A Second Chance to Learn: One Child's Path to Literacy

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Abstract

The purpose of this case study was to examine the reading behaviors of an at-risk reader and how they changed over time as he participated in Reading Recovery instruction. The focus of the study was the description of a student's reading behaviors at the beginning of instruction, the changes that occurred over time and the student's reading behaviors at the end of the program. The participant in this case study was a child in grade one who received Reading Recovery instruction from a trained Reading Recovery teacher. Reading behaviors as the child read from a familiar book and a new book during the lessons were recorded weekly and analysed. Results of pre and post tests were also compared. The findings revealed that, over time as the child received lessons in Reading Recovery, his reading behaviors changed from those characteristic of an at-risk reader to those of a successful reader. Post test scores indicated improvement in letter and word identification, writing vocabulary, and phonological awareness. The findings are discussed within the context of Clay's theory of reading and support early intervention as an effective means in helping at-risk readers overcome their reading difficulties.

Dedication

To my sister, Emily, for her support, guidance and knowledge which enabled me to complete this project.

Acknowledgments

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Chapter 1

Introduction

Many children come to school having had rich literacy experiences and usually they become successful, independent readers. Unfortunately for a small percentage of children, learning to read and write is a challenge. These children are at-risk for failure to learn to read for a variety of reasons. Since children enter school with different backgrounds and learning experiences, the school is faced with the challenge of how to deliver effective first instruction, and what kind of supplementary help to provide children who are not making satisfactory progress (Clay, 1998). According to Clay (1991), "Despite the diversity of approaches to instruction, most children learn to read and they learn in very different programs" (p. 6). Educators may take some comfort in this assertion while at the same time, acknowledging that in every classroom, there are a number of children who have significant difficulty learning to read. These children may not have had early experiences with books, and they may have confusions with the concepts of a letter, a word, or sounds (Pinnell, 1989). For whatever reason, these children continue to struggle and fall further behind their classmates.

For many years now, schools have been attempting to address the problem of the at-risk reader by providing supplementary help in a variety of ways. Traditional practices, attempting to support struggling readers, have not adequately addressed this problem (Clay, 1987; Johnston & Allington, 1991; Lyons, 1994; Pinnell, 1989). Early intervention and one-on-one instruction have been identified as important factors in effective programs

for at-risk readers (Johnston & Allington, 1991; Walmsley & Allington, 1995; Wasik & Slavin, 1993). Some of these one-on-one programs are considered more effective than others (Pinnell, Lyons, DeFord, Bryk, & Seltzer,1994; Wasik & Slavin, 1993). Reading Recovery, an early intervention, developed by Dr. Marie Clay, an educator and researcher in New Zealand, is considered effective for preventing reading failure (Fountas & Pinnell, 1996; Johnston & Allington, 1991; Pinnell et al. 1994; Routman, 1991; Sylva, Hurry, & Peters, 1997). Reading Recovery has been implemented in New Zealand, the United States, Australia, the United Kingdom, and in ten Canadian provinces (Reading Recovery Council of North America Online).

In 1998, Prince Edward Island (P.E.I.) was the last province in Canada , excluding Saskatchewan, to implement this program in the school system. By the year 2002, Reading Recovery, taught by 37 trained teachers under the direction of two teacher leaders, was offered as one method of intervention for at-risk readers in the Grade One program in 44 schools in Prince Edward Island.

As more schools make a decision to implement Reading Recovery, several questions arise and are worth exploring:

1. What are the experiences of the children who participate in Reading Recovery?
2. How does a child progress through this program?
3. What are the reading behaviors of an at-risk reader and how do the reading behaviors change over time as a child becomes a more proficient reader?

Quality instruction is the first step in preventing reading difficulties, but given the diversity of backgrounds and learning experiences of children in the primary grades, it

remains a challenge to schools to provide good first teaching to all (Clay, 1998; Fountas & Pinnell, 1996; Lyons, Pinnell & DeFord, 1993). Effective teachers must be sensitive observers of individual progress and have a repertoire of strategies to meet individual needs, especially in the first year of school because this is the time when we can detect difficulties and provide supplementary help to prevent further problems (Clay, 1993a, 1998, 2001).

In *An Observation Survey of Early Literacy Achievement*, (OSELA) Clay (1993a) says,

> For effective instruction we need answers to two basic questions: "What typically occurs for children like those I teach as learning takes place over the school year?" and "How is this individual child changing over time in relation to what typically occurs?" Teachers who have answers to these questions will be more responsive to the daily learning of their pupils and will deliver more appropriate feedback. (p. 3)

This study will take up these two questions and use a case study approach to describe the changes that take place over time in one at-risk reader while receiving one-on-one tutoring in Reading Recovery.

Topic

The problem of how to help students who are not making satisfactory progress in reading has been discussed in professional literature as early as 1896 (Johnston & Allington, 1991), and continued into the early 1900's with a search for the cause of the reading problem. Efforts were focused on looking for the cause "within" the child which

was once called "word blindness" by Morgan (1896) and Hinshelwood (1917), according to Johnston and Allington (1991). Later terms such as "remedial reader"and "learning disabled" were used to describe the child, suggesting that the problem lay within the child. Factors such as the home, learning opportunities, or classroom instruction received very little attention. These children were placed in Remedial Reading or Special Education Programs, labelled as having specific learning disabilities, or retained in their current grade level for a year (Lyons, 1991). They received a different kind of instruction than the mainstream student with a focus on isolated skills and very little time spent on actual reading (Spiegel, 1995). This kind of intervention was not found to be effective because many children, who were placed in a remedial reading program, remained there for several years. They continued to experience reading difficulties throughout their school years (Johnston and Allington, 1991; Slavin 1996).

In her article, *Learning to be Learning Disabled,* Clay (1987) asserts that the underlying assumption of remedial reading programs teaches the child to be learning disabled. This assumption is based on the deficit model which involves finding out what's wrong and trying to teach what seems to be lacking. Using this model, she claims that, "Teachers run the risk of teaching the child to be learning disabled when they design their lessons from their models of disability. The child is likely to learn many items and responses relevant to reading but be unable to orchestrate the act of reading" (p. 166). Clay (1998) challenged this assumption when she asked the question, "What happens when you change the instruction?" Her assumption is that all children can learn to read, given good reading instruction in the early years of schooling. Slavin (1996) also believes

that with appropriate prevention and intervention, nearly all children in the early elementary grades can learn to read well.

Early Intervention

Clay conducted research to explore another question: "What is possible when we change the design and delivery of traditional education for the children that teachers find hard to teach" (Clay, 1993b, p. 97). She also wondered if there was an optimum time when extra help could reduce the risk of reading difficulties (Clay, 1994). Clay's research and several other studies (Pikulski, 1994; Pinnell et al. 1994; Spiegel, 1995; Wasik & Slavin, 1993) demonstrated that early one-on-one intervention is the most effective time to help children sort out reading difficulties. Johnston and Allington (1991) agree that early intervention makes sense because, they say, "If problems can be detected and acted upon early enough, confusions and misconceptions may not be compounded by extensive failure, and the gap between the more and less able may be eliminated rather than continue to widen" (p.1001). The argument for early intervention is also supported by Clay (1998) who states, "If we can dramatically reduce the number of learners who have extreme difficulty with literacy learning, ... we can minimize the 'Matthew effect,' which asserts that the good always get better while the low achievers fall further and further behind (Stanovich, 1986)" (p. 210).

Purpose

"Education is primarily concerned with change in the learning of individuals, yet educators rarely document change over time in individuals as they grow and learn"(Clay, 1993a, p. 33). This observation by Clay provides a basis and rationale for this study

because its purpose is to describe the changes in an at-risk reader that take place over time while receiving one-on-one tutoring in an early intervention program. Since Reading Recovery is considered to be an effective early intervention, this study is situated in that context. This case study provides a rich description of the reading behaviors of an at-risk reader and documents how the child progresses through this program.

Significance

This case study adds to previous research done on Reading Recovery. It helps to illuminate the process of how children learn to read and how to help at-risk children become independent readers, and therefore, contributes to a better understanding of how to accelerate their progress. The findings are useful to educators in a decision-making context concerning the type of supplementary help they should or can provide students who are not achieving in the regular classroom program. While Reading Recovery is not a classroom program, its research-based theories provide an insight into the process of learning to read, and therefore, are also useful to classroom teachers in improving their understanding and instructional practices. With this insight, the teacher is more knowledgeable in ways to support those students who are participating in or have previously completed Reading Recovery lessons. In addition, the teacher may become more effective in observing and identifying reading behaviors which may indicate reading difficulties.

Research Questions

The research questions which guided this study are:

1. What are the reading behaviors of a grade one child who has been identified as at-risk

for learning to read and a candidate for Reading Recovery intervention?

2. How do the reading behaviors change over time as this child receives one-on-one tutoring in Reading Recovery?

3. What are the reading behaviors of this child at the end of the Reading Recovery lessons?

Theoretical Framework

This study is situated within a theoretical framework based on the following assumptions:

1. Learning to read is a "message-getting, problem-solving activity which increases in power and flexibility the more it is practiced" (Clay, 1991).

2. "The learner gradually constructs a network of strategies which make up a self-extending system, allowing the learner to continue to learn to read by reading and learn to write by writing" (Clay, 1993a, p. 19).

3. All children can learn to read, given good reading instruction in the early years of schooling (Clay, 1998).

4. A number of children with normal intelligence will fail to learn to read. Traditionally, these children have been retained, assigned to remedial or special education programs, or labelled as having specific learning disabilities (Slavin, 1996).

5. With appropriate prevention and intervention, nearly all children in the early elementary grades can learn to read well (Slavin, 1996).

6. Reading Recovery is considered to be an effective program for preventing reading failure (Boehnlein, 1987; Fountas & Pinnell, 1996; Johnston & Allington, 1991; Pinnell et

al. 1994; Shanahan & Barr, 1995).

Definition of terms

At-risk student: A child who, during the first year of formal instruction, demonstrates difficulties in learning to read and is among the lowest-achieving students compared to average classmates.

Early intervention: providing supplementary help early in a child's formal schooling in order to prevent reading failure.

Independent reading: Defined by Clay (1991) as the ability to read grade level materials with little or no assistance from the teacher.

Reading behaviors: what children do as they read, such as noticing unfamiliar words, rereading, sounding out words, self-correcting, repeating words or phrases, and using structure, meaning, and visual cues to monitor their reading.

Reading Recovery: Reading Recovery is defined by the Reading Recovery Council of North America as "a short term, early intervention program for young readers who are experiencing difficulty in their first year of reading instruction". It was developed by Dr. Marie Clay, a New Zealand educator and researcher.

Reading Recovery teacher: Usually an experienced primary or Resource/Special Education teacher who receives year long training by a teacher leader. Part of the training involves working with individual children and observing other teachers. Reading Recovery teachers continue to receive inservice training during the tutoring period and on-going professional development.

Resource teacher: A teacher who has received further training, beyond a Bachelor

of Education degree, in Special Education and/or Reading methodology. This specialist teacher teaches below average students in a modified program which is usually delivered in a small group setting and replaces the regular classroom Language Arts program.

Running record: A systematic observational assessment developed by Clay (1993a) and used by Reading Recovery teachers and classroom teachers to record reading behaviors while a child reads aloud. Codes are used to record specific reading behaviors, such as repetitions, substitutions, omissions, self-corrections and the child's attempts at words.

Chapter 2

Review of the Literature

There is much debate and discussion in research literature on the topic of what kind of instruction will help children who experience difficulty in learning to read. Traditional remedial programs have been criticized because of the meager gains made by students, their negative effects on motivation and self-esteem, and the high cost of long-term intervention (Clay, 1998; Johnston & Allington, 1991; Lyons, 1991; Slavin, 1996). Shanahan & Neuman (1997) claim that there are more than 50,000 studies on literacy. No doubt, this problem will continue to be explored and studied for years to come, as researchers search for a method that will make all children readers. Jones (1997) notes that while significant advances have been made, research doesn't reveal all we need to know about how children learn to read and why some children experience more difficulty than others.

Even with the best reading instruction available, "A certain number of children with normal intelligence will fail to learn to read" (Slavin, 1996, p. 5). According to Clay (1998) "There is not and never will be a prescriptive program that will make all children readers and writers. Individual diversity will always prevent this outcome"(p. 204). Children enter school from different backgrounds and learning experiences, therefore, no classroom program will adequately address the needs of all children (Clay, 1991). Given this reality, Clay proposes that schools should provide a "safety net and make-up opportunities" (p. 6).

Traditionally, hard-to-teach children were labelled as having a learning disability and placed in special education or remedial reading programs. The responsibility for their learning was taken over by the reading specialist. In this "pull-out" model, the responsibility for the child's learning shifts to the "specialist" and the teacher is relieved of this role (Johnston & Allington, 1991).

Nowadays, classroom teachers are expected to adapt and modify curriculum and programs in order to meet the needs of all learners within the classroom setting. The teacher assumes more responsibility for the learning of all students in the classroom by adjusting and changing the instruction to fit the needs of the child. Inclusion, the placement of children with special needs in regular classroom programs, has a major impact on regular school programs (Lyons, 1997). These factors combine to make the role of primary teachers more challenging as they are expected to "... find out what children already know, and take them from where they are to somewhere else" (Clay, 1993a, p.6). Meeting the needs of all learners in the classroom presents a challenge to the first grade teachers, in particular, because children are beginning school with various pre-school experiences and are unequally prepared (Clay, 1998). As Clay points out, "The new entrant to school is where he or she is and can be nowhere else. The program must go to where the child is and take him or her to somewhere else" (p. 203).

It would be helpful for the teacher to have an understanding of how to meet the challenge of providing learning opportunities which meet the diverse needs of these new students. In order to take a child from where he or she is to somewhere else, a teacher needs to know what the child knows in order to extend his or her learning. In particular,

students who have difficulty learning to read, need make-up opportunities to learn and this learning needs to be accelerated in order for them to catch up and not fall further behind (Clay, 1991, 1993a, 1993b, 1998, 2001).

According to Lyons, (1997) Reading Recovery can help meet these challenges in three ways:

1. It identifies low-achieving students from those who have more severe learning problems, thus, reducing the number of special education referrals.
2. The year-long training provides Reading Recovery teachers with an understanding of how children think and learn by observing, recording, and analyzing students' reading and writing behaviors. These observations help them make good teaching decisions to meet individual needs.
3. Reading Recovery teachers continue to develop an in-depth understanding of the learning and teaching process. This knowledge helps low-achieving students learn how to read; regular classroom teachers understand how to help these children; and, Special Education teachers further their understanding of how children learn to read and their role in assisting them.

A Brief Comparison of Remedial Reading and Reading Recovery

In order to understand the theoretical basis of Reading Recovery and how it differs from earlier methods of addressing the needs of the struggling reader, a brief comparison is necessary.

Shanahan and Neuman (1997) describe how Reading Recovery differs from traditional remedial reading programs. In the Reading Recovery program, instruction takes

place in the context of real reading; observation is a key assessment technique. It provides a high quality teacher education program and individualized instruction for each child.

Swartz and Klein (1997) identified key elements of Reading Recovery that demonstrate how this program can be used to influence reform in reading and writing instruction. These elements differ from those found in comparable programs such as Title 1 and special education as summarized below.

Reading Recovery

1. It involves early intervention and accelerated learning and is based on the belief that only acceleration can help a child catch up to the average level of his or her class. It allows for participation in the regular classroom program.

2. It serves the lowest-achieving children without exception.

3. Children develop a "self-extending" system of learning to read which supports them in the regular classroom program.

4. The teacher training program involves teaching students and it provides continuous professional support through meetings and additional inservices beyond the first year of training.

5. It is cost-effective because of its short-term nature.

6. Student outcomes are sustained over time. Data are collected on every child in the program so accountability is built into the program.

Traditional Remedial Reading Program

1. This type of program intervenes later after problems have been established. Only some progress is made and students remain behind their peers. Often, its participants continue in

remedial programs for several years and are unable to participate in the regular classroom program.

2. Reasons are sought to explain low achievement, such as, lack of parental support or a learning disability. Referrals are made to Special Education services.

3. Instruction in remedial programs is usually different from the classroom program. Skills are often taught in isolation, outside the context of reading.

4. There is little contact with students in the training program.

5. It may be more expensive because it is usually long-term. However, the perception is that it is less expensive because it serves more children.

6. Some programs have limited outcomes or do not attempt to measure outcomes.

A look at these two approaches illustrates the contrasting beliefs and instructional practices.

Problem

How can schools help children become independent readers and prevent those children, who experience difficulty in learning to read, from becoming poor readers throughout their schooling?

Review of the literature revealed that, "prevention" and "early intervention" are key words in reference to how to help children with reading difficulties. The shift in perspective from remedial to early intervention approaches of how to help at-risk readers has implications for the classroom teacher and the school. Prevention of reading difficulities is possible by providing a quality reading program to ensure that most children will succeed. Many different kinds of programs for beginning reading instruction have

been developed and while most children succeed in different programs, Clay (2001) expects about 20% of the school population to experience reading difficulties. Given the assumption that "... every program will have its lowest achievers" (Clay, 1998, p.204), the school is responsible for providing early intervention programs in order to prevent reading failure.

In some studies and reviews (Pinnell et al. 1994; Shanahan & Barr, 1995; Slavin, Karweit, & Wasik, 1992), the authors compared the effectiveness of remedial reading programs and early intervention programs and concluded that children who received Reading Recovery lessons performed better than comparison groups. In other studies, the effectiveness of one-on-one tutoring was examined. Rodgers (2000) concluded that the nature of the teacher talk was an important factor contributing to a child's success in a one-on-one tutoring situation in Reading Recovery. Schmitt (2001) explored the development of strategic processing in children while receiving instruction in Reading Recovery and reported an increase in strategy use by at-risk readers in first grade which exceeded their average classmates. Reading Recovery has been demonstrated to be effective (Center, Wheldall, Freeman, Outhred, & McNaught, 1995; DeFord, Lyons, & Pinnell, 1991; Pinnell et al.1994; Shanahan & Neuman, 1997). The proponents of Reading Recovery program claim that "the same results are achieved again and again with different children, different teachers, and in different places (Reading Recovery Review, 1998, p. 7; Lyons et al.1993). Clay (2001) attributes this achievement to the theory of Reading Recovery teachers which views progress in terms of the changes in 'literacy processing' over time.

A Key Theorist

Marie Clay, a well-known New Zealand educator and developmental psychologist, whose research has made a significant impact on literacy education, is considered to be a major theorist of early literacy acquisition (Anderson, 1999). Her influence is not limited to literacy education, but is also felt in the fields of developmental psychology, early childhood education, special education, teacher education, professional development, as well as assessment and research design (Gaffney & Askew, 1999; Glynn & McNaughton, 1992). Her influence and contribution in many areas of education have been recognized by the editors of *Stirring the Waters: The Influence of Marie Clay*. This book, a tribute to Clay, is a collection of scholarly writings by authors from Australia, New Zealand, the United Kingdom, the United States, and Canada, whose work was inspired in some way by Clay and is a testament to her widespread influence in literacy education.

As a major researcher and theorist in literacy learning and the developer of Reading Recovery, it is appropriate in this literature review to examine Clay's theory of reading and Reading Recovery as it is understood by its proponents and critics. An earlier discussion and criticism of traditional remedial reading programs and comparison to the Reading Recovery program illustrated Clay's influence on the changing perspectives on learning disabilities.

A Theory of Reading Acquisition

Learning to read is a complex activity which can be compared to learning to drive a car. Like learning to drive a car, learning to read involves using many skills together. The skills in learning to drive a car cannot be taught in isolation, nor in a particular

sequence. We've heard the advice given to new drivers, "Here's your license, now go out and learn to drive". People learn to drive by driving and as a result improve with practice. With more practice, some skills become automatic, and the driver orchestrates many tasks at the same time (Clay, 1991). Likewise learning to read involves many skills which are used together to produce the act of reading. Clay (2001) describes the early learning stages of both activities as being complex and requiring a combination of "looking, hearing, deciding, moving and taking action" (p. 150).

What is reading? Clay defines reading as a "message-getting, problem-solving activity which increases in power and flexibility the more it is practiced" (Clay, 1991, p. 6). The more children read, the better readers they become. From her observations of children and teachers involved in reading, she has formed a theory about learning to read. In her words,

> A theory emerges which hypothesizes that out of early reading and writing experiences the young learner creates a network of competencies which power subsequent independent literacy learning ... learning generates further learning ... constructed by the learner as he works on many kinds of information coming from the printed page in reading or going to the printed page in writing. (Clay, 1991, p.1)

In light of research on 'literacy processing', Clay (2001) refines her theory of what happens as children learn to read or write:

> Children begin to read or write using very simple 'working systems' borrowed at first from different kinds of learning prior to school which have

> to be adapted for these novel activities. Over three to four years they construct a vast range of complex processing activities, finely tuned to the requirements of literacy learning. (p.96)

According to Clay (1991, 1993b), children need to control four different kinds of behaviors when reading:

1. Using language: In learning to read, children use their knowledge of oral language.
2. Concepts about print: conventions of print, such as direction, word spacing, punctuation, and sentences.
3. Attending to visual information: clusters of words, syllables, blends, and letters.
4. Hearing sounds in sequence: The child must be able to use the visual information from left to right and hear the order of the sounds.

Learning to read involves using and integrating sources of information which can be cross-checked to confirm or reject a response. Skilled readers use three sources of information in problem solving when reading, which Clay (1985) describes as cueing systems:

1. Meaning: Does it make sense?
2. Structure: Can we say it that way?
3. Visual information: Does it look right?

When a child stops while reading, rereads, or makes another attempt, it can be assumed that he or she is using these cues to cross-check one source of information against another because Clay (2001) says that "When they problem-solve text they dip into these 'different ways of knowing something' and make a series of decisions as they work

across text" (p.96).

Based on her own research in New Zealand, Clay (1991) believes that her theory is grounded in proven practices that are applicable to literacy learning in any country, language, or program of instruction.

Clay's Research

According to Shanahan and Neuman (1997), "No study has so successfully influenced remedial reading instruction as Marie Clay's Reading Recovery program" (p. 207). Unlike previous researchers who were debating the causes of reading difficulties and proposing changes in programs, Clay's research began with a different focus (Clay, 1985, 1994). She ..."wondered whether there was an optimum time in a child's education when some extra help could reduce the risk of literacy difficulties. What would be possible, and what would the 'something' extra have to be" (Clay, 1994, p. 90). She also wondered if we can see the process of learning to read going wrong in the first year of school.

Clay's early research, which looked at the reading behaviors of children in their first years of schooling, revealed rich information about what successful readers do in contrast to struggling readers. This information led to a hypothesis that if we teach at-risk readers to do what successful readers do, then they can become good readers. How does a good reader learn to read by reading? Clay (1991) offers a possible answer to this question, "... that the behaviors, the inner control, the visual perception and the in-the-head processing learned in the reading acquisition period become part of an interactive system of strategies which work in some way that empowers the system" (p. 317).

Clay (1993b) describes an independent reader as one who:

> monitors his reading; searches for cues in word sequences, in meaning, and in letter sequences; discovers new things for himself; cross-checks one source of cues with another; repeats as if to confirm his reading so far; self-corrects taking the iniative for making cues match or getting words right; and solves new words by these means. (p. 43)

Clay's research studies revealed that beginning readers often have confusions about direction of print, but for children who are having difficulty, these confusions tend to persist. Other characteristics which these children have in common are poor motor coordination, the tendency to be quick and impulsive, the tendency not to be risk-takers, difficulty attending to one printed word at a time in a sequential order, and difficulty hearing sounds in sequence (Clay, 1993b). Struggling readers may have been practising inefficient strategies and have fewer strategies to draw on for problem-solving (Clay, 1991), while successful readers have acquired 'effective processing systems' which enable them to read and problem-solve new or unknown words Clay (2001).

According to Clay (1991) "A strategy cannot be seen. It is some activity 'in the head', a move directed by the child during reading work to problem-solve a section of text and it belongs to an orchestrated set of strategies needed in literacy activities" (p.2). She further explains that, "Reading behavior becomes organized into a complex system of strategies for cue-finding, cue-using, choosing, checking, and correcting during the first two to three years of instruction in a way that sets the pattern for subsequent gains in skill" (p. 315). Therefore, the first two years of formal reading instruction are considered critical because children are developing strategies as they are learning to read. In observing

reading behaviors, a teacher may infer that the reader is using a system of strategies in learning to read. If they are using inefficient strategies and practice these strategies over a period of time, the reading process starts to break down and these children fall further behind their classmates. Clay believes that we can see the process going wrong during this time and therefore considers this to be the optimum time to provide extra help: before the child establishes these inefficient strategies and they become harder to change. Thus, this forms the basis for her argument for early intervention. In addition to learning efficient strategies, it is also necessary to accelerate the students' learning because they have to catch up to their classmates who are continuing to make progress.

Clay began another research study to investigate the second question concerning what that extra help would be. Out of that research project, Reading Recovery was developed.

Reading Recovery

Reading Recovery is a short term early intervention program developed by Dr. Marie Clay for children who are having difficulty learning to read during the first year in school. It serves the lowest 20% of at-risk readers in a class. These students are identified by their classroom teacher's assessment and by using Clay's *Observation Survey of Early Literacy Achievement* (OSELA). In addition to regular classroom instruction, these children receive 30 minutes of daily one-to-one instruction by a trained Reading Recovery teacher for a period of 12 to 20 weeks. The goal is to accelerate the child's learning so that he or she will learn to read at or above the class average by developing independent reading strategies. The instruction works from the child's strengths and assists the child to

extend his/her learning in their 'zone of proximal development'. It is based on Clay's theory of learning that "... assumes that the learner gradually constructs a network of strategies which make up a self-extending system, allowing the learner to continue to learn to read by reading, and learn to write by writing" (Clay, 1993a, p. 19).

During the first two weeks of the program, the teacher gets to know the child through activities in what is called "roaming around the known". The teacher then begins the Reading Recovery lessons which follow this sequence of activities:

1.Re- reading familiar stories.

2. Reading a story from the previous day (yesterday's new book)

3. Working with letters and/or words using magnetic letters.

4. Writing a story.

5. Assembling a cut-up story.

6. Reading a new book that will be read independently the next day.

According to Askew, Fountas, Lyons, Pinnell, and Schmitt (1998), Reading Recovery has two positive outcomes:

1) The child reads at a comparable level to that of an average reader in his or her class and is discontinued from the program.

2) A recommendation is made for further assessment which may indicate a need for long-term intervention. In this regard, it also serves as a period of diagnosis.

Reading Recovery Research

Several studies have examined the effectiveness of Reading Recovery for a variety of purposes. Pinnell et al. (1994) compared the effectiveness of Reading Recovery to three

other instructional models and concluded that Reading Recovery was more effective because of its one-on-one instruction. Center et al. (1995) evaluated the effectiveness of Reading Recovery in primary schools in New South Wales and found that Reading Recovery students scored higher than control students at short-term (15 weeks) evaluation. However, they found no significant differences at medium-term (30 weeks) evaluation, although the Reading Recovery students scored higher on the book level test. Two different studies, Iversen and Tumner (1992) and Sylva and Hurry (1995), examined the effectiveness of Reading Recovery if systematic instruction in phonological skills were included and concluded that Reading Recovery children made significantly more progress than the control group. The results of these studies revealed that Reading Recovery children performed better than comparison groups.

Several reviews of Reading Recovery came to similar conclusions on the effectiveness of the program, as summarized in *Reading Recovery Review* (Askew et al., 1998, p. 22-23). In *Preventing Early Reading Failure with One-to-One Tutoring: A Review of Five Programs*, Wasik and Slavin (1993) concluded that 1) Reading Recovery brings the learning of many of the lowest achieving students up to average-achieving peers and 2) Effects of Reading Recovery are impressive at the end of implementation year and effects are maintained for at least two years. In the article, *Reading Recovery in the United States: What Difference Does it Make to an Age Cohort?* Hiebert (1994) concluded that 1) A high percentage of Reading Recovery children can orally read at least first grade text at the end of grade one, and 2) Prominent elements of Reading Recovery are identified as characteristics of successful beginning reading instruction.

Similarly, Shanahan and Barr (1995) came to the conclusion that 1) Reading Recovery brings the learning of many of the lowest achieving students up to average-achieving peers, and 2) Reading Recovery is a strong program in terms of consequences for student learning and replicability across sites.

While there were many similar positive findings in several studies, there were also some criticisms and challenges related to the Reading Recovery. Some of these criticisms have been addressed by proponents of the program and are available on the website of the Reading Recovery Council of North America which can be viewed at www.readingrecovery.org. Some criticisms and their responses were summarized in *Reading Recovery Review* (Askew et al. 1998) and are presented below with each criticism followed by the published response.

1. Reading Recovery is expensive.

It costs money to employ resource room teachers/ special education teachers and there are long-term costs when children are retained. The initial costs of start-up costs should be averaged across several years (Askew et al., 1998).

2. Reading Recovery uses its own measures in evaluating the program which allows for bias in reporting the results.

Data are collected on every child served in order to improve teaching and implementation. Any published, controlled studies on Reading Recovery used rigorous data collection standards (Pinnell, 1999).

3. Data were lost in Ohio State study and Clay's study excluded data on children who did not complete the program.

Those assumptions were errors made by some researchers in citing other researchers and were subsequently corrected in published responses (Pinnell, 1999).

4. Children are dropped from Reading Recovery in early lessons because of predicted failure.

The program is designed to offer up to 20 weeks for all children. Any exception to this may be due to a recommendation by a specialist and in consultation with those involved (Askew et al., 1998).

It is beyond the scope of this literature review to present all of the critiques of Reading Recovery; therefore only some of the criticisms, which have been noted in reviews of effective intervention programs, have been included. The authors of *Reading Recovery Review* caution readers when reading research and evaluation studies related to Reading Recovery. They suggest that these studies "should be examined with attention to their accuracy in reporting the original studies, issues relating to features of design and methodology, and possible biases and limitations of the findings" (p 34).

Summary

After reviewing the literature, Opitz (1991) proposed the following hypotheses of why Reading Recovery is successful:

1. It is based on a theory of reading that emphasizes meaning.

2. The child's reading and writing behaviors are thoroughly diagnosed.

3. Diagnosis is on-going and is part of the instructional process.

4. It provides children with more time to learn necessary reading strategies.

5. Emphasis is on reading connected to "real" text.

6. All modalities are emphasized:

- visual, auditory, kinesthetic, tactile
- instruction matches learner styles
- multi-sensory

7. Reading and writing are emphasized and are connected.

8. The child is taught to be aware of strategies used in reading.

9. Teachers model appropriate behaviors and provide feedback. Research supports these two teaching strategies as being effective.

Lyons (1998) reviewed the 13 years of replication data that support Reading Recovery's effectiveness. She concluded that 1) Within 12-20 weeks of daily, one-to-one instruction, the majority of the lowest achieving first grade students can be placed in an average reading group in their first grade classrooms; 2) Reading Recovery is more effective when compared to traditional one-to-one and small group remedial programs targeting low-achieving first grade students; and 3) Reading Recovery greatly reduces the number of children referred to special education or labelled as having learning disabilities.

Referring to her book, *Becoming Literate: The Construction of Inner Control*, Clay (1991) says,

> I hope the reader will find ideas which will guide their observations of children who are not following the majority path, children who will succeed, if only we can tune into the way they are seeing and doing things at some particular point in their progress towards literacy. (p 17)

Studies that provide us with rich descriptions of these learners should contribute to

our understanding of the reading behaviors of struggling readers and thus, inform and improve our practices.

Chapter 3

Methods

Research Approach

The purpose of this study is to describe changes over time, and this focus on rich description calls for a qualitative approach. The entire process of change is more important than a single quantitative measure which could be obtained from test scores (Patton, 1990; Yin, 1994). This qualitative approach is also appropriate because the study took place in a natural setting, in this instance, a school which offers Reading Recovery. While there seems to be a lack of a precise definition of case study research, Merriam (2001) draws on definitions offered by several researchers to describe the characteristics of case study research and concludes that

> Case studies can be defined in terms of the process of conducting the inquiry (that is, as case study research), the bounded system or unit of analysis selected for the study (that is the case), or the product, the end report of a case investigation. (p.43)

She also concludes that a case is a single entity which has boundaries: for example, a student, a teacher, a program, or a class. According to Merriam (2001), "Educational processes, problems, and programs can be examined to bring about understanding that in turn can affect and perhaps even improve practices" (p. 41).

A case study approach, as defined by Patton (1990) and Yin (1994) has the following characteristics:

1. It focuses on one phenomenon which the researcher selects to understand in-depth,

regardless of the number of sites or participants.

2. It is a method for conducting qualitative research.

3. It is used to examine specific issues, illuminate problems, evaluate programs and interventions.

4. It is appropriate for answering "how" and "why" questions.

5. It relies on multiple sources of information.

Given the above characterization of case study research, this is an appropriate approach for this research study which explored the following research questions:

1. What are the reading behaviors of a grade one child who has been identified as at-risk for learning to read?

2. How do the reading behaviors change over time as this child receives one-on-one tutoring in Reading Recovery?

3. What are the reading behaviors at the end of the Reading Recovery lessons?

A case study approach was used in this study in order to develop an in-depth understanding of the changes in reading behaviors that may occur as a child progresses through Reading Recovery lessons. The case, in this study, was an at-risk reader who received supplementary help in Reading Recovery. It sought to answer a "how" question as it examined the reading behaviors of an at-risk reader over the duration of the intervention. This study used multiple sources of information to analyse the findings: observation, lesson records, test results, and the teacher.

The benefits of using a case study approach to explore the research questions in this study allowed the researcher to focus on one phenomenon, (the at-risk reader in

Reading Recovery); to provide "thick" description of a phenomenon, (the changing reading behaviors); to illuminate the problem, (how to help an at-risk reader); and to provide insight which may inform and improve practices, (reading instruction and supplementary programs).

Researcher's Role

Through my experiences as an elementary teacher and Resource teacher, I have been interested in understanding how children learn to read, and in particular, how to help children who have difficulties learning to read. During the first few years of my teaching, I realized how little I had learned about how to teach children to read, even though I had completed a Reading Methods course. I returned to university to take courses in a Summer Reading Institute which helped me gain an understanding of how to test and plan remediation for students with reading difficulties. Later in my career, as a Resource teacher, my task was to help these struggling readers progress so that they could return to the regular classroom reading program. In order to become more knowledgeable about current practices, I read articles and books on the subject and discovered that there was much debate as to how to help these children. The writings of Marie Clay had a profound influence on my thinking which changed my perspective and gave me a deeper understanding of the process of learning to read. This insight caused me to reflect on what we do to help these children who fall behind and who do not make satisfactory progress even after years of receiving help in a pull-out program. Clay's theory made much sense and offered another way to look at these children and additionally, it confirmed what other researchers had found. It was a real shift in thinking for me. The differences in theories,

upon which Remedial Reading programs and Reading Recovery are based, led me to become interested in exploring Reading Recovery.

Site and Population Selection

This study took place in an elementary school (population 230) in Prince Edward Island which had implemented the Reading Recovery Program the previous year. This site was chosen by the researcher because of its access to the Reading Recovery program, as well as its convenient location. Purposeful sampling was used to select the two students who participated in this study. Two students were selected to prevent loss of data in the event of illness, moving to another school, or other unforseen circumstances. Purposeful sampling was appropriate because the participants must be selected by the Reading Recovery criteria. In order to document the change from entry to exit of the program, it was necessary to choose students who were beginning the program. Letters of information and informed consent forms were sent to the School Board, the Principal, Reading Recovery Teacher, and the Reading Recovery Teacher Leader (See Appendixes A, B, C, and D). Once the Reading Recovery teacher agreed to participate in the study, the parents of two students who were ready to begin the Reading Recovery lessons were sent similar letters of information and consent forms which were signed by both the parents and the children (See Appendixes E and F).

Participants

The participants were two grade one students who were identified by their classroom teacher as achieving below average in the grade one reading program and at-risk for failure to learn to read. These students were assessed using the Reading Recovery

testing procedures and were considered to be candidates for the Reading Recovery program. These two males were in their first year of public school and were identified as having significant reading difficulties by mid-year. In this study, they will be known under the pseudonyms, David and Aaron.

For the purpose of this study, the data collected on one student were selected for an in-depth analysis. Aaron was chosen because his rate of progress resulted in data which revealed rich information in the changing reading behaviors over the course of the program. At the end of the program he was able to return to the regular classroom program at a reading level comparable to the average reader in his class. Over time as David progressed through the Reading Recovery program, it became evident that he would need longer term intervention. At the end of his program, he was referred to a modified Language Arts program, where he would receive long-term intervention. Both students are examples of the two positive outcomes Reading Recovery described by Askew et al. (1998): 1) The child reads at an independent level of the average reader in his or her class and is discontinued from the program; 2) A recommendation is made for further assessment which may indicate a need for long-term intervention. In this case, it serves as a period of diagnosis.

Aaron began first grade at six years and 5 months of age. Since formal schooling begins in first grade in Prince Edward Island, this was his first year in the public school system. Like his peers, he was learning to adjust to the structured routines of a first grade classroom and this was his first year of formal reading instruction. Near the end of the first reporting period, late fall, Aaron's teacher noticed that he was not making as much

progress as his peers in learning to read and write. She was concerned about his lack of progress in reading and referred him for further assessment to the Reading Recovery teacher. He was assessed using The Observation Survey of Early Literacy Achievement (Clay1993a) and the low results qualified him as a candidate for the Reading Recovery Program. He had the lowest stanines in more areas than other students who were tested. His instructional reading level was determined to be at Level 1. His reading showed no evidence of self-monitoring, nor self-correcting, and there was no phrasing or fluency.

The Reading Recovery Teacher was an experienced Special Education/Resource teacher who received training in Reading Recovery. This was her second year teaching Reading Recovery which provides one-on-one tutoring to four at-risk readers who are struggling in the Grade One Reading program. She worked as a Reading Recovery teacher in the morning and then she continued in her role as a Resource teacher in the afternoon resource program which involved teaching small groups of struggling readers in a pull-out model. For the purpose of this study, she will be referred to by the pseudonym, Mrs. Read.

Reading Recovery

As described by Swartz and Klein (1997), Reading Recovery is a short-term, early intervention program designed to accelerate the learning of first grade children who are having difficulty in learning to read and write. Children receive one-on-one tutoring from a trained Reading Recovery teacher and are taught to use effective strategies through individually tailored lessons. The program usually lasts 12-20 weeks during which time the child is expected to read independently at an average reading level of his or her classmates. At that time, the child is discontinued from the program and his or her progress in the

classroom program is monitored periodically over the next two years. If the child does not reach an average level of reading at the end of twenty weeks, he or she is referred to other services providing longer-term support.

Reading Recovery follows a thirty minute standardized lesson format using the following sequence:

1. Rereading familiar books
2. Rereading yesterday's new book (Teacher records the oral reading in a running record)
3. Letter identification and making and breaking words
4. Writing a story
5. Cut-up story
6. Introduction to new book
7. New book attempted

Since the purpose of this study was to examine how reading behaviors change over time, data were collected during the reading portions of the Reading Recovery lesson which involved rereading 'yesterday's new book', and reading of the new book. The research questions determined the focus of the observations.

Description of Setting

The observations for this case study took place in a classroom also used for small group instruction in a Language Arts Resource Program. The Reading Recovery lessons took place in a corner of this room during the morning sessions. The following is a description of the area used for the Reading Recovery lessons.

The teacher and the student sit at a hexagon shaped table upon which is a supply of

books, magnetic letters, a timer, an alphabet book, writing book, pens, correction tape, and the teacher's lesson records. On a wall facing the table, chart paper is posted with prompts for the teacher that may be used at appropriate moments in the lesson. To the left of the table, there is a magnetic whiteboard on an easel to which various magnetic letters are attached. To the right of the table and just behind where the teacher sits, is a collection of books which are organized in boxes according to the numbered level of difficulty. The teacher and the student sit side by side at the table and the teacher watches as the child is reading. She takes notes from time to time and interacts with the child as he reads. They move to the magnetic whiteboard during the "letter identification, and making and breaking words" portion of the lesson.

The video camera is positioned behind the participants, as if looking over the child's shoulder. Positioning the camera in this way, reduces or eliminates any negative effects on the participants and enables one to see the book which the child is reading and observe reading behaviors at the same time.

Data Collection and Analysis

Videotape. The reading of yesterday's new book of which the teacher takes a running record, and the reading of the new book were videotaped once a week for twelve weeks. The final, 100th lesson was also videotaped.

The videotapes were viewed and transcribed. When the child encountered difficult words or, as termed in this study, problem words, I noted what the child did. As I examined the child's 'plan of action', I identified the types of reading behavior. My prior knowledge of previous research and theories of reading enabled me to label the

occurences and to look for expected types of reading behaviors, such as, self-correcting, rereading, appealing for help and omitting words. Such reading behaviors are recorded in a running record, an observational assessment tool developed by Clay, and used as a systematic way to record reading behavior as it is occurring. This assessment tool is used by Reading Recovery teachers to keep track of student progress and to gain evidence about how the child problem solves and what strategies the child is using. I coded the reading behaviors as: self-monitoring, self-correcting, rereading to problem-solve, rereading to confirm, appealing for help, omitting words, and sounding out. Using a table adapted from a research study (Schmitt, 2001), I recorded the frequency of these behaviors. I made two charts for each lesson; one to record the behaviors on the yesterday's new book, and one for the new book. When the child encountered an unknown word, the attempt was recorded in the column, Attempt. Reading behaviors were categorized as self-monitors, self-corrects, rereads to problem solve, rereads to confirm, and sounds out. For each reading behavior which the child showed evidence of using, an x was placed in the appropriate box.

If the self-correcting behavior was prompted by the teacher's assistance, it was coded as A, meaning assisted. When the self-correction was made without any help, it was coded as UA, meaning unassisted.

Sounding out behavior was coded as "beg." when the child only used the initial letter sound, and "beg. & end" when the child sounded out the whole word. The attempts were recorded using the word the child said or if he produced the sounds, it was recorded inside []. If the teacher intervened, what she said is recorded in that column.

The page numbers after the problem words are for the researcher's use in locating these words in the transcripts. If the child stopped or paused before attempting a word, it was inferred that he was monitoring his reading. If the child reread a word or a group of words, it was determined whether he read to problem solve or to confirm what he had read.

I totalled the occurrences of each of the reading behaviors and recorded the totals in a new chart. Again I used a separate table for yesterday's new book and new books. In examining the data, additional information emerged, so I made some changes to the categories of reading behaviors. I noticed two kinds of self-correction behavior: self-correcting without any assistance and self-correcting after the teacher gives prompts, such as, "What would make sense? Do you know a word that looks like that?" Also, I noticed changes in the 'sounding out behavior' so I coded these as Sounding Out (Beginning Sounds) and Sounding Out (Beginning and Ending sounds). Since the child never appealed for help or rarely inserted words in the text, I omitted these categories in the final table. The information on the tables was used to examine the occurrence and frequency of the reading behaviors demonstrated by the child.

Document review. Lesson records kept by the Reading Recovery teacher, including running records, were used in the analysis. These records were used by the researcher to corroborate my analysis of the videotapes. I looked for any evidence of change in reading behaviors in the Running Records and I examined the teacher's lesson notes to aid or confirm my analysis.

Questionnaire. The Reading Recovery teacher was asked three questions

concerning the child's reading progress. The questions that were posed to the Reading Recovery teacher were:

1. Why was Aaron selected for the Reading Recovery Program?

2. What reading behaviors did you observe during the "roaming around the known" sessions and the beginning of the program?

3. How would you describe his reading behaviors at this point in the program (June)? Are there any changes since the beginning of the program?

Measures

Pre and Post Tests. The results of the OSELA and the Burt Word Test were collected and examined. These test results, raw scores and stanines, were compared at three different points in time:

The scores from the pre and post OSELA as described (Rodgers, 2002) were collected on the following tasks:

1. Letter Identification measures how many upper and lower case letters a child can identify by either name, sound or a word that starts like that. The highest score that can be achieved is 54.

2. 'Ready to Read' Word Test measures the number of words a child can correctly identify from a list of 15 words, sampled from most frequently occurring words in the 'Ready to Read' series of books used in New Zealand.

3. Concepts About Print examines the child's concepts or understandings about print. The highest score that can be achieved is 24.

4. Hearing and Recording Sounds in Words measures how many phonemes a student can

hear and record when dictated a sentence that contains 37 phonemes.

5. Writing Vocabualry measures the number of words a child can write in ten minutes. There is no ceiling score on this task.

6. Text Reading Level involves having the child read aloud while the teacher records the child's oral reading behaviors. The highest level at which a child reads with no less than 90 percent accuracy is considered to be the child's instructional reading level.

Other measures included The Burt Word Test which measures a child's word recognition skills. The child reads as many words from a list of 110 words graded in order of difficulty which are printed in different sizes and types of print. The results are reported in terms of equivalent age. This test was administered at three different points in time.

As well, a weekly record of levelled book examples was plotted on a graph to show progress made by the child. In Reading Recovery lessons, teachers use books leveled from 1-20. The numbers represent particular characteristics of books which are designed for beginning readers. The lower numbers represent books which are highly predictable, follow oral language structures, and provide high support through the illustrations, while the higher levels provide less support with pictures, feature varied sentences using literary language and little or no repetition . The features of these books which were characterized by Barbara Peterson and summarized by DeFord, Lyons and Pinnell (1991) are briefly described here. Levels 1-4 provide a high level of support from pictures and repeat 1-2 sentences patterns using oral language structures. Levels 5-8 provide high support from pictures and repeat 2-3 sentence patterns or varied simple sentence patterns using oral language structure. Levels 9-12 repeat 3 or more sentence patterns using a mixture of oral

and written language, with moderate support from pictures. In levels 13-15, the picture support is low to moderate and uses literary language with varied sentence structure. Levels 16-20 provide low picture support, unfamiliar vocabulary, literary language, and complex sentence structure. (p. 135)

Trustworthiness

Trustworthiness of the study has been addressed by using the four criteria proposed by Lincoln and Guba (1985).

Credibility. The researcher conducted the study for a prolonged period of time which involved videotaping lessons weekly from February to June and the final lesson in November. In addition, the researcher took time to learn about the Reading Recovery program in literature and from knowledgeable sources. A detailed description of Reading Recovery and the setting is provided for the reader. Triangulation of the sources was achieved by collecting and comparing information from a variety of sources: pre and post test scores, the teacher's lesson notes and records, the teacher's response to the questionnaire, and the transcripts of the videotapes. Member checks were conducted by giving the Reading Recovery teacher, the teacher leader, and a teacher leader trainer an opportunity to review and respond to the findings and its interpretation.

Transferability. Transferability was established by providing a description of the context of the study, Reading Recovery and its participants, and a detailed account of the design methods used to conduct the study. This description allows the reader to assess the findings and to decide if the results might apply to a similar context.

Dependendability. Dependability was addressed by making long term observations

in videotaping the lessons over a period of time. Transcripts of the videotapes and coding tables were recorded and maintained so that the data may be retrieved if necessary. Page numbers were recorded on coded information for easy retrieval of raw data.

Confirmability. Confirmability was established by obtaining feedback from knowledgable sources which included the Reading Recovery teacher, a Reading Recovery teacher leader, and a teacher leader trainer. Their responses provided confirmation of factual information and interpretations by the researcher. Any errors of fact or interpretation were noted and corrected. The researcher's biases have been made known in the discussion of the findings so the reader can assess how these biases might affect the outcome of the study.

Chapter 4

Findings

In this chapter, the reader is introduced to the child and given an overview of a typical Recovery Recovery lesson. The findings are presented according to the research questions which guided this study and include a description of the child as an at-risk reader, an account of how the child's reading behaviors change over time and a description of this child's reading behaviors at the end of the Reading Recovery lessons. These findings are supported with examples of text readings, pre and post test scores, tables and figures to represent the findings, and the Reading Recovery teacher's assessment at different points in the program.

Description of the Child

Aaron lives with his mother, father and older sister. He is a pleasant well-mannered child who possesses a quiet, reserved nature. He enjoys his pet cats and playing with his friends. His parents read to him during his preschool years and books are available in his home. He attended a kindergarten program prior to entering grade one in the public school system at the age of 6 years and 5 months. When he entered grade one, he had difficulty learning to read and write, and he often neglected to do his homework. The classroom teacher observed that he was not making progress in the Language Arts program as compared to his average classmates. He was falling behind his classmates in learning to read and write. The teacher felt that his problems were significant enough to put him at-risk for failure to learn to read, so he was referred for further assessment to Mrs. Read, the Reading Recovery teacher. Aaron scored below average compared to his age group on a

variety of tests. When a place became available, Aaron entered the Reading Recovery program in January, 2002 in his first year of school. He continued to participate in the classroom reading program while receiving daily one-on-one tutoring for thirty minutes.

A Typical Reading Recovery Lesson

Aaron follows the same routine as his classmates, except for the daily thirty minutes of tutoring which he receives from Mrs. Read. Everyday after recess, he takes his plastic bag containing the books, the cut-up sentence from the pervious day, and joins Mrs. Read in another classroom where he sits beside her at the table. His daily lessons follow the same format and sequence as described by Clay (1993a) and outlined here.

1. Rereading familiar books. He reads parts of previously read books, known as familiar books. He is expected to read these books independently and the teacher makes careful observations and takes notes in her lesson record about his reading.

2. Rereading yesterday's new book. During the reading of yesterday's new book, Mrs. Read takes a running record of his oral reading. This means that the teacher records Aaron's reading behaviors which she later analyses to check on the strategies he was using or neglecting and to determine the appropriateness of the book level for him.

3. Letter Identification and 'making and breaking' words. Next Aaron joins the teacher at the magnetic board where he manipulates magnetic letters involving word study tasks such as making and breaking words. Through observations and lesson notes, the teacher has carefully chosen some aspect of word study that the child needs to work on. Then they go back to the table and continue with the next part of the lesson.

4. Writing a story. This part of the lesson may involve writing one or more

sentences based on Aaron's personal experience or an idea from a previously read book. Mrs. Read helps Aaron think about some writing ideas by asking him about his interests and daily activities. Aaron decides what he wants to write about and proceeds to write the sentences in his writing book. The writing book is unlined and the upper portion is used for practising letters, fluent writing of a word, or solving unknown words. Using a variety of Reading Recovery strategies, Mrs. Read helps him when he has difficulty spelling a word. The bottom portion of the book is used for writing the sentence. Mrs. Read also writes the sentence on a strip of paper and cuts it up between the words or the syllables of a word as Aaron reads it. The pieces of paper are mixed up and Aaron has to reassemble the words in the correct order. He practises reading the sentence and Mrs. Read places it in an envelope for him to take home to read to his parent.

5. Introduction to the new book. The new book is carefully chosen by the teacher so that the child can apply what he already knows, while providing him with an opportunity for new learning. Mrs. Read introduces the new book and gives an overview of the story by talking about the pictures as they turn the pages. During the book introduction, she will use the language and vocabulary that the child will meet in the story. There is interaction between them as they discuss the story. With this orientation to the story, Aaron is ready to read the book. While Aaron is expected to do the 'reading work', Mrs. Read will assist when he needs prompting by using a variety of strategies to help him problem-solve and apply what he knows.

At the end of the thirty minute lesson, Aaron takes his plastic bag containing the two or three previously read books, the new book, and his cut-up sentence back to the

classroom. He will read these books and his sentence to his parent for homework. He returns to the classroom and joins his peers in the classroom activities. Aaron follows this daily routine for the duration of his Reading Recovery program.

Using the research questions as a guide, I will follow Aaron's path to becoming a successful reader. His reading behaviors will be described at different points in the Reading Recovery program and supported with excerpts from his text reading.

Profile of an At-risk Reader

Question one: What are the reading behaviors of a grade one child who has been identified as at-risk for learning to read and a candidate for reading Recovery intervention?

By the end of the first term, Aaron had been identified as having significant difficulties in learning to read compared to his average classmates. The classroom teacher referred him to the Reading Recovery teacher for further assessment. Using the Observation Survey of Early Literacy Achievement (as described in Chapter 3), the Reading Recovery teacher found that Aaron scored below average on most of the subtests (See Table 1 for January results). The classroom and the Reading Recovery teachers' assessments resulted in a recommendation that Aaron should receive supplementary help in addition to the classroom reading program. In January, a space became available in the Reading Recovery program and Aaron was given a 'second chance' to learn in a one-on-one setting.

During the 'Roaming Around the Known' period, the first two weeks of the program, the teacher and the child get to know each other. This period also serves as an

	Test Date	Letter ID	Concepts About Print	Word Test	Burt Word Test	Writing	HRSIW	Reading Level
Raw	Jan. 2002	28/54	16/24	2/15	4	8	18/37	Level 1
Stanine		2	4	2	5.10-6.4	1	4	
Raw	June 2002				27			Level 12
Stanine					6.5-6.11			
Raw	Sept. 2002	52/54	18/24	14/15	27	34	35/37	Level 10
Stanine		5	5	5	6.5-6.11	4	6	
Raw	Nov. 2002	54/54	24/24	13/15	37	50	37/37	Level 21+
Stanine		7	9	5	7.3-7.9	6	7	

Table 1 Progress for student on An Observation Survey and the Burt Word Test, at the beginning, middle and end of the Reading Recovery program.

opportunity for the teacher to find out what the child can do, before introducing new learning. From her observations of Aaron and the records she kept while roaming around the known, Mrs. Read described Aaron's reading behaviors:

> His instructional reading was at level 1 with no phrasing or fluency, and there was no self-monitoring or self-correcting. He does not appeal for help or reread at difficulty. He predicts written text from picture cues. Meaning and structure guided his reading and he neglects visual cues as another source checking. He has not learned to use initial and final letters in text reading.

The coded transcripts of the first two videotapes, also reveal these reading behaviors which are followed by examples of his oral reading.

Neglects visual information. Aaron was not matching the spoken word with the written word. He did not notice the mismatch and did not self-correct. He may have used the picture cues and invented the text but he did not seem to notice that the words did not match.

Example 1:

Text: A fire engine is big.

Aaron: A fire truck is big.

Mrs. Read: That sounds right and it makes sense. I want you to make it match. Put your finger under each word and read it again.

Example 2:

Text: The goldfish is here.

Aaron: The fish is here.

Mrs. Read: That sounds right and it makes sense. You said, "The fish is here." What sound do you expect to hear at the beginning of fish?

Example 3:

Text: Mother Chimp is awake.

Aaron: Mother Chimp wakes up.

Example 4:

Text: Dad is asleep.

Aaron: Dad isn't up.

Mrs. Read: You want to make it match. Put your finger under each word.

Aaron: Dad is not up.

Mrs. Read: That's a tricky word. You said, "Dad is not up." (Mrs. Read takes his finger and points to each word as she repeats what he said.) We ran out of words. We can find a way to figure out a tricky word. One way is to look at the picture. Another way is to look at the first letter. What sound would you expect this word to begin with?

Aaron: [a]

Mrs. Read: So what would make sense and sound right?

There was no response from the child so the teacher eventually told him the word. In the above example, Mrs. Read is teaching Aaron ways to problem-solve and cross-check, that is, to use other sources of information, such as picture cues, meaning, and the visual cues of the first letters to figure out an unknown word.

Word by word reading. Aaron followed the text by finger pointing or voice pointing. He read word by word which resulted in choppy reading and often there were

pauses while he tried to problem-solve a word. He frequently uttered "um" and paused before attempting the word. This behavior indicated that he was monitoring his reading and 'in the head' processing was going on. However, his slow response or lack of response interrupted the flow and the meaning was lost. Further evidence that word by word reading is not an efficient behavior is provided by his teacher's comments throughout the beginning lessons as she tried to replace this behavior with another. "Can you read that with your eyes? I like the way you read that. It sounds just like talking. Remember when you read, it sounds just like talking."

Following the words using his finger. In the early lessons, Aaron pointed to each word as he read. This behavior resulted in choppy reading, as mentioned previously. The teacher discouraged this behavior by reminding him to read with his eyes. Aaron dropped this behavior early but it was observed that he tapped his finger on the table as he read each word.

No phrasing, fluency, or expression. Aaron did not pay attention to how he sounded. He tended to read word by word, not in phrases of three to four words as we do in oral language, so his reading sounded robot-like. He did not read expressively or use punctuation cues such as exclamation points or other cues indicated by tag words in dialogues, such as shouted or whispered. For example, when reading the text, 'Kate said, "Wake up, Dad!"', Aaron read with no expression. The following exchange between Aaron and Mrs. Read demonstrates how she is trying to bring his attention to reading expressively.

Mrs. Read: What do you call these marks?

Aaron: Quotation marks.

Mrs. Read: That means that someone is talking there. So when you read it, it has to sound like someone is talking.

Aaron then reread the sentence with expression.

Uses initial letters to predict words. The following excerpts illustrate how Aaron used only the initial letter and predicted the word, while neglecting visual cues.

Text: Mother Monkey is asleep.

Aaron: Monkey, monkey is a ... (He didn't notice the error and is having difficulty with the last word in the sentence.)

Text: Here comes Tiger.

Aaron: Hungry ... (The teacher intervenes to help him problem-solve.) Aaron predicted the word hungry based on the first letter and the context of the story. Earlier in the text, he read that the tiger is hungry, so he may have anticipated that the word would be hungry.

Doesn't reread to self-correct and shows little or no self-correction. There was no evidence of rereading to self-correct. Rereading behavior was not present in his reading at the beginning of the program. It seemed that Aaron did not notice the errors because he did not hesitate or stop which would indicate that he was monitoring his reading and noticed a mismatch.

Doesn't seek help at difficulty. In reading a level 3 text, Aaron did not recognize high frequency words such as 'here', even though in an earlier reading of a different book, he read this word correctly. He attempted to sound out the word but was unsuccessful.

Text: Here comes baby monkey.

Aaron: [H- h]

Mrs. Read: What would make sense there? (She wants him to try other cues such as meaning.)

Aaron: He.

The teacher told Aaron the word and asked him to try it again. Aaron did not appeal for help.

While reading, Aaron also exhibited signs of anxiety, such as squirming, tugging at his clothes, and rubbing his head or legs.

These examples illustrate Aaron's early reading behaviors at the beginning of the Reading Recovery program. His reading was slow, word by word with no expression, and he was not matching the spoken word with the written word. He was using the beginning letter and prediction to guide his reading while neglecting visual cues.

Changes Over Time

Question Two: How do the reading behaviors change over time as this child receives one-on-one tutoring in the Reading Recovery program?

Aaron's reading behaviors were coded from the transcripts of the videotapes and then recorded using a format similiar to one developed by Schmitt (2001) to record observable reading behaviors (See Tables 2 and 3). These overt behaviors suggest what strategies the child is using or neglecting while problem-solving unknown words.

In reviewing the transcripts of the videotapes, it became apparent that changes in

Date: March 28, 2002 Yesterday's New Book: Dilly Duck and Dally Duck Level 7 Week 8/ Lesson 30								
Problem Word	**Attempt**	**Self Monitors**	**Self Corrects**	**Rereads to Problem Solve**	**Rereads to Confirm**	**Sounds Out**	**Teacher Intervention** (What teacher says or does)	**Told**
look P.36	Look at							
We can go down to the river to play. P.36	We can go play in the river (pause) to play.							
splash p. 37	[s-um]					x Beg. sound		x
down p.38	[d-on t]					x Beg. sound		x
on p.38	An, and		x A				Try that again	
mother p.39	Mom	x	x UA					
go p.40	[g..]	x	x UA			x Beg. sound		
back P. 40	[b...]	x				x Beg. Sound		x
the p. 41	then							
walked p.41	[wa..]	x				x Beg. Sound		x
ran p. 42	are	x	x UA	x				
the p. 42	they	x	x UA		x			
TOTAL: 12		**6**	**1 A 4 UA**	**1**	**1**	**5 Beg. Sound**	**1**	**4**

Table 2. Sample chart of coded reading behaviors. UA means unassisted. Beg. means beginning. x means the behavior was observed. [ ] means the child said the letter sound. Page numbers refer to the researcher's fieldnotes.

Date: May7, 2002		New Book: My Big Brother Level 8		Week 14/ Lesson 53				
Problem Word	**Attempt**	**Self Monitors**	**Self Corrects**	**Rereads to Problem Solve**	**Rereads to Confirm**	**Sounds Out**	**Teacher Intervention** (What teacher says or does)	**Told**
My brother can ride a big bike. P.85	My big brother and my big can.						Try that again.	
Same as above	My brother can ride a bike {bik, bik, bike. My brother can ride a bike back.		x A			x Beg.	Try that again. Points to word before bike. Get your mouth ready to say the word.Think about what makes sense.	
We p.85	With	x	x UA					
home p. 85	[h-ome]	x				x Beg.&end		
games p.85	Guns	x	x UA					
in p.85	Up I mean on							
lets P.86	Likes	x	x UA					
comes p.86	Can	x	x UA					
looks p.86	Likes	x	x UA					
TOTAL: 9 - 1		**6**	**5 UA 1 A**			**1 beg. 1 end**	**2**	**0**

Table 3. Sample chart of coded reading behaviors.

reading behaviors were occurring as Aaron progressed through the program. His reading behaviors as he read the previous day's new book and the new book were coded and recorded in a table for each videotaped lesson. Examples of how the reading behaviors were recorded are provided in Tables 2 and 3. The reading behaviors for both books were also tallied for all of the lessons and recorded in two charts (Tables 4 and 5) which summarize the frequency of each reading behavior. It is important to note that during the reading of the previous day's new book, the teacher takes a running record and can only tell the child a word or ask him to try it again. The reading behaviors which were recorded in the tables revealed what Aaron could do with and without the teacher's assistance. This information also shows how the reading behaviors were changing over time.

Some new reading behaviors appeared while others increased or decreased in frequency. When Aaron began Reading Recovery, he did not notice errors or self-correct. Self-correcting behavior appeared and increased over time in relation to the number of problem words or errors that occurred. Figure 1 represents the percentage of self-corrections Aaron made in relation to the number of problem words he encountered as he read the previous day's new books. Figure 2 represents the percentage of self-corrections he made in relation to the number of problem words he encountered in the new books. Although not linear, there is an increase in self-correcting behavior without assistance from the teacher and is represented by the solid line as indicated in Figures 1 and 2. There is a decrease in self-correcting behaviors resulting from assistance given by the teacher, as represented by the broken line. Compared to the previous day's new book, the number of assisted self-corrections is higher in the new books, in particular, at the beginning of the

Summary of Reading Behaviors in Previous Day's New Books											
Date Wk/Lesson Level ( )	**Problem words**	**Self-Monitor**	**Self-Correct UA**	**Self-Correct A**	**Percent of SC**	**Reread PS**	**Rereads Confirm**	**Sound Out** Beg.	**Sound Out** Beg. & End	**Teacher Intervention**	**TOLD**
Feb.18 4/11 (1)	1	0	0	1	100% A	0	0	0	0	1	0
Feb.19 4/12 (3)	5	5	2	2	40% UA 40% A	2	0	2	0	2	1
Mar.4 6/19 (4)	5	4	1	0	20% UA	2	2	2	0	0	3
Mar.28 8/30 (7)	12	6	4	1	33% UA 8% A	1	1	5	0	1	4
Apr.3 9/32 (7)	9	3	3	0	33% UA	1	2	3	0	1	5
Apr.17 11/40 (8)	20	15	11	0	55% UA	3	2	3	11	0	6
Apr.23 12/44 (8)	13	16	4	0	31% UA	0	0	4	12	0	6
Apr.30 13/49 (8)	4	3	3	0	75% UA	0	0	1	0	0	1
May 7 14/53 (8)	6	6	4	0	67% UA	0	0	0	3	1	0
May 14 15/58 (9)	6	8	4	0	67% UA	0	0	2	2	0	1
May 28 17/66 (9)	5	5	5	0	100%U	0	2	0	1	0	0
June 5 18/70 (9)	9	9	7	0	78% UA	0	2	0	2	0	0
Nov. 6 26/100 (16)	14	11	11	0	79% UA	0	0	1	0	0	0

Table 4 Total count of reading behaviors on the previous day's new books.

Summary of Reading Behaviors in New Books											
Date Wk/Lesson Level ( )	**Problem words**	**Self-Monitor**	**Self-Correct UA**	**Self-Correct A**	**Percent of SC**	**Reread PS**	**Rereads Confirm**	**Sound Out** Beg.	**Sound Out** Beg. & End	**Teacher Intervention**	**TOLD**
Feb.18 4/11 (1)	4	1	0	3	75% A	0	0	0	0	4	1
Feb.19 4/12 (3)	7	2	0	4	57% A	0	0	4	0	6	3
Mar.4 6/19 (4)	13	6	0	9	69% A	0	0	6	1	10	2
Mar.28 8/30 (7)	9	5	3	2	33% UA 22% A	1	0	1	1	3	3
Apr.3 9/32 (7)	17	9	1	5	6% UA 29% A	0	0	3	5	8	7
Apr.17 11/40 (8)	14	11	5	8	36% UA 57% A	0	0	4	2	8	1
Apr.23 12/44 (8)	15	9	3	9	20%UA 60% A	0	1	5	3	11	2
Apr.30 13/49 (8)	11	9	6	4	55%UA 36% A	3	0	2	3	5	0
May 7 14/53 (8)	8	6	5	1	63% UA 13% A	0	0	1	1	2	0
May 14 15/58 (9)	14	16	8	4	57%UA 29% A	2	4	0	6	6	2
May 28 17/66 (9)	9	16	6	1	67% UA 11% A	1	2	1	7	1	2
June 5 18/70 (9)	15	12	9	3	60% UA 20% A	3	3	0	0	4	1
Nov. 6 26/100 (16)	13	10	10	2	77% UA 15%	2	0	0	0	3	1

Table 5 Total count of reading behaviors in new books.

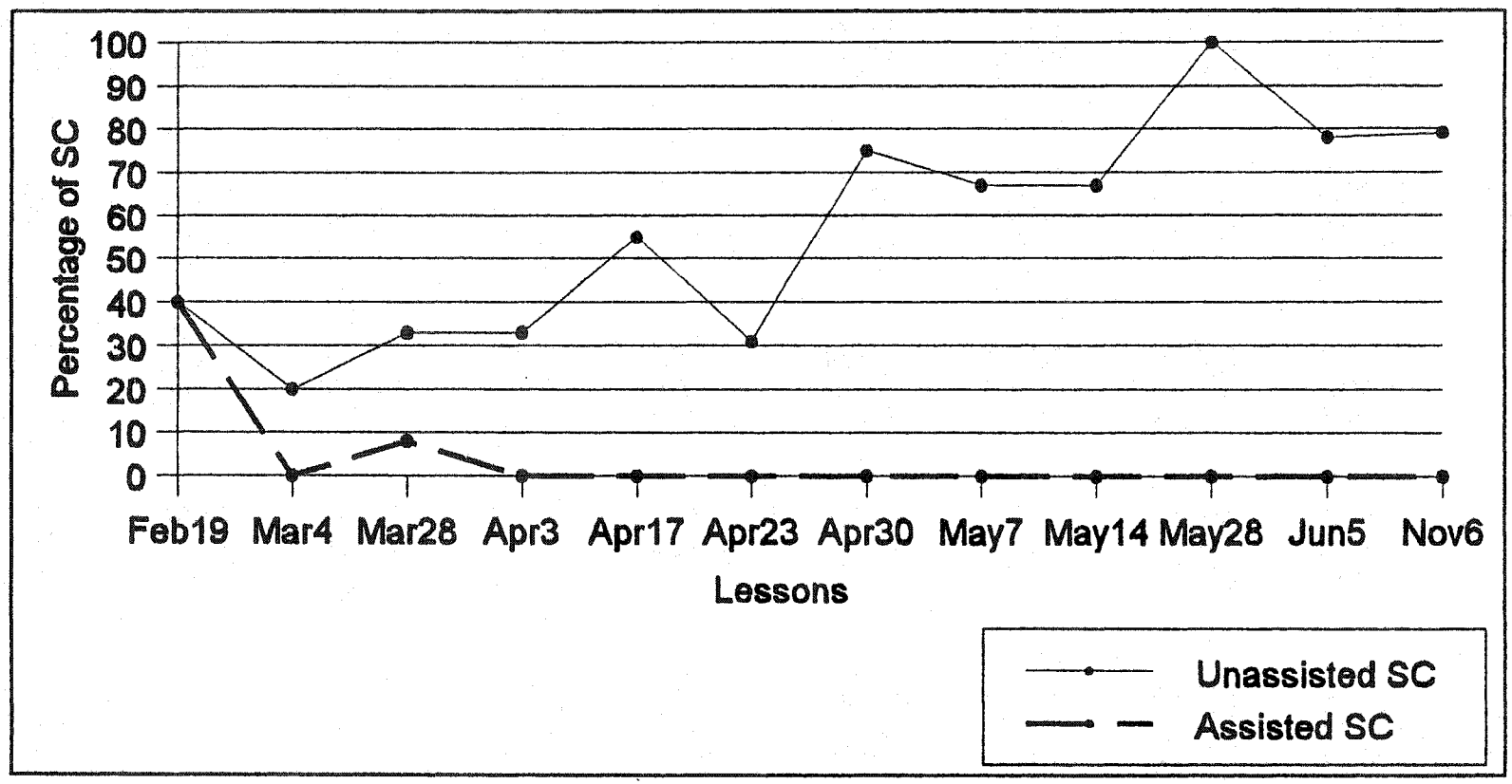

Figure 1 Percentage of unassisted and assisted self-corrections in reading the previous day's new book.

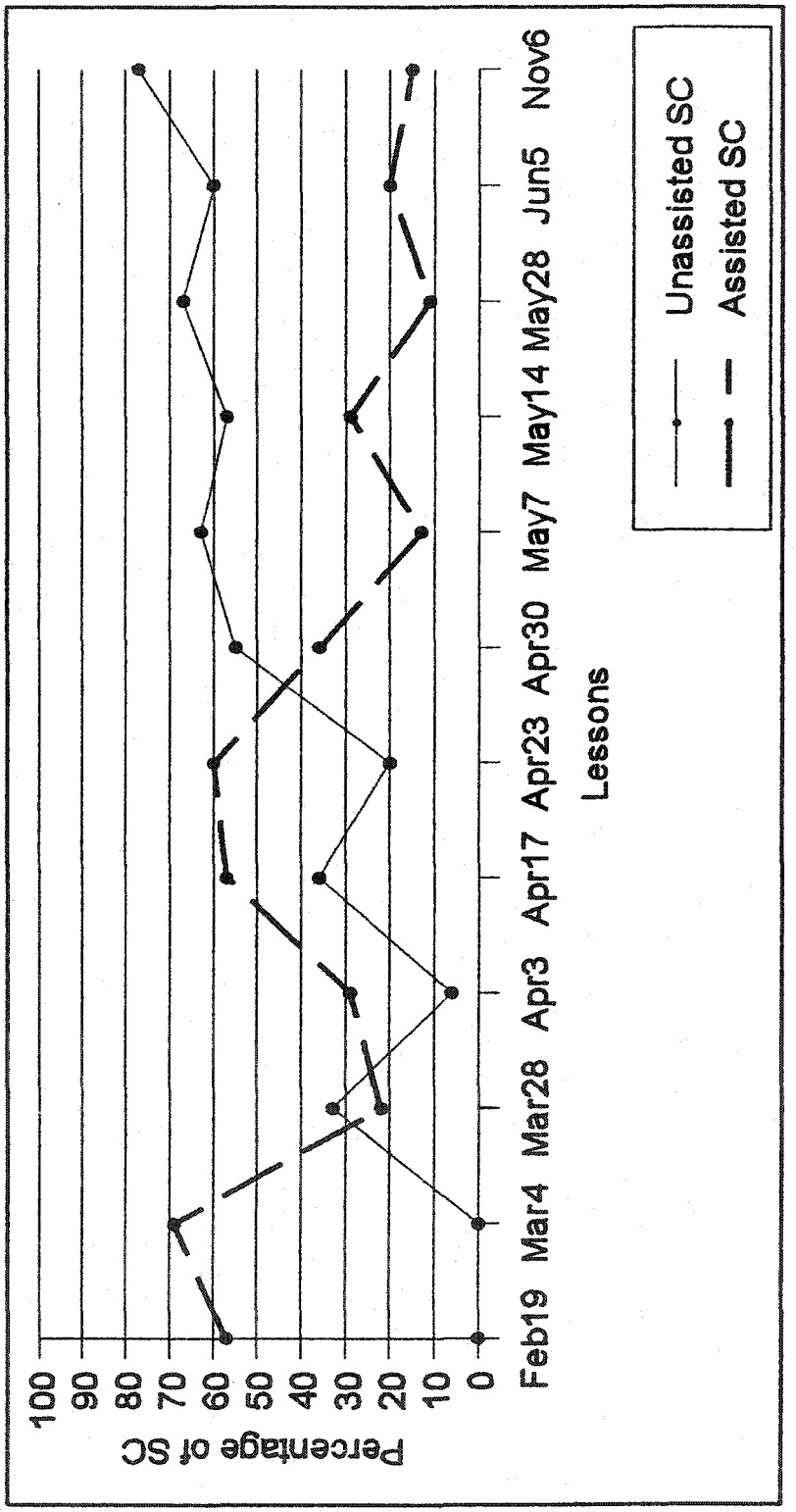

Figure 2. Percentage of unassisted and assisted self-corrections in reading new books. SC means self-corrections.

program. The teacher cannot assist, but can tell the child a word when taking a running record of the previous day's new book, so a 'told' word was counted as an instance of assistance. The frequency of self-corrections resulting from assistance by the teacher gradually decreased over time, suggesting that Aaron was gradually taking control over the reading process. This evidence is significant because it shows that he could do more complex things even as the text level became more difficult. It is more signicant than if the text level had remained the same.

Another indication that Aaron was taking more control over the problem-solving process is the decrease in the number of times the teacher had to tell him a word (See Tables 4 and 5). As noted earlier, the teacher can only 'tell' a word during the reading of the previous day's book because she is taking a running record of the child's independent reading.

There was a decrease in using beginning letters only, as an attempt to figure out the word. Using beginning and ending letters became apparent and increased midway through the program and then decreased over time. This evidence suggests that Aaron was noticing the rest of the word and therefore paying more attention to visual cues. However, there was a period of time when Aaron overused this strategy and tried to 'sound out' each letter of an unknown word which resulted in unsuccessful attempts. These examples show his attempts at sounding out the words: He sounded out [w-w-e-nt] for went, [w-en-went wel–k-ed] for walked, [go-go-d] for good, [p-h-elp- helped] for helped, and [st-st-sat-a] for stayed. The teacher discouraged that behavior because it was not a helpful or efficient strategy. She showed him other ways to figure out the word, such as saying the

sounds of the first two letters and thinking about what would make sense, checking to see if the word looks right, or by relating it to a word he already knew. She reminded him not to sound out words because it would take too long. Eventually this reading behavior occurred less frequently indicating that he was no longer relying on this strategy alone.

There is also evidence that his fluency and expression have improved as noted in the teacher's comments. At the beginning of the program, Mrs. Read described Aaron's reading as being choppy with no phrasing or fluency and it was noted by the researcher that his reading was mainly word by word with some long pauses. In June, having received seventy lessons, his reading was expressive with a mixture of phrasing and word by word reading. At the end of the program in November, she described his reading as mostly phrased and fluent.

Another indicator of change is evident in the teacher's weekly record of progress which is tracked by using a Record of Book Level chart (Clay, 1993a). Aaron was reading at an instructional level (90 - 94 percent accuracy) in each book of which the teacher took a running record. Figure 3 shows that Aaron progressed through increasingly more difficult texts at an instructional level. It is interesting to note that he remained at the same level of difficulty (level 8) during the month of April. According to the researcher's summary of reading behaviors in new books, there was an increase in the number of interventions by the teacher, as well as an increase in the percentage of assisted self-corrections which indicated the child was not reading at an instructional level. During that time Aaron was 'sounding out' as his main strategy to figure out words. It also coincided

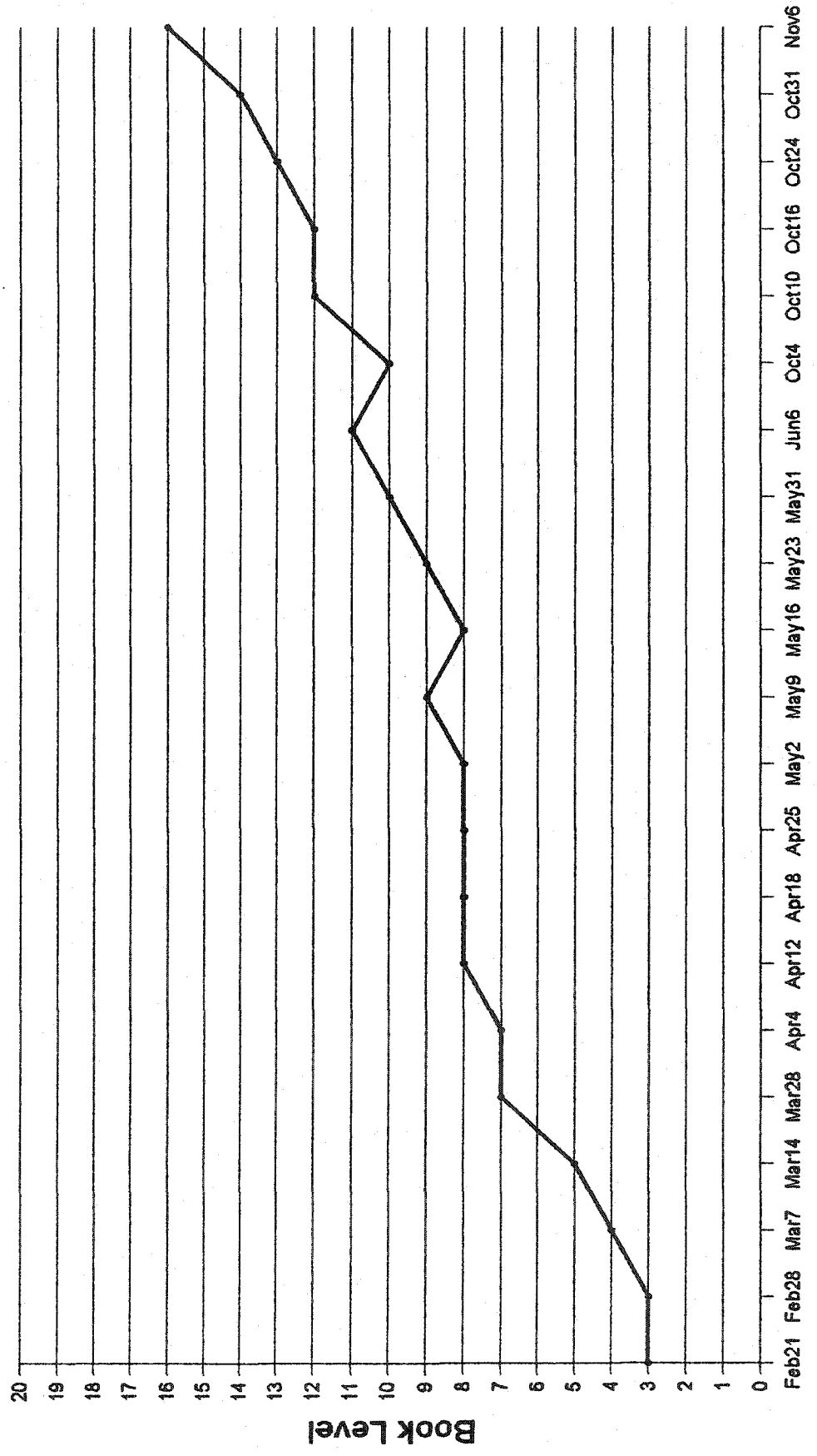

Figure 3. Record of book level from weekly running records of text reading.

with the teacher's decision to move him to a lower level book.

Changes over time may also be observed in the test scores which were administered at three different points in time during the Reading Recovery lessons: January, June and November (See Table 1). Descriptions of these tests may be found in Chapter Three. The raw scores and stanines are reported for each test. Aaron's test score on the Letter Identification (Letter ID) increased from identifying 28 out of 54 letters in January to correctly identifying all the letters in November. The results from the Concepts About Print showed similar gains. On the timed writing task, Aaron's writing vocabulary increased over time. The scores on both word tests indicate that Aaron's ability to represent sounds in the written word had improved significantly. His reading ability improved as demonstrated by his progress on books levelled on a gradient of difficulty from levels 1 to 21. The testing results indicate that the raw scores increased and the stanine scores placed him in the average to above average group at the end of the program.

Due to interruptions caused by special school events, holidays, absences due to illness, or cancellations due to weather, it was necessary to continue Aaron's program in the following school year. Therefore, in June, Aaron was only given the Burt Word Test which showed an improvement in scores. At that time, Mrs. Read described his reading behaviors:

> Aaron is reading at level 11 with mainly phrased and fluent reading. He self-monitors, self-corrects, and cross-checks information using visual cues as another source. In some of his errors, he uses all three sources of information. Aaron is

more aware of what makes sense, sounds right, and looks right while reading text. His sight vocabulary has improved from equivalent age of 5.10 - 6.4 to 6.5 - 6.11.

The following examples from Aaron's text reading demonstrate that he is noticing errors, self-correcting, rereading to self-correct, and paying attention to the endings of words.

In this example Aaron is reading a new book, *Bingo Goes to School*, level 9.

Text: We are having a Pet Day at school on Saturday.

Aaron: We are having a pet dog, I mean, We are having a Pet day.

(This example shows how Aaron noticed the error and reread to self-correct. He continued to read.) at school on Sunday, um, Saturday.

Text: They saw a little boy with a black cat.

Aaron: Um, they s-saw a lot, um, um, dog. They saw a little boy with a bl-ack cat. (He reread and self-corrected.)

Text: You are the best dog at school today.

Aaron: You are the best behave, I mean, dog at s-c-school today. (He noticed the error and self-corrected. This error suggests he is using his language experience and anticipating what makes sense.)

Another example shows how Aaron reads a new book at level 11, *The Toytown Racecar*.

Text: The tow truck came out of the garage to have a look.

Aaron: The toy town come, coming. The tow truck came out of the garage to have a look. (He reread and self-corrected.)

Text: I will not go too fast down the Toytown road again.

Aaron: I won't, will not go too fast down the, um, puddle, Toytown road again. (He noticed the errors and self-corrected.)

The above sources of information provide some evidence of how Aaron was progressing through the Reading Recovery program and also how his reading behaviors were changing over time.

End of Program

Question Three: What are the reading behaviors of this child at the end of the Reading Recovery program?

Aaron's 100th lesson was videotaped on November 6, 2002 and he was successfully discontinued from the Reading Recovery program. A final check on Aaron at the end of his program revealed that changes in his reading behaviors had occurred since the beginning of his Reading Recovery lessons. He was showing more independence in problem-solving and therefore, gaining control over the reading process. The summary of reading behaviors in the new books (Table 5) provides a comparison of Aaron's earlier reading behaviors. The increase of unassisted self-corrections suggest that Aaron is noticing his errors and also using strategies which result in successful corrections. There are fewer instances of interventions by the teacher, meaning that the child is taking more control over the problem-solving. The low level strategy of relying on beginning letter sounds while neglecting other cues is no longer present in his reading.

At the end of his program, Mrs. Read described Aaron's reading behaviors in this way:

In reading text, Aaron integrates all three sources of information most of the time. He self- monitors and self-corrects at a good rate. He also cross-checks during reading of text. He will reread to confirm and to improve fluency. His reading is mostly phrased and fluent.

The following examples taken from his reading of a previous day's new book and a new book provide evidence that Aaron is now monitoring his reading and using more efficient strategies to problem-solve. This evidence suggests that he is cross-checking by using other sources of information, (i.e., meaning, structure, and visual).

In this example, Aaron is reading the previous day's new book, *Lost in the Forest*, level 16.

Text: Small Duck-bill loved eating leaves.

Aaron: Some, small Duck-bill lived, loved eating leaves. (Aaron immediately noticed each error and self-corrected.)

Text: Sometimes she nibbled at the flowers.

Aaron: Sometimes she nibbled on, at the flowers. (He noticed the error and self-corrected.)

Text: All the duck-bills started to run.

Aaron: All the duckbills stared, started to run. (Again he self-corrected.)

In another example, Aaron is reading a new book, *The Little Red Hen*, level 16.

Text: Once upon a time, there was a little red hen.

Aaron: Once upon a time, there was a little white, red hen. (He self-corrected.)

Text: She lived on a farm with a duck, a dog, and a pig.

Aaron: She loved on a farm. She lived on a farm with a duck, a pig, a dog, and a pig. (He reread the first part of the sentence and self-corrected.)

Text: "Not I," quacked the duck, and she went away to swim in the pond.

Aaron: "Not I," pecked, quacked the duck, and she [d-] went away to swim in the pond. (Aaron had confused the letters p and q and this may be the reason he said 'pecked' for 'quacked' before he self-corrected. The picture showed the duck diving into the pond so maybe he was going to say 'dived' but his cross-checking strategy caused him to quickly self-correct.) This correction confirms that he was paying attention to visual information. His substitution would have made sense and sounded right, but it didn't look right.

Aaron was successfully discontinued from Reading Recovery and is no longer receiving supplementary help. No adaptations to his reading program were recommended because he was considered to be reading at a level comparable to the average readers in his class. However, his progress will be monitored on a regular basis by the Reading Recovery teacher and contact will be made with the classroom teacher.

Summary

In this case study, I followed Aaron's path of progress from an at-risk reader on his way to becoming a successful reader. The findings of this study can be summarized using these emerging themes which characterize the changes in his reading behaviors over time.

Self-correction. There was little evidence of self-correction early in the program; however, over time, this behavior appeared. In relation to the number of problem words in a text, Aaron was noticing and correcting more errors without prompting.

Self-monitoring. At the beginning of Reading Recovery, Aaron did not notice his errors which indicated that he was not always monitoring his reading. There was evidence from his reading behaviors that over time he started monitoring his reading more closely. Pausing, rereading, self-correcting, and attempting to say a word are signals that Aaron was monitoring his reading. Fluent and correct reading are also signs of self-monitoring.

Using visual information. At the beginning of the program, Aaron predicted a word using the first letter of the word along with the meaning and structure cues. He neglected the visual information provided by the rest of the word. As he progressed through the program, he made attempts at saying the sounds of other parts of a word, suggesting that he was using visual cues. In other words, he was attempting to match what he said with the word in the text.

Integration of cueing system. Meaning, structure and visual are sources of information a reader uses to confirm or reject an attempt. A reader uses these three sources in an integrated way; that is, he or she checks one source against another in order to determine the correctness of a word. This cross-checking behavior happens quickly and may not be noticeable in successful readers. In Aaron's case, he was using a lower level strategy of predicting words by sounding out initial letters of a word. However, his reliance on this strategy decreased and possibly disappeared, as he learned to cross-check his response with other sources of information, such as meaning, structure and visual. Since these strategies are 'in the head' processes and cannot be seen, one can only infer from the overt behaviors, such as pausing, repeating, making another attempt, or looking at the pictures, that a reader is integrating these sources of information.There was

evidence from observing Aaron's reading behaviors that he was cross-checking in his attempts to problem-solve. The teacher's comments on the running records of his reading also show evidence that Aaron was cross-checking sources of information

Phrasing and fluency. There was improvement in phrasing and fluency. At the beginning of the program, Aaron was finger pointing or voice pointing which meant he was reading word by word resulting in choppy reading. Throughout the lessons, the teacher modelled and encouraged fluent reading by reading groups of words with expression. Aaron attempted to do this while reading text and gradually improved over time. The teacher's description of the degree of fluency changed from "choppy, word by word", to "mixture of word by word and some phrasing", to "mostly phrased and fluent".

Aaron, a Successful Reader

Three months after Aaron was discontinued from Reading Recovery, he continues to successfully participate in the classroom reading program. He is progressing as a reader and demonstrates reading behaviors which show signs of independent problem-solving. His reading behaviors indicate that he is using strategies when problem-solving words and there is little evidence of reliance on one strategy, such as sounding out a word. He reads with fluency and expression.

According to his grade two teacher, Aaron appears confident and proud of his reading ability. He often compares himself to others and inquires about the reading level of books he or others are reading. He shows enjoyment in reading aloud to his classmates and when the teacher is reading aloud.

Chapter 5

Discussion

This study is situated in the context of an early intervention, Reading Recovery, which provides one-on-one tutoring to the lowest achievers in a grade one reading program. This early intervention is grounded in theory which supports providing early intervention for at-risk readers in order to prevent reading failure, since these children tend to fall further behind their classmates. The goal of the early intervention is to accelerate the learning of the at-risk reader in order to "catch up" to the average reader in his or her class. Reading Recovery is based on the belief that all children can learn to read, given effective reading instruction and appropriate intervention. Grounded in a constructivist theory of learning, Reading Recovery is also based on the belief that in the process of learning to read, beginning readers are developing a "self-extending" system (Clay, 1993a) or "working systems" (Clay, 2001). Most children construct efficient working systems which enable them to become proficient readers. A small percentage of beginning readers, which Clay (2001) predicts to be 20% of the school population, will experience difficulty and their rate of progress will fall behind the average readers. If they are left alone to catch up, Juel (1988) concluded that the reader experiencing difficulty has an 88% chance of still being in the low group by fourth grade, while average readers have a 12% chance of becoming low readers by fourth grade. By intervening early and providing one-on-one tutoring, the chances of remaining in the low-achieving group of readers or being labelled as having a learning disability should be reduced for at-risk readers in the first grade.

A goal of this study was to describe how an at-risk reader progressed through an early

intervention program by examining the child's reading behaviors and how they changed over time. I used a qualitative case study approach (Merriam, 2001) in order to describe the reading behaviors of an at-risk reader at different points in time, guided by three research questions in my inquiry.

1. What are the reading behaviors of a grade one child who has been identified as at-risk for learning to read and a candidate for Reading Recovery intervention?
2. How do the reading behaviors change over time as the child receives one-on-one tutoring in a Reading Recovery program?
3. What are the reading behaviors of this child at the end of the Reading Recovery program?

In this chapter I will discuss the findings and position them in a broader theoretical framework.

In order to describe Aaron's reading behaviors and how they changed over time, I recorded his reading behaviors as he read from the previous day's new book and the new book for that day. I videotaped his Reading Recovery lessons and recorded the reading behaviors when he began receiving Reading Recovery lessons in January, at weekly intervals until June, and followed up with his last lesson in November of the following school year.

I documented these changes over time by recording the occurrence and frequency of each type of observable reading behavior. Did the reading behaviors occur less frequently or more frequently? Did new behaviors appear? Did any reading behaviors disappear? What do the reading behaviors tell us? What is the significance of these

findings? I will discuss the findings of each research question which guided the study.

Describing the Reading Behaviors of an At-risk Reader

Aaron was identified by his classroom teacher as being at-risk, which was subsequently confirmed by the Reading Recovery teacher's assessment and his low test scores, and thus, considered a candidate for Reading Recovery intervention. Test results indicated he could identify about half of the letters of the alphabet which were written in various forms. He was able to correctly read two out of fifteen words on a word test. He was able to write only 8 words in a timed writing vocabulary test and correctly represented 18 phonemes out of 37 on a dictation task. The low test scores in these areas would be expected in poor readers. These test results are good indicators that without intervention Aaron would most likely have continued to experience difficulty in learning to read. Robinson's study as cited in Clay (2001), included children from 5:6 to 6:6 and she found that the number of words a child could produce and write correctly without help in a timed ten-minute test was a good predictor of progress in early reading. In addition, the proficient readers had significantly better scores on letter identification and word tests than the low-achieving group. Clay (1993a) suggests that having a low writing vocabulary may indicate that the child is not noticing the visual differences in print.

Clay (1991) sees the low progress reader as "constructing an inefficient processing system" which differs from the traditional view of the child as a slow learner who needs more time. She further characterizes the low progress reader as one who may have a narrow range of strategies, pays no attention to visual details, guesses words from first letters, or invents words from memory, and doesn't notice the mismatch between his

spoken word and the written words. (p.323)

In comparison, Aaron's reading behaviors seem to have had similar characteristics. There was no evidence of self-correction in Aaron's reading behavior. He didn't seem to notice the mismatch of the printed word to what he was saying, therefore he did not reread to correct or to problem-solve at difficulty. This supports Clay's (2001) earlier findings in her studies of reading errors and self-correcting behaviors. She found that high progress readers made fewer errors and many self-corrections, while the low progress group had a higher error rate and hardly any self-corrections. The absence of self-correction and the presence of error were indications that Aaron was not actively working on mismatches nor using other sources of information, such as meaning, structure, visual, or graphophonemic cues. Since his attempts made sense and sounded right, one can infer that he was using meaning and structure; that is, what he read made sense and sounded right, but he did not use the visual cues as a check on his reading which would have told him that it didn't look right. It appeared that he was using the first letter while neglecting the middle and ending letters.

Another indicator of reading success is related to fluency, phrasing, and reading rate. Fountas and Pinnell (1996) found that students who read slowly, with long pauses and tried to sound out each part of a word had difficulty understanding what they read, while students who read quickly and in phrased chunks, rather than word by word, were more successful on reading compehension tests. Aaron's low achievement in reading may be attributed to these factors because there was no phrasing or fluency in his reading since he read slowly, word by word with no expression.

Reading Behaviors Changing Over Time

Documenting and describing changes over time requires a look at what happened between a starting point and an endpoint. Having a description of Aaron's reading behaviors at the beginning of his Reading Recovery lessons provided a baseline from which to document subsequent changes. In this study, changes in reading behavior were indicated by examining the usage and frequency of their occurrences; comparing test scores; graphing progression through levelled books; and perusing the teacher's description of his reading behaviors which were recorded in the teacher's lesson records.

The findings indicated that the changes in Aaron's reading behaviors ocurred in self-correction, self-monitoring, use of visual information, integration of cueing systems, and phrasing and fluency. These changes occurred as he progressed through a range of book levels of increasing complexity. While the reading behaviors are discussed here as separate items for the purpose of analysis, it should be noted that they are integrated and dependent on one another, and occur quickly, especially in proficient readers.

Self-correction. Results indicated an increase in the percentage of unassisted self-corrections and a decrease in the percentage of assisted or prompted self-corrections when reading new books. Likewise, an increase was noted in the percentage of unassisted self-corrections and a decrease in the percentage of words the teacher had to tell him during the rereading of the previous day's new book.

This analysis suggests that Aaron was starting to take more control over the reading process. He was relying less on the teacher and was developing independence in problem-solving. Evidence from research by Clay (2001) concluded that self-correcting

behaviors in beginning readers are one kind of evidence that the child is gaining control over the reading process. While error to self-correction ratios may be correlated to progress in beginning readers, it is not reliable when the reading becomes silent in older, proficient readers because it cannot be observed. Clay points out that "It (self-correction) doesn't have a linear relationship with progress because although it arises early, fewer self-corrections are observed as reading becomes increasingly well-orchestrated" (p. 194). Also, it should be noted that the efficiency of self-correcting behaviors is dependent on the text level. If the level of text is easy, there will be fewer opportunities to self-correct and likewise, if the text level is too hard, then meaning is lost and self-correcting will not occur. Therefore, it is important that the text be at an instructional level (90% accuracy or above) in order to provide enough control over the reading process while allowing opportunity for self-correction to occur. Reading Recovery teachers carefully select books to match the instructional reading level of the child based on observations of the reading behaviors recorded in running records and make changes when necessary by choosing a lower level or higher level of text.

Text Level. Progression from one level of text to another is also a signal that changes in reading behaviors are occurring. In this case study, Aaron progressed from texts levelled 3 to 7 in six weeks, remained at level 8 for four weeks, moved to level 9 and back to level 8 and then continued to progress through to level 16 by the end of his lessons. Aaron was able to read books of greater complexity at 90% accuracy or greater. It was not expected that this progress would continue at equal intervals upwardly because as the book levels increase, so does the complexity of the reading task. Individual children

progress at different rates and may require more time at a particular level than another level (Fountas & Pinnell, 1996).

Self-monitoring. One must assume that a reader is monitoring himself or herself if he or she is reading accurately; conversely, one can assume that a reader is not monitoring his or her reading if he or she does not notice errors or mismatches, especially if those errors interfere with meaning (Clay, 1993b). In this study, occurrences of self-monitoring were not counted when the child was reading correctly, only when he self-corrected or paused to problem-solve a word, or simply stopped when he did not know a word. These actions indicated that he was monitoring his reading and were recorded as such. A comparison of the number of errors and the instances of self-monitoring suggests that Aaron was now noticing errors more often and attempting to problem-solve. His attention to the errors or unknown words suggested he was monitoring his reading and attempting to problem-solve.

Visual Information. Aaron's errors suggested that he was neglecting visual information because he did not notice mismatches between the spoken word and the word in the text. He used the first letter and predicted what would make sense. Over time, Aaron showed evidence that he was noticing and using visual information because there was more self-correcting and he was slowing down and attempting to say the sounds of the middle and last letters, not just relying on the beginning letters for cues. There was also a period of time when Aaron paid too much attention to smaller units of a word by attempting to sound out each letter of the word, resulting in pauses and distortion in the pronounciation of words. This example of ineffective processing caused loss of meaning

and was discussed by Clay (1991) as a sign and creator of reading difficulty. This ineffective strategy was discouraged by the teacher and gradually disappeared.

Reading Behaviors at End of Intervention

The school year ended before Aaron received the full Reading Recovery program, so his lessons were continued in the following school year when he entered grade two. A final check on Aaron's reading behaviors at the end of the program indicated he had made progress and was successfully discontinued from Reading Recovery.

While there is no specific level of text or test score which a child must attain to be discontinued from Reading Recovery, a child is usually discontinued when he or she has received the maximum number of weeks or lessons and has developed a competency in reading comparable to the average readers in his class. He or she must have a system of strategies which allows him or her to read and problem-solve independently on texts at instructional level in order to benefit from classroom instruction and to continue making progress with the average readers. Clay's (1993b) checklist of reading behaviors indicate that a child may be ready to be discontinued from the program when the reading behaviors demonstrate control over directional movement, one-to-one matching of spoken to written words, self-monitoring, cross-checking, using multiple cue sources, and self-correcting. Also, there should be an improvement in the number of words the child can write independently and an ability to read at a level comparable to the average reader in second grade.

Clay (1991) hypothesized that if we teach at-risk readers to do what successful readers do, then they can become good readers. Did Aaron learn to do what successful

readers do?

Consider Clay's description of a proficient reader. Clay (1993a) described an independent reader as one whose:

> ... early strategies are secure and habituated; monitors his or her own reading or writing; searches for cues in word sequences, in meaning, in letter sequences; discovers new things for himself; cross-checks one source of cues with another; repeats as if to confirm his reading; self-corrects, takes the initiative for making cues match, or getting words right; and solves new words by these means (p.12).

The final analysis of Aaron's reading behaviors suggest that he was using those strategies as indicated by the findings. At Aaron's last lesson, he was reading at level 16, within the range of higher level text reading. The summary of his reading behaviors reveals frequent monitoring of his reading, greater independence in self-correcting, fewer interventions by the teacher, and rereading to problem-solve, indicating an independence in using strategies. This demonstrated independence in using strategies to problem-solve would be an expected outcome of a program which helps children develop strategies. Schmitt (2001) had similar findings in a study which sought to examine the development of strategic processing in a group of children receiving Reading Recovery instruction. By analysing the reading behaviors of these children, her study revealed that there was a significant increase in the use of strategies, as inferred from the behaviors such as, rereading, noticing errors, and attempting to solve words. She also noted the increase in self-monitoring, self-correcting, and rereading to to confirm or problem-solve. These behaviors are signals that the child is becoming a strategic reader which seems to be a

characteristic of successful readers.

The improvement in test scores from the beginning to the end of the program also indicates progress towards being a successful reader. Aaron's test scores in November placed him in the average to above average group. For example, he identified all of the letters on the Letter Identification test, correctly represented 37 out of 37 phonemes on the dictation test, wrote more words independently on the timed writing task, and improved his score on both word tests. The improvement in these test scores would be expected and supports conclusions made by Sylva and Hurry (1997) that Reading Recovery is effective at raising test scores.

Qualitatively, the teacher's description of Aaron's reading behaviors changed. In her lesson records at the end of his lessons in Reading Recovery, she noted, "In reading texts, Aaron integrates all sources of information most of the time. He self-monitors, self-corrects, cross-checks, and rereads to confirm. His reading is mostly phrased and fluent." Aaron's program was effective at taking him from the rank of lowest achiever in reading to average reader. Spiegel (1995) discusses some of the elements of Reading Recovery which may have enabled Aaron to make this accelerated progress. She proposed that certain elements of Reading Recovery make it more effective than some traditional remedial reading programs: 1) Intervention takes place early in the child's learning rather than later when it is more difficult to change habits. 2) Reading instruction takes place in the context of reading whole texts rather than completing worksheets on isolated skills. 3) Time spent on reading is provided by reading familiar books and new books rather than worksheets and workbooks. 4) The goal is to teach children to use strategies in order to

become independent problem solvers rather than the goal of completing the immediate task. 5) Instruction is individualized and based on the child's strengths rather than small group instruction where everyone completes the same task. These examples are some of the factors which Spiegel suggests contributes to the effectiveness of Reading Recovery and which were an integral part of Aaron's program.

Conclusions and Implications

This case study described the reading behaviors of an at-risk reader, the changes that occurred over time as he received tutoring in Reading Recovery, and the reading behaviors when he received his last lesson. Its purpose was to explore and examine the changes that may occur over time in the reading behaviors of an at-risk reader. The findings help illuminate the process of how to help children learn to read and offer another perspective on how to help at-risk readers become proficient readers. This study adds to the findings of other research studies (Pikulski, 1994; Pinnell, 1994; Schmitt, 2001; Spiegel, 1995; Wasik & Slavin, 1993) which support early intervention and one-on-one tutoring as an effective means to reducing and preventing reading failure.The findings of this study support the notion that children who fall behind their classmates need one-on-one instruction in order to accelerate their learning so that they may catch up their average classmates who continue to make progress (Clay, 1991). Reading Recovery is one early intervention program which was demonstrated to be effective in preventing reading failure (Boehnlein, 1987; Fountas & Pinnell, 1996; Johnston & Allington, 1991; Pinnell et al, 1994).

Early intervention makes sense because in the first two years of instruction,

children are developing a "network of strategies" which enable them to learn to read and improve as they read increasingly difficult text. Clay (1991) describes her theory that " ... reading behavior becomes organized into a complex system of strategies for cue-finding, cue-choosing, checking, and correcting during the first two to three years of instruction in a way that sets the pattern for subsequent gains in skill" (p.315). Therefore, she says, if we allow children to "build ineffective processing strategies", we begin to produce reading failures. These children are more difficult to help when they are older readers because habits are formed and more difficult to change. In older readers, reading becomes silent, making their reading behaviors invisible, so we cannot tell what strategies they are using. Given this asumption, it is critical that the classroom teacher be knowledgeable and observant of the reading behaviors of children in the first two years so that extra help may be provided to children who are not following the expected path of learning to read. Without early intervention, these children may be retained at the same grade level for another year or later placed in Special Education programs in the hopes that he or she will catch up.

Clay (1991) suggests that low-achieving readers may be practising inefficient strategies or have fewer strategies to draw upon. She hypothesized that if we teach at-risk readers to do what successful readers do, they can become good readers. The child in this case study is an example of that outcome.

While Reading Recovery is not a classroom program, the theories of reading and learning upon which its instructional strategies are based may inform and extend the classroom teacher's understanding of literacy acquisition. Since the classroom teacher is

the first line in prevention by providing quality instruction, it is necessary for the teacher to have a description of high-progress readers and low-progress readers in order to identify the children who are not making the expected progress.

This study suggests that the classroom teacher needs to be observant of the reading behaviors of individual children in his or her classroom and knowledgeable about the changes that should occur over time. With this knowledge and sensitivity, he or she is perhaps more likely to identify at-risk readers early in their learning when it can be seen that the process going wrong. Early identification may improve the child's chances of success in learning to read, or identify those children whose learning difficulites may require longer-term intervention, thus reducing the number of children referred to Special Education.

Without an early intervention program such as Reading Recovery, Aaron's story may have been different. If he had not made accelerated progress in reading, he would have been retained in grade one. It is unlikely that such progress would have been possible without one-on-one instruction designed to respond appropriately to his individual path of learning.

Limitations

Generalizing from qualitative studies, and in particular, case studies, has been recognized as a limitation to this type of research. According to Merriam (2001) a case study approach is chosen because "one wishes to understand the particular in depth, not because one wants to know what is generally true of the many." (p.208) Therefore, one cannot generalize from this case because it is specific to the child in this specific site. The

findings apply to the child in this study and may not be transferable. However, with enough detail and description of the context, the reader can decide how this study may compare to his situation or to other studies in a similiar context.

This study cannot be replicated because it is the study of a single case. Replication may not give the same results because of the individual differences of the people involved. The researcher, the teacher, and the child bring different skills and experiences to the context of the study and these differences will have an impact on the outcomes. In this study, the researcher was not trained in Reading Recovery and the Reading Recovery teacher, an experienced Special Education/Resource teacher, having received training in the previous year, was in her second year of teaching Reading Recovery lessons. The newness of the experience for both participants may affect the outcomes and interpretation of the findings. However, the researcher dedicated a significant amount of time in reviewing the literature related to reading difficulities and learning about Reading Recovery. In order to conduct a trustworthy study, this researcher consulted key informants who were knowledgeable about, and trained in, Reading Recovery procedures, and who also reviewed drafts to check for errors of fact or interpretation.

One cannot infer causation from correlation. Since there are many uncontrolled variables in this study, one can only infer but not claim that the findings in this study were caused by the effects of the one-on-one tutoring sessions.

Finally, another limitation to consider is the biased views of the researcher which may influence the findings and conclusions. This researcher has revealed her bias toward the reading theories espoused by Marie Clay, the founder of the Reading Recovery

program. These views may affect how the findings of this study are analysed. A description of the researcher's background and theoretical position allows the reader to take into account how these biases may affect the results of this study. One factor that may reduce the effect of researcher bias is that the researcher of this study is not a Reading Recovery teacher, nor a stakeholder in the program, but an educator who is interested in literacy learning and early intervention.

Suggestions for Future Studies

While a high percentage of children are successfully discontinued from Reading Recovery, that is, they have reached an average level of reading ability, it is expected and found that there will be some children who require longer term help. Another study could compare the reading behaviors of successfully discontinued students to those students who did not reach an average reading level after receiving the maximum 20 weeks of instruction. How do the reading behaviors of these two groups of children compare? How do the reading behaviors change over time? What differences, if any, can be found between the two groups? Such a study may further our understanding of what the "hard to teach" child needs in order to accelerate his or her learning. Clay (1991) says if children are apparently unable to learn, we should assume that we have not yet found the right way to teach them. If we approach the problem of reading difficulties from this perspective, then we must continue to refine and re-evaluate our practices and consider what we have to offer children who need a second chance to learn.

Personal Reflections

My interest in undertaking this study originated with my personal experience of

how to help children who were experiencing difficulty learning to read. My desire to provide quality instruction in order to help these children sort out their confusions motivated me to learn more about current practices, related research studies and theories. I was intrigued by Clay's theory which provided an alternate way of viewing children's difficulties in learning to read. Finding out what the child can do and using the child's existing strengths to extend his or her learning was a shift in how learning difficulties were traditionally viewed.

In contrast, past practices involved finding out what the child didn't know and attempting to teach what the child couldn't do on his or her own. Children were taught in small groups with little time provided to address individual needs, and they were given the same sequence and set of skills in isolation from reading texts. Also, attempts were made to find the cause for the learning difficulty within the child by administering standardized tests, such as IQ tests. The data resulting from these tests were often not helpful to the teacher in terms of planning instruction and contributed to lowered expectations. The scores may have revealed strengths and weaknesses in areas of isolated reading skills but offered little information that might change the child's expected path of progress.

On the other hand, Clay's theory of preventing reading failure by intervening early and providing one-on-one tutoring which meets the individual's needs seems more logical and promising to me. Although the classroom teacher does not have the year long intensive training as a Reading Recovery teacher and cannot provide the same level of individual attention in a group setting, he or she can learn to use observational tools such as running records and Clay's OSELA to keep track of the individual's progress. This

ongoing observation can aid the teacher in early identfication of children who may be at risk for failing to learn to read. These children may benefit from early intervention by trained teachers or may be identified as requiring further specialized help.

As a result of conducting this study I have gained a deeper insight into the process of learning to read and an appreciation for the complexity of this activity. I, also, learned that there are no simple solutions to the problem of at-risk readers and what kind of supplementary help to provide. However, I believe that we can reduce the number of children who are placed in special education programs by providing quality instruction and early intervention.

"Coaching the learners in how to do things changes the score on the score card and provides the insurance of long-term effects. This is especially true when an intervention begins early in the learning process "(Clay 2001, p.6). Clay's analogy between improving performance in reading and golf illustrates the importance of providing tutoring which teaches the learner "how-to" achieve success. This analogy seems to describe what happens as a child participates in Reading Recovery lessons.

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Appendix A

Sample letter to the School Board

Dear_____:

I am writing to request permission to conduct a research study with the Reading Recovery teacher and two students who are in the Reading Recovery program at _____. This study is part of a requirement for the degree of Master of Education at the University of Prince Edward Island.

The purpose of this study is to investigate the changes that may occur as a child progresses through the Reading Recovery program. I am interested in observing the reading portion of the lessons in order to document changes in reading behaviors that may occur over time. The information will be collected through personal observations and videotapes from the child's entry into the program through to discontinuation.

I plan to collect the following data for the duration (20 weeks) of the program or until the child is discontinued, if that happens earlier.

- Observe and videotape the reading part of the lesson once every two weeks for each child.
- Photocopy running records and any other records pertaining to reading progress. All identifying information will be removed.

These videotapes will be used for research purposes only and will be destroyed after completion of the Master's thesis. The videotapes will not be used by anyone else for any reason and only I will have access to it. Pseudonyms will be used at all times to protect the confidentiality of the material I collect.

This study should not in any way interfere with the normal course of Reading Recovery lessons. The child's Reading Recovery Teacher has the right to refuse or terminate participation in the study, at any time, if she feels that it is having an adverse effect on her performance or the child's progress. Please note that participation in this study is strictly voluntary. The identity of the school and people involved will not be revealed or used for evaluation purposes.

If you require further information please contact me at A copy of the draft of the research proposal is available if requested.

If you have any questions regarding the ethical conduct of this study , you may contact the Office of Research Development at UPEI at

Your signature below indicates your acceptance of the above request but you may withdraw your consent at any time. I will return a copy of this signed letter of consent for your records.

Sincerely,

Deborah Cole
Graduate Student, University of Prince Edward Island

I, _____, agree to allow the above study to be conducted at this site.

Signature:_____ Date: _____

Appendix B

Sample Letter for the Principal

Dear

I am writing to request permission to conduct a research study with the Reading Recovery teacher and two students who are in the Reading Recovery program at _____. This study is part of a requirement for the degree of Master of Education at the University of Prince Edward Island.

The purpose of this study is to investigate the changes that may occur as a child progresses through the Reading Recovery program. I am interested in observing the reading portion of the lessons in order to document changes in reading behaviors that may occur over time. The information will be collected through personal observations, videotapes from the child's entry into the program through to discontinuation.

I plan to collect the following data for the duration (20 weeks) of the program or until the child is discontinued, if that happens earlier.

- Observe and videotape the reading part of the lesson once every two weeks for each child.
- Photocopy running records and any other records pertaining to reading progress. All identifying information will be removed.

These videotapes will be used for research purposes only and will be destroyed after completion of the Master's thesis. The tapes will not be used by anyone else for any reason and only I will have access to it. Pseudonyms will be used at all times to protect the confidentiality of the material I collect.

This study should not in any way interfere with the normal course of Reading Recovery lessons. The child's Reading Recovery Teacher has the right to refuse or terminate participation in the study, at any time, if she feels that it is having an adverse effect on her performance or the child's progress. Please note that participation in this study is strictly voluntary. The identity of the school and people involved will not be revealed or used for evaluation purposes.

If you require further information please contact me at
copy of the draft of the research proposal is available if requested.

If you have any questions regarding the ethical conduct of this study , you may contact the Office of Research Development at UPEI a

Your signature below indicates your acceptance of the above request but you may withdraw your consent at any time. I will return a photocopy of this signed letter of consent for your records.

Sincerely,
Deborah Cole
Graduate Student, University of Prince Edward Island

I, _____, agree to allow the above study to be conducted at this site.

Signature:_____ Date: _____

Appendix C

Sample letter for the Reading Recovery Teacher

Dear

I am writing to invite you and to obtain your consent to take part in a research study which I would like to conduct with two students who are in the Reading Recovery program at your school. This study is part of a requirement for the degree of Master of Education at the University of Prince Edward Island.

The purpose of this study is to investigate the changes that may occur as a child progresses through the Reading Recovery program. I am interested in observing the reading portion of the lessons in order to document changes in reading behaviors that may occur over time. The information would be collected through personal observations and videotapes from the child's entry into the program through to discontinuation.

I would like to have your permission to collect the following data for the duration (20 weeks) of the program or until the child is discontinued, if that happens earlier.

- Observe and videotape the reading part of the lesson once every two weeks for each child.
- Photocopy running records and any other records pertaining to reading progress. All identifying information will be removed.

These videotapes will be used for research purposes only and will not be used by anyone for any reason. Only I will have access to it, and the videotapes will be destroyed after completion of this Master's thesis. Pseudonyms will be used at all times to protect the confidentiality of the material I collect. All records will be kept confidential and in a secure place.

This study should not in any way interfere with the normal course of Reading Recovery lessons.

Please note that your participation in this study is **strictly voluntary** and there will be absolutely no prejudice to you if you do not wish to participate. The identity of the school and people involved will not be revealed or used for evaluation purposes. Please be assured that your participation in this study will not have any adverse effects on you personally or professionally. You have a right to refuse or to terminate the study at any time if you feel that it is becoming detrimental to your teaching or the progress of the children. You have a right to refuse to be video or audio taped at any time.

If you require further information please contact me at

you have any questions regarding the ethical conduct of this research, please contact the Office of Research Development at UPEI at !

Your signature below indicates your willingness to participate but you may withdraw your consent at any time. I will return a photocopy of this signed consent for your records.

Sincerely,

Deborah Cole
Graduate Student
University of Prince Edward Island

I, _____, agree to participate in the above study.

Signature:_____ Date: _____

Appendix D

Sample letter for Reading Recovery teacher leader

Reading Recovery Teacher Leader
Department of Education
16 Fitzroy St.
Charlottetown, P.E.I. C1A 7N8

Dear Mrs. _____

I am writing to request permission to conduct a research study with the Reading Recovery teacher and two students who are in the Reading Recovery program at _____. This study is part of a requirement for the degree of Master of Education at the University of Prince Edward Island.

The purpose of this study is to investigate the changes that may occur as a child progresses through the Reading Recovery program. I am interested in observing the reading portion of the lessons in order to document changes in reading behaviors that may occur over time. The information will be collected through personal observations and videotapes from the child's entry into the program through to discontinuation.

I plan to collect the following data for the duration (20 weeks) of the program or until the child is discontinued, if that happens earlier.

- Observe and videotape the reading part of the lesson once every two weeks for each child.
- Photocopy running records and any other records pertaining to reading progress. All identifying information will be removed.

These videotapes will be used for research purposes only and will be destroyed after completion of the Master's thesis. The videotapes will not be used by anyone else for any reason and only I will have access to it. Pseudonyms will be used at all times to protect the confidentiality of the material I collect.

This study should not in any way interfere with the normal course of Reading Recovery lessons. The child's Reading Recovery Teacher has the right to refuse or terminate participation in the study, at any time, if she feels that it is having an adverse effect on her performance or the child's progress. Please note that participation in this study is strictly voluntary. The identity of the school and people involved will not be revealed or used for evaluation purposes.

If you require further information please contact me at

copy of the draft of the research proposal is available if requested.

If you have any questions regarding the ethical conduct of this study , you may contact the Office of Research Development at UPEI at

Your signature below indicates your acceptance of the above request but you may withdraw your consent at any time. I will return a copy of this signed letter of consent for your records.

Sincerely,

Deborah Cole
Graduate Student, University of Prince Edward Island

I, _____, agree to allow the above study to be conducted at this site.

Signature:_____ Date: _____

Appendix E

Sample letter for Parent

Dear

Your child's Reading Recovery teacher has agreed to take part in a study about how young children learn to read in a one-to-one tutoring setting. This letter is to invite you to give permission for your child to participate in this study. This study is part of a requirement for the degree of Master of Education at the University of Prince Edward Island.

I would like your permission to observe your child's Reading Recovery lessons so that I can study the progress in reading that occurs over time. I would like to videotape lessons once a week for the duration of the program. I would also like to have your permission to have access to the results of tests and the teacher's records of your child's work. The videotapes will be used for research purposes only and will not be shared in any way with the school for evaluation purposes, nor by anyone for any reason. Only I will have access to it, and the videotapes will be destroyed after completion of this Master's thesis. Your child's name will never be used on any information that I collect, nor will the teacher's name be used. All information and records will remain confidential and will be only used by me and the Reading Recovery Teacher for the purposes of my study. Your child will not be asked to do anything differently or take part in any activities outside the usual Reading Recovery lessons. There will be no disruption to your child's lesson. The Reading Recovery lessons will go on as would be expected for any child in the program. Your child's Reading Recovery Teacher has the right to terminate the participation if she feels that it is adversely affecting the well-being or progress of your child. Participation in this study is **strictly voluntary** and will not affect your child's standing in the Reading Recovery program. You may withdraw your consent to participate at any time. If you have any questions, please contact me at Please sign in the space below to indicate your consent. A photocopy of this letter will be sent to you for your records. If you have any questions regarding the ethical conduct of this research study, you may contact the Office of Research Development at UPEI at

Sincerely,
Deborah Cole

I **consent** to my child's taking part in the study described above.

Signature: _____ Date: _____

Appendix F
Sample letter for the child

Dear _____,

My name is Mrs. Cole and I teach _____ at _____. I am also a student at the University of Prince Edward Island. I am interested in learning about how children learn to read. I would like to go to your Reading Recovery lessons to watch you and your teacher while she is teaching you how to read. I would like your permission to videotape your lessons when you read. If you don't want me to do that, you can say no. I will not interrupt you while you are reading. Your parents and teacher have given me permission to go to some of your lessons.

Please print your name below if it is okay with you that I can be there for some of your lessons. If you decide that you don't want me to be there, then you can tell me any time.

Signature:_____

Date:_____