded for pretest and posttest scores. Both groups were compared before and after program intervention. The lowest scoring 20% within each grade 1 class was compared with class means on pretest and posttest scores. Postest scores were used as a comparative measure after intervention by the researcher. No other contact was made with the control group.

The Diagnostic Survey

Overview

When Clay began her research in 1962, she asked herself this simple question: " Can we see the reading process go

wrong in the first year of instruction?" (Clay, 1985, p. 6). In response, she devised a Diagnostic Survey to be used as an inventory of what a child knows and can do. The Diagnostic Survey is recommended after one year of formal instruction and is designed for those students who operate inappropriately on text and who are having difficulty building a self-extending system of strategies on text. The diagnostic procedures are intended to help uncover what a particular student controls and what operations and items he/she should be taught next. Clay has outlined six initial assessment techniques for students who are recommended for the Reading Recovery Program. The same six techniques are used for the final assessment upon discontinuance from the program. While each test yields a numerical score, the real value of the assessment is to uncover what a particular student controls and how he/she uses that knowledge on text. Clay, (1985), bases these recommendations on the belief that it is desirable to:

1. observe precisely what children are saying;
2. use tasks that are close to the learning tasks of the classroom;
3. observe what children have been able to learn;
4. discover what reading behaviors should be taught next based on an analysis of performance on text;
5. increase the adequacy of the student's response by training on actual reading tasks.

The six assessment techniques are:

(1) Letter Identification

(2) Word Test

(3) Concepts About Print Test

(4) Writing Vocabulary

(5) Dictation

(6) Running Record of Text Reading

Clay provides a Diagnostic Survey Summary sheet for recording both numerical scores and teacher observations for all six assessment areas. The summary sheets provide a comprehensive picture of the student's strengths and weaknesses. It is also used to summarize useful and problem strategies on text, with words, and with letters, as observed and recorded by the teacher during the testing situation.

Letter Identification

Clay has designed a specific test for letter identification (see Appendix A). Children are asked to identify 54 upper and lower case letters and conventional print for "a" and "g". The letters are presented in random order and the child reads across the lines. All letters are tested and a score sheet is used to score results. The testing time should be approximately five to ten minutes. Tuition sessions should take into account what specific upper and lower case letters the student can identify. Clay (1985) outlines specific directions for administering the Letter

Identification Test. This method was used with all subjects who participated in the Reading Recovery Program.

Administration

Each student was tested individually. The student was given a copy of the test. The responses were recorded on a separate sheet. The student's attention was drawn to the sheet. He/she was asked the following questions:

1. What do you call these?
2. Can you find some that you know?

If the student failed to respond the researcher pointed to a letter and said:

3. What is this one called?

If the student did not respond the researcher asked:

4. Do you know its name?

If the student did not respond the researcher said:

5. Do you know a word that starts like that?

The same pattern was continued with all letters.

Scoring

The Letter Identification Score sheet was used to score all results. The following key was use in scoring: A - alphabetic response; S - sound response; and W - word that begins with the letter. All incorrect responses were recorded. An alphabetic name, a sound that is acceptable for the letter, and a response that says that it begins like..., were all recorded as correct. Subtotals of each type of response were recorded and noted. The student's preferred mode of response,

the letters he/she confused and the letters that were unknown were all noted and recorded. The student's preferred mode of response should be noted and this strength should be used to improve the student's ability on the basis of what works best for him/her.

Word Test

When Clay first designed the " Word Test", she selected a small list of 15 words from the 45 most frequently occurring words in the 12 little books of the Ready To Read series of books used in Auckland schools (Clay, 1985). The child's ability to identify these words was accepted as a good indicator of his/her accumulated reading vocabulary. Clay (1985) believed that standardized word tests were an unreliable indicator of a child's accumulated vocabulary until he/she had acquired a sufficient vocabulary to make sampling a feasible process. Teacher-compiled lists from the most frequently occurring words in the child's basic reading texts would probably provide a more accurate assessment of vocabulary retention. The researcher compiled two lists of 20 words each using basic sight words from the classroom reading list. The word lists were labelled "List A" and "List B" (see Appendix B). These lists were used with the selected students. List A was used for pretest assessment and list B was used for posttest assessment.

Administration

The Word Test takes very little time to administer. Each child was asked to read down through the list of words. The administrator used a practice word to ensure that the student knew what was expected of him/her. The practice word was not scored. The researcher did not prompt the child and all responses were recorded. Clay (1985), recommends that the compiled list should not be subsequently used as a teaching list. The researcher adhered to this recommendation.

Scoring

The score does not give a reading age. Rather, the number of correct responses is used as an indicator of the child's accumulated reading vocabulary. Stanine scores have been computed based on a large sample of children aged five to seven (Clay, 1985). The child's individual score might be compared with expected performance based on the " Ready to Read Word Test" stanine groups. Successive tests would indicate a progressive change in the child's reading ability. As the child's score becomes higher he/she would be expected to move through the Stanine score range (Clay,1985). The researcher did not see any relevance in comparing individual scores with stanine scores which had been based on the " Ready to Read Word Test" since she had used her own compiled word list. Rather, the researcher compared pretest and postest scores for each individual student to whom the test had been administered. The researcher interpreted a significant gain in test scores as a measurable indicator of progress.

Concepts About Print Test

The" Concepts About Print Test" requires the child to perform a variety of tasks during a book reading. The tests are designed to reveal the child's concepts about printed language. The Concepts About Print Test are entitled Sand (Clay,1972) and Stones (Clay,1979). The test items are a limited set of indicators that have proven effective in supporting reading acquisition (Clay, 1985). The test items are not presented in any graded level of difficulty, however there are age level expectations. The greatest value of the test is diagnostic. The test reflects changes in reading skills during the first year of instruction (Clay,1985).

Administration

The required Sand (1972) and Stones (1979) were not available to the researcher at the time of testing. The researcher carefully reviewed a selection of children's trade books in an attempt to find a suitable substitute for the required texts. Just For You by Mercer Mayer was selected as an appropriate substitute. Several items could not be tested using Just For You. The specific items which could not be tested were items 9, 12, 13, and 14. The researcher made herself very familiar with the wording of the test as outlined in the administration procedures (Clay, 1985). These procedures were adhered to as closely as the substituted text permitted.

Scoring

The " Concepts About Print" score sheet was used to score all results (see Appendix C). Each correct response was credited with one point. Responses among the students tested varied, but if the student indicated an understanding of the concept, the response was considered correct. Although Clay (1984; 1990) recommends that raw scores be converted into stanine scores, the researcher did not consider this necessary to the diagnostic function of the test. The stanine scores presented by Clay (1984) were based on studies of New Zealand children and not recommended for other groups of children. Rather, Clay (1990) recommended that schools have their own table of stanine scores. Since such scores were unavailable at school or district level the researcher determined that comparison with stanine scores from another continent could possibly invalidate the diagnostic importance of the test. The test was used to determine which concepts about print the child had acquired and which ones he/she still had to learn.

Writing Vocabulary

A child's written text is a good indicator of his/her knowledge of letters and of left to right sequencing of text. He/she must recall letter configuration and details. As a child begins to print text, hand and eye begin to support and supplement each other indicating the beginning of visual discrimination (Clay,1985). A poor writing vocabulary may suggest that visual discrimination is not developing.

Administration

Each student was tested individually. The testing time was approximately ten minutes. During the testing, the student was given a blank sheet of paper. The student was asked to write down all the words that he/she knew how to write down. The student was prompted to begin with his/her own name. During the ten minute testing time the student was prompted if necessary. If the student stopped writing during the ten minute period, familiar words were suggested that he/she would have encountered during classroom reading and writing activities.

Scoring

Each student was asked to read through his/her list of responses. Each word that was completed accurately was marked as correct. Any word that was spelled correctly but read incorrectly was marked incorrect. Words that were repeated using variant endings were accepted as correct. Word families were also accepted as correct. The total number of correct responses were totalled and recorded.

Dictation Test

Clay compiled five alternate forms of the dictation test. Each form includes two sentences. The sentences were comparable in length and structure (see Appendix D). Susan Robinson and Barbara Watson devised these tests for use in the Reading Recovery Program. The test is a good indicator of the student's ability to go from analysis of sound in spoken words

to analysis of sound in written words (Clay,1985). The researcher believed these tests to be a fair assessment of the student's classroom curriculum and were used as Clay (1985) suggested.

Administration

Each child was tested individually. The test sentences were first read at a normal speed. Then the test sentences were read at a very slow speed. When the student encountered a problem he/she was encouraged to say the word slowly. If the student could not complete the word he/she was told to skip the word and try the next in sequence. The researcher showed the student how to leave a space and continue.

Scoring

The correct text was recorded below the student's version. The student was given one point for each phoneme analyzed correctly. One mark was deducted for incorrect letter order. Alternative letters were accepted as correct when the sound analysis was correct. For example, k was accepted as an alternative for c and c was accepted as an alternative for s. Silent letters were not scored even if included in correct sequence. For example, in the word "ha've" the e is silent and not scored. Any incorrect additions did not affect scoring. Clay (1985), has emphasized the diagnostic significance of the test beyond the numerical score. The researcher recorded her observations of each student's behaviors during the testing

procedure. Any correct or unusual behaviors were noted and recorded and were later incorporated in the student's program.

Running Record

The Running Record is a good indicator of the student's knowledge of language and print. The student is observed precisely and all observations are systematically recorded. While the student is reading, the teacher watches for and records such behaviors as substitutions, self corrections, insertions and omissions (Pinnell et al., 1990). Clay (1985), recommends that a Running Record be taken on three texts. The texts should include an easy book, an instructional book and a hard book. The test should include a sample reading of 100-200 words. It is acceptable for the sample words to fall below 100 when the student is at an early reading level if three books are used. The three samples provide valuable insights into the child's strengths and weaknesses.

Administration

Each student was tested individually. The testing time was approximately ten minutes. Each student was asked to read three books from the classroom reading library. The researcher made copies of each text. The student's responses to the text reading were recorded on these sheets. Clay (1985), recommends that certain conventions be used when recording. These were adhered to as closely as possible. Each correct response was marked with a tick. A wrong response was recorded under the correct text on the scoring sheet. All trial responses were

recorded and any previous error that was self-corrected was recorded as SC (self-corrected). No response was recorded as a dash (-), and any insertions were recorded over a dash. When the student asked for help he/she was told to "try that again" and marked on the scoring sheet as TTA. All responses were recorded. When the student was unable to continue because he/she had made an error and couldn't self-correct, he/she was told the word and TOLD was recorded on the scoring sheet. Repetitions were recorded and numbered but were not considered as errors. Directional strategies on text were noted by asking each student to read with his/her finger. All observations were recorded.

Scoring

When scoring the Running Record, the researcher followed the scoring procedure as outlined by Clay, (1985). Each student's score was recorded on the Summary of Running Record score sheet (see Appendix E). Correct or self-corrected responses and errors were totalled and recorded. Insertions were counted as errors but if the student had more errors than there were words on a page the student's score was zero. The student did not receive a minus score. If a line or sentence was omitted each word missed was scored as an error. If the student accidentally turned two pages together the missing words were not calculated as errors and the total number of missed words were deducted from the Running Words Score. Repeated errors of the same word were totalled except when the

error was a proper name. A proper noun error was considered as only one error. Errors in pronunciation were not considered as reading errors. When the student was told to "try that again", only the second response was recorded.

The Error Rate, Accuracy, and Self-Correction Rate were calculated using the Calculation and Conversion Tables designed by Clay, (1985) (see Appendix F). These scores were then transferred to the Summary of Running Record score sheet. The student's demonstrated knowledge of directional movement was also recorded.

The Diagnostic Summary

Clay (1985) recommends that all test results be compiled and summarized under the headings of the Diagnostic Survey Summary Sheet (Clay, 1985), (see Appendix G). The researcher did not use the Summary sheets. Rather, an individual profile sheet was used to summarize the collected information for each student in the program. The profile summarized and described all the child's strengths and weaknesses and an analysis of the useful strategies used by the student. Problem strategies were also identified. These profiles provided a starting point for the at- risk students who had been selected for an adaptation of Clay's (1985) Reading Recovery Program.

Collection of Data

Data were collected through the use of the tests and measurement procedures as described in the sections under

Teacher-Student Interaction, Gates-MacGinitie Reading Tests and The Diagnostic Survey.

Treatment of Data

The data from the tests and measurement procedures are presented and discussed. Pretest scores from the Gates-MacGinitie Reading Test helped identify the lowest scoring 20% of each grade one class. Posttest scores from the Gates-MacgGinitie Reading Test helped identify program intervention results. By comparing the Raw, Stanine, Percentile Rank, and Grade Equivalent scores for the lowest scoring 20% on both lots of test results the researcher could measure any significant gain within the intervention group. Teacher recorded observation were compared with standardized test results to see if any major discrepancies existed. The Diagnostic Survey (Clay,1985) helped the researcher to identify the existing strengths and weaknesses of each student in the study. Program implementation was guided by these results. The Diagnostic Survey was repeated upon discontinuance from the program and results were compared with initial scores. The primary focus was on the contribution of the data toward evaluating the effectiveness of the intervention program.

Procedure

Overview

The goal for all Reading Recovery Programs is to help the child to develop a self-extending system that will enable

him/her to independently increase his/her ability to read and write (Jones, 1991). Learning and teaching are strategic processes in ensuring the development of independence in learning. The child learns, accompanied by a skilled teacher who builds rather than deprives the learner of independence. Reading Recovery is not a package of materials with sequenced skills and a step by step approach. Rather it is an individualized program in which the teacher responds to each child in a unique way - a way that supports the development of an independent system for reading and writing (Clay, 1985). Reading Recovery is a preventive rather than a remediation program. The use of systematic observation procedures allows for the early identification of at-risk children and the effective implementation of an immediate intervention program will reduce the need for long term remediation programs (Gaffney, 1991).

Two basic assumptions go along with Clay's Reading Recovery model: (1) a classroom program will continue alongside the extra tuition sessions; and (2) the tuition sessions must be individualized (Clay, 1985).

Due to the unique nature of program implementation, not all procedures were strictly adhered to as outlined by Clay (1985). Although the overall goal of the program was to foster independence in reading and writing, modifications in both structural and instructional procedures were necessary. Clay's

(1985) principles were adapted to accommodate the physical and structural demands of a regular grade one classroom.

During a period of approximately 17 weeks from February 3, 1993 to May 31, 1993, the researcher implemented an adaptation of Clay's Reading Recovery Program. The four students who had scored lowest on the Gates-MacGinitie Reading Tests were selected as suitable candidates for program intervention. The researcher met with each student for approximately 20 minutes each day on a one to one or a two to one basis. Grouping for instruction in specific skills was considered acceptable because of the unique nature of implementation. Grouping was based on specific individual needs. For example, if two students were weak in letter identification they were taught together in one lesson and the total minutes were considered as program time for both.

All Reading Recovery lessons took place in the grade one classroom. The first meetings for all students focused on the Diagnostic Survey. The subsequent ten sessions focused on "roaming around the known" (Clay, 1985). The researcher involved the students in reading and writing activities that were familiar to the student. Both researcher and student worked collaboratively and explored the student's specific strengths and weaknesses. The main objective of these sessions was to help students overcome the "I Can't syndrome" (Clay, 1985). The remaining sessions were learning sessions where

each student was considered individually and his/her specific needs met.

Parent Volunteers

Parents were invited to attend a meeting in the grade one classroom on February 3, 1993. At least one parent for each student attended the meeting. During the meeting the researcher reviewed the objectives of the grade one curriculum and discussed curriculum related concerns. The researcher also discussed effective intervention strategies to prevent at-risk students from failing to learn how to read and write. Reading Recovery procedures were discussed with parents and all parents were asked to sign a consent form which permitted the researcher to select students for program intervention. Parents were not made aware that the lowest scoring 20% on the Gates-MacGinitie Reading Tests would be selected.

All parents were asked to support and encourage his/her child's take- home reading program. Each student's reading program was individualized and consisted of a variety of trade books from the classroom reading center and the school's resource center. Each student had his/her own reading journal. All book titles were recorded with appropriate suggestions for parents included. Each student's strengths were highlighted and suggestions were included to help parents effectively support classroom intervention to help develop the strategies on text that the student had not yet mastered. Parents were asked to respond to the researcher's comments and questions in

short written statements and to write a comment on his/her child's reading of the text. Parents were asked to keep a variety of markers, pencils, crayons, paper, etc. available to his/her child at all times and to support writing in the home. The researcher offered suggestions to encourage pencil and paper activities. Parents were also asked to visit the public library with their children on a weekly basis. All parents agreed but the researcher did no follow-up study to determine if parents had complied.

The meeting concluded with discussion of a Parent Volunteer Program. Parents were invited to come to class with their children and offer support with classroom activities. Parent participation would be on a scheduled basis. Upon leaving the meeting, parents were given a Parent Volunteer form to complete (see Appendix H). They were asked to complete the form and return it to the school only if they were interested in participating in the proposed volunteer program. Eight parents agreed to participate. These parents were met with in a small group meeting and program procedures were discussed.

Throughout the study period, the researcher maintained formal and informal contact with all parents by phone, notes, and chance encounters. Regular contact was made with the parents of those children who were directly involved in the study.

Scheduling of Sessions

Each student was given 20 minutes of Reading Recovery Program time each school day. Program time was either on an individual or small group basis with group size never extending beyond two. The sessions usually ran for 20 consecutive minutes but when classroom demands interfered with program time, these sessions were divided into two 10 minute sessions. The researcher found it most productive to run two sessions in the morning between 9:40 a.m. and 10:20 a.m. This time was set aside for independent reading and writing activities. All students were required to participate in independent journal writing and sustained silent reading. The students were expected to work on their own and not to interrupt the researcher when she was working one to one with a student. The remaining two sessions were scheduled in the afternoon from 2:20 p.m. to 3:00 p.m., after the regular class had been dismissed for the day. Throughout the course of the study a degree of flexibility was used when scheduling sessions, and when classroom time permitted all sessions were conducted during the regular classroom day. Students were ensured 20 minutes of program time irregardless of scheduling. When students were absent because of sickness or approved leave, sessions were cancelled for that day. The program time was not extended to compensate for time lost.

Planning the Sessions

Each student's program was determined by the student's strengths. The researcher planned both classroom and Reading Recovery sessions around what the student knew and did well independently. Baker & Brown (cited in Simmons, 1991), provide insights into some of the characteristics of learning environments that successfully promote learning. They identify three factors that distinguish recent instructional research. The first is a focus on programs that promote the learner's awareness of why they are learning something and how to control and regulate their own learning. The second supporting factor is teaching for strategies within the actual context of reading activities with a focus on meaning rather than isolated skills and text items. The third supporting factor is an emphasis on the positive relationship and interaction between teacher and student. Throughout the duration of the study, the researcher attempted to provide a learning environment for all students that supported individualized learning in a risk free learning environment.

All Reading Recovery sessions were planned to accommodate the curricular demands of the grade one program. All classroom learning activities and all Reading Recovery sessions were planned by the researcher. Reading Recovery sessions were prepared for on a daily basis. Because of the unique nature of a Reading Recovery Program, preplanned sessions were inappropriate. The researcher prepared for each session by

familiarizing herself with the appropriate framework and available materials. The researcher's knowledge of the reading process was considered effective in enabling the researcher to interpret reading behaviors and hypothesize about the strategies that each student used to operate on text. The researcher felt prepared to make informed decisions regarding students' needs on a demand basis. The grade one program was planned around a six day cycle. Careful and advance planning was necessary for classroom activities in order to effectively accommodate the demands of a daily Reading Recovery Program. The researcher planned each cycle in advance. The average grade one day was scheduled between 9:00 a.m. and 2:20 p.m. . Recess was always from 10:20 a.m. to 10:35 a.m.. Lunch break was from 12:00, noon, to 12:55 p.m Morning sessions focused on group instructional time, independent reading and writing, center activities and individualized reading. Monthly themes were selected based on student interest and most sessions centered around these themes. The afternoon sessions were more interchangeable. Specific program requirements were met especially in the areas of mathematics, science, physical education and music.

The researcher was aware of the need for all students in her grade one class to achieve a functional level of independence in reading and writing. The books used in the classroom reading program were drawn from a variety of sources. Clay (1985), provides a list of over 350 books graded

in difficulty from 1-20. Many of these titles were unavailable to the researcher and funding to purchase new titles was not available. Therefore all reading materials came from the classroom library, the school's resource center, students' books and the researcher's personal collection. The researcher used her knowledge of trade books, current research on text readability, and classroom experience with young children to analyze and select books spanning a continuum of difficulty. Books with predictable features, repetition of phrases, content that describes familiar experiences, natural language, and pictures that clearly depict the message in the written text were chosen. Deford, Lyons & Pinnell (1991), maintain that factors such as the familiarity with the story, the match between text and illustrations, the predictability of language patterns, and the actual story, are more influential in determining the quality of reading than any readability formulas.

200 books were selected. Each book was given a number from 1-200. The book numbers were for identification purposes and were not numbered for readability levels. The book titles and numbers were recorded in a log book. Each classroom student's name was recorded in the log book. An individual log book was kept for the Reading Recovery students. The researcher recorded all assigned text for each classroom student on a daily basis. Student performance on text was also recorded on a daily basis. Parent volunteers listened to many

of the regular program students read their prepared texts. Parents were expected to enter a written comment on each student's performance. At the end of each school day, texts and comments were reviewed and the next day's reading assignment selected and recorded. When possible, classroom reading sessions were monitored by the researcher. The researcher ensured that she listened to all students read their trade books at least once in each six day cycle. Those students who required extra tuition sessions but who were not selected for Reading Recovery sessions were monitored more closely.

Books for Reading Recovery lessons were selected from the 200 listed titles. The researcher selected suitable titles to meet each student's individual needs and interests. These titles were kept in separate boxes for each Reading Recovery student. The books were reviewed and interchanged on a demand basis. A personal record book was kept for each student and entries were made as the student demonstrated his/her skills on text reading and writing. These entries were reviewed and evaluated at the end of each school day. New insights into the student's daily progress were integrated into the next day's lesson.

Running The Sessions

Clay, (1991), defines reading as "...a message-getting problem-solving activity which increases in power and flexibility, the more it is practised" (p.6). Children who

fail to learn how to read are not developing power and flexibility with print. Rather, they are developing confusions about print which if not clarified could lead to permanent failure. Clay (1985), maintains that children who fail are far more different from themselves than are average children. Teaching sequences of any standard kind are unlikely to meet their specific needs. Furthermore, the child who has failed to learn to read is also not fully progressing in writing skills. Tuition sessions should foster a reciprocal relationship between reading and writing and the continuous development of skills on print.

The teacher must skilfully plan activities based on each student's individual needs. Clay (1985), outlines ten steps that the teacher should follow when carrying out a Reading Recovery lesson. These steps have been summarized and are listed below:

1. Expert sequencing of text is critical. The teacher is responsible for finding the hardest text that each student can read with a 90% accuracy rate.
2. Determine what the student can write independently and keep him/her moving forward.
3. Record specific details about what each student can do.
4. Build fluency on what the student already knows and can do well.
5. Watch for new behaviour on text reading and writing and reinforce correct behaviors.

6. Introduce new material as the student demonstrates readiness.
7. Identify, record and clarify the student's confusions about print.
8. Support self-checking strategies and make the student aware that he/she is using these strategies correctly.
9. Use caution when increasing the level of text difficulty. Ensure that the student is fluent with the prior level before moving on.
10. Determine what the student cannot do and make a list. Priorize the list and make the student aware of his/her own strengths and weaknesses.

The researcher integrated this philosophy into the components of the daily Reading Recovery lessons. Every student's Reading Recovery lesson was different. Each lesson included choices made by the student and decisions made by the researcher. These choices and decisions were based on the student's strengths and needs.

The first ten sessions began immediately after the Diagnostic Survey results had been analyzed The sessions were incorporated into learning center activities which had been designed around curriculum objectives for the whole class. All activities were designed to be open-ended with the intent of accommodating all students at their individual levels (both regular and Reading Recovery students). As previously indicated, these sessions were designed to explore with the

student what he/she was already familiar with. No new materials were introduced. The researcher made and recorded observations of how each Reading Recovery student interacted with and performed on the various activities. The researcher also used this time to observe how each student performed within the confinements of a typical classroom environment.

All Reading Recovery lessons took place in the grade one classroom. Lessons took place at a work table in a quiet area of the classroom. All grade one students participated in their daily activities while sessions were conducted. Reading Recovery students participated in all required curriculum-related activities alongside special tuition sessions. The researcher was present and conducted all sessions. Parents attended all sessions that were conducted during the regular classroom day. There were usually two parents in attendance . These parents acted as facilitators to ensure that the regular students completed all assigned work activities that had been set up prior to each daily lesson.

Although Clay (1991) maintains that every student's Reading Recovery lesson is different, she provides a basic framework for each lesson. The researcher used the components of this framework for each Reading Recovery lesson. Although Clay, (1985), recommends that a Running Record be taken daily, the researcher found that she could not effectively do so, with time restraints being a critical factor. Therefore a Running Record on text reading was taken two to three times

within the six-day cycle. The following five components were used for tuition session:

1. Reading Familiar Stories
2. Taking A Running Record
3. Reading A New Story
4. Working With Letters
5. Writing A Message

Reading Familiar Stories

Each student read two familiar books from his/her box of books. The books were chosen by the student. The researcher encouraged the student to practice fluency and to read using proper expression. The researcher often modelled appropriate intonation using punctuation and story content as a guide. The researcher recorded all observations of student behaviors on text reading.

Taking A Running Record

The researcher took a running record of text reading approximately every second day. The student was required to read the book that was read once the day before. The researcher did not participate in the text reading unless the student would not proceed without prompting. The researcher remained for the most part a neutral observer while recording student responses.

Reading A New Book

The new book was selected by the researcher. The selection was made prior to the lesson. The researcher used the running record on text from the previous day's lesson to aid in the selection. The researcher used information from the running record to determine which specific details of print the student was attending to. This information was used to guide the student's reading of the new book. The researcher selected texts that she felt would be most appropriate in helping each student to apply his/her existing knowledge to solve problems on text reading. After the student had become familiar with the pictures, characters, plot, important ideas , and language c'. the book, he/she was asked to read the book for the first time. All observations were recorded by the researcher.

Working With Letters

Knowledge of letters and letter/sound relationships were taught as each student encountered problems on text reading and writing. Only one student showed a particular weakness in this area and because of the overall classroom demands placed on the researcher, a take-home program was prepared for that child. The mother of the child was contacted and specific directions given as to how to help her child with letter and letter/sound identification.

Writing A New Message

Every day each student was required to compose a new message. All students in the grade one class were required to write in their writing journals at least once every day. This activity was used for Reading Recovery students as one of their tuition sessions. As each student wrote in his/her journal, the researcher called him/her to the work table and supervised the writing. When journals were completed independently, the researcher used writing center activities as tuition sessions. The student was required to write one or two sentences depending on his/her level of development. As the student wrote a message, the researcher helped him/her to make links between letters and sounds. The researcher sometimes gave the correct spelling for more difficult words or wrote the word for the student. The researcher found that many decisions had to be made based on time restraints. The researcher quickly wrote the student's message on a sentence strip. The strip was then cut into words and given back to the student to reassemble. The writing activity was meant to be a collaborative effort between researcher and student and as in the daily reading activity, the literacy activity was supported through oral language interaction.

There was no time at the end of each tuition session to review recorded observations. Review of each student's daily lessons was done at the end of each school day. The next day's

session was planned using the collected information as a guide.

Take-Home Work

Although Clay (1991), advocates parent involvement as an important part of student learning, there is no set criteria for take-home work. The researcher felt that a take-home program would support classroom tuition sessions which had been shortened from Clay's (1985) recommended 30 minutes. The student was expected to complete take-home assignments on each night prior to the next school day. There was no extra work assigned for Friday and Saturday nights. Each Reading Recovery student selected two familiar books for take-home reading. The parent was asked to record any observations he/she had made. The student was also given a homework book with assigned activities for each night. The required activities were different for each student and based on each student's specific needs. Homework books were collected at the end of each school week and reassigned at the beginning of the next school week. The researcher found all parents to be very cooperative and all activities were completed on time.

Discontinuance From The Program

Clay (1985) recommends that a student be discontinued from Reading Recovery lessons after he/she has reached a level of performance whereby he/she can effectively learn from group instruction within the confinements of a regular classroom environment. The student should be able to read

increasingly difficult texts with an accuracy rate of at least 90%. The student should be observed reading for pleasure while showing a more confident attitude towards print-related activities. Clay (1985) suggests that the Reading Recovery teacher work with the student in the classroom for the last two weeks of the program sessions. The student's current status should be discussed with the classroom teacher upon reentry and the student's subsequent progress should be monitored closely. Extra sessions may be scheduled to ensure that the student maintains what he/she has learned.

The four Reading Recovery students were discontinued after a period of seventeen weeks. Students were not discontinued because the researcher felt that the above criteria had been met. Rather, the school year was drawing to a close and the researcher found it necessary to bring closure to the study with time being a determining factor. The researcher was pleased with the progress that each student had made. The study concluded with the Diagnostic Survey and a comparison of pretest and posttest scores.

CHAPTER IV

EVALUATION

Introduction

This chapter presents and discusses the results of the three assessment procedures used to identify and evaluate student achievement in reading and writing behaviors. The evaluation of the study is based on data collected on the reading and writing behaviors of four Grade 1 students who appeared at risk of not learning how to read and write, the Grade 1 class from which the at-risk students were selected, and the Grade 1 class previously identified as the control group. Qualitative and quantitative data were collected using a variety of measurement procedures: (a) Teacher-Student Interaction; (b) the Gates-MacGinitie Reading Tests; and (c) the Diagnostic Survey. Data were collected before, during, and after the four Grade 1 students participated in an adaptation of Clay's (1985) Reading Recovery Program for a period of 17 weeks.

The four Grade 1 students who were selected for program intervention were selected based on the evaluation of formal and informal data collected through Teacher-Student Interaction and through the results of the Gates MacGinitie-Reading Tests. Clay's (1985) Diagnostic Survey was administered before program intervention and was intended to identify the specific program needs of each individual student. The Diagnostic Survey was administered again after

the 17 weeks had expired. Results from both assessments were compared. Since the main objective of the intervention program was to accelerate students to meet the expectations of a regular Grade 1 class, the researcher needed comparison scores. Therefore, all students in the Grade 1 class were evaluated on reading and writing behaviors using informal and formal data gathered from Student-Teacher Interaction and data collected from results on the Gates- MacGinitie Reading Tests. The data collected from Student-Teacher Interaction was assessed by the researcher. The students were compared as each one demonstrated specific strengths and weaknesses on text reading and writing. The Gates-MacGinitie Reading Tests provided data on the reading behaviors of both Grade 1 classes (the experimental and the control group). These data were used as comparison measures between both grade 1 classes before and after program intervention.

Student-Teacher Interaction

Overview

The power of evaluation lies in the dynamic transaction between teachers and students resulting in change. The examination of that change reveals the development of the learning (Goodman, Goodman, & Hood, 1989). Clay (1985), maintains that school programs should provide for the observation and recording of what students are doing. To plan for this type of evaluation it is necessary to remain aware of

the social context of the classroom and its organization. The role of evaluation cannot be separated from the teaching/learning transaction (Goodman et al., 1989).

A group of teachers in Tuscon, Arizona who were involved in whole language learning in their classrooms became aware that they were evaluating whenever they were observing, interacting with, and analyzing students. Goodman (cited in Goodman et al., 1989), refers to this process of evaluation as "kidwatching". Observation, interaction, and analysis can occur incidently while students are engaged in activities that reveal learning or development, or may be part of a preplanned activity by the teacher to assist in the collection and analysis of specific information. Goodman (cited in Goodman et al., 1989), recommends that teachers record the every day events and interactions in their classrooms in their anecdotal records. Significant events may be analyzed in relation to student achievement as time permits.

Guba and Lincoln (cited in Cambourne & Turbill, 1990), describe "kidwatching" under the paradigm of "naturalistic inquiry". Naturalistic inquiry is based on the assumption that human assessment is as valid as test assessment in assessing human behaviors. Cambourne & Turbill (1990) have used the axioms underlying naturalistic inquiry to develop a non-standardized system of evaluation they call "responsive assessment". They have outlined five basic steps to be followed. The researcher used these steps as a guide when

collecting formal and informal data for student portfolios while following the basic guidelines for "kidwatching" as outlined by Goodman (cited in Goodman et al., 1989). The steps have been listed below:

(1) When to record information

(2) How to record information

(3) What information to record

(4) How to make sense of the information collected

(5) Ensuring the trustworthiness of the assessment

Assessment Procedures

When to record information

The researcher continuously monitored language and conceptual development as well as the physical and emotional growth of each student in her class. Informal observation took place as the researcher moved around the classroom and interacted with the students. The researcher also recorded student behaviors as she worked with students in small group and individual reading and writing conferences. These observations were recorded in a notebook which the researcher kept on her desk. Significant events or concerns were transferred to a student anecdotal record sheet as time allowed (see Appendix I). At the end of each month the researcher used the collected information to compile a more comprehensive monthly summary sheet (see Appendix J). At the end of each month the researcher also reviewed a language evaluation checklist on each student (see Appendices K, L, M).

The language evaluation checklist was divided into three sections- oral, writing, and reading. The form was a checklist of expected outcomes. As each outcome was mastered the item was checked.

How to record information

During a regular classroom day, students were engaged in a variety of compulsory and elective activities. The time plan for the classroom was such that the researcher had allowed time for data collection. As the students shared information, read individually to the researcher, and shared their writing samples, the researcher listened for and recorded indicators of language growth. Some work samples were copied and kept in the student's portfolio for a more detailed analysis at another time. Each student had his/her own reading journal. The researcher kept a detailed record of all books that the student had read.

What information to record

The researcher recorded the student's developing control over all language-related activities. Particular attention was given to the student's knowledge of letter/sound relationships and his/her ability to apply that knowledge effectively in reading and writing situations; cueing strategies on text reading; directional awareness; independent behaviors; and personal attitudes.

How to make sense of the information collected

The collected information was used to assess each individual student's progress. Anecdotal notes were reviewed as the researcher examined individual work samples. The last week of each month was set aside to review all student portfolios. Individual programs were determined based on assessment results.

Ensuring the trustworthiness of the assessment

It is difficult to measure in quantitative terms the trustworthiness of assessment data that is significantly different from the more traditional approach. The concepts of internal validity, external validity, reliability, and objectivity cannot be effectively measured quantitatively. Goodman et al., (1989), and Cambourne & Turbill, (1990), maintain that human assessment is as valid as test assessment in assessing human behaviors.

Collective Analysis

At the end of January, 1993 all student portfolios were carefully examined. Seven students were identified as being potentially at risk of not learning how to read and write by the end of grade 1. These students were weak in letter/sound knowledge and cueing strategies on text reading. They showed very few independent behaviors. Clay, (1985) requires that Reading Recovery procedures be used on the lowest scoring 20% of the whole group. The researcher reviewed the information and identified the four students, who were given pseudonyms, from the group (i.e. the lowest 20%) that she believed most

likely at risk. The collective information on each student was reviewed to identify individual strengths and weaknesses. Each student's anecdotal record has been included up until February, 1993 prior to program intervention. Monthly summary sheets and language evaluation sheets have been included for January, 1993 (prior to program intervention) and May, 1993 (after discontinuance from the program).

Anecdotal Records

Robert (see Appendix N)

Robert consistently appeared weak in letter identification and letter/sound relationships. His independent writing samples showed no evidence of word knowledge. His use of letters to represent text showed no phonetic correspondence. Written text was very short and he had demonstrated difficulty in recalling what he had written. Pictures showed no correspondence to written text. Directional awareness was evident as he consistently demonstrated left to right. However, text was so short that it was difficult to determine knowledge of a return sweep to the left.

His reading of new text showed no evidence of independent behaviors. When reading familiar text he tracked correctly and used picture cues. When presented with new text, he became easily confused and those strategies broke down.

Robert appeared to be making some progress socially. He still appeared immature in comparison with the class. His

attention span was very short and quite often he had to be reminded to stay on task.

Aaron (see Appendix O)

Aaron had demonstrated an adequate knowledge of upper and lower case letters but had no apparent knowledge of letter/sound relationships. This was evident from close examination of independent writing samples and from close interaction with Aaron while he was writing and reading text. When asked to write he usually resorted to drawing a picture. When he did attempt to write he could not remember what his text said. Sometimes he copied a message from the classroom walls. The message was usually not relevant to the picture indicating to the researcher that he had no understanding of the text that he had written.

He was more eager to write when the researcher was willing to assume a supportive role. He wrote from left-to-right indicating correct directional awareness. However text length was too short to indicate knowledge of a return sweep to the left.

Aaron could read familiar books fairly fluently. The text was short with one line per page. He tracked well and used pictures to cue in text. He did not use letter/sound relationships. When asked to read new books that were considered equal in difficulty and length he became confused and no cueing strategies were evident. He reacted by looking

immediately to the researcher for help. If help was not given he would probably cry. The researcher noted that Aaron was very insecure and needed to feel successful. Fear of failure was probably interfering with his willingness to become a risk-taker.

Aaron appeared socially and emotionally immature when compared with the majority of his classmates. He was very dependent on others when completing all assigned activities and consistently sought approval. Aaron constantly challenged classroom rules and looked to others for approval when he broke them.

Rebecca (see Appendix P)

Rebecca could identify some upper and lower case letters correctly but had demonstrated no knowledge of letter/sound relationships. Her written text was a jumble of letters with no evidence of spacing. She demonstrated awareness of correct directionality by writing in a left to right direction. She was unable to read her written text and when asked to do so she would orally compose a new message which showed no positive correspondence to the written text.

She had not demonstrated any independent cueing strategies on text reading. She was reading one-line text and read either from memory or composed a story by looking at the pictures. She attempted to track the text with her finger but

was usually unsuccessful at matching. She occasionally glanced at the pictures but did not use this strategy successfully.

Rebecca appeared both socially and emotionally immature for her age. Her speech and language levels were considerably below the expectations for grade 1. She appeared unaware of her low performance level.

Anne (see Appendix Q)

Anne could identify many upper and lower case letters and had some knowledge of letter/sound relationships. She could identify some initial consonants but had no understanding of how to apply this knowledge to reading and writing activities. Anne spaced words correctly when writing and copied written messages demonstrating correct directional awareness. Text was short in length and sentences were repetitive.

She could read short stories independently once they had become familiar. She used pictures to cue in text and tracked correctly. No other cueing strategies were evident. When she was presented with new text she was uncertain and demonstrated no independent behaviors.

Anne was always cooperative and eager to learn. She was very quiet and very rarely asked for help.

Monthly Summary Sheets

Robert

Robert's Monthly Summary Sheet for January indicated that he was still having difficulty with all print related activities (see Appendix R). Although he could identify some upper and lower case letters his knowledge of letter/sound relationships was very weak. He could discriminate between initial consonants but could not match sounds and consonants correctly. His written text showed no evidence of any emerging strategies. He copied words from memory or copied a message from the classroom displays. He had difficulty recalling what he had written. He used picture cues and tracked correctly when reading familiar text but still showed no independent behaviors on new text of equal length and difficulty.

An examination of Robert's Monthly Summary Sheet for May revealed that he was still experiencing difficulties with some print related activities (see Appendix S). The researcher noted, however, that he had made important gains in all areas. He could now identify most upper and lower case letters correctly and could identify all initial and final consonants correctly. He had begun to apply this knowledge to reading and writing activities with adult supervision. His basic sight vocabulary had increased from 3-5 words to a self-generated list of 15-20 words. Independent behaviors on text reading were also emerging. Robert consistently used picture cues and tracked correctly on both new and familiar text. He could identify bad miscues and reread text in an attempt to self-correct. He could use letter/sound relationships and

contextual knowledge to cue in new vocabulary when prompted. He did not use these strategies independently.

Aaron

Aaron's Monthly Summary Sheet for January indicated that he was still experiencing difficulties with all print-related activities (see Appendix T). He could identify most upper and lower case letters and many initial consonants. He did not, however, apply this knowledge to reading and writing activities. Written messages were very short in length (eg., 2-4 words in each message) and were usually copied from somewhere in the classroom. He was unwilling to cooperate when asked to compose a message independently. He could read familiar text with some fluency and used picture cues, contextual information, and tracked correctly. He demonstrated no effective strategies on unfamiliar text of equal length and difficulty.

Although Aaron was still performing slightly below the class average, an examination of his May Monthly Record Sheet revealed that he had made considerable gains in all areas (see Appendix U). He had developed a good understanding of letter/sound relationships and was applying this knowledge when reading and writing new text. His written text (independent) had increased in length from 2-4 words to 2-4 sentences. He had developed a well-balanced set of cueing strategies on text reading and was applying these strategies when reading new text. He used picture cues, phonetic cues,

contextual cues, and had acquired a basic sight vocabulary of up to 30 words.

Rebecca

Rebecca's Monthly Summary Sheet for January indicated that she was experiencing considerable difficulties with all print-related activities (see Appendix V). Although she could identify all upper and lower case letters and some initial consonants, she had no understanding of how to apply this knowledge to any reading or writing situation. Rebecca had given no indication of being able to generate her own written text. She copied letters using correct directional movement but when asked to read her written text she orally composed a new message. When asked to track with her finger when reading her written text she showed no awareness of word knowledge and often used a letter to represent more than one word. She could read familiar text with some fluency . She used picture cues effectively on familiar text but used the pictures to compose her own version of the text when the text was unfamiliar. Rebecca was very immature. She demonstrated emotional and social behaviors that were inappropriate for her chronological age.

Rebecca's Monthly Summary Sheet for May indicated that she had made minimal progress and was still performing considerably below the expectations of grade 1 (see Appendix W). She could identify most initial consonants but had difficulty with final consonants. Although she would attempt

to apply her knowledge of initial consonants with adult supervision she did not apply this knowledge when reading and writing independently. Her written text (independent) still consisted of a mixture of letters that showed no positive correspondence to the intended message. She could read familiar text accurately but demonstrated no cueing strategies on new text. Her sight vocabulary has increased from 4-6 words to approximately 8-10 words. Rebecca still appeared socially and emotionally very much below the average expectations for the class.

Anne

An examination of Anne's Monthly Summary Sheet for January revealed some strengths emerging (see Appendix X). She was still, however, performing below the average for the class. She could identify most upper and lower case letters correctly and had demonstrated a good understanding of initial consonant sounds but she did not apply this knowledge to reading and writing activities. Anne would attempt to compose her own written message but rarely attempted to invent spelling. She relied mostly on her own basic sight vocabulary and print materials in the classroom. She read familiar books fluently and had begun to use picture cues and contextual information to cue in new text. Text length was short with only 1-line per page.

Anne's Monthly Summary Sheet for May indicated considerable progress in all language related areas (see

Appendix Y). She could recognize all upper and lower case letters and identify all initial and final consonants correctly. She applied this knowledge effectively to reading and writing activities. Anne had indicated a growing independence in both reading and writing. She now completed most assigned tasks independently and had developed effective cueing strategies on text reading (both new and familiar). Although Anne was still performing below the average expectation for the class she was accelerating in a positive direction.

Language Evaluation Checklists

During the month of January, prior to program implementation, the researcher reviewed the Language Evaluation Checklists for oral and reading development. The scores were totalled and compared with the total of class means for each item on both the oral and reading checklists. The January results revealed that the Reading Recovery students scored considerably below the class mean on both sets of scores (see tables 1 & 2). The May results (oral) had revealed that two of the four students (Aaron and Anne) were very close to the class mean. Robert had moved closer to the class mean but Rebecca still remained considerably below (see table 3). The May scores (reading) showed similar results. Two of the four Reading Recovery students (Aaron and Anne) had scored within range of the total class mean, with Anne

exceeding the class mean. Although Robert's and Rebecca's total score increased, they were still functioning below the classroom expectations (see table 4). The writing Language Evaluation Checklist was not a cumulative score. Therefore comparison measures based on class means were not possible. Rather, the students were rated according to the hierarchial level he/she had achieved. A examination of the January scores (see tables 5,6,7,& 8) and May scores (see tables 9, 10 11 & 12) scores revealed that Aaron and Anne demonstrated considerable growth in their ability to write messages using correct directionality, correct letter/sound matching and an acceptable language level of two or more sentences. Robert made reasonable improvement but did not achieve the expected level of independence. Rebecca still remained very dependent on adult supervision.

The Gates-MacGinitie Reading Tests

Alternate forms of the Gates-MacGinitie Reading Tests were administered to both grade one classes on the same day and at the same approximate time. Level R, Form 3 was administered on February 3rd, 1993. Level R, Form 4 was administered on May 31st, 1993. The tests were administered according to the procedures recommended in the Gates-MacGinitie Reading Tests : Teacher's Manual (1992). Raw, stanine, percentile rank, and grade equivalent scores were computed and recorded for each student in both the control

group and the experimental group . Similar scores were computed and recorded for Level R, Form 4 respectively. Level R, Form 3, was used to identify the lowest scoring 20% in both the control group and the experimental group (see tables 13 and 14). Level R, Form 4, was used as a comparison measure after program intervention (see tables 15 and 16). The mean raw score and mean percentile rank were calculated and recorded for both grade one classes on pretest and posttest scores. Pretest and posttest mean scores were used as a comparison measure for those children scoring in the lowest 20% group for both grade one classes.

The students in the control group have been identified using alphabetical symbols. The lowest scoring 20% have been given pseudonyms in order to facilitate discussion. Keith, Edgbert, Adrian, and Mike were identified as the lowest scorers on Level R, Form 3. The students in the experimental group have been identified using numerical symbols. The lowest scoring 20% were also given pseudonyms. Aaron, Rebecca, Anne, and Robert were identified as the lowest scoring 20% on pretest scores.

The results of the pretest and postest scores for the control group indicated that the raw score and percentile rank scores for Keith, Edgbert, Adrian, and Mike remained considerably below the mean raw score and mean percentile rank scores for the whole class (see table 17). Actually, Edgbert, Adrian, and Mike showed a regression in performance on

posttest scores, while Keith showed minimal gain. Posttest scores indicated that all students continued to score considerably below the class mean on both raw and percentile rank scores.

The results of the pretest for the experimental group showed that Aaron, Rebecca, Anne, and Robert had scored considerably below the class mean on both raw and percentile rank scores. Posttest scores showed that Aaron and Robert had made considerable gains with Aaron surpassing the class mean on both the mean raw score and the mean percentile rank score for the class. Anne,s scores indicated that she had made some progress. Rebecca's scores indicated no regression but she had not moved beyond the 2nd percentile rank (see table 18).

The Diagnostic Survey

The real value of the Diagnostic Survey is to identify what particular controls a student has on text reading and writing. Although some credence is given to scores and quantifying progress, the major emphasis is to identify for the Reading Recovery teacher what operations and items a student can control and what operations and strategies a student should be taught next. Clay (1985), maintains that the Diagnostic Survey should be used to emphasize the operations and strategies that the student can use effectively, rather than on test scores and disabilities. Clay, (1985), further maintains that an effective Reading Recovery approach by-

passes reading levels and learning disabilities and emphasises the identification and recording of what the student does on texts of specified difficulty. Once the student's strengths and weaknesses have been identified they are compared with a model of strategies used by successful readers and writers. The focus then for the Reading Recovery teacher is to help the student who is at-risk to make satisfactory progress in developing a self-improving system of strategies on text reading and writing.

The Diagnostic Survey was administered to each student in the Reading Recovery group. All six assessment techniques were used with each student and administered individually before and after program intervention. These assessment techniques and the administration and scoring procedures have been discussed in detail in Chapter III. Each sub-test of the Diagnostic Survey was administered to each student before moving on to the next sub-test. For example, the Letter Identification Test was administered to all four Reading Recovery students before administering the Word Test. Similarly, the Word Test was administered to all students before moving on to the Concepts About Print Test. The researcher found that she could most effectively administer the survey this way because of the restraints imposed by the confinements of the classroom environment. Scores for each sub-test were scored at the end of the school day on which the test was administered. Individual score sheets were kept for

each student. However, for the purpose of this report, individual scores will be reported and discussed collectively for each subtest of the Diagnostic Survey. Clay's (1985) score sheets and proposed method of scoring were adhered to. After all tests had been administered and scored, a profile sheet was completed for each student. The researcher did not use Clay's Diagnostic Summary sheet but rather compiled a profile for each student in reference to test scores and recorded observation. The researcher will report individual scores on each subtest according to the following order:

(1) Letter Identification

(2) Word Test

(3) Concepts About Print Test

(4) Writing Vocabulary

(5) Dictation

(6) Running Record of Text Reading

Since the Diagnostic Survey was administered before and after program intervention, scores for each administration will be compared for each student.

Letter Identification Test

Each student was given the Letter Identification test as designed by Clay (1985). Students were asked to read through the list . If the student failed to respond, the researcher questioned him according to the administrative procedure outlined in Chapter III. A sound (S) response, a word

response (W), and an alphabetic response (A), were all scored as correct. Each students' raw score was calculated according to the type of response given. A total raw score was then calculated for each student. The same procedure was followed for posttest scores. All correct responses were calculated according to the type of response and then a total raw score was calculated for each student. Pretest and posttest scores were compared and the difference calculated (see table 19).

Word Test

Each student was asked to read down through a list of words that the researcher had labelled " List A ". The raw score was calculated for each student and scored. The same procedure was followed for posttest scores. Each student in the study was asked to read through a list of words which the researcher had labelled " List B " . The raw score was again calculated and recorded. The researcher calculated the gains made by each student and recorded that gain in the column marked " Difference" (see table 20).

Concepts About Print Test

The researcher did not use the prescribed test booklets entitled Sand (Clay, 1972) and Stones (Clay, 1979) as indicated in Chapter III. Just for You by Mercer Mayer was selected by the researcher as an appropriate substitute. Test

items 9, 12, 13, and 14 were omitted. The researcher felt that she could not effectively reconstruct the appropriate examples within the context of the text being used. Test item 8 was tested by inverting one page of the text before testing began. The researcher tested item 10 by reading the text order incorrectly. The researcher scored the total items correct out of 20 rather than 24 because of the omitted items. The same procedure was repeated for posttest scores. Pretest and posttest scores were then compared. (see table 21).

Writing Vocabulary

The Writing Vocabulary Test was administered and scored according to the administrative and scoring procedures as outlined in Chapter III. Each student was asked to write as many words as he/she could in 10 minutes. The students were prompted when they stopped writing but were not given any further assistance. The total number of words that each student wrote accurately and could read accurately were given a score of one point. Each student's raw score was recorded for both pretest and posttest situations. Each student's individual scores were compared and the difference recorded (see table 22).

Dictation Test

The researcher used Form A of the Dictation Test for both pretest and posttest situations. The researcher wanted to

measure each student's progress before and after program intervention and felt that she could do so more effectively by comparing scores on the same dictation. Each student was given a total raw score out of a possible 37 points. Pretest and posttest scores were compared (see table 23). Although the numerical score gave the researcher some indication of the student's ability to analyze words and sounds, the researcher felt that the real value of the test was in its diagnostic function. The researcher observed the student as he/she completed the assessment and recorded any observations she noticed on sequencing, spacing and letter/sound knowledge. These observations were recorded on each student's individual profile sheet.

Running Record

The researcher elected to use text materials that were part of her classroom reading materials. Although the classroom materials were not graded by any recognizable grading standard, the researcher felt that she was very familiar with the readability level of her classroom reading library. She based her selections on her prior use of the selected texts in a variety of teaching situations over a number of years of teaching children how to read.

Since each student in the class had his/her own individualized reading program, it was necessary to use different texts for each testing situation. Each student was

tested on three books. The first book was one with which the student was quite familiar. The second book was the current book that the student was reading in his/her take-home reading program. The third book was a new text to which the student had no prior exposure. The new text was discussed with the student before he/she was asked to read independently. A Running Record was taken on all three text levels. The Error Rate, Accuracy, and Self-correction Rate were calculated using the Calculation and Conversion Tables designed by Clay, (1985). Each student's individual score was recorded. Pretest and posttest scores were compared (see table 24). The researcher was most interested in measuring the gains made by each student on the Running Record taken on the new text. The researcher felt that this was a more accurate measure of the student's level of independence and his/her development of a balanced set of cueing strategies on text reading. Observations made during the administrative process offered valuable insights into individual strengths and weaknesses on text reading. These observations were recorded on the student's individual profile sheet.

A Running Record was taken on new and current texts two to three times an administrative cycle during program implementation. However, discussion will focus only on the Running Records taken during the pretest and posttest Diagnostic Survey. The Error Rate, Accuracy, and Self-Correction Rate scores were used by the researcher to help

select appropriate weekly reading material for each student at various stages of his/her Reading Recovery Program.

The Diagnostic Summary

The researcher reviewed each student's pretest and posttest results and recorded observations made by the researcher during the testing situation. Each subtest was examined separately and then collectively. The collected information was used to create an individual profile for each student. The profile that was generated from pretest scores and observations, was used by the researcher to plan each student's individualized Reading Recovery Program. The profile that was generated from posttest scores and observations, was used by the researcher to assess student gains in text reading and writing. The following is a detailed examination of each student's profile sheet. The results will be examined for pretest and then posttest situations.

The researcher completed a compilation of the data collected from the Diagnostic Survey on both pretest and posttest scores. She reviewed the test results under the specific test headings and recorded all relevant observations. She then examined test results collectively looking for similarities and differences.

Robert

Letter Identiication Test

Pretest

Robert identified 32 out of a possible 54 letters correctly. All responses were alphabetical. He identified W, J, Q, M, D, and N incorrectly. He gave no response for Y and V. He identified w, k, i, q, m, b, n, v, and r incorrectly. He gave no response for h, y, and t. Incorrect responses were believed to be guesses. The student appeared uncertain when he responded incorrectly.

Posttest

Robert identified 54 out of a possible 54 letters correctly. All responses were alphabetical. He approached the testing situation with confidence. His responses were immediate and all first responses were correct.

Word Test

Pretest

Robert identified 4 out of 20 words correctly. He appeared to read correctly those words that had been committed to memory. Although he showed an awareness of letter/sound relationships, he did not match letters and sounds correctly. The researcher noted that Robert identified the "t" sound correctly and used it correctly to identify the word "to". Any other attempts made by Robert to read the list words that were not committed to memory were ineffective.

Posttest

Robert's pretest scores showed a significant gain in his acquisition of high frequency words. He read 17 of the 20 words correctly. The researcher noted that Robert was much less apprehensive than during the pretesting situation. His responses were confident and demonstrated an awareness of letter/sound relationships. The researcher noted that although Robert appeared to have acquired an increased awareness of letter/sound relationships, he still would require extra practice in using this knowledge effectively.

Concepts About Print Test

Pretest

Robert scored 11 out of a possible 20 responses correctly. His responses indicated that he had a good understanding of the visual representation of words. Robert demonstrated a good understanding of directionality. He could tell where a word began and ended. He could "read with his finger" (word by word matching) and knew how to make a return sweep to the left. He became confused when the line and word order were altered and didn't appear to understand punctuation marks.

Posttest

Robert scored 19 out of a possible 20 responses correctly. He demonstrated an excellent understanding of the visual representation of words. He could identify when line and text order were altered and had shown improvement in his

understanding of punctuation marks. He could not identify and did not appear to understand the function of a comma.

Writing Vocabulary

Pretest

Robert wrote five words. The researcher observed as he completed each word. He appeared to write only those words that he had committed to memory. Robert correctly read each word that he had written. He was unwilling to attempt to write more. He responded by saying that there were no more words that he knew. No strategies were evident.

Posttest

Robert showed considerable improvement in his ability to recall and write words from memory. He wrote 20 words during the testing time. The researcher noted that Robert used his knowledge of letter/sound relationships to help him cue in letters when he was unsure of what should come next. When Robert could not apply this knowledge effectively, he scratched out the word and tried another. All 20 responses were spelled and read correctly.

Dictation Test

Pretest

The researcher read Form A of the dictation test to Robert. The dictation was repeated very slowly and precisely. Robert appeared confused and did not seem to understand the directions. He attempted only three words of the total dictation. The words I, a, dog were completed correctly in

sequence. Through observing Robert through the process, the researcher determined that he wrote only those words that he had committed to memory. He did not appear to understand how to apply letter/sound relationships to attempt the spelling of those words that were not committed to memory. He did not attempt to articulate each word slowly in an attempt to analyze the sound sequence.

Posttest

Robert appeared a little uncertain when the testing procedure was explained. The researcher recalled that Robert had become very confused during the pretest situation. She tried to reassure him and told him that he just had to do the best that he could do. Robert showed considerable improvement in his ability to analyze letter/sound sequence in words. He scored 30 correct responses out of a possible 37. He sequenced all consonant sounds correctly and matched all letter/sound responses correctly. He substituted the letter "K" for the "C" sound in "school" but the researcher scored the sound as correct. Robert's responses indicated that he had a good understanding of beginning and ending consonant sounds. He mostly omitted vowel sounds. He identified vowel sounds only in those words that had been committed to memory.

Running Record

Pretest

An analysis of Robert's Running Record indicated that he performed much better on current and familiar texts than on

new. He approached the familiar texts with confidence. He appeared to read from memory. When he came to a word that he didn't know, he first scanned the picture and then looked to the researcher for help. He did not appear to use any other strategies. When Robert was asked to read a new text, he became very confused. He still scanned the pictures for information but could not apply the picture information effectively.

Posttest

An analysis of Robert's Running Record indicated that he continued to do well on easy and instructional texts. He read the familiar texts fluently and with confidence. The researcher carefully observed Robert as he read the new or "hard" text. Several text cueing strategies were evident. He continued to use picture cues effectively and tracked words and sentences correctly in a left to right direction. He attempted to use his knowledge of letter/sound relationships and made some successful attempts. He used contextual information to self-monitor and when he felt that he was reading incorrectly the researcher noted that he went back to the beginning of the sentence in an attempt to self-correct.

Aaron

Letter Identification Test

Pretest

Aaron identified 47 out of a possible 54 letters correctly. All 47 responses were alphabetical. He approached

the test with confidence and attempted all letters. He confused " b" and " d", and identified both upper and lower case " Q ", " q " as " g ". He did however correctly identify the upper and lower case " G " correctly. He identified " l" as " i ". All other letters were identified correctly.

Pretest

Aaron identified 54 out of a possible 54 letters correctly. All responses were alphabetical. He approached the test with confidence and appeared secure in his knowledge to identify all letters correctly.

Word Test

Pretest

Aaron identified 16 of the 20 words correctly. He read through the list quickly and with confidence. He appeared to notice some similarities in the visual appearance of words. He identified "not" as "no" and "an" as "and". The researcher believed that Aaron read mostly from memory.

Posttest

Aaron identified all List B words correctly. He read through the list with fluency. It was difficult to determine which strategies he was applying. The researcher could only assume that he was familiar with all the words and had committed them to memory.

Concepts About Print Test

Pretest

Aaron scored 15 out of a possible 20 responses correctly. He appeared to have a good understanding of correct directionality. He could tell where a word began and ended, and tracked correctly with his finger as text was read. He demonstrated a good understanding of the return sweep to the left. Aaron demonstrated an understanding of what a period and question mark meant but had no knowledge of the function of a comma or quotation marks. Aaron became confused when text and line order were altered. He seemed to know that text was not read correctly but could not explain what was wrong.

Posttest

Aaron scored all items on the test correctly. He demonstrated an excellent understanding of how print is used to convey messages. He could identify when line and text order were altered and responded by saying that it was " mixed up ". He also understood the function of a comma and quotation marks.

Writing Vocabulary Test

Pretest

Aaron attempted to write 10 words. He appeared insecure and the researcher had to keep asking him to "try another". He wrote and read six of the ten words correctly. The researcher noted that Aaron tended to reverse some letters and confuse

letter order. He confused "b" and "d" and spelled "she" as "seh".

Posttest

Aaron attempted to write 40 words in the ten minute testing time. He wrote and read 30 of the words correctly. The researcher noted that the misspelled words were accurate in letter/sound analysis. Most misrepresented letters were vowels.

Dictation Test

Pretest

The researcher read Form A of the Dictation Test to Aaron. The dictation was read very slowly and Aaron needed a lot of encouragement to even attempt any of the words. Aaron did not appear to be able to identify sounds in any sequential order. He wrote only those words that been committed to memory. Aaron scored 12 out of a possible 37 responses correctly.

Posttest

The researcher explained the testing situation. Aaron did not appear to be apprehensive. Form A of the Dictation Test was read slowly as he wrote his response. Aaron scored 34 correct responses out of a possible total of 37. He identified and sequenced most sounds correctly. His errors were vowel omissions.

Running Record

Pretest

An analysis of Aaron's Running Record indicated that he had read all three texts with a high degree of accuracy. He approached the easy and instructional text with confidence and needed no encouragement to begin reading. The researcher noted that as Aaron read the hard text, he used picture cues very effectively. The researcher was surprised with Aaron's high accuracy rate (93%) and wondered about his familiarity with the text. Aaron said that he had not read the text prior to the Running Record. The researcher suspected, based on Aaron's prior readings of new text, that Aaron may have had the text read to him at home.

Posttest

Aaron read all three texts with a high degree of accuracy. He demonstrated a well-balanced set of cueing strategies on all text readings. The researcher particularly noted Aaron's confident approach to the " hard " text. Although the texts were repetitive, the researcher noted that Aaron used contextual cues very effectively and consistently reread to self-correct. His errors were mostly meaningful substitutions.

Rebecca

Letter Identification Test

Pretest

Rebecca identified 42 out of a possible 54 letters correctly. All responses were alphabetical. She correctly identified all upper case letters except "J", "V", and "P". She correctly identified all lower case letters except "p", "b", "j", "q", "d", "i", "g", and "v". Rebecca attempted all letters. The researcher could not identify any evident pattern in incorrectly identified letters. Rather, the researcher determined that the errors were guesses.

Posttest

Rebecca identified 54 out of a possible 54 letters correctly All responses were alphabetical. She read through the list with fluency and appeared confident in her ability to do so.

Word Test

Pretest

Rebecca identified 6 out of a possible 20 words correctly. No strategies were evident as she read through the list. The researcher determined that those words that were read correctly were read from memory. Rebecca attempted to identified some beginning sounds as she read down through the list. There was no positive correspondence between letter and sound identified. Even though Rebecca attempted to identify the beginning sound in some words from the list, she did not

attempt to finish the word. She did not seem aware that what she was doing was ineffective. The researcher concluded that Rebecca was aware that letters made sounds but had no understanding of how to match letter and sound correctly.

Posttest

Rebecca identified 10 out of a possible 20 words correctly. She attempted all words on the list. Her correct responses were immediate, suggesting to the researcher that these were words that had been committed to memory. All remaining responses were incorrect and showed no evidence of word analysis. Rebecca did not appear aware that her responses might be incorrect.

Concepts About Print Test

Pretest

Rebecca scored 16 out of a possible 20 responses correctly. Her responses indicated that she had a good understanding of the visual representation of words. She demonstrated an understanding of directionality by tracking correctly as text was read. She did not understand the function of a comma or quotation marks. She could not identify "was" and "no" and could not identify the bottom of the picture when the book was inverted.

Posttest

Rebecca scored 18 out of a possible 20 responses correctly. Her responses indicated that she had an excellent understanding of the visual features of words. She still could

not explain the function of a comma or quotation marks. The researcher noted that even though Rebecca's score was high, there seemed to be little transference into actual text reading.

Writing Vocabulary

Pretest

Rebecca attempted 10 words during the ten minute testing period. She completed only 3 words correctly . Her incorrect responses showed no positive letter/sound correspondence but rather were simply a jumble of letters printed in random order. She read through the list and showed no indication that she was aware that she had read incorrectly. Rebecca knows that letters make words. She can hear sounds at the beginning of words but doesn't know which letter represents the sound. This inability to match letter and sound correctly is probably interfering with her ability to achieve some independence in reading and writing.

Posttest

Rebecca wrote 10 words correctly. The researcher observed her through the testing session and recorded any evident strategies. Rebecca attempted to write only those words that she had committed to memory. All her attempts were successful. The researcher encouraged Rebecca to try more words but she responded by saying "I don't know any". The researcher was not able to observe Rebecca attempting words by correct use and

sequencing of letter/sound relationships. She made no attempts at spelling words that she had not committed to memory.

Dictation Test

Pretest

The researcher read Form A of the Dictation Test to Rebecca. The dictation was read very slowly and Rebecca was told to write down the words that she heard. She identified some sounds correctly in many of the words as the dictation was read. Rebecca seemed to be able to follow the text line and sequence the words properly. She identified 12 sounds correctly out of a possible 37. She had problems identifying initial consonant sounds. She mostly identified final consonant sounds and used the final consonant only to represent the total word. Those words that were committed to memory were spelled correctly. The researcher was surprised at Rebecca's ability to identify any sounds correctly as this had not been evident in both the Word Test and the Writing Vocabulary Test.

Posttest

The researcher read Form A of the Dictation Test to Rebecca. She appeared confused with text line and word order and asked the researcher to read the text again. She attempted the dictation as the researcher read the text slowly. The researcher noted that Rebecca appeared more apprehensive than in the pretest situation. Rebecca scored 25 out of a possible 37 responses correctly. An analysis of her responses indicated

the she was identifying most initial and final consonant sounds correctly. She did not attempt to identify any vowel sounds except in those words that had been committed to memory.

Running Record

Pretest

An analysis of Rebecca's Running Record indicated that she performed better on the easy and instructional texts than on the new or "hard" text. The researcher noted that as Rebecca read the easy and instructional texts, she did not attempt to correct any errors. However, the researcher noted that she hesitated each time that she read a word from the text incorrectly. She appeared to know that what she had read was incorrect but was unaware of the need to attempt corrections. The researcher concluded that Rebecca read from memory. Rebecca used only picture and contextual cues as she read the hard text. She attempted to track with her finger as she read but became confused when she could not interpret the text. Tracking became inaccurate and Rebecca read mostly by composing the story from the pictures. She did however maintain story sequence by "reading the pictures".

Posttest

An analysis of Rebecca's Running record indicated that she read the easy and familiar texts with a high degree of accuracy. She used a balance of cueing strategies and made successful attempts at self-correcting errors. As Rebecca read

the new or hard text, she used picture cues very effectively to cue in unfamiliar text. She tracked accurately with her finger as she read and was able to refocus when she became confused. She was able to use those high frequency words that had been committed to memory to help cue in unfamiliar words in the text. Rebecca made no attempts at self-corrections when words were read incorrectly. Her errors were contextually correct but gave no evidence of letter/sound matching.

Although Rebecca read all three texts with a reasonable degree of accuracy, the researcher noted that she had made little progress in increasing text length and difficulty since the pretesting session.

Anne

Letter Identification Test

Pretest

Anne identified 49 out of a possible 54 letters correctly. All responses were alphabetical. She correctly identified all upper case letters except "F", "Y", and "V". She identified all lower case letters except "y" and "v". She identified all incorrectly identified letters as "U". The researcher believed that the errors were guesses. Anne approached the testing situation with confidence.

Posttest

Anne identified all 54 letters correctly. All responses were alphabetical. She approached the testing situation with

confidence and her responses were immediate. All first responses were correct.

Word Test

Pretest

Anne read 19 of the 20 words in List A correctly. The researcher observed Anne as she read through the list. She read through the list quickly. The researcher determined that most of the words had been committed to memory. It was therefore difficult to identify any cueing strategies.

Posttest

Anne identified 19 of the 20 words in List B correctly. The researcher observed Anne as she read through the list. Although it was evident that some words had been committed to memory, the researcher was able to observe as Anne attempted words that were less familiar. She used initial, middle, and final consonants effectively.

Concepts About Print Test

Pretest

Anne scored 13 out of a possible 20 responses correctly. She appeared to understand that print was a visual representation of words. She indicated an understanding of correct directionality and could track correctly with her finger as text was read. She did not notice when line and page order were altered and when asked what was wrong, she responded that it was right. She understood and could explain

the function of a period but could not identify or explain the function of a question mark, comma, or quotation marks.

Posttest

Anne scored 20 out of a possible 20 responses correctly. She demonstrated an excellent understanding of the visual representation of words. She correctly identified and explained when line, text, and page order were altered. She demonstrated a good understanding of the function of a period, question mark, comma and quotation marks. She approached the test with confidence and seemed to enjoy demonstrating what she had learned.

Writing Vocabulary

Pretest

Anne attempted to write 19 words during the ten minute testing time. She wrote all words correctly but reversed some letters. The researcher accepted the words as correct if Anne read them correctly. She did not penalize Anne for letter reversals. Anne was not given credit for the words that she could not read. The researcher believed that Anne had copied these words from classroom displays. Anne had included the names of all her family members in the list. It was difficult for the researcher to observe any cueing strategies as Anne wrote all words correctly. The researcher could only assume that all words had been committed to memory or copied from classroom displays.

Posttest

Anne appeared excited about the challenge of writing as many words as she could in the 10 minute testing time. She attempted 38 words, 35 of which she spelled and read correctly. The researcher observed Anne as she worked. She made many successful attempts at letter/sound analysis. An analysis of Anne's errors indicated that she had a good understanding of letter/sound relationships. Her errors were either vowels or letter omissions.

Dictation Test

Pretest

The researcher read Form A of the Dictation Test to Anne. She scored 28 out of a possible 37 responses correctly. She asked to have the dictation read slowly and experienced some problems in remembering and recording text order correctly. She spelled some words correctly and the researcher believed that these words had been committed to memory. She effectively used letter/sound relationships to analyze beginning and final consonants in those words that were less familiar. She did not correctly identify or record vowel sounds and middle consonant sounds correctly.

Posttest

The researcher read Form A of the Dictation Test to Anne. She scored 33 out of a possible 37 responses correctly. Anne experienced few problems with the dictation. She could recall word order and effectively apply letter/sound relationships to

analyze those words that had not been committed to memory. Anne's incorrect responses were all omissions. There were no recorded letter/sound errors. The researcher concluded that Anne had an excellent understanding of letter/sound relationships and could apply that knowledge effectively to word analysis.

Running Record

Pretest

An analysis of Anne's Running Record indicated that she read all three texts with a high degree of accuracy. She used picture cues and contextual cues effectively. All errors were contextually correct (meaningful substitutions). Anne was successful at detecting and correcting errors as she read. The researcher observed as Anne read the hard text. She scanned the picture details for information to help cue in unfamiliar words. She tracked correctly as she read. When she became confused, she went back to the beginning of the line or sentence and reread in an attempt to self-correct. She used initial consonant sounds effectively. No other strategies were evident.

Posttest

An analysis of Anne's Running Record indicated a high degree of accuracy on all three texts. Anne read fluently and a variety of cueing strategies were evident. She also proved accurate at identifying and self-correcting on the instructional text. This was not evident on the easy and hard

texts. The researcher felt that Anne was using a well-balanced set of cueing strategies on text reading and was self-monitoring as she read. Anne read the hard text with a 94% accuracy rate. She continued to use a well-balanced set of cueing strategies as she read. Most errors were omissions and meaningful substitutions. She did not however identify her errors and made no attempt to self-correct.

The researcher used the information collected on the pretest Diagnostic Summary to assess each student's strengths and weaknesses. Each individual student's program plan was based on what the student knew and what he needed to learn. The posttest Diagnostic Summary was used to assess the student's gains after program intervention. The posttest assessment results were also used by the classroom teacher to further enhance program intervention.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Summary

It is essential that children have access to literacy from a very early age. When children achieve literacy it acts as a positive drive that frees them to acquire knowledge throughout their lives. There still exists however, the infinite debate as to how literacy is best achieved. Genuine literacy implies using reading, writing, listening and speaking in the real world. An actively literate person is constantly thinking, learning and reflecting. Environment, knowledge, and affective, cognitive and metacognitive control and interaction all simultaneously affect literacy acquisition.

Theoreticians have long been divided into two major groups - traditionalists and progressivists. Traditionalists have long remained " product-oriented" whereas progressivists have remained" process-oriented". Traditionalists, believe that the function of education is to transmit knowledge, whereas progressivists believe that the function of education is the development of processes which free the learner to learn. The most fundamental difference between the two is in their view of human knowledge.

A child's mind is not a vacuum. From infancy, a child is constantly acting on and organizing experiences. A child needs to form hypotheses and try them out through physical and

mental manipulations. Experiences that arouse a need and desire to learn, provide intrinsic motivation. Families constantly foster and support the young child's literacy experiences within the context of their day to day interactions. Once a child comes to school, parents adopt a more peripheral role and the teacher is expected to set the context and framework for learning. If teachers teach in a way that enables students to learn, they let children explore and confirm, provide the support and context that is necessary for learning and become active learners themselves.

Reading and writing are qualitative processes. The learners' reading and writing experiences must focus on meaning. Children interact with written language based on their previous experiences. Rather than learning through memorizing, transcribing and reciting, children must construct meaning and explore structure in a risk-free learning environment. The primary school years are crucial in laying the foundation for successful control of literacy. Through effective program implementation, most grade one students will be able to coordinate their use of graphic and contextual knowledge to become independent, functional readers. However, children differ widely and in any school district a percentage of students fail to learn how to read and write. These at-risk children can be identified as early as age six. The literate society that we live in demands that children achieve literacy early in their lives. Children who do not achieve

literacy are vulnerable in a school setting. If it is possible to prevent failure then educators have a responsibility to do so. Therefore, when children first show signs of difficulty it is time to intervene.

In many remediation programs, instruction has become a decontextualized process. The focus is often on isolated elements of print and not on meaning. Children are active learners who learn language in natural surroundings and strive for meaning at all times. Approaches to reading and writing that focus on elements other than meaning tend to isolate children from what is naturally instinctive to them. Reading Recovery is a short term intervention program intended for children who are experiencing difficulty in their first year of reading and writing instruction. The program is not designed to replace the regular program of instruction, but rather, is designed to provide daily tutorial lessons that focus intently on reading and writing instruction in a holistic environment.

This study investigated the effects of an adaptation of Clay's (1985) Reading Recovery Program on four grade one children. Two basic assumptions go along with Clay's (1985) Reading Recovery Program: (1) a classroom program will continue alongside the extra tuition sessions; and (2) the tuition sessions must be individualized. Due to the unique nature of program implementation, modifications in both structural and instructional procedures were necessary. These

adaptations were necessary in order to meet the physical and instructional demands of the grade one classroom environment. The program was implemented in a regular grade one classroom by a regular grade one teacher who was not trained in Reading Recovery procedures. The program was conducted over a period of 17 weeks (from February 3, 1993 to May 31, 1993) and was organized so that program students remained actively involved and received maximum benefit from the day-to-day classroom activities. The aim of the program was to accelerate the reading and writing skills of four grade one students who were determined to be at risk of failing to learn how to read and write, so that they could function within the average group in their grade one class. The researcher used several assessment techniques to measure the outcomes of the study. These were: (1) Student-Teacher Interaction; (2) Gates-MacGinitie Reading Tests; and (3) Clay's (1985) Diagnostic Survey. The pretest and posttest results were compared and used as a measure for program effectiveness.

The major questions underlying this study were:

(1) Can an adaptation of Clay's Reading Recovery Program be effective?

(2) Can an adaptation of Clay's (1985) Reading Recovery Program be effectively implemented within the confinements of a grade one classroom?

(3) Can an adaptation of Clay's Reading Recovery Program be effectively implemented by a grade one teacher who has not completed the required teacher training?

Prior to program implementation, the researcher who was also the classroom teacher, kept a detailed account of the progress of all students who were in her class. Evaluation was based on the researcher's interactions with different students in both group and tutorial situations on a day to day basis. The students were monitored on reading and writing behaviors with particular attention given to the student's knowledge of text reading and writing strategies, and personal and social attributes. The specific text reading and writing strategies have been outlined in detail in Chapter III. The collected information was reviewed and then revised at the end of each month. The revised information was recorded on a monthly summary sheet and added to each student's portfolio. By January, 1993, seven students had been identified by the researcher as performing below the expectations for grade one at mid-year on text reading and writing. The researcher then administered the Gates-MacGinitie Reading Test to all students in her class. The additional information collected from individual student scores was used to select four students from the seven who had been identified as at risk of failing to learn how to read and write. A control group was also administered the Gates-MacGinitie Reading Test. The results from the control group were used as a comparative measure. At

the end of the study, pretest and posttest results were compared on raw, stanine, percentile rank, and grade equivalent scores for both the control and experimental groups. No other contact was made with the control group. Program students' scores were compared with class means on pretest and posttest scores. The four students who had been selected for program intervention were then administered the Diagnostic Survey. Results were compared on pretest and posttest scores. The results were useful in measuring individual growth in reading and writing strategies.

As previously stated, the purpose of this study has been to determine the success of the implementation of an adaptation of Clay's (1985) Reading Recovery Program in a regular grade one class by a grade one teacher who had not been trained in Reading Recovery procedures. The answers to the previously stated question, based directly on information which has been presented in more detail in Chapter IV, are outlined below.

Question #1

Can an adaptation of Clay's (1985) Reading Recovery Program be effective?

The effectiveness of an adaptation of Clay's Reading Recovery Program was measured using the results of the three assessment techniques used in the study to measure student change. The results were as follows:

Student-Teacher Interaction

An examination of the January Monthly Summary sheets for all four program students indicated a general weakness in most print- related activities. Although each student varied in specific strengths and weaknesses, each was notably weak in his/her ability to use any acquired strategies independently on text reading and writing. Rebecca particularly appeared unaware of word knowledge and would often use a single letter to represent more than one word. An examination of the May Monthly Summary sheets for all program students showed that three of the four students had made considerable gains in text reading and writing strategies and in their ability to use these strategies independently in reading and writing activities. Rebecca's Monthly Summary sheet for May indicated that she showed no regression but had made only minimal progress. There was no evidence to confirm any independent strategies emerging on text reading and writing.

Language Evaluation Checklists

During the months of January and May, the researcher reviewed the Language Evaluation Checklists on oral and reading development for all students in the grade one class. The scores for each program student were totalled and compared with the total of class means for each item on both lists. The January results indicated that all four program students had scored considerably below the class mean on both oral and reading checklists. The class mean for January indicated that

the average student's total score for items on the oral checklist was 12.9. Robert and Rebecca showed a total score of 7, Aaron, 9 and Anne, 6. May results showed a total class mean of 14.7. Aaron and Anne were close to the class mean with each scoring a total of 14, while Robert scored 11 and Rebecca remained considerably below the class mean with a score of 8. An examination of the reading checklist for January indicated that all four students scored considerably below the class mean of 15.8. Each program student's individual total score was as follows: Robert, 4; Aaron, 7; Rebecca, 8; and Anne, 9. An examination of the May results indicated that Aaron had moved closer to the class mean (20.9) with a total score of 20 that Anne had actually surpassed the class mean with a total score of 23. Robert and Rebecca still remained considerably below the class mean with scores of 14 and 13 respectively. The Writing Evaluation Checklist was not a cumulative score. Students were rated according to the hierarchial level that he/she had achieved. Comparison measures based on class means were not possible. A comparison of January and May scores revealed that Aaron and Anne demonstrated considerable growth in their ability to write messages using correct directionality, correct letter/sound matching and an acceptable language level of two or more sentences. Robert did not achieve the expected level of independence and Rebecca still remained dependent on adult supervision.

Gates-MacGinitie Reading Test

Alternate forms of the Gates-MacGinitie Reading Test were administered to both a control group and the experimental group at the same approximate time and on the same day. Level R, Form 3 was administered on February 3, 1993 and Level R, Form 4 was administered on May, 31, 1993. Raw, stanine, percentile rank and grade equivalent scores were computed and recorded for each student in each group. Level R, Form 3 was used to identify the lowest scoring 20% in both groups. Level R, Form 4 was used as a comparison measure after program intervention. The mean raw score and the mean percentile rank scores were also calculated and recorded for both groups and on both tests. These scores were used as a comparison measure for those students in both groups who had scored in the lowest 20% group.

An examination of pretest scores for each group indicated that those students who had scored in the bottom 20% were also considerably below the class means on raw and percentile rank scores. The pretest and posttest results for the control group indicated that Keith, Edgbert, Adrian and Mike, all of who were in the bottom 20%, scored considerably below the class mean on both raw and percentile rank scores, with Adrian and Mike showing a regression on percentile rank scores and Edgbert showing a regression on both raw and percentile rank scores on posttest scores. An examination of the pretest and posttest scores for the experimental group indicated that

Aaron, Rebecca, Anne and Robert who scored in the bottom 20%, had all scored considerably below the class means on raw and percentile rank pretest scores. An examination of posttest scores indicated that Aaron had surpassed the class mean on both raw and percentile rank scores. Robert had moved closer to the class mean but Anne and Rebecca had remained considerably behind. There was no regression in raw and percentile rank scores. Comparison measures between the control group and the experimental group indicated that although the experimental group did not achieve the expected results, they performed better than the control group in a comparison of pretest and posttest scores.

With the exception of Aaron, all student gains were less than expected. The use of norm-referenced tests such as the Gates-MacGinitie Reading Tests to assess instructional intervention is increasingly being questioned as an effective measure of assessment. Anne's scores may be an indication that process oriented methods such as " Naturalistic Inquiry", referred to in Chapter IV, which formed the basis for teacher-based assessment, are a more accurate measure of individual growth.

The Diagnostic Survey

The real value of the Diagnostic Survey is to identify what particular controls a student has on text reading and writing. The major emphasis for the Reading Recovery teacher is to identify what strategies a student can control and what

strategies must be taught next. The Diagnostic Survey is divided into six subtests: Letter Identification; Word Test; Concepts About Print Test; Writing Vocabulary Test; Dictation Test and Running Record. The Diagnostic Survey was administered to the four program students who had been identified as the lowest scoring 20% of their class. Although emphasis is on the process and recorded observations, and not on quantitative measures, numerical scores were recorded and used in assessing program effectiveness. Each subtest has been discussed in some detail in Chapter IV. Overall results indicated that three of the four students made measureable gains between pretest and posttest situations. Although Rebecca's scores indicated that she had made less progress than the others, there were reasonable gains in text reading and writing strategies. Particularly noteworthy were the gains made in word analysis and Running Records of hard texts. Each student had progressed in his/her ability to write independently and apply reading strategies to new texts. The researcher's recorded observations also indicated a positive change in attitude towards reading and writing activities.

The researcher determined that the intervention program had accelerated the progress of three of the four students in text reading and writing strategies. Although some inconsistencies existed in test results, a cumulative examination indicated that three of the four students made consistent progress, and made greater progress than the

control group as indicated by The Gates-MacGinitie Reading Tests. Furthermore, the Diagnostic Survey results indicated that all students had made significant gains in text reading and writing strategies. Although students did not accelerate to the average level of their class, they did move forward in a positive direction that might otherwise have ended in a regression of student performance as indicated by the control group.

Question #2

Can an adaptation of Clay's (1985) Reading Recovery Program be effectively implemented within the confinements of a grade one classroom?

The effectiveness of Clay's Reading Recovery Program has been measured by the number of students who accelerate to the average of their class and are discontinued from the program. If effectiveness is to be measured according to discontinuance criteria, then Reading Recovery cannot meet program goals within the specified time frame of the Reading Recovery Program within the confinements of a regular grade one classroom environment. Even with constant parent support, the researcher found it difficult to remain on task while working with the program students. Interruptions from other students, school personnel and general school administrative functions affected time on task. However, if program effectiveness were to be measured on the basis of individual achievement, then implementation was effective.

Question #3

Can an adaptation of Clay's Reading Recovery Program be effectively implemented by a grade one teacher who has not completed the required teacher-training program?

Studies have indicated that effective teacher training is the single most important factor in the implementation of a Reading Recovery Program and that for Reading Recovery to be effective, guidelines must be strictly adhered to. As previously stated in questions one and two, students in the Reading Recovery program did not meet discontinuance criteria. Implementation was based on research and not on learned procedures. Although three of the four students made significant gains on text reading and writing strategies, no student reached the average level of his/her classmates on all assessment measures.

Conclusions

This study investigated the effectiveness of the implementation of an adaptation of Clay's (1985) Reading Recovery Program in a grade one classroom by a grade one teacher who was not formally trained in Reading Recovery procedures. The students who participated in the study were the students scoring in the bottom 20% in a standardized test of text reading and writing. The program was conducted over a period of 17 weeks and was organized in such a way that students were able to receive maximum benefit from both individual and class instruction. The anticipated outcome of

the program was that each of the four students involved in the Reading Recovery program would accelerate to the average level of their classmates.

During the course of the study, individual and process-oriented assessment techniques, such as anecdotal recordings, comprehensive monthly summary sheets on student performance, reading, writing, and oral language checklists and Clay's (1985) Diagnostic Survey, all indicated student growth in the development and independent use of strategies on text reading and writing. The assessments also indicated that all students demonstrated a positive change in attitude towards reading and writing activities. Quantitative scores on the Gates-MacGinitie Reading Tests indicated that Aaron was the only student to score equal to or better than the class mean.

Many factors are influential during the course of any study. Several factors seemed to have had special significance for this study. The researcher and the classroom teacher were the same person, thereby ensuring consistency in instruction. The lessons took place in the regular grade one classroom, usually when other students were present and actively engaged in learning. Most Reading Recovery activities were developed around monthly themes and assigned classroom activities were often used in tutorial sessions. Parents were actively involved at both school and home levels, with parents participating in actual classroom activities on a daily basis. The active involvement of parents served to create an active

and positive rapport between students, teachers and parents on a daily basis. All students in the grade one class were receiving individualized reading instruction from either the classroom teacher or a parent volunteer, so program students were often unaware that they were receiving specialized instruction. The individualized program was effective in identifying the specific strengths and needs of four children who appeared at risk of failing to learn how to read and write. Although three of the four students made significant gains in reading and writing, they did fall slightly below the expectations for the average grade one student at the end of grade one. A complementary feature of the program was the positive attitude change that was evident in all students.

Implications

Reading Recovery instruction is based upon holistic language and literacy learning principles. The principles underlying Reading Recovery should not be restricted to children who are at risk of failing to learn how to read and write. All children are entitled to a learning environment that is rich in children's literature and is nourished by the knowledge, care and understanding of an effective teacher. Learners are entitled to a learning environment that identifies, recognizes and responds to the individual needs of each student.

The present study found that three of the four students who had received individualized instruction in reading and

writing responded favourably and made significant gains. Although the overall goal of individualized instruction is to accelerate students so that they might be enabled to function within the average of their class, it does not mean pushing children through materials that are too difficult. Instead, effective teachers support students as they read. They teach and demonstrate problem solving strategies while engaged in actual text reading and writing. As children learn to use their knowledge in flexible ways, they develop more efficient processing systems and thus make faster progress.

The students who were identified as at-risk did not receive program intervention until February. This was well into the school year. Clay (1985), maintains that we can see the reading process go wrong after one year of instruction. Research has indicated that early intervention is the key to preventing at-risk students from failing to learn how to read and write (Clay, 1985; Holdaway, 1984; Goodman, 1986; Pinnell,1988; Routman, 1988).

The study raised some areas of possible interest for further investigation. These areas are as follows:

(1) Although Clay (1985) maintains that the effective implementation of a Reading Recovery Program is dependent on strict adherence to program guidelines, what would be the effects on student achievement if the program, as described by the researcher, were to continue into the students' next year in second grade? Would more time in program intervention be

successful in accelerating students to the average of their group?

(2) Individualized instruction has been determined to be an effective strategy in preventing reading and writing failure in the first years of schooling. What would be the effects for at-risk children of an individualized reading program that began with the child's initial attempts at reading written text and continued until the child had finished third grade?

(3) If grade one teachers were to incorporate the principles of Reading Recovery and follow the program outline in group situations, what might be the effects on young children's early reading and writing experiences?

(4) What might be the long term effects for those children who had participated in the study? Would the student who had acquired effective strategies on text reading and writing continue to progress and would that student eventually function with the average of the class without further intervention?

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Appendix A

A	F	K	P	W	Z
B	H	O	J	U	
C	Y	L	Q	M	
D	N	S	X	I	
E	G	R	V	T	
a	f	k	p	w	z
b	h	o	j	u	a
c	y	l	q	m	
d	n	s	x	i	
e	g	r	v	t	g

Appendix B

WORD TEST

List A	List B
me	but
to	look
is	said
it	then
but	not
she	here
he	my
go	she
not	come
look	can
no	came
am	saw
like	was
an	are
at	run
the	can't
a	want
I	go
oh	funny
see	jump

Appendix C

Scoring Standards

Item	Pass	Score
1	Front of book.	
2	Print (not picture).	
3	Points top left at *'I took . . .'* (Sand); *'I walked. . .'* (Stones)	
4	Moves finger left to right on any line	
5	Moves finger from the right-hand end of a higher line to the left-hand end of the next lower line, or moves down the page.	
6	Word by word matching.	
7	Both concepts must be correct, but may be demonstrated on the whole text or on a line, word or letter.	
8	Verbal explanation, or pointing to top of page, or turning the book around and pointing appropriately.	
9	Score for beginning with 'The' and moving right to left across the lower line and then the upper line, OR, turning the book around and moving left to right in the conventional movement pattern.	
10	Any explanation which implies that line order is altered	
11	Says or shows that a left page precedes a right page	
12	Notices at least one change of word order	
13	Notices at least one change in letter order	
14	Notices at least one change in letter order	
15	Says 'Question mark', or 'A question', or 'Asks something'	
16	Says 'Full stop', or 'It tells you when you've said enough' or 'It's the end'	
17	Says 'A little stop,' or 'A rest', or 'A comma'	
18	Says 'That's someone talking', 'Talking', 'Speech marks'	
19	Locates two capital and lower case pairs	
20	Points correctly to both *was* and *no*	
21	Locates one letter and two letters on request	
22	Locates one word and two words on request	
23	Locates both a first and a last letter	
24	Locates one capital letter.	

Age Expectations For Items

(Age at which 50 percent of average European children pass an item)

Age / Item	5:0	5:6	6:0	6:6	7:0		5:0	5:6	6:0	6:6	7:0
1						13					
2	x					14					
3						15					
4						16					
5						17					
6						18					
7						19					
8						20					
9						21					
10						22					
11						23					
12						24					

Appendix D

Administration and scoring

Select one of the following alternate Forms: A. B. C. D or E.

Form A

I	h a ve	a	b i g	d o g	a t	h o m e	
1	2 3 4	5	6 7 8	9 10 11	12 13	14 15 16	
T o d a y	I	a m	g o i n g	t o	t a k e	h i m	
17 18 19 20		21 22	23 24 25 26 27		28 29 30	31 32 33	
t o	s c h oo l.						
	34 35 36 37						

Form B

M u m	h a s	g o n e	u p	t o	th e	sh o p.
1 2 3	4 5 6	7 8 9	10 11	12 13	14 15	16 17 18
Sh e	w i l l	g e t	m i l k	a n d		
19 20	21 22 23	24 25 26	27 28 29 30	31 32 33		
b r e a d						
34 35 36 37						

Form C

I	c a n	s e e	th e	r e d	
1	2 3 4	5 6	7 8	9 10 11	
b o a t	th a t	w e	a r e	g o i n g	
12 13 14	15 16 17	18 19	20 21	22 23 24 25 26	
t o	h a v e	a	r i d e	i n.	
27 28	29 30 31	32	33 34 35	36 37	

Form D

Th e	b u s	i s	c o m i n g	I t	
1 2	3 4 5	6 7	8 9 10 11 12 13	14 15	
w i l l	s t o p	h e r e	t o	l e t	m e
16 17 18	19 20 21 22	23 24 25	26 27	28 29 30	31 32
g e t	o n				
33 34 35	36 37				

Form E

Th e	b oy	i s	r i d i n g	h i s	b i k e	
1 2	3 4	5 6	7 8 9 10 11 12	13 14 15	16 17 18	
H e	c a n	g o	v e r y	f a s t	o n	i t
19 20	21 22 23	24 25	26 27 28 29	30 31 32 33	34 35	36 37

Appendix E

SUMMARY OF RUNNING RECORD

Name: _____ Date: _____ D.of B. _____ Age: ___ yrs ___ mths

School: _____ Recorder: _____

SUMMARY OF RUNNING RECORD TEXT TITLES	RUNNING WORDS / ERROR	ERROR RATE	ACCURACY	SELF-CORRECTION RATE
1. Easy		1:	%	1:
2. Instructional		1:	%	1:
3. Hard		1:	%	1:

Directional Movement _____

ANALYSIS OF ERRORS Cues used and cues neglected

Easy _____

Instructional _____

_____

Hard _____

_____

CROSS CHECKING ON CUES

Page		E	SC	

Appendix F

CALCULATION AND CONVERSION TABLES

Error Rate	Percent Accuracy
1 : 200	99.5
1 : 100	99
1 : 50	98
1 : 35	97
1 : 25	96
1 : 20	95
1 : 17	94
1 : 14	93
1 : 12.5	92
1 : 11.75	91
1 : 10	90
1 : 9	89
1 : 8	87.5
1 : 7	85.5
1 : 6	83
1 : 5	80
1 : 4	75
1 : 3	66
1 : 2	50

CALCULATIONS

RW = Running Words

E = Errors

SC = Self-corrections

Error Rate

$$\frac{\text{Running words}}{\text{Errors}}$$

e.g. $\frac{150}{15}$ = Ratio 1 : 10

Accuracy

$$100 - \frac{E}{RW} \times \frac{100}{1}$$

$$100 - \frac{15}{150} \times \frac{100}{1} \ \%$$

= 90%

Self-Correction Rate

$$\frac{E + SC}{SC}$$

$$\frac{15 + 5}{5} = \text{Ratio } 1 : 4$$

Appendix G

DIAGNOSTIC SUMMARY SHEET

Recommended for survey checks after one year of instruction

Name: _____ Date: _____ D.of B._____ Age: ____ yrs ____ mths

School: _____

SUMMARY OF RUNNING RECORD TEXT TITLES		RUNNING WORDS / ERROR	ERROR RATE	ACCURACY	SELF-CORRECTION RATE
1.	Easy		1:	%	1:
2.	Instructional		1:	%	1:
3.	Hard		1:	%	1:

Directional Movement _____

ANALYSIS OF ERRORS Cues used and cues neglected

Easy _____

Instructional _____

Hard _____

CROSS CHECKING ON CUES

LETTER IDENTIFICATION /54

CONCEPTS ABOUT PRINT /24

WORD TEST (CLAY) LIST A _____ LIST B _____ LIST C _____ /17

OTHER WORD TEST (SCHONELL, BURT-VERNON) _____ /17

WRITING SAMPLE	WRITING VOCABULARY	DICTATION	STORY	SPELLING
Language :				
Message :				
Direction:		/37		

Appendix H

I would like to participate in my child's education. I would like to participate at the school level. I am available to help out in the classroom on the following day(s) and time:

_____

_____

_____

_____

Parent's signature: _____

Appendix I

STUDENT:

Anecdotal Record

Date Entry

Appendix J

STUDENT:

Monthly Summary Notes

Date:

(a) Letter/sound Knowledge:

(b) Directional awareness:

(c) Sight vocabulary:

(d) Independent behaviors:

(e) Personal, social, and emotional attributes:

Appendix K

STUDENT:

Language Evaluation Sheet: oral
Adapted from Cambourne & Turbill, 1990

1. Shows a sense of audience:
   a. Recognizes the audience's degree of background information when relating an event or telling a story; _____
   b. Uses appropriate organizational structure when relating an event or telling a story; _____
   c. Doesn't ramble (has a sense of having finished relating an event or telling a story); _____
   d. Sticks to the topic when relating an event or telling a story; _____

2. Vocabulary acquisition:
   a. Uses vocabulary appropriate to the context of the event or story the student is relating; _____
   b. Uses newly acquired words from monthly unit themes when relating an event or story that is theme related; _____

3. Control of grammatical options:
   a. Demonstrates appropriate use of tenses; _____
   b. Demonstrates appropriate use of pronouns; _____
   c. Demonstrates appropriate use of prepositions; _____
   d. Demonstrates logical sentence construction; _____

4. Confidence in using language:
   a. Willing to share information during sharing/discussion sessions; _____
   b. Willing to respond to questions during sharing/discussion sessions; _____
   c. Willing to participate in dramatic play activities; __
   d. Willing to participate in puppet activities; _____
   e. Willing to attempt new language tasks related to specific curriculum objectives; _____

Appendix L

STUDENT:

Language Evaluation Sheet: writing
Adapted from Cambourne & Turbill, 1990; Clay, 1985

1. Indicates a willingness to write:
   a. Writes only when required to; _____
   b. Writes for pleasure; _____
   c. Enjoys writing letters to friends during classroom free-time; _____
   d. Participates in group writing activities; _____
2. Language level:
   a. Mixes numerals and letters; _____
   b. Uses letters only; _____
   c. Some recognizable words; _____
   d. Attempts a simple sentence; _____
   e. Two or more sentences evident; _____
   f. Two or more paragraphs; _____
3. Message quality:
   a. Uses correct letter symbols; _____
   b. Matches some letter/ sounds correctly (consonants); _
      The student has a working knowledge of the following sounds: _____
   c. Matches all letter/sounds correctly: _____
   d. Uses vowels correctly; a_____, e_____, i_____, o_____, u_____
   e. Uses a period correctly; _____
   f. Uses a question mark correctly; _____
   g. Uses an exclamation mark correctly; _____
   h. Uses a comma correctly; _____
   i. Uses an upper case letter at the beginning of a new sentence; _____
   j. Understands that he/she is conveying a message; _____
   k. Copies a message; _____
   l. Uses a repetitive sentence pattern when composing; ___
   m. Attempts to record his/her own message using knowledge of letter/ sound relationships to invent spelling; ___
4. Directional awareness:
   a. No evidence of directional knowledge; _____
   b. Starts on the upper left top of the page; _____
   c. Writes from left to right; _____
   d. Uses a return sweep from left to right; _____
   e. Consistently demonstrates knowledge of correct directional pattern; _____
   f. Evidence of space between words; _____
   g. Uses correct directional pattern and spaces between words;__
   i. Extensive text indicating correct arrangement and spacing;__

Appendix M

STUDENT:

Language Evaluation Sheet: reading

Adapted from Cambourne & Turbill, 1990; Clay, 1985

1. Shows an enjoyment of reading books:
   a. Being read to; _____
   b. Reading to other students; _____
   c. Reading to the teacher; _____
   d. Reading to another class; _____
   e. Reading to another adult other than teacher; _____
   f. Reads independently for a sustained period of time; __
   g. Asks to borrow books from the classroom library; _____

2. Book awareness:
   a. Familiar with a variety of genres; _____
   b. Selects books relevant to topics; _____
   c. Selects books appropriate to age/interest level; _____
   d. Selects books to read that are suitable to his/her reading level; _____

3. Applies the following strategies when text reading:
   a. Uses picture cues; _____
   b. Matches what he/she reads correctly with written text (tracks with finger); _____
   c. Recognizes good and bad miscues; _____
   d. Rereads to self-correct miscues; _____
   e. Uses contextual meaning to predict new vocabulary; ___
   f. Indicates a knowledge of letter/sound relationships; __
   g. Applies knowledge of letter/sound relationships when reading new and familiar text;_____
   h. Applies correct directional principles when text reading; _____

4. Can identify story details:
   a. Can identify story characters; _____
   b. Can describe specific character traits; _____
   c. Can describe storyline in proper sequence; _____
   d. Can classify fiction and non-fiction; _____

Appendix N

STUDENT: Robert

Anecdotal Record

Date	Entry
September 28, 1992	Robert is a very quiet child. He appears to be socially immature for his age. He participates in group discussions but his comments have no relevance to the group conversation. He tends to talk about his own personal experiences.
October 10, 1992	His independent journal writing consists of a picture and some letters. When asked to read his written text there appears to be no correlation between what is written and how he reads the text.
October 29, 1992	Robert is reading trade books that are 1-line text. He reads from memory. He does not use picture cues. He does not track accurately.
November 14, 1992	Robert cannot recognize the letters in his name. When asked to read upper and lower case letters in a random order he could identify t, s, and a. He was not checked on all letters. He has no knowledge of letter/sound relationships.
November 30, 1992	Robert is easily confused when reading new text. Although he attempts to use picture cues to cue in written text, he does not use this strategy effectively or consistently. He is beginning to track well on familiar text.
December 14, 1992	When asked to read new text, Robert appears confused. He knows that he is confused but doesn't know what to do about it. He has no self-helping strategies. His written text is still a jumble of letters that show no relevance to the intended message.
January 14, 1993	Robert is performing way below grade level expectations. His reading and writing skills are progressing at a very

	slow rate. He is particularly weak in his knowledge of letter/sound relationships.
January 29, 1993	When asked to read his journal entry, Robert could not read what he had written but there is some evidence of words. He tracks well and uses picture cues effectively on familiar text.
February 12,1993	Robert's knowledge of letter/sound relationships is improving. He can identify some sounds. He does not transfer this knowledge to reading and writing activities.

Appendix O

STUDENT: Aaron

Anecdotal Record

Date	Entry
September 28, 1992	Aaron has a speech problem (physiological). He is very inattentive. He has to be reminded to obey classroom rules.
October 4, 1992	Aaron can make his own name using uppercase letters only. Independent journal writing shows no indication of word knowledge. All journal entries are the same - he traces his hand and does not attempt any written text.
October 27, 1992	There is no apparent knowledge of letter/sound relationships. He can recognize and make many upper and lower letters. Aaron appears emotionally and socially immature for his age. He is always trying to get the other children to laugh at him. He doesn't obey classroom rules.
November 9, 1992	Aaron's behaviour is interfering with the other children in the classroom. His parents have been contacted and appear supportive. His behaviour is interfering with his own learning. He does not want to work and rarely finishes work assignments.
November 30, 1992	He will attempt to write a message with teacher support. He constantly looks for positive reinforcement. His mom is helping with take-home reading. He is reading 1-line text and is tracking familiar text accurately. He is using picture cues to cue in new words.
December 15, 1992	When Aaron is asked to write in his journal he will draw a picture and attempt to write his own text. When asked to read what he has written he says he can't remember. When he has adult support he is more eager to write. His knowledge of letter/sound relationships

	is improving but he does not apply this knowledge when working independently.
January 10, 1993	He wrote in his journal independently. He wrote "the moon". The picture that he drew was not relevant to the text. When this was pointed out to him he drew a moon.
January 30, 1993	Aaron read fluently on his current and familiar books. He does not do well with new text. He is beginning to recognize bad issues but does not have the necessary skills to self-correct.
February 10, 1993	His reading is becoming more fluent. He is showing a more positive interest. He wastes a lot of time and must constantly be reminded to stay on task.

Appendix P

STUDENT: Rebecca

Anecdotal Record

Date	Entry
September 29, 1992	The class is very unsettled. It has been difficult to spend individual time with Rebecca. She speaks very loudly and her language appears immature.
October 4, 1992	Rebecca appears socially and emotionally immature for her chronological age. She can print her own name but uses a mixture of upper and lower case letters. She has no apparent knowledge of any basic sight words.
October 27, 1992	She has no apparent knowledge of letter/sound relationships. When journal writing, Rebecca draws a picture but cannot copy the date without supervision. Her written message is a jumble of letters with no spacing. The letters have no letter/sound sequence.
November 9, 1992	When asked to read her written message, Anne tends to compose a new message which has no obvious relationship to what she has written. There is no evidence of word knowledge when reading. She is reading 1-line text and occasionally glances at the picture to help cue in text.
December 14, 1992	Rebecca consistently reads I, a, the, and see from memory. Try to get her to incorporate these words when text reading.
January 12, 1993	She can print pattern sentences using I see a ____. She cannot use letter/sound knowledge to fill in the blank without supervision. When reading Rebecca doesn't track accurately. She slides her finger under text but does not match what she says with what is written.
January 29, 1993	Rebecca is unaware of her performance level. Her level of independence is below all other children in the class. When

	she chooses reading material it is always well above her reading level.
February 7, 1993	Rebecca is not producing the volume of work that is necessary to maintain a sufficient level of progress. She appears unable to keep up with any of the other children.

Appendix Q

STUDENT: Anne

Anecdotal Record

Date	Entry
September 30, 1992	Anne is a quiet child who is very cooperative. She appears to be functioning within the lower average of the class.
October 15, 1992	Anne is reading short one-line text fluently. She is using picture cues and tracking correctly with her finger. She reverses some letters. a,h.d,b,n, were noticed. She spaces words when writing and is willing to attempt writing independently.
October 31, 1992	Reading - Anne can identify bad miscues but doesn't know how to self-correct. She looks to me for direction. Written text is very short and does not indicate a complete sentence.
November 18, 1992	Anne is so quiet and cooperative that she would be easy to overlook. She does not ask for help. Her book knowledge is weak. She is not performing with the average of the class.
December 4, 1992	Anne is using good expression when reading. Her knowledge of letter/sound relationships is improving. She spaces words when writing and can identify initial consonants when prompted.
January 19, 1993	Knowledge of letter/sound relationships is evident in reading and writing activities. She needs to learn how to apply this knowledge independently. She tends to look at supporting person when confused.
February 25, 1993	Anne doesn't understand rhymes. Her attitude towards work is positive and she is always willing to try activities that are more challenging.

Appendix R

STUDENT: Robert

Monthly Summary Sheet

Date: January 31, 1993

(a) **Letter/sound knowledge:** Robert can identify some letters but still needs instruction in this area. He can identify the sound at the beginning of words but cannot match the sound with the correct letter.

(b) **Directional awareness:** Robert can locate the beginning of a text and consistently read from left to right using a return sweep. He matches what he says with the correct text while tracking with his finger. He demonstrates correct directional awareness when copying text or composing his own text. His written text is very short (average would be 2-6 words).

(c) **Sight vocabulary:** see, it, is, go, me (write); see, it, is, go, me, and, can, like (reading).

(d) **Independent behaviors:**

Writing__ no evident strategies for text generation. He copies words from memory or from a previous writing assignment. He can't read his own written text. His written text does not complement the pictures he draws.

Reading__ He uses correct directional movement (tracks with finger) and uses pictures to cue in text when text is familiar. No strategies are evident on new text.

(e) **Personal, social, and emotional attributes:** Robert is socially and emotionally below the expectations of the classroom environment. He is very pleasant and tries to cooperate with his classmates but his social skills are weak. He does not focus well and his attention span is very short (5 minutes or so).

Appendix S

STUDENT: Robert

Monthly Summary Sheet

Date: May 31, 1993

(a) **Letter/sound knowledge:** Robert can usually identify all upper case letters and most lower case letters. He sometimes confuses b, d, and p.. He can identify all beginning and final consonants in words if the sounds are slightly exaggerated for him. He rarely applies his knowledge of letter/sound relationships without the support of an adult when reading and writing. Most recently he has attempted to do this with some success.

(b) **Directional awareness:** Robert has demonstrated correct directional awareness when reading and writing. Although his written text is still shorter than grade level expectancy he proceeds from left to right with a return sweep to the left.

(c) **Sight Vocabulary:** When asked to spell as many words as he can from memory, Robert will usually generate a list of 15 to 20 words which are spelled correctly. His sight reading vocabulary has improved and he is now using specific text reading strategies to read unfamiliar words.

(d) **Independent behaviors:**

Writing__ relies on sight vocabulary rather than knowledge of letter/sound relationships; spaces words correctly; and can use letter/sound relationships (invents spelling) to compose messages with adult supervision.

Reading___ consistently demonstrates correct directional knowledge; uses picture cues; can identify bad miscues; and rereads in an attempt to self-correct. Overall, he is becoming more dependent on text cues and is beginning to develop a self-extending system on text reading.

Personal, social, and emotional attributes: Robert has shown some evidence of social growth. He plays well with his classmates but usually assumes a passive role. His attentiveness to classroom activities has decreased and he appears tired and sleepy. His volume of take-home work has decreased. He says that he is playing outside in the evening and is later going to bed.

Appendix T

STUDENT: Aaron

Monthly Summary Sheet

Date: January 31, 1993

(a) **Letter/sound knowledge:** Aaron can usually recognize all upper and lower case letters. He sometimes confuses b and d. He can identify initial consonants and match letter and sound correctly. He does not apply his knowledge of letter/sound relationships when reading and writing unless supported.

(b) **Directional awareness:** It is very difficult to evaluate directional awareness in text writing because most independent writing is usually 1-2 words. Text is usually copied from somewhere in the classroom. Letters are copied and sequenced correctly from left to right. He reads from left to right and tracks text with finger correctly.

(c) **Sight vocabulary:** see, to, look, mom, it, he, bad (dad), bog (dog), like (write); me, to, is, it, but, she, he, go, not, like, look, can, the, see, a, I (read).

(d) **Independent behaviors:** Writing__ Aaron does not like to write independently. He usually resorts to copying a theme related word(s) that he can see somewhere in the classroom. When asked to write independently by using his knowledge of letter/sound relationships he will become discouraged and sometimes cries. Reading___ Aaron is developing some cueing strategies on text reading. He uses picture cues, tracking, contextual knowledge and can identify bad miscues. Fluency is developing on familiar text.

(e) **Personal, social, and emotional attributes:** Aaron wastes a lot of time . He does not focus himself well. He does not always cooperate with classmates and teacher and must continually be reminded to obey classroom rules. He is socially and emotionally below the expectations of the classroom environment. He will usually cry when things do not go his way.

Appendix U

STUDENT: Aaron

Monthly Summary Sheet

Date: May 31, 1993

(a) **Letter/sound knowledge:** Aaron has demonstrated a good understanding of letter/sound relationships. He is still a little insecure in approaching a writing assignment independently but will do so with less support. When he applies his knowledge of letter/sound relationships (invented spelling) he is usually accurate. He has begun to use his knowledge of letter/sound relationships when reading new and familiar text.

(b) **Directional awareness:** Aaron has demonstrated correct directional strategies on both text reading and writing. He reads/writes from left to right and uses a return sweep to the left. He spaces words correctly when writing and has begun to use lined paper.

Sight vocabulary: When asked to spell as many words as he can from memory, Aaron will usually generate a list of 20-30 words. Most of these words are spelled correctly. His sight reading vocabulary is equal to or better than his sight writing vocabulary. He has developed good cueing strategies on text reading and this has improved his reading vocabulary.

(d) **Independent behaviors:** Writing__ Aaron will now write 2-4 sentences independently. He will use his knowledge of letter/sound relationships to attempt words that he can't find in the classroom or recall from memory. He still enjoys adult support but is showing a positive gain in self-confidence. Reading__ he is developing a well balanced system of cueing strategies on text reading. He reads easy and familiar text with fluency. He uses picture cues, phonetic cues, contextual cues, and can recognize bad and good miscues. When he miscues, he will go back to the beginning of the sentence or page and reread. He thinks about an unknown word carefully before he asks for help.

(e) **Personal, social, and emotional attributes:** Although Aaron has progressed socially and emotionally, he sometimes finds it frustrating to function within the expectations of the classroom environment. He has become more confident of his abilities and is more willing to take risks.

Appendix V

STUDENT: Rebecca

Monthly Summary Sheet

Date: January 31, 1993

(a) **Letter/sound knowledge:** Rebecca knows all upper case letters and some lower case letters. Although she can identify some initial consonant sounds, her knowledge is very much below grade level expectations. She appears to have no understanding of how to apply knowledge of letter/sound relationships to text reading and writing.

(b) **Directional Awareness:** Rebecca has demonstrated incorrect directional practices. She does not understand where a word begins and ends and when asked to track with her finger when reading, has read several words while pointing to one word. She does however move in a left to right direction but does not consistently return to the left. When writing Anne will produce letters in a left to right pattern but may read several words as she points to the letters. The letters appear to have little relevance to the written text. There is no evidence of spacing.

(c) **Sight Vocabulary:** Rebecca, see, a, I, mom, cat (write); is, he, see, I, a, the, mom, cat (read).

(d) **Independent behaviors:** Writing__ she can copy a message using correct directional movement from some other source but cannot generate her own written text. She will draw pictures but adds very few details. She uses picture cues when text reading but if text is unfamiliar she will make up her own story to match the pictures. She can memorize short stories and track the print with her finger. When she forgets the text she tracks incorrectly.

(e) **Personal, social and emotional attributes:** Rebecca is a very affectionate child but is performing very much below the social and emotional expectations of the classroom environment. She is always very enthusiastic about learning and does not seem to be aware of the fact that she is performing considerably below the expectations of an average grade one class. Oral language skills are weak.

Appendix W

STUDENT: Rebecca

Monthly Summary Sheet

Date: May 31, 1993

(a) **Letter/sound knowledge:** Rebecca can identify all upper and lower case letters. She can identify many initial consonant sounds accurately but never applies this knowledge independently. She will attempt to sequence the sounds she hears in words with adult supervision.

(b) **Directional awareness:** Rebecca writes from left to right. However her written text is so short that she has not demonstrated a knowledge of a return sweep to the left. Quite often her written text (independent) is a jumble of letters with no discernable words. However when words are discernable there is evidence of spacing. She reads from left to right and tracks correctly with her finger as she reads.

(c) **Sight vocabulary:** When asked to spell as many words as she could from memory, Rebecca generated a written list of 10 words, 9 of which were spelled correctly. Her sight reading vocabulary has increased but is still far below grade level expectations.

(d) **Independent behaviors:** Writing__ When unsupervised, Anne tends to scribble or print letters to represent her story ideas. She knows that this is incorrect and when asked to try again she will usually use a repetitive pattern (eg. I like...). She is aware that scribbling and a random combination of letters do not make words but will still do so. Reading___ Although Rebecca is making progress, she has very few independent skills. She uses picture cues and tracks with her finger without prompting. She can sometimes identify a bad miscue but doesn't self-correct.

(e) **Personal, social, and emotional attributes:** Rebecca is very immature socially. She is very dependent on others. She does not work well independently and does not focus herself on assigned work activities. She talks all the time and has begun to make inappropriate noises while others are working.

Appendix X

STUDENT: Anne

Monthly Summary Sheet

Date: January 31, 1993

(a) **Letter/sound knowledge:** Anne can identify all upper and lower case letters except y (Y) and v (V). She reverses b and d and inverts n and u. She can identify most initial consonant sounds and can match the sound with the correct letter. She does not apply her knowledge of letter/sound relationships when reading or writing.

b) **Directional awareness:** Anne writes from left to right and spaces words when reminded to do so. Text is short but she has indicated an awareness of the return sweep to the left. She reads from left to right and tracks correctly with her finger. She appears to have a good understanding of when a word begins and ends.

(c) **Sight vocabulary:** When asked to spell as many words as she can independently, Anne will consistently generate a list of 10 -15 basic sight words. Her sight reading vocabulary is a little more extensive and falls within a range of 15-20 words.

(d) **Independent behaviors:** Writing___ Anne will attempt to write a message independently. She uses words that are posted around the classroom or copies words from other children. She uses words from her sight vocabulary but rarely attempts to invent spelling by using her knowledge of letter/sound relationships. Reading___ She reads familiar books fluently. She is using some strategies on unfamiliar text. She uses picture cues, tracks with her finger, and uses contextual knowledge to read new vocabulary. She appears to love books and quite often uses her free time exploring new and familiar books.

Personal, social, and emotional attributes: Anne appears socially and emotionally equal to grade level expectations. She is very quiet and is always cooperative. She tries to finish all work assignments and is always willing to try new and more challenging work.

Appendix Y

STUDENT: Anne

Monthly Summary Sheet

Date: May 31,1993

(a) **Letter/sound knowledge:** Anne can identify all upper and lower case letters. She can identify all initial and final consonant sounds and can match letters to sounds correctly. She attempts to use this knowledge of letter/sound relationships to write stories independently. She applies this knowledge effectively when reading new text.

(b) **Directional awareness:** Anne writes from left to right and makes a return sweep to the left. She usually spaces words correctly. She reads from left to right and tracks correctly with her finger as she reads.

(c) **Sight vocabulary:** When asked to generate a list of words from memory, Anne can consistently write from 20-25 words correctly. Her reading vocabulary is steadily expanding and she is using a well balanced cueing system when reading new text.

(d) **Independent behaviors:** Writing__ Anne has begun to work independently in a group situation. She completes most written assignments within an average range. Written text is still short. Reading__ Anne reads familiar books fluently. She has developed a well balanced set of cueing strategies on new text reading. She uses picture cues, contextual cues, phonetic cues, and can identify bad miscues. She rereads from the beginning of the text or sentence in an attempt to self-correct.

(e) **Personal, social and emotional attributes:** Anne is willing to try new things. She enjoys learning and appears to be very pleased with the progress that she is making. She plays and works cooperatively with others.

Table 1
Language Evaluation Checklist: Oral
Adapted from Cambourne & Turbill (1990)

Items	1	2	3	4	Total	
Robert January	0	0	2	5	7	
Aaron January	1	1	3	4	9	
Rebecca January	0	0	2	5	7	
Anne January	2	1	3	0	6	
Class Mean January	2.7,	1.6,	4,	4.6	12.9	3.20

Note. Maximum possible score on item # 1 is 4.
Maximum possible score on item # 2 is 2.
Maximum possible score on item # 3 is 3.
Maximum possible score on item # 4 is 5.
Maximum possible total score is 14.
"Total" indicates the total number of correct responses.

The Reading Recovery students were not included when calculating the class means and class total.

Table 2
Language Evaluation Checklist: reading
Adapted from Cambourne & Turbill, (1990); Clay, (1985)

Items	1	2	3	4	Total
Robert January	2	0	1	1	4
Aaron January	2	1	2	2	7
Rebecca January	5	0	2	1	8
Anne January	3	0	4	2	9
Class Mean January	4.4,	3.4,	5.1,	2.9	15.8

Note. Maximum possible score on item 1 is 7.
Maximum possible score on item 2 is 4.
Maximum possible score on item 3 is 8.
Maximum possible score on item 4 is 4.
Maximum possible total score is 23.
"Total" indicates the total possible score.

The Reading Recovery students were not included when calculating the class means and total.

Table 3
Language Evaluation Checklist: Oral
Adapted from Cambourne & Turbill (1990)

Items	1	2	3	4	Total
Robert May	0	2	4	5	11
Aaron May	3	2	4	5	14
Rebecca May	0	0	3	5	8
Anne May	4	2	3	5	14
Class Mean May	3.7,	2.0,	4.0,	5.0	14.7

Note. Maximum possible score on item # 1 is 4.
Maximum possible score on item # 2 is 2.
Maximum possible score on item # 3 is 3.
Maximum possible score on item # 4 is 5.
Maximum possible score is 14.
"Total" indicates the total number of correct responses.
The Reading Recovery group were not included when calculating the class means and total.

Table 4
Language Evaluation Checklist: reading
Adapted from Cambourne & Turbill, (1990); Clay, (1985)

Items	1	2	3	4	Total
Robert May	3	3	6	2	14
Aaron May	5	4	7	4	20
Rebecca May	6	2	4	1	13
Anne May	7	4	8	4	23
Class Mean May	6.4,	3.8,	7.0,	3.7	20.9

Note. Maximum possible score on item 1 is 7.
Maximum possible score on item 2 is 4.
Maximum possible score on item 3 is 8.
Maximum possible score on item 4 is 4.
Total possible score is 23.
"Total" indicates total possible score.

The Reading Recovery students were not included when calculating the class means and total.

Table 5
STUDENT: Robert (January)
Language Evaluation Sheet: writing
Adapted from Cambourne & Turbill, 1990; Clay, 1985

1. Indicates a willingness to write:
   a. Writes only when required to; ✓
   b. Writes for pleasure; ✓
   c. Enjoys writing letters to friends during classroom free-time; _____
   d. Participates in group writing activities; ✓
2. Language level:
   a. Mixes numerals and letters; _____
   b. Uses letters only; ✓
   c. Some recognizable words; _____
   d. Attempts a simple sentence; _____
   e. Two or more sentences evident; _____
   f. Two or more paragraphs; _____
3. Message quality:
   a. Uses correct letter symbols; ✓-can't call them by name
   b. Matches some letter/ sounds correctly (consonants); _
      The student has a working knowledge of the following sounds: He doesn't identify any Sounds
   c. Matches all letter/sounds correctly: _____
   d. Uses vowels correctly; a_, e_, i_, o_ u_
   e. Uses a period correctly; _____
   f. Uses a question mark correctly; _____
   g. Uses an exclamation mark correctly; _____
   h. Uses a comma correctly; _____
   i. Uses an upper case letter at the beginning of a new sentence; _____
   j. Understands that he/she is conveying a message; _____
   k. Copies a message; _____
   l. Uses a repetitive sentence pattern when composing; ___
   m. Attempts to record his/her own message using knowledge of letter/ sound relationships to invent spelling; ___
4. Directional awareness:
   a. No evidence of directional knowledge; _____
   b. Starts on the upper left top of the page; ✓
   c. Writes from left to right; ✓
   d. Uses a return sweep from left to right; _____
   e. Consistently demonstrates knowledge of correct directional pattern; _____
   f. Evidence of space between words; _____
   g. Uses correct directional pattern and spaces between words;__
   i. Extensive text indicating correct arrangement and spacing;__

Table 6
STUDENT: Aaron (January)
Language Evaluation Sheet: writing
Adapted from Cambourne & Turbill, 1990; Clay, 1985

1. Indicates a willingness to write:
   a. Writes only when required to; ✓
   b. Writes for pleasure; _____
   c. Enjoys writing letters to friends during classroom free-time; _____
   d. Participates in group writing activities; _____
2. Language level:
   a. Mixes numerals and letters; _____
   b. Uses letters only; ✓
   c. Some recognizable words; _____
   d. Attempts a simple sentence; _____
   e. Two or more sentences evident; _____
   f. Two or more paragraphs; _____
3. Message quality:
   a. Uses correct letter symbols; _____
   b. Matches some letter/ sounds correctly (consonants); _ The student has a working knowledge of the following sounds: _____
   c. Matches all letter/sounds correctly: _____
   d. Uses vowels correctly; a_, e_, i_, o_, u_
   e. Uses a period correctly; _____
   f. Uses a question mark correctly; _____
   g. Uses an exclamation mark correctly; _____
   h. Uses a comma correctly; _____
   i. Uses an upper case letter at the beginning of a new sentence; _____
   j. Understands that he/she is conveying a message; _____
   k. Copies a message; ✓
   l. Uses a repetitive sentence pattern when composing; ___
   m. Attempts to record his/her own message using knowledge of letter/ sound relationships to invent spelling; ___
4. Directional awareness:
   a. No evidence of directional knowledge; ✓
   b. Starts on the upper left top of the page; _____
   c. Writes from left to right; _____
   d. Uses a return sweep from left to right; _____
   e. Consistently demonstrates knowledge of correct directional pattern; _____
   f. Evidence of space between words; _____
   g. Uses correct directional pattern and spaces between words;__
   i. Extensive text indicating correct arrangement and spacing;__

Table 7
STUDENT: Rebecca (January)
Language Evaluation Sheet: writing
Adapted from Cambourne & Turbill, 1990; Clay, 1985

1. Indicates a willingness to write:
   a. Writes only when required to; _____
   b. Writes for pleasure; _____
   c. Enjoys writing letters to friends during classroom free-time; ✓ (uses only pictures)
   d. Participates in group writing activities; ✓
2. Language level:
   a. Mixes numerals and letters; _____
   b. Uses letters only; _____
   c. Some recognizable words; ✓
   d. Attempts a simple sentence; _____
   e. Two or more sentences evident; _____
   f. Two or more paragraphs; _____
3. Message quality:
   a. Uses correct letter symbols; _____
   b. Matches some letter/ sounds correctly (consonants); _
      The student has a working knowledge of the following sounds: _____
   c. Matches all letter/sounds correctly: _____
   d. Uses vowels correctly; a_, e_, i_, o_, u_
   e. Uses a period correctly; _____
   f. Uses a question mark correctly; _____
   g. Uses an exclamation mark correctly; _____
   h. Uses a comma correctly; _____
   i. Uses an upper case letter at the beginning of a new sentence; _____
   j. Understands that he/she is conveying a message; ✓
   k. Copies a message; ✓
   l. Uses a repetitive sentence pattern when composing; ___
   m. Attempts to record his/her own message using knowledge of letter/ sound relationships to invent spelling; ___
4. Directional awareness:
   a. No evidence of directional knowledge; ✓
   b. Starts on the upper left top of the page; _____
   c. Writes from left to right; _____
   d. Uses a return sweep from left to right; _____
   e. Consistently demonstrates knowledge of correct directional pattern; _____
   f. Evidence ot space between words; _____
   g. Uses correct directional pattern and spaces between words;__
   i. Extensive text indicating correct arrangement and spacing;__

Table 8
STUDENT: Anne (January)
Language Evaluation Sheet: writing
Adapted from Cambourne & Turbill, 1990; Clay, 1985

1. Indicates a willingness to write:
   a. Writes only when required to; ✓
   b. Writes for pleasure; _____
   c. Enjoys writing letters to friends during classroom free time; _____
   d. Participates in group writing activities; ✓
2. Language level:
   a. Mixes numerals and letters; _____
   b. Uses letters only; _____
   c. Some recognizable words; ✓
   d. Attempts a simple sentence; ✓
   e. Two or more sentences evident; _____
   f. Two or more paragraphs; _____
3. Message quality:
   a. Uses correct letter symbols; ✓ (reverses some)
   b. Matches some letter/ sounds correctly (consonants); _
      The student has a working knowledge of the following sounds: b c d k l m n p r s t z
   c. Matches all letter/sounds correctly: _____
   d. Uses vowels correctly; a_, e_, i_, o_, u_
   e. Uses a period correctly; _____
   f. Uses a question mark correctly; _____
   g. Uses an exclamation mark correctly; _____
   h. Uses a comma correctly; _____
   i. Uses an upper case letter at the beginning of a new sentence; _____
   j. Understands that he/she is conveying a message; ✓
   k. Copies a message; ✓
   l. Uses a repetitive sentence pattern when composing; ___
   m. Attempts to record his/her own message using knowledge of letter/ sound relationships to invent spelling; ___
4. Directional awareness:
   a. No evidence of directional knowledge; _____
   b. Starts on the upper left top of the page; ✓
   c. Writes from left to right; ✓
   d. Uses a return sweep from left to right; ✓
   e. Consistently demonstrates knowledge of correct directional pattern; _____
   f. Evidence of space between words; _____
   g. Uses correct directional pattern and spaces between words;__
   i. Extensive text indicating correct arrangement and spacing;__

Table 9
STUDENT: Robert (May)
Language Evaluation Sheet: writing
Adapted from Cambourne & Turbill, 1990; Clay, 1985

1. Indicates a willingness to write:
   a. Writes only when required to; _____
   b. Writes for pleasure; _____
   c. Enjoys writing letters to friends during classroom free-time; ✓
   d. Participates in group writing activities; ✓
2. Language level:
   a. Mixes numerals and letters; _____
   b. Uses letters only; _____
   c. Some recognizable words; ✓
   d. Attempts a simple sentence; ✓
   e. Two or more sentences evident; _____
   f. Two or more paragraphs; _____
3. Message quality:
   a. Uses correct letter symbols; ✓
   b. Matches some letter/ sounds correctly (consonants); __
      The student has a working knowledge of the following sounds: _____
   c. Matches all letter/sounds correctly: ✓
   d. Uses vowels correctly; a_, e_, i_, o_, u_
   e. Uses a period correctly; ✓
   f. Uses a question mark correctly; _____
   g. Uses an exclamation mark correctly; _____
   h. Uses a comma correctly; _____
   i. Uses an upper case letter at the beginning of a new sentence; _____
   j. Understands that he/she is conveying a message; ✓
   k. Copies a message; _____
   l. Uses a repetitive sentence pattern when composing; ✓
   m. Attempts to record his/her own message using knowledge of letter/ sound relationships to invent spelling; ___
4. Directional awareness:
   a. No evidence of directional knowledge; _____
   b. Starts on the upper left top of the page; ✓
   c. Writes from left to right; ✓
   d. Uses a return sweep from left to right; ✓
   e. Consistently demonstrates knowledge of correct directional pattern; _____
   f. Evidence of space between words; ✓
   g. Uses correct directional pattern and spaces between words;__
   i. Extensive text indicating correct arrangement and spacing;__

Table 10
STUDENT: Aaron (May)
Language Evaluation Sheet: writing
Adapted from Cambourne & Turbill, 1990; Clay, 1985

1. Indicates a willingness to write:
   a. Writes only when required to; _____
   b. Writes for pleasure; ✓
   c. Enjoys writing letters to friends during classroom free-time; ✓
   d. Participates in group writing activities; ✓
2. Language level:
   a. Mixes numerals and letters; _____
   b. Uses letters only; _____
   c. Some recognizable words; _____
   d. Attempts a simple sentence; ✓
   e. Two or more sentences evident; ✓
   f. Two or more paragraphs; _____
3. Message quality:
   a. Uses correct letter symbols; ✓
   b. Matches some letter/ sounds correctly (consonants); _
      The student has a working knowledge of the following sounds: _____
   c. Matches all letter/sounds correctly: ✓
   d. Uses vowels correctly; a✓, e_, i_, o_, u_
   e. Uses a period correctly; ✓
   f. Uses a question mark correctly; _____
   g. Uses an exclamation mark correctly; _____
   h. Uses a comma correctly; _____
   i. Uses an upper case letter at the beginning of a new sentence; _____
   j. Understands that he/she is conveying a message; ✓
   k. Copies a message; _____
   l. Uses a repetitive sentence pattern when composing; ___
   m. Attempts to record his/her own message using knowledge of letter/ sound relationships to invent spelling; ✓
4. Directional awareness:
   a. No evidence of directional knowledge; _____
   b. Starts on the upper left top of the page; ✓
   c. Writes from left to right; ✓
   d. Uses a return sweep from left to right; ✓
   e. Consistently demonstrates knowledge of correct directional pattern; ✓
   f. Evidence of space between words; ✓
   g. Uses correct directional pattern and spaces between words;__
   i. Extensive text indicating correct arrangement and spacing;__

Table 11
STUDENT: Rebecca (May)
Language Evaluation Sheet: writing
Adapted from Cambourne & Turbill, 1990; Clay, 1985

1. Indicates a willingness to write:
   a. Writes only when required to; _____
   b. Writes for pleasure; ✓
   c. Enjoys writing letters to friends during classroom free-time; ✓
   d. Participates in group writing activities; ✓
2. Language level:
   a. Mixes numerals and letters; _____
   b. Uses letters only; _____
   c. Some recognizable words; ✓
   d. Attempts a simple sentence; ✓
   e. Two or more sentences evident; _____
   f. Two or more paragraphs; _____
3. Message quality:
   a. Uses correct letter symbols; _____
   b. Matches some letter/ sounds correctly (consonants); ✓
      The student has a working knowledge of the following sounds: m s p t d f k z
   c. Matches all letter/sounds correctly: _____
   d. Uses vowels correctly; a_, e_, i_, o_, u_
   e. Uses a period correctly; when told
   f. Uses a question mark correctly; _____
   g. Uses an exclamation mark correctly; _____
   h. Uses a comma correctly; _____
   i. Uses an upper case letter at the beginning of a new sentence; _____
   j. Understands that he/she is conveying a message; ✓
   k. Copies a message; ✓
   l. Uses a repetitive sentence pattern when composing; ✓
   m. Attempts to record his/her own message using knowledge of letter/ sound relationships to invent spelling; ___
4. Directional awareness:
   a. No evidence of directional knowledge; _____
   b. Starts on the upper left top of the page; ✓
   c. Writes from left to right; ✓
   d. Uses a return sweep from left to right; ✓
   e. Consistently demonstrates knowledge of correct directional pattern; _____
   f. Evidence of space between words; Sometimes
   g. Uses correct directional pattern and spaces between words;__
   i. Extensive text indicating correct arrangement and spacing;__

Table 12
STUDENT: Anne (May)
Language Evaluation Sheet: writing
Adapted from Cambourne & Turbill, 1990; Clay, 1985

1. Indicates a willingness to write:
   a. Writes only when required to; _____
   b. Writes for pleasure; ✓
   c. Enjoys writing letters to friends during classroom free-time; ✓
   d. Participates in group writing activities; ✓
2. Language level:
   a. Mixes numerals and letters; _____
   b. Uses letters only; _____
   c. Some recognizable words; _____
   d. Attempts a simple sentence; _____
   e. Two or more sentences evident; ✓
   f. Two or more paragraphs; _____
3. Message quality:
   a. Uses correct letter symbols; ✓
   b. Matches some letter/ sounds correctly (consonants); _
      The student has a working knowledge of the following sounds: _____
   c. Matches all letter/sounds correctly: ✓
   d. Uses vowels correctly; a✓, e_, i_, o_, u_
   e. Uses a period correctly; ✓
   f. Uses a question mark correctly; ✓
   g. Uses an exclamation mark correctly; _____
   h. Uses a comma correctly; _____
   i. Uses an upper case letter at the beginning of a new sentence; _____
   j. Understands that he/she is conveying a message; ✓
   k. Copies a message; _____
   l. Uses a repetitive sentence pattern when composing; ___
   m. Attempts to record his/her own message using knowledge of letter/ sound relationships to invent spelling; ✓
4. Directional awareness:
   a. No evidence of directional knowledge; _____
   b. Starts on the upper left top of the page; ✓
   c. Writes from left to right; ✓
   d. Uses a return sweep from left to right; ✓
   e. Consistently demonstrates knowledge of correct directional pattern; ✓
   f. Evidence of space between words; ✓
   g. Uses correct directional pattern and spaces between words;_

i. Extensive text indicating correct arrangement and spacing;

Table 13
Reading Achievement as indicated on the Gates-MacGinitie Reading Test Level R Form 3
Control Group

Student	Raw	Stanine	Percentile Rank	GradeEquivalent
Keith	20	3	11	k
Edgbert	22	3	14	k
A "F"	35	4	36	1.3
Adrian	22	3	14	k
B "F"	39	5	45	1.5
C "F"	37	5	41	1.4
D "M"	47	6	62	1.7
E "F"	30	4	26	1.1
F "F"	41	5	50	1.5
G "F"	50	6	67	1.8
H "M"	40	5	48	1.5
I "M"	37	5	41	1.4
J "M"	48	6	64	1.7
Mike	24	3	17	k
K "F"	33	4	32	1.2
L "M"	27	3	21	1.0

Table 14
Reading Achievement as indicated on the Gates-MacGinitie Reading Test, Level R Form 3
Experimental Group

Student	Raw	Stanine	Percentile Rank	Grade Equivalent
1 "F"	24	3	17	k
2 "M"	29	4	24	1.1
Aaron	19	2	9	k
3 "M"	21	3	13	k
Rebecca	14	1	2	k
4 "M"	29	4	24	1.1
Anne	14	1	3	k
5 "F"	45	5	58	1.6
6 "F"	46	6	60	1.7
7 "M"	43	5	54	1.6
8 "F"	37	5	43	1.4
9 "M"	35	4	36	1.3
10 "M"	37	5	43	1.4
11 "M"	40	5	48	1.5
12 "M"	30	4	44	1.1
13 "F"	22	3	14	k
Robert	18	2	8	k
14	44	5	56	1.6

Table 15
Reading Achievement as indicated on the Gates-MacGinitie Reading Test, Level R, Form 4
Control Group

Student	Raw	Stanine	Percentile Rank	Grade Equivalent
Keith	36	3	14	1.3
Edgbert	17	1	1	k
A "F"	23	1	2	k
Adrian	29	2	5	k
B "F"	39	5	49	1.5
C "F"	53	5	57	2.0
D "M"	52	5	53	1.9
E "F"	51	5	50	1.8
F "F"	54	6	53	2.0
G "F"	54	6	53	2.0
H "M"	36	3	39	1.3
I "M"	49	5	45	1.8
J "M"	48	5	43	1.7
Mike	25	1	3	k
K "F"	38	3	18	1.4
L "M"	33	2	9	1.2

Table 16
Reading Achievement as indicated by the Gates-MacGinitie Reading Test, Level R, Form 4
Experimental Group

Student	Raw	Stanine	Percentile Rank	Grade Equivalent
1 "F"	38	3	18	1.4
2 "M"	38	3	18	1.4
Aaron	51	5	50	1.8
3 "M"	36	3	14	1.3
Rebecca	23	1	2	k
4 "M"	30	2	6	1.1
Anne	31	2	7	1.2
5 "F"	58	7	82	2.6
6 "F"	57	6	76	2.4
7 "M"	55	6	65	2.2
8 "F"	57	6	76	2.4
8"M"	50	5	48	1.8
9 "M"	48	5	43	1.7
10 "M"	48	5	43	1.7
11 "F"	45	4	35	1.6
Robert	41	4	25	1.5
12 "M"	*			

Note This student had transferred to another school. Posttest scores were not available.

Table 17
Reading Achievement as indicated on the Gates-MacGinitie Reading Tests, Level R, Forms 3 and 4
Control Group

Control Group	Mean Raw Score	Mean Percentile Rank
Group		
Pretest	38.7	42.0
Posttest	44.2	39.3
	Raw Score	**Percentile Rank**
Keith		
Pretest	20	11
Posttest	36	14
Edgbert		
Pretest	22	11
Posttest	17	1
Adrian		
Pretest	22	14
Posttest	29	5
Mike		
Pretest	24	17
Posttest	25	3

Table 18
Reading Achievement as indicated on the Gates- MacGinitie Reading Tests, Level R, Forms 3 and 4
Experimental Group

Experimental Group	Mean Raw Score	Mean Percentile Rank
Group	31.4	38.4
Pretest	31.4	38.4
Posttest	43.0	40.3
	Raw Score	Percentile Rank
Aaron		
Pretest	19	9
Postest	51	50
Rebecca		
Pretest	14	2
Posttest	23	2
Anne		
Pretest	14	3
Posttest	31	7
Robert		
Pretest	18	8
Posttest	41	25

Table 19
Letter Identification Test, Clay, (1985)

Responses	Sound(S)	Word(W)	Alphabetic(A)	Total	Difference
Robert					
February	0	0	32	32	
May	0	0	54	54	22
Aaron					
February	0	0	47	47	
May	0	0	54	54	7
Rebecca					
February	0	0	42	42	12
May	0	0	54	54	
Anne					
February	0	0	49	49	
May	0	0	54	54	5

Note. Maximum possible score is 54.
At the end of program intervention all students identified all items on the Letter Identification Test correctly.
The preferred mode of response was alphabetic.

Table 20
Word Test, adapted from Clay, (1985)

Items	List A(pretest)	List B(posttest)	Difference
Robert	4 (20%)	17 (85%)	13(65%)
Aaron	16 (80%)	20 (100%)	4 (20%)
Rebecca	6 (30%)	10 (50%)	4 (20%)
Anne	19 (95%)	19 (95%)	0 (0%)

Note. Maximum possible raw score is 20.
Each student has been given a Raw Score and a Percentile Score.

Table 21
Concepts About Print Test, Clay, (1985)

Student	Correct Responses(February)	Correct Responses(May)
Robert	11	19
Aaron	15	20
Rebecca	16	18
Anne	13	20

Note. Maximum possible score is 20
"Correct Responses" indicates the number of items on the test that the student identified correctly.
Test results were calculated and scored in February (pretest) and May (posttest).

Table 22
Writing Vocabulary Test , Clay, (1985)

Responses	Pretest Score	Posttest Score	Difference
Robert	5	20	15
Aaron	6	30	24
Rebecca	3	10	7
Anne	15	35	20

Note. The number recorded for Pretest and Posttest scores indicates the number of words that each student could read and write correctly in an approximate ten minute period. The column marked "Difference" indicates the gains made by each student between testing situations.

Table 23
Dictation Test, Clay, (1985)
Form A

Student	Correct Responses (February)	Correct Responses (May)
Robert	5	30
Aaron	12	34
Rebecca	12	25
Anne	28	33

Note. The total possible score was 37. The student scored one point for each correctly identified sound that was written in correct sequence.

Table 24
Running Record, Clay, (1985)

Items	Error Rate	Accuracy	Self-Correction Rate
Robert			
February			
1.Easy	1:7	85.5%	1:0
2.Instructional	1:19	96%	1:5
3.Hard	1:08	15.7%	1:0
May			
1.Easy	1:96.5	98.9%	1:2
2.Instructional	1:112	99.1%	1:3.1
3.Hard	1:13.2	92.4%	1:3.1
Aaron			
February			
1.Easy	1:16	94%	1:0
2.Instructional	1:24	98%	1:5
3.Hard	1:13.3	93%	1:5
May			
1.Easy	1:0	100%	1:0
2.Instructional	1:23.8	95.7%	1:6
3.Hard	1:24.9	95.9%	1:3.75
Rebecca			
February			
1.Easy	1:45	93%	1:0
2.Instructional	1:19.3	80%	1:0
3.Hard	1:6	39%	1:0
May			
1.Easy	1:0	100%	1:0
2.Instructional	1:19.3	94.8%	1:5
3.Hard	1:9.3	89.2%	1:0

Anne
February

1.Easy	1:0	100%	1:1
2.Instructional	1:23.5	96%	1:8
3.Hard	1:16	94%	1:3.5

May

1.Easy	1:43	97.6%	1:0
2.Instructional	1:33.5	97%	1:2
3.Hard	1:17	94%	1:0